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PRINCIPAL PERCEPTIONS OF DISTRICT SUPPORT IN OKLAHOMA: WHAT THEY GET, WHAT THEY WANT, AND HOW IT AFFECTS THEIR PSYCHOLOGICAL NEEDS

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PRINCIPAL PERCEPTIONS OF DISTRICT SUPPORT IN OKLAHOMA: WHAT THEY GET, WHAT THEY WANT, AND HOW IT AFFECTS THEIR PSYCHOLOGICAL NEEDS

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF EDUCATIONAL LEADERSHIP AND POLICY STUDIES

BY THE COMMITTEE CONSISTING OF

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Abstract

The purpose of this study is to explore the relationship between principals' basic psychological needs and the district-level factors that support them. Evidence from the past thirty years of educational research has pointed to school principals as influential in improving school outcomes. In addition to their traditional managerial roles, principals are now expected, among other things, to develop a shared vision of high achievement, cultivate a strong culture, develop and recruit teaching talent, and most importantly, to improve teaching and learning. Because of this, the principalship has continued to evolve into a role of ever-increasing complexity that has been shown to carry extremely high levels of pressure, stress, and burnout. While there is a growing body of literature on what school districts can do to support principals' capacity for instructional leadership and school improvement, little attention has been given to understanding what types of support principals report needing from the district office in order to meet their psychological needs. For principals to carry out the challenging and complex work before them, there must be a greater understanding of which district-imposed conditions support their motivation to engage in that work. Using self-determination theory, a survey of 187 elementary and secondary principals across the state of Oklahoma was conducted to determine what principals in the State currently receive from their district offices, the relationship between those supports and principals' psychological needs, and to identify the supports principals report to value and want from their district offices to better support them in their work. "Principals" was used to refer to both head principals and assistant principals. The study found that goal setting and instructional coherence (ß=.255), support for autonomy (ß=.295), and networking and collaboration opportunities (ß=.186) were supports provided by Oklahoma districts which had a positive correlation with principals' basic psychological needs and its subscales. It also found

that while the majority of school districts offer professional development and mentoring opportunities as supports for their principals, principals themselves place more value on autonomy supports and networking and collaboration opportunities. These results have implications for how districts should go about supporting their principals in their work and also build upon the theoretical and empirical knowledge related to district effectiveness and principal development.

Chapter 1: Introduction

Over the past thirty years, educational research has demonstrated that principals play an important role in numerous school outcomes (Hallinger & Heck, 1998; Ladd, 2009; Leithwood et al., 2004; Leithwood et al., 2008; Peck et al., 2013; Spillane et al., 2004; Waters et al., 2003). Historically, the principal was seen primarily as a manager. Effectiveness in the principalship amounted to managing the day-to-day school activities and ensuring that classrooms were staffed and hallways were orderly (Hallinger, 1992). That long-held view changed rapidly in the 1980s with the introduction of new conceptions of principal effectiveness, which included the notion of the principal as an instructional leader who could influence levels of student achievement (Bossert et al., 1982; Bridges, 1982). Since that time, multiple studies have demonstrated that principal leadership explains variation in student learning between schools (Creemers & Reetzig, 1996; Townsend, 1994), with some asserting that principal leadership is the second most important school-level factor for student achievement, behind only teacher quality (Hallinger & Heck, 1998; Leithwood et al., 2004; Waters et al., 2003). Effective principals have also been shown to positively influence the recruitment, retention, and working conditions of effective teachers (Baker & Cooper, 2005; Brewer, 1993; Grissom, 2011; Kraft et al, 2016; Ladd, 2009, 2011; Leithwood et al., 2004; Milanowski et al., 2009).

While evidence about the role that principals play in improving school outcomes has grown, so has the complexity around the expectations and nature of the position. The principalship has always been a complex job, but principals are now expected to lead innovatively, prepare their students with the skills needed to be successful in the 21st century, and respond to the competing demands of numerous constituencies (Catano & Stronge, 2006; Schoen & Fusarelli, 2008; Spillane & Kinney, 2012). Additionally, principals must also serve as

their school's public relations expert, employee supervisor, professional figurehead, student mentor, and empowering leader. All this while devoting at least one third of their workday to addressing as many as 25 interruptions (Thomas & Ayres, 1998). It is no wonder, then, that a recent Met Life (2013) survey of 500 K-12 principals across the nation found that 75% of principals felt their job was too complex.

The modern principalship has also been marked by high accountability and limited control. Principals are leading schools in an era that places greater accountability and expectation on them than ever before. Accountability to meet external demands such as higher student test scores and legislative mandates has been cited as a source of principal stress (Glidden, 1999; Klocko & Wells, 2015; Wells, 2016; West et al., 2014). These demands have also carried with them higher levels of scrutiny for schools at the local, state, and national levels (Langer & Boris-Schacter, 2003; Thomas et al., 2003; Tyack & Cuban, 1995). As a result, states and districts have placed greater pressures on principals to achieve desired results. This has been evidenced in the past decade by a renewed focus on principal evaluation systems, many of which have included student growth measures (Jacques, 2012)

However, principals have also reported that they lack the autonomy and control necessary to improve their schools. One study found that the majority of principals report they do not have sufficient authority to make decisions or the resources to carry out their responsibilities as instructional leaders (DiPaola & Tschannen-Moran, 2003). Another study on elementary principals' perceptions found that only one-third said they had the autonomy needed to effectively lead their schools and less than 20 percent said they had the autonomy they needed over programing, curriculum, and instructional methods (Ouchi, 2006). Additionally, a third study found that the majority of principals do not feel they have enough control over removing

ineffective teachers (MetLife, 2013). This discrepancy between principal accountability and control has been labeled "the autonomy gap" and findings from research on this gap indicate that principals' job satisfaction and organizational commitment greatly decline when they feel they do not have the ability to capability to adequately meet the challenges associated with their work (Adamowski et al., 2007; Chang et al., 2015).

The high complexity and accountability of principals' work has added high levels of stress to an already challenging job, creating what some have deemed a "culture of stress" (Combs et al., 2009; Klocko & Wells, 2015; West et al., 2014). In 2013, almost half of principals reported that they feel under great stress several days a week (MetLife, 2013). Studies conducted on principals' stress have shown that their greatest stressors are associated primarily with the demands of the job which include insufficient time to accomplish tasks, constant interruptions, stress over disciplinary incidents, keeping up with emails, conducting teacher evaluations, the volume of paperwork, and the loss of personal time and work-life balance (Klocko & Wells, 2015; Rangel, 2018; Wells et al., 2015). These demands have shown to contribute to diminished job satisfaction among principals (Ballek et al., 2005). In 2013, only 59% of principals felt very satisfied with their job, down from 68% in 2008 (MetLife, 2013). This is cause for concern considering the stress from an overload of responsibilities has been shown to lead to burnout among principals (Systma, 2009).

These job-related factors have ultimately contributed to high turnover and attrition rates within the principalship. Estimates of principal turnover and attrition vary greatly depending on the type of school and its location, but one national sample found that in one given year 6% of principals moved to a new school and 12% left the principalship (Goldring & Taie, 2014). Other studies from specific states have reported that between 15% and 30% of principals leave their

school each year (Beteille et al., 2011; Branch et al., 2009; DeAngelis & White, 2011). These statistics are significant when you consider the important role that principals can have on school outcomes, the fact that research indicates school improvement most commonly takes 5 to 7 years, and that it costs school districts an estimated $75,000 to hire and onboard a single principal (Fullan, 2001; School Leaders Network, 2014).

In response to these challenges and stressors and as a means of improving student achievement, school districts have made efforts to support principal growth and development. These efforts have included school districts providing professional development for principals (Hightower, 2002; Knapp et al., 2003; Supovitz, 2006), developing mentoring opportunities for principals to learn from former school leaders who are now in central office roles (Leithwood, 2011; Goldring et al., 2018; Marsh et al., 2005), establishing clear, structured, and coherent instructional goals for principals (Augustine et al., 2009; Darling-Hammond at al., 2007), yielding autonomy over resources and decisions to principals (Honig, 2009; Darling-Hammond et al., 2003), and by forming and promoting peer support networks (Togneri & Anderson, 2003; Mascall & Leithwood, 2010). While these findings have advanced knowledge about how districts have sought to improve the quality of principals' practice, they have left much to learn about how districts can support the work of principals (Ford et al., 2020).

Several authors have noted the absence of theoretical approaches within the district effectiveness literature and have called on future researchers to address it by applying theory to explain why some district actions garner better results (Teddlie & Reynolds, 2000; Trujillo, 2013, 2016; Ford et al., 2020). One author's review of the district effectiveness literature found that only half of the studies incorporated theory within their work and only one quarter of the studies had presented any theoretical rationale for the factors that were selected for analysis or

the design on which their study was based (Trujillo, 2013). Such studies have generated many correlates associated with district effectiveness and have provided districts with many concrete behaviors and actions they can implement which may result in higher performance. However, without a theoretical grounding, these studies have not been able to interpret how these various correlates interact with one another or under what conditions the correlates produce particular results. As a result, district leaders may take well-intentioned steps to better support their principals but, instead, create undesired outcomes due to the differences within their district contexts.

In response to this shortcoming, one group of authors have sought to apply multiple theories of human motivation to the existing empirical findings on the relationship between school districts supports and principal effectiveness (Ford et al., 2020). Using these five distinct, prominent social-cognitive theories of motivation – self-efficacy theory, self-determination theory, expectancy-value theory, attribution theory, and goal theory – the authors conducted a review of the district effectiveness literature to begin to explore how these theories could be applied to what is already known about how districts can support principals' needs for development, motivation, and success. Their analysis suggested that self-determination theory was one of two theories which provided the most promising alignment between its framework and the existing research on district effectiveness and principal support. Following this finding, the authors proposed a new line of research in which the application of these theories could "…be used to theorize about the conditions needed to increase principals' satisfaction, enjoyment, and expectations for success, fostering a motivational climate that seeks to support, sustain, and retain them" (Ford at al., 2020, p. 47). The current study seeks to advance this new line of research.

Additionally, most of the knowledge generated from existing district effectiveness studies has focused on the improvement of principal practice as the primary desired outcome of understanding. While this has its value, little work has focused on attempting to understand what supports principals need to do their work. Similarly, the overwhelming majority of the studies have focused on what district leaders have decided to do in order to improve principals' practice, but very few have inquired about principals' perceptions of the supports they need (for exceptions, see Johnston et al., 2016; Weiner & Woulfin, 2017). This is an important omission because motivation is an internal process that moves a person toward a goal or action. Much of what drives human motivation, therefore, is derived from the feelings and perceptions of the individual. A logical next step in the advancement of principal development is to consult practicing principals about what they feel they need to do their jobs well and to feel satisfied.

Purpose

The current study seeks to add to this new line of inquiry proposed by Ford, Lavigne, Fiegener, and Si (2020) about how districts can better support principals' needs through the theoretical lens of self-determination theory (SDT). SDT is a macro-theory of human motivation developed by Richard Ryan and Edward Deci nearly forty years ago (Deci & Ryan, 1985). Since its conception, the theory has been applied to a host of disciplines and fields of study, including extensive application in education (Gagné, 2014). One of the foundational premises of SDT is the belief that need for growth drives human behavior and that each individual has basic psychological needs that must be met in order for growth to occur (Deci & Ryan, 2002). These needs are outlined in one of SDT's mini-theories, basic psychological needs theory (BPNT), and include the need for competence, autonomy, and relatedness. SDT and BPNT posit that when these three basic psychological needs are met within a person, that individual will experience

greater amounts of intrinsic motivation, growth, and flourishing. SDT was chosen as the theoretical framework because of its wide application across the field of education research and the promising alignment between its framework and current research.

While there are no known studies or analyses on the supports which principals say they want and receive from their district offices, an argument can be made that Oklahoma provides an appropriate setting for the study because it offers a representative case of the challenges that principals across the nation face in their work. A recent review of literature on principal turnover found that school performance, principal salary, and challenges hiring teachers were among the determinants identified in the research (Rangel, 2018). Compared to other US states, Oklahoma ranked 49th nationally in educational quality indicators, which included student achievement (Blad, 2019). The National Center for Education Statistics (2019) reports that Oklahoma ranks 49th in administrator pay. At the beginning of the 2018 school year, Oklahoma schools still had 536 unfilled teaching vacancies and the state department had granted 2,915 emergency certifications (Watson, 2019). Considering Rangel's study, this data suggests that Oklahoma principals may face many of the challenges faced by principals across the nation, which may contribute to them leaving the position.

In fact, Oklahoma does experience large amounts of principal turnover. Of the state's approximately 1,900 principals, 73 percent held their role as principal for five years or less (Palmer, 2019). The rate is even higher for high-poverty and high-minority schools—78 percent—and data show that these rates have been on the rise over the past decade. This appears to be consistent with the national trends for principal turnover, as some researchers estimate that over 70 percent of school principals leave their positions by the fifth year (Fuller & Young, 2009) and others estimate that an average school district loses between 15 and 30 percent of their

principals each year (Beteille et al., 2011). While the reasons that these principals leave the role are undoubtedly as complex as the nature of the work itself, the workload and profound isolation of the job have been identified as extreme detriments to principals' physical and psychological well-being (Johnson, 2005). Oklahoma's educational climate and the rate at which its principals are leaving their positions make it an opportune setting to study the supports provided by school districts to support principals' psychological needs.

Thus, the primary purpose of this study was to explore which supports Oklahoma principals say they are currently receiving from their district offices and to understand how those supports correspond with principals' basic psychological needs. The study also seeks to identify the supports principals report to want and value from their district offices in order to better assist them in their work. In doing so, the goal is to provide Oklahoma district-level executives with a better understanding of what they can do to activate the psychological determinants of principals' growth, motivation, and well-being so that they may flourish in their roles. Thus, the study is framed by three main research questions:

1. What is the current landscape of district supports being provided to Oklahoma school principals?
2. What current principal-reported district-level supports are associated with support of principals' basic psychological needs?
3. What supports do Oklahoma principals report to value and want from their district offices to assist them in their work?

Design

To answer the research questions, principals and assistant principals across the state of Oklahoma were surveyed. Quantitative survey research is appropriate to the task, as it has been identified as an ideal methodology for identifying factors that influence an outcome (Creswell, 2009). The survey consisted of a 32-item questionnaire that was developed by utilizing items from the Principal Support of Teacher Psychological Needs measure that has been used to understand the which supports principals can provide to teachers in order to enhance their psychological needs (Olsen, 2017). These items have been "leveled-up" and rewritten to apply to district-level support of principals. Items within the questionnaire were also developed to conceptualize district-level factors and mechanisms that were consistent within existing literature. A preliminary draft of the survey developed in Qualtrics® was pilot-tested, refined, and then distributed via email to all principals and assistant principals who are listed in the Oklahoma State Department of Education administrator database. It was also dispersed via email to principal networks associated with the Cooperative Council for Oklahoma School Administrators and the Oklahoma School Board Association. Data was collected from October to December of 2020, a nine-week response window.

Overview

This dissertation is divided into five additional chapters. Chapter two is a review of the current literature that exists on district effectiveness and district support of principals. It is thematically organized around the primary approaches school districts have employed to support and develop principals. The end of the section provides a description of gaps in the current literature, particularly in regard to how they relate to self-determination theory and the scope of this study. Chapter three describes the theoretical framework and includes a section on self-

determination theory, basic psychological needs support, and existing claims that have been produced in educational research about the effects that needs satisfaction has on human flourishing, well-being, and motivation. This section also makes connections between district actions that have intended to support principals that have been identified in the literature and the three basic psychological needs: competence, autonomy, and relatedness. Chapter four presents the study's intended research methods. It includes a description of the study design, measures, sample, data collection and analysis, limitations, and ethical considerations. Also embedded in this chapter is rationale for the research methods as they relate to the research questions. Chapter five reports on the results of the study, as arranged by research question. Finally, chapter six takes the concluding analysis and discusses how the findings relate to the research questions, as well as the implications for future research and practice.

Chapter 2: Review of Literature

In this chapter, I review the existing empirical literature related to district support of principals. I begin with a historical overview of the district effectiveness literature that undergirds much of what has been studied about how districts have attempted to support principals. After describing more recent findings from the district effectiveness literature, I shift my focus to research that has provided insight into how districts have attempted to support principals. I have arranged this literature into five strands of work in this area: (1) professional development; (2) mentoring; (3) goals clarity, structure, and instructional coherence; (4) autonomy over decisions and resources; and (5) networking and collaborative support structures. Existing gaps in the literature within each strand are highlighted throughout. The chapter concludes with a description of the significant gaps in the literature: (1) an absence of consideration of principals' perceptions when determining which district supports to provide, and (2) a deficient application of a theoretical framework to understand principals' needs.

To understand how principals can be better supported in their work by district-level executives, it is first important to examine the larger context of district effectiveness. The focus on the effectiveness of school districts as *a priori* for improving student achievement began near the turn of the twenty-first century. Before that time, individual school sites had been the primary unit of analysis for improving student achievement and districts were commonly viewed as stagnant bureaucracies that were impervious to any innovations that might contribute to greater student achievement (Doyle & Finn, 1984; Edmonds, 1979). This view of superintendents and district office staff was so pervasive in the late 1980s it earned the moniker the "blob" from the Secretary of Education, William Bennett (Montague, 1987).

Around the same time, however, scholars began to question whether school-based reform efforts could produce large-scale, sustainable improvements in student achievement (David, 1989) and turned to the potential advantages of district-wide approaches (Cuban, 1984; Purkey & Smith, 1985). This shift coincided with a greater advocacy for a systems-approach to change in schools (Vinovskis, 1996), including calls for better alignment and coherency at the state, district, and school level (Fuhrman, 1993; Smith & O'Day, 1991). What would follow was the next iteration of school reform literature that focused on analyzing successful, or "high-performing" school districts.

This initial analysis consisted almost exclusively of case studies which attempted to extrapolate common features of districts who were able to achieve greater success in enhancing instruction and producing greater outcomes for their students. The first of such research on district effectiveness came from Murphy and Hallinger in 1988. Their article, "Characteristics of Effective School Districts," sought to identify districts that were instructionally effective based on their ability to produce greater achievement on their students' standardized test scores, after controlling for socioeconomic status, previous academic achievement, and language proficiency. Their findings produced seventeen common themes which they categorized within school districts conditions, climate factors, characteristics of curriculum and instruction, and organizational dynamics (Murphy & Hallinger, 1988). The common themes were labor peace, board support, community acceptance, productivity focus, improvement focus, problem-solving focus, instrumental orientation, internal focus, goal driven, established instructional and curricular focus, consistency and coordination of instructional activities, strong instructional leadership by the superintendent, monitoring of curricular and instructional focus, rationality

without bureaucracy, structured district control with school autonomy, systems perspective with people orientation; and strong leadership with an active administrative team.

Since Murphy and Hallinger's early work, the largest line of inquiry within district effectiveness has remained understanding the effects that districts have on student outcomes (Anderson, 2006); however, the particular scope of the research has varied considerably. Researchers have inquired about traits of successful district leadership (Leithwood, 1995, 2010; Waters & Marzano, 2006), districts' capacity to undergo change (Honig, 2003; Spillane & Thompson, 1997), the tension between district authority and school autonomy (Hightower, 2002), and how districts can approach systematic improvement while still being considerate of variability between individual school sites (Elmore & Burney, 1997), to name a few. Each of these studies have sought to identify the various correlates associated with effective district leadership for the purpose of identifying what school districts can do to improve student achievement.

The overwhelming majority of the identified correlates of effective districts have been technical in nature. A review of 50 articles on district effectiveness literature from the past three decades found that the most frequently cited correlates of district effectiveness were related to the technical components of district operation (Trujillo, 2013). These technical correlates were present in 83% of studies and included a focus on student outcomes, having a clear mission or vision, frequent monitoring, accountability, organizational coherence, standards alignment, focused and quality professional development for teachers, planning and goal setting, and strong instructional leadership. The remaining 17% of correlates were related to the normative and social-political dimensions of district functioning and featured setting high expectations,

fostering positive home-school relations, and building coalitions, alliances, and trusting relationships with multiple stakeholders.

A second seminal work within district effectiveness research was published by Leithwood in 2010. It provided an extensive review of 31 district effectiveness articles. In all, Leithwood found eight common characteristics that aligned with the finding first proposed by Murphy and Hallinger. These included: (1) having a district-wide focus on student achievement; (2) using proven approaches to curriculum and instruction; (3) using evidence for planning, organizational learning, and accountability; (4) fostering a district-wide sense of efficacy; (5) building and maintaining good communications and relations, learning communities, and district culture; (6) investing in instructional leadership; (7) focusing reforms and interventions on low-performing schools and students; and (8) facilitating the alignment of organizational structures (Leithwood, 2010). Additionally, Leithwood reported that (9) the implementation of high-quality, focused professional development for teachers and leaders and the (10) alignment of school improvement efforts with government reform initiatives had been established as common characteristics of effective districts.

A more recent review of district effectiveness literature has found several additional correlates of district effectiveness that have demonstrated significant empirical evidence (Anderson & Young, 2018). These correlates were (1) establishing processes, practices, and goals that foster equity within the district (Koschoreck, 2001; Rorrer & Skrla, 2005; Rorrer et al., 2009; Skrla et al., 2000), (2) focusing on fostering relationships with individuals and developing their human capital to foster strong communication and relationships within the district (Honig, 2003, 2006, 2008; Spillane & Thompson, 1997), and (3) reflecting on their successes and failures while growing in their capacity for change (Duke, 2011; Peterson, 1999). Together, these 13

characteristics, listed in Table 1, have provided a framework for researchers and practitioners who wish to engage in the improvement of student outcomes through district-level reforms.

Principal Supports

Of these 13 established characteristics of district effectiveness established by Leithwood (2010) and Anderson and Young (2018), four speak in some fashion to the role of the principal: the importance of providing professional development for leaders, building instructional leadership capacity, relationship-building between district and school personnel, and supporting principal efficacy. The fact that this much of the district effectiveness literature has focused on the roles of principals supports the notion that principals are important actors in district improvement. This is a logical notion, considering that in the hierarchy of school systems, principals serve as a bridge between the district level and the teachers who are working directly with students in their classrooms. It is not surprising then, that a tangential body of research has centered on how to improve principal practice and support that work that principals need to undertake in order to improve district aims.

Professional Development

One of the primary ways districts have attempted to support the needs of principals is by providing professional development. Some districts have done this by providing monthly principals' meetings or periodic principals' conferences (Hightower, 2002; Supovitz, 2006). Others have also used on-site models which focus on job-embedded activities like data analysis techniques, classroom walkthroughs, or daily office tasks (Galluci & Swanson, 2008; Hightower, 2002; Knapp, 2010; Wallace Foundation, 2013). Multiple studies described districts utilizing outside organizations, such as universities or private institutes, to lead the trainings or coursework (Marsh, 2005; Spillane et al., 2009), while others have relied on district leaders, like

Table 1

Practices for district effectiveness

District Practice	**Primary Source(s)**
Establish district-wide focus on student achievement	Murphy & Hallinger, 1988; Leithwood, 2010
Adopt proven approaches to curriculum and instruction	Murphy & Hallinger, 1988; Leithwood, 2010
Use evidence for planning, organizational learning, and accountability	Murphy & Hallinger, 1988; Leithwood, 2010
Foster a district-wide sense of efficacy	Murphy & Hallinger, 1988; Leithwood, 2010
Build and maintain good communications and relations, learning communities, and district culture	Murphy & Hallinger, 1988; Leithwood, 2010
Invest in instructional leadership	Murphy & Hallinger, 1988; Leithwood, 2010
Focus reforms and interventions on low-performing schools and students	Murphy & Hallinger, 1988; Leithwood, 2010
Facilitate the alignment of organizational structures	Murphy & Hallinger, 1988; Leithwood, 2010
Implementation of high-quality professional development for teachers and leaders	Leithwood, 2010
Align school improvement efforts with government reform initiatives	Leithwood, 2010
Establish processes, practices, and goals that foster equity within the district	Koschoreck, 2001; Rorrer & Skrla, 2005; Rorrer et al., 2009; Skrla et al., 2000
Place importance on personnel and the role they play	Honig, 2003, 2006, 2008; Spillane & Thompson, 1997
Develop the capacity for change	Duke, 2011; Peterson, 1999

superintendents or instructional leadership directors, to lead the workshops (Grissom & Harrington, 2010; Hightower, 2002).

The primary intent in offering these professional development opportunities has most commonly been to better equip principals to carry out the expectations of their jobs and to accomplish district goals. One narrow study of 49 principals in one school district found that most of their professional development was offered by their district with the main topics focusing on assessment, curriculum and instruction, and organizational development (Spillane et al., 2009). While 90 percent of these principals reported that the professional development provided useful knowledge, the majority also felt that it did not provide enough feedback for their individual practice, covered too many topics, and was not delivered in an optimal format.

Regardless of the delivery model, the consistent focus of the professional development found in the literature centers on the development of principals' instructional leadership capacity. Several studies describe districts who attempted to encourage principals to think and act as instructional leaders though training or modeling (Knapp, 2010; Marsh, 2005; Supovitz, 2006). One case study that detailed San Diego City School's instructional reform efforts focused on exceptional teaching practices which supported teacher and student learning and aligned with the districts' formally adopted teaching philosophy (Hightower, 2002). All these efforts seem consistent with reports about what principals feel they need. Johnston, Kaufman, and Thompson (2016) found that principals reported that professional development is important, especially when it is geared toward instructional leadership.

There is limited evidence that offering professional development increases principals' effectiveness. In one study, district-led professional development was shown to be associated with an increased frequency of instructional leadership practices such as classroom observations

and discussing ways to improve instructional methods with teachers (Augustine, 2009). The study did not, however, specify the actions that district administrators took that initiated those practices. Another study observed in-service training for principals in five different districts with established leadership development programs (Darling-Hammond et al., 2007). These districts' programs provided various supports for principals, including job-embedded professional development such as analyzing classroom practices, planning professional development opportunities for teachers, setting goals, and delivering feedback. Ultimately, the study found that, on average, principals that were engaged in these supports felt better prepared for major elements of their work that have been identified as improving teacher practice, focused more on improving and supporting their teachers, and self-reported to enjoy their work and expressed intent to stay in their role.

Another case study of one urban district found that central office administrators can, when done well, provide effective professional development—in this case, monthly meetings focused on instructional leadership development to assist principals in developing their instructional leadership skills (Honig & Rainey, 2014). However, principals also reported having predominantly low or mixed reviews about the value of those meetings for their practice. The researchers also acknowledged that there were several mediating factors that contributed to the findings, such as the role and position of the central office administrator, the current external demands on participants, and participants own orientations to the professional development. Additionally, one quantitative study's findings suggested that the specific modes of principals' professional development had important implications for principal performance (Grissom & Harrington, 2010). The researchers in this study found that principals who took university

coursework were less effective than those who had not taken coursework, according to their teachers' perceptions.

There are several recommendations that can be drawn from existing research about how to most effectively provide professional development opportunities to principals. It seems clear that professional development opportunities are best when job-embedded and sustained for consistent durations (Blase & Blase, 1999; Darling-Hammond et al., 2007; Davis et al., 2005; Fink & Resnick, 2001; Leithwood et al., 2004; Peterson, 2002; Stucher et al., 2017). This creates a greater likelihood that principals will view topics as being relevant to their actual practice and gives them multiple opportunities to adopt and integrate new skills. Studies of high-performing districts also suggest that professional development should be tailored to the principal's career stage (Augustine et al., 2009; Darling-Hammond et al., 2007), organized around a principal's objectives and goals for his or her school (Hubbard et al., 2006), and focused on the principal's specific needs (Grissom & Harrington, 2010; Marsh, 2005; Wallace Foundation, 2013). These findings suggest that principals, like teachers, do not respond well to, or benefit from, one-size-fits-all approaches to professional development.

There are several gaps in the existing research on professional development for principals. First, there is limited knowledge regarding the specific topics covered in professional development that principals find beneficial. While some research has begun to investigate what principals receive and desire from their professional development opportunities (e.g. Johnston et al., 2016; Salazar, 2007), the majority only recognize the presence of professional development opportunities for principals in effective districts. This lack of knowledge implies that districts should provide professional development opportunities to their principals as a matter of best

practice but does not provide an explanation as to what that professional development should entail or why it is important.

Relatedly, there is a lack of research as to whether professional development for principals increases their personal well-being and job-related motivation. The overwhelming majority of the studies on principal professional development set some element of improving principal practice as the desired outcome—growth in instructional leadership being the most prevalent. While important for what it can tell us about principals' roles in optimal school performance, this focus further perpetuates the harmful characterization within school and district effectiveness studies of the principal as "producer." It ignores the fact that principals are human beings, who require nurturance and support. Better understanding what principals need from professional development can assist school districts in providing valuable training that promotes their well-being and optimal performance.

Mentoring

Another common way that districts have attempted to support principals is through the use of mentoring or coaching. Mentoring opportunities differ from professional development in that they focus more on principals having one-on-one conversations and coaching opportunities with a more experienced and capable district leader, as opposed to receiving information within the context of a larger group. Examples of principal mentors found in the literature include other, more veteran principals (Darling-Hammond et al., 2003), instructional leadership directors (Honig, 2012), or superintendents (Duncan & Stock, 2010). The role of the specific mentor in each study appears to depend on the size and bureaucratic structure of the district. Regardless of the role of the mentor, the mentorship activities can include conversations regarding classroom

walk-throughs or giving one-on-one feedback and modeling of instructional leadership (Darling-Hammond et al., 2003; Honig, 2012; Knapp et al., 2010; Leithwood, 2011).

Some districts have attempted to create greater capacity to provide mentoring to principals through the creation of district office roles that were specifically aimed at developing one-on-one interactions with principals and allowed for coaching and mentoring (Knapp et al., 2010). Others have developed learning communities led by former principals who now coached and mentored principals to increase their instructional expertise and identify the school's teaching and learning needs (Darling-Hammond et al., 2003). Formal interactions with experts such as these have suggested some improvements in principals' instructional leadership skills (Leithwood, 2011; Marsh et al., 2005). This is accomplished by providing principals with vicarious experiences in which they can learn from more experienced colleagues with greater instructional leadership capacity (Eilers & Camacho, 2007). While these findings are encouraging, multiple case studies recommend being strategic and cautious about assigning principals to mentors, citing poor instructional leadership of district officials and role conflicts between principals and district leaders as potential shortfalls (Golding et al., 2018; Honig, 2012; Honig et al., 2010).

Mentoring opportunities for principals may also be available outside of their school district. One study on school leaders' on-the-job learning found that 98 percent of principals reported attending meetings of local principals, 88 percent maintained contact with local principals, and 80 percent attend monthly meetings outside their districts (Spillane et al., 2009). It has been suggested that these boundary-spanning social interactions facilitated in this type of networking may be a potential avenue for further mentoring opportunities.

Results about principals' perceptions on the value of mentoring opportunities have produced mixed results. One study on district improvement has reported that principals desire more time and supportive interactions with central office staff (Marsh et al., 2005). Two studies on rural school principals' mentoring needs produced conflicting results. The first described that rural principals expressed limited interest in mentoring (Salazar, 2007), while the latter stated that 96% of principals felt that mentoring was important (Duncan & Stock, 2010). Another study suggested that school leaders placed greater value on supervision and mentor support over traditional professional development when the mentoring focuses on developing their leadership (Johnston et al., 2016). However, Salazar (2007) concluded that the majority of principals were less interested in mentoring, favoring traditional professional development like attending seminars and conferences.

Similarly, principals appear to vary in the amount of mentoring they receive. Duncan and Stock found that only half of novice principals and 13% of veteran principals in rural schools report to have received any formal mentoring opportunities (Duncan & Stock, 2010). A study with a larger and more diverse sample size found that 78% of first year principals received mentoring and 41% of principals with three or more years of experience received mentoring (Johnston et al., 2016). However, only half of the principals surveyed said their district had a formal mentoring process in place. This is unfortunate because mentoring opportunities have been demonstrated to be somewhat effective in developing current and aspiring principals (Bottoms and Schmidt-Davis, 2010) and multiple studies have suggested that mentoring can be an effective and financially efficient means of supporting new principals (Lindley, 2003; Villani, 2006; Weingartner, 2009; Zachary, 2012). Likewise, a study of principals' effectiveness, according to their teachers, found that principals who regularly participated in mentoring and

coaching opportunities had the greatest performance, as compared to those who took university coursework or participated in principal networking (Grissom & Harrington, 2010).

There is much to learn about how districts can support principals through the use of mentoring. Not enough is understood about how principals respond to specific types of mentoring activities. Also, there is limited existing knowledge about the varying needs among principals and assistant principals in their mentoring needs. A greater understanding of these differences could greatly influence how districts provide mentoring opportunities to their principals. As it relates to this study, there is no known research about how mentoring affects principals' basic psychological needs satisfaction. Gaining a greater understanding of this relationship could be of value because a mentoring relationship could provide principals with higher levels of engagement and motivation.

Goal Clarity, Structure, and Instructional Coherence

Some research has been aimed at understanding how goal clarity and instructional coherence can be used as a lever to support the work of principals. When districts have worked to provide goal clarity, they have done so in order to allow principals to focus on the district goals given highest priority, thus providing clear expectations around desired outcomes. Recent work has suggested that the presence of too many initiatives and programs create barriers for principals as they try to improve their schools in strategic ways (Bennet et al., 2013). To avoid this, some districts have attempted to set performance targets that are intended to guide principals to focus on the most important work at their site (Augustine, 2009; Darling-Hammond et al., 2007). This aligns with other studies conducted on high performing districts which revealed that the central offices in those districts focused on offering clear expectation and defined structure for their principals (Bottoms & Schmidt-Davis, 2010; Knapp et al., 2010)

Indeed, one study of a district aiming to turnaround specific struggling schools proposed that specific and clear improvement goals that are focused on principals' instructional leadership skills were vital for success (Leithwood & Jantzi, 2008).

Similar to goal clarity, instructional coherence advocates for districts to provide a clear vision of the types of instructional practices and approaches that are to be utilized throughout the districts (Honig & Rainey, 2015). This has demonstrated promise in increasing principals' instructional leadership capacity when districts have provided clear guidance on the instructional philosophies and specific teaching methods the district wishes to deploy (Marsh, 2005; Supovitz, 2006). Such instructional frameworks appeared to give principals confidence in what they were looking for from teachers' instruction and gave them a common language to use to discuss such practices (Honig et al., 2010). Research on instructional coherence has also advocated for school districts to redesign their central offices in order to center on performance alignment that focus entirely on supporting the improvement of principals' instructional leadership and teachers' instruction practices (Honig & Rainey, 2015).

Instructional coherence and goal clarity can also be provided via district and school leadership teams. One study suggested that these teams working together built congruence throughout their organization by aligning the goals and mental models of teachers, principals, and district officials (Chrispeels et al., 2008). Such approaches may provide principals with clear expectations regarding how to go about improving their sites and opportunities to distribute leadership across staff members and teams, thus lightening the responsibilities put on principals. While these findings show promise, more work is needed to understand how goal clarity and instructional coherence can support principals, aside from improving their instructional leadership.

Autonomy over Decisions and Resources

Districts have also attempted to support and develop principals by granting them autonomy over decisions and resources. Providing principal autonomy involves districts giving principals the ability to "run their schools" as they see fit. Districts have been seen historically as being more oriented toward placing demands on sites, rather than offering autonomy. This is not surprising when you consider that district offices have been responsible for guaranteeing that schools have been compliant toward state and federal requirements. This has created a dynamic between the district and individual school sites that situates the district as being more burdensome than supportive (Ouchi, 2006), especially considering the increased accountability policies of recent history. As a result, research from the past decade has called for districts to reorient themselves around the possibility of viewing school autonomy as a potential lever for reform (Augustine et al., 2009; Honig, 2008, 2012), but just as many have pointed out that districts find it challenging to shift to a service-oriented approach that attempts to provide an appropriate balance of control and autonomy to schools (Daly & Finnigan, 2016; Honig, 2012, 2013; Johnson & Chrispeels, 2010).

When districts have attempted to provide sites more autonomy, they have done it through activities like giving principals the flexibility in the hiring of teachers and support staff, scheduling, teaching methods, and granting control over the site-budget and funds that are dedicated to site and instructional improvement (Knapp et al., 2010; Ouchi, 2006). In these districts, the aim has not been to align all schools to be exactly the same. Instead, districts have created a coherent vision for the district and then allowed principals to chart their own paths and solve their own problems for their schools (Bottoms & Schmidt-Davis, 2010). This approach has been termed "defined autonomy" or "controlled autonomy" and consists of providing building-

level autonomy while also providing clear expectations and structure for how sites are to relate to district goals (Knapp et al., 2010; Waters & Marzano, 2006; Weiner & Woulfin, 2017). One of these studies suggested that principals conceptualize district support and, depending on the type of support, place different expectations on the support or autonomy they need within a given domain (Weiner & Woulfin, 2017).

Research on autonomy initiatives being granted by districts to school sites have revealed some positive findings. One review of empirical studies conducted on autonomy initiatives found that schools that were truly granted autonomy by their central offices posted modest improvements, as measured by attendance and graduation rates (Honig & Rainey, 2012). However, the authors determined that these results may have also been related to simultaneous district initiatives to focus on improving teaching and learning practices and to build greater capacity for implementation at the schools. They also found that while most districts were willing to grant autonomy in word, the majority were unwilling to follow-through with the initiatives. This finding is consistent with another study that demonstrated that urban districts who have undergone long-term decentralization efforts have seen greater student achievement, as compared to similar districts around the country (Ouchi, 2006). However, the researchers stated that these districts had decentralized by word and deed, and stressed that districts should grant autonomy over budgeting, scheduling, staffing, and teaching methods.

While this literature supports the notion that greater school and principal autonomy may have the ability to improve student outcomes, there have been few studies which have examined the effects the efforts can have on principals' motivation and well-being. One nationwide survey of approximately 1500 principals provided evidence that principals are more likely to be emotionally attached to their districts and more satisfied with their jobs when they see their

superintendents as being more autonomy supportive (Chang et al., 2015). Other research has suggested that this type of autonomy support positively influences principals' instructional leadership practices (Ouchi, 2006) and may play a role in district reform initiatives aimed at greater school performance (Augustine et al., 2009; Steinberg, 2014; Supovitz, 2006).

The literature on district autonomy support suggests principals should be granted some degree of autonomy to run their schools as they see fit (Weiner & Woulfin, 2017). However, the school district should still engage in ongoing capacity-building to ensure that principals have the knowledge and skills requisite to effectively lead their sites. The existing research also suggests that districts should view principal autonomy support as an iterative process that requires constant two-way dialogue about the types and levels of autonomy that principals need (Honig, 2013). Analysis of these studies reveal a need for investigations into the specific types of district variables and district-level executive behaviors that principals perceive as being autonomy-supportive, both of which are addressed in the present study.

Networking and Collaborative Support Structures

Districts have also attempted to support the work of principals through the formation of networks and structures that create supportive environments. The names of these support networks and structures have varied in their titles and types of supports, including school leadership teams (Chrispeels et al., 2008), networks of instructional experts (Togneri & Anderson, 2003), learning communities (Hightower, 2002), principal networks or peer networking (Darling-Hammond et al., 2003, 2007), supportive relationships fostered from district leaders (Leithwood, 2011; Tschannen-Moran & Gareis, 2004), and collaborative structures and cultures where principal and district-wide collaboration is encouraged (Augustine, 2009; Leithwood & Jantzi, 2008; Panasonic Foundation, 2006). Regardless of the type or title,

these structures have been created to facilitate opportunities for principals to build collaborative and supportive relationships with other principals and district officials, to unite with other school leaders in the pursuit of district goals, and to nurture a district culture of continuous learning and improvement.

Several studies have suggested that these networks may be important to support principals, as well as other district leaders, because they provide an opportunity for individuals with the same role to discuss challenges, provide ideas and advice, and share successes with another leader who is not in an authority position over them (Knapp, 2010). These opportunities have shown some promise for improvement of principal performance. For example, one study's findings suggested that principals who were in principal networks had better job-related performance than those who took university coursework, as reported by teachers (Grissom & Harrington, 2010). However, there is a lack of knowledge about the types of networking opportunities principals' desire and the potential outcomes produced by networking opportunities.

Similarly, other studies have shown that districts may be able support principals through various support structures, which have been defined as operational support (Knapp, 2010). Operational support involves district leaders providing additional resources, guidance, and problem-solving attention to principals in order to reduce the burden of their job responsibilities. The literature has provided some suggestions about how this can be accomplished. One study proposed that districts could limit the amount of paperwork or the number of off-site meetings principals are required to attend (Marsh, 2002). Another study encouraged district office staff to develop regular assistance relationships with principals so they can respond to administrative, legal, political, and logistical issues in a timely manner, thus having more time to focus on their

numerous other responsibilities (Knapp, 2010). Still yet, there is much to learn about the types of support structures that principals' wish to receive from their district offices, how those desired supports differ by context, and how those supports can be used as tools to promote principals' growth and improvement.

Literature Gaps and Contributions

This study seeks to address two specific gaps in the literature on district support of principals. First, prior research on district support of principals has primarily focused on the steps that district-level executives have taken to try to grow and develop principals. The intended outcomes of the supports have ranged from growing principals' leadership capacities to developing their ability to improve teaching and learning practices within their schools. While this focus on principal development has added value to the understanding of common features of effective districts, it does so only from the perspective of the district personnel and ignores the perceptions of principals. While there are a few exceptions (see Johnston et al., 2016), current literature has largely focused on what district leaders believed would best help principals instead of consulting principals as to what supports would address what they saw as needs in helping them to carry out their work. To move district offices from their traditional paradigm of compliance to one of support for principals, research should first inquire into principals' work as they see it and consult them about how they can be better supported in it. The current study seeks to redress this gap by focusing on identifying those district factors and district-level executive actions that principals deem as being necessary for supporting their well-being and effective job performance.

Secondly, while prior research has generated lists of district factors and variables that correlate with strong principal leadership or greater school effectiveness, the majority have not

applied theory to their findings. This atheoretical approach is consistent with the larger school effectiveness, district effectiveness, and school leadership research literature (Trujillo, 2013). Devoid of theoretical application, insights into how districts can better support principals will always be limited by the degree to which such insights are accompanied by reasoned arguments for why such practices might better support principals' work, and subsequently, their well-being (Ford et al., 2020). This study aims to build off the aforementioned line of inquiry proposed by Ford, Lavigne, Feigener, and Si (2020) to use human motivation theory to provide a richer, more nuanced understanding of how and why certain district factors produce greater perceptions of support by principals. The work of these authors has provided a template for organizing empirical evidence about the types of support that districts offer to principals around the frameworks of theories of human motivation. This study seeks to apply Self-determination theory to an understanding about how to better establish the district-level conditions principals need to optimize their well-being and motivation.

Chapter 3: Theoretical Framework

Existing studies on district support of principals have largely been devoid of theory, resulting in a large gap in our ability to explain why certain district factors and actions produce greater support for principals (Trujillo, 2013). This study utilized Basic Psychological Needs Theory (BPNT), which has been applied to numerous disciplines and fields of study and has yielded substantial insight into what activates human beings' tendencies toward growth, integration, well-being, and greater motivation (Gagné, 2014). This chapter provides an overview of Self-determination theory and BPNT, while also describing how both have been applied within other educational studies. It also makes connections between the existing empirical evidence about district support of principals and the three components of Basic Psychological Needs Theory: competence, autonomy, and relatedness.

Originally developed by Richard Ryan and Edward Deci over forty years ago, SDT is a macro-theory of human motivation which holds a dialectical view which accounts for the active, integrating nature of human beings and the social contexts which either nurture, or impede, this drive (Deci & Ryan, 2002). Since its conception, SDT has been elaborated upon and refined by scholars around the world and across domains, including organizational psychology, sport, religion, healthcare, psychotherapy, personal goals, and work, among others (Gagné, 2014). It was chosen as the theoretical framework for this study because of its extensive utilization within educational research and its application to student performance and motivation, teacher motivation, teacher preparation, teacher professional development, school achievement, and principal motivation. Previous scholarly work has also identified SDT as having substantial alignment to the existing empirical findings about district support of principals and is robust

enough to provide an adequate framework for understanding why certain district factors increase principals' perceptions of support in a given context (Ford et al., 2020).

SDT seeks to explain human motivation and human flourishing (Deci & Ryan, 1985). It posits that all human beings have an innate desire to create a more integrated sense of self and greater integration of oneself with others (Deci & Ryan, 2002). This integration is not, however, automatic. SDT holds that there are social-contextual factors that influence the frustration, thwarting, or support of human beings' basic psychological needs of autonomy, competence, and relatedness (Ryan & Deci, 2000). These three needs constitute one of six SDT mini-theories, Basic Psychological Needs Theory (BPNT), which postulates that human growth, flourishing and motivation are dependent on an individual's experience of conditions and environments that support those needs (Ryan & Deci, 2009). In the same way that plants need water, sunlight, and soil for growth and development, autonomy, competence, and relatedness serve as critical nutriments that human beings require for flourishing and optimal development (Deci & Ryan, 2000).

Basic Psychological Needs Theory and District Support of Principals

Previous empirical research has not explicitly utilized BPNT as a theoretical framework to analyze district support of principals. However, as originally proposed by Ford, Lavigne, Feigener, and Si (2020), much of the existing empirical evidence about district support of principals aligns with the foundational premises of BPNT. This section interweaves the three basic psychological needs –autonomy, competence, and relatedness – with what is currently know about how districts have attempted to support principals and improve their performance.

Autonomy

BPNT describes autonomy as being the owner of one's own behavior and experiencing a sense of agency when carrying out an activity (Deci & Ryan, 2002). It represents an individual's desire to experience a sense of choice and freedom to guide one's own behavior. Autonomy support has shown to lead to a greater sense of well-being, intrinsic motivation, and job satisfaction (Deci & Ryan, 2000). In educational research, autonomy has been described as a psychological state in which students experience a sense of internal control over their academic outcomes and goals (Jang et al., 2010).

Autonomy support can be seen when districts give principals the freedom to make decisions over staffing, curriculum, budgeting, best instructional practices, and other organizational practices that relate to their site. Many district effectiveness studies have demonstrated that district support of principals' need for autonomy has led to numerous benefits (Augustine et al., 2009; Bottoms & Schmidt-Davis, 2010; Honig & Rainey, 2012; Knapp et al., 2010; Ouchi, 2006; Supovitz, 2006) and one study has demonstrated that principals who experience higher levels of autonomy support report having greater job satisfaction and organizational commitment (Chang at al., 2015).

Studies have revealed that principals desire to have autonomy over many different dimensions of their work. One qualitative study of seven urban school districts found that principals desired to have flexibility and freedom to use their site budget to improve instruction in ways that they saw fit, as opposed to having resources and funds allocated by the district (Knapp et al., 2010). This is consistent with other studies that have suggested that successful districts give school principals discretion and control in the areas of staff selection, scheduling, instructional programs, and the appropriation of new and existing resources (Bottoms &

Schmidt-Davis, 2010; Ouchi, 2006). One of the comparative case studies found that on average, the schools of principals who had been granted greater levels of autonomy had better levels of student performance and were more successful at closing the achievement gap among at-risk students than their colleagues serving in more centralized districts (Ouchi, 2006). While the study's design had many limitations, it may provide a glimpse into the potential positive outcomes for schools led by principals who receive greater levels of autonomy support.

Despite principals' desire to have control over certain dimensions of their work, there is also evidence that suggests that there may be other domains in which principals need district offices to exert greater levels of control. One study's findings suggest that the majority of principals would prefer to have some autonomy over how they run their school, but also believe their district should provide supports to ensure that principals know how to use that autonomy effectively (Weiner & Woulfin, 2017). Similarly, Steinberg and Cox (2017) found that granting principals with full autonomy did not guarantee they would have greater influence on important aspects of instructional leadership at their site. They too recommended that districts communicate clearly with principals about the types of support they would receive and how they would be expected to utilize their increased levels of autonomy.

These findings appear to agree with existing evidence in the district effectiveness literature which has suggested that districts have a role to play providing operational support (Augustine, 2009; Knapp, 2010; Marsh et al., 2005), acting as a buffering agent against external demands (Honig, 2012), and responding to resources requested by principals in a timely manner (Leithwood, 2011), while still observing appropriate boundaries toward principals' needs for autonomy. This all supports SDT's assertions that autonomy support is not granting the ability to have complete power or control over all dimensions of activity but is, instead, support that

allows individuals to take actions that they self-endorse and fully own (Ryan & Deci, 2017). An obvious component, then, of districts providing appropriate autonomy support to principals involves clear communication about what principals' autonomy looks like and delineating the specific roles of the principal and district.

Some authors have noted that historically, autonomy initiatives have been treated as a zero-sum game between districts and principals (Honig & Rainey, 2012). Others have agreed and have called for a more flexible approach of "controlled autonomy" in which district leaders and principals view various domains of activity as opportunities to collaborate with one another in order to solve the complex challenges they face on the path to improving their schools (Weiner & Woulfin, 2017). Creating such balanced conditions is an important undertaking, as autonomy support also appears to have an influence on principals' motivation and organizational commitment. A survey of approximately 1500 principals found that principals were more emotionally attached to their school district and reported having higher job satisfaction in districts who provided greater autonomy support (Chang et al., 2015).

Competence

Competence has been described within SDT as individuals feeling confident and efficacious in their interactions and in the expression of their capacities (Deci & Ryan, 2002). Having competence represents one's belief that they can achieve a desired task or state. Research has shown that support of competence can affect an individual's sense of well-being, effectiveness, satisfaction, and meaningfulness (Deci & Ryan, 2000; Deci & Vansteenkiste, 2004; Graves & Luciano, 2013; Lynch et al., 2005; Van den Broeck et al., 2010). Within some educational studies, competence has been described as students' belief that they can meet the rigors of their schoolwork and experience high levels of academic success (Niemiec & Ryan,

2009). Considering these studies, principal competence might be defined as a principal's belief that he or she can manage the responsibilities associated with the job and can experience positive levels of success for improving teacher practice and student achievement.

District support of principals' need for competence can be seen in existing district effectiveness literature when districts have provided principals with sustained professional development (Hightower, 2002; Johnston et al., 2016; Knapp et al., 2010; Marsh et al., 2005; Supovitz, 2006; Wallace Foundation, 2013). Offering the right professional development may increase the skills and knowledge that principals have around the essential tasks and responsibilities of their jobs and, consequently, increase their feelings of confidence and efficaciousness. One study of principals who received consistent job-embedded professional development felt better prepared for major aspects of their work like instructional leadership, focused more time on supporting teachers, and enjoyed their work more and expressed an intent to stay in their role, as compared to a national sample (Darling-Hammond et al., 2007). This is consistent with another study which demonstrated that principals who participated in an ongoing professional development program described feeling more efficacious in their role and were less likely to leave their role (Jacob et al., 2015). It is not surprising, then, that effective districts have shown to differentiate themselves from less-effective districts based on their ability to provide a variety of job-embedded professional development opportunities (Bottoms & Schmidt-Davis, 2010; Iatarola & Fruchte, 2004; Leithwood, 2011). Consistent with SDT, when districts offer effective professional development opportunities, they are equipping principals with the skills and knowledge requisite for their work, thus increasing their perceptions of competence.

Mentoring is another way districts may be able to increase principals' sense of competence. Effective school districts have used school walk-throughs, data analysis meetings,

and one-on-one discussion sessions with central office staff as methods of allowing more veteran and experienced district administrators to mentor principals in order to improve their practice and increase their competence (Darling-Hammond et al., 2003, 2007; Knapp et al., 2010; Leithwood, 2011). One study's findings suggested that principals who engaged in mentoring with district office personnel displayed better performance, as measured by student outcomes and teachers' perceptions (Grissom & Harrington, 2010). Honig (2012) and Honig et al. (2010) have demonstrated that instructional leadership directors can also build principals' competence in core competencies, such as instructional leadership, in addition to traditional district officials such as superintendents. While only half of principals in one study reported to be working in a district that has a formal mentoring process (Johnston et al., 2016), another study found that 96% of principals thought that new principals benefitted from mentoring and 79% felt experienced principals did as well (Duncan & Stock, 2010). This may not hold true across all contexts, as one study of 316 principals from seven states found that there was limited interest in mentoring from the district office as a vehicle for improving their performance (Salazar, 2007).

Principal competence may also be fostered through networking with other principals. Multiple district effectiveness studies have utilized principal networks as a vehicle for improving their practice (Darling-Hammond et al., 2003, 2007; Leithwood, 2011). Knapp et al. (2010) identified networking as one of five types of site leader support. They found that when districts established principal networks, they provided an opportunity for principals to interact with other individuals in similar roles about ideas, advice, and problem-solving. The authors suggest that networking may provide a more authentic mode of facilitating discussions about improvements in practice, as it less threatening to engage in conversations with peers rather than superiors. Spillane, Healey, and Parise (2009) suggest that principals are already networking with their

peers, as 88% of them reported having sustained contact with other principals. They see principal networking as potential untapped source for on-the-job learning. However, more needs to me known about formal principal networking as an opportunity for growth, as some studies have suggested that it may not appeal to principals in all contexts (Salazar, 2007) and it may actually be related to a decrease in principal performance (Grissom & Harrington, 2010).

Lastly, school districts may also be able to improve principals' competence by providing a clear district vision, goals, and expectations. Multiple district effectiveness studies have identified vision setting and instructional coherence as means of promoting principals' competence (Marsh et al., 2005; Supovitz, 2006). Doing so specifies what the district's goals are so that principals can prioritize where to place their energy and time (O'Day & Bitter, 2003). Bottoms and Schmidt-Davis (2010) propose that successful districts must develop such a vision and align district policies with that vision, in order for principals to be successful in their roles. Similarly, Honig and Rainey (2015) suggest that districts create "performance alignment" to make sure that all their work is the "right work" which will help support principals to improve student learning. They believe this includes adopting research-based definitions of what high-quality instruction looks like, so that principals may know what to develop within their teachers. By providing clarity and structure for principals, districts give them a clear understanding of what needs to be accomplished and what principals need to do in order to be successful.

Relatedness

The final psychological need of BPNT is relatedness. Relatedness is described in SDT as feeling connected to others, caring for and being cared for by others, and having a sense of belongingness to other individuals or to a given community (Deci & Ryan, 2002). In relation to

the workplace, relatedness has been operationalized as a sense that one is committed to the mission or purpose of the organization (Stone & Ryan, 2009). Relatedness has been manifested in educational research when students feel a sense of security and belongingness to their school and to the educators who work there (Adams et al., 2015; Ryan & Deci, 2000). Relatedness, as it pertains to principals, may be defined as a principal's sense that he or she has belongingness to the school district and is committed to its mission and goals.

Districts have demonstrated support for principals' needs for relatedness when they have developed strong relationships with principals (Knapp et al., 2010). This may be accomplished through mentoring opportunities or through the facilitation of networking among principals within the district (Honig & Rainey, 2014; Knapp et al., 2010). Facilitating these relationships have shown to create spaces where principals and district administrators can share challenges and discuss ideas for instructional improvement. One study (Tschannen-Moran & Gareis, 2004) identified this type of district-level support as a key predictor of principals' perceived self-efficacy. The authors found that this support was characterized, in large part, by interpersonal support from both the superintendent and district office. Likewise, Leithwood (2011) differentiated high performing districts based on principals' views that superintendents were their partners and collaborators who they could easily access and felt "very close" to. This type of collaborative work is similar to characteristics of distributed leadership (Mascall & Leithwood, 2010; Togneri & Anderson, 2003). These activities increase the likelihood that principals would feel connected to the district and cared for by their supervisors at the district level.

There may be other opportunities for districts to support principals' needs for relatedness through tasks associated with instructional improvement or operations. Working to improve

instruction, build coherence in the curriculum, and establishing a common district vision are all activities that have shown to unite individuals through the pursuit of common goals (Honig & Rainey, 2014; Portin et al., 2009; Togneri & Anderson, 2003). These activities provide formal opportunities for individuals with different roles to discuss ideas and solve problems and provide one another with social-emotional support, all-the-while increasing their feelings of connectedness with one another (Knapp et al., 2010).

Multiple studies have identified the provision of operational needs by the district as a correlate of school district effectiveness and some evidence suggests that this may be associated with increasing principals' need for relatedness. Knapp et al. (2010) suggested that meeting operational, financial, or instructional needs developed deeper, trusting relationships across the district. Another study identified "resource support" as a key component of district-level support which was cited as a significant predictor of principals' perceived self-efficacy (Tschannen-Moran & Gareis, 2004). Likewise, Leithwood (2011) found that high performing districts had central offices that quickly provided resources when requested by the principals. This likely suggests that districts who are quick to serve their principals in these ways demonstrate collegial support to principals, thus increasing their feelings of trust and relatedness toward the district. In the same way, attempts to decentralize authority and give principals greater control over staffing, budgeting, and scheduling would demonstrate trust in principals' capacities. These actions have been shown to increase principals' emotional and relational attachment to their districts (Chang et al., 2015).

While the existing literature clearly presents the possibility for alignment between certain district actions and the support of principals' basic psychological needs, what is needed is empirical evidence that can begin to define the relationship between the two. One of the purposes

of this study is to begin to establish that foundational evidence by applying SDT, and more specifically BPNT, to the supports that school districts have offered to their principals in the hope that it may provide a better understanding of which supports enhance principals' basic psychological needs.

Chapter Four: Method

In this chapter, I describe the method used to answer my three research questions:

RQ1: What is the current landscape of district supports being provided to Oklahoma school principals?

RQ2: What current principal-reported district-level supports are associated with support of principals' basic psychological needs?

RQ3: What supports do Oklahoma principals report to value and want from their district offices to assist them in their work?

I begin by describing my research design and justifying its appropriateness to answer my research questions. Next, I provide a succinct description of my study's variables—district supports and principals' basic psychological needs—as they have been developed in previous chapters and how they have been operationalized. Afterward, I outline my procedures for data collection, describe and analyze my participants and discuss their characteristics and representativeness of the principal population in Oklahoma. I close the chapter by describing my data analysis techniques and the limitations and delimitations of the study.

Research Design

The primary purpose of this study was to better understand the supports that school district offices provide to their principals and which of those supports corresponded with higher levels of principals' basic psychological needs. As stated before, there is a paucity of knowledge about the types of supports principals receive and how those supports influence their well-being and job motivation. Because these questions correspond to an exploratory study of the current existence of a phenomenon, in this case supportive practices of school districts, an overall descriptive/correlational research design was chosen for this study. Descriptive design has been

recognized as an appropriate approach for answering such questions (Creswell & Creswell, 2018), as is correlational research, which extends description by examining the associations between described phenomena. Because there are an estimated 1900 principals and assistant principals across the state of Oklahoma, a quantitative survey research method was chosen. Survey research has been recognized as an especially useful approach when a researcher aims to describe features or perceptions of a very large group (Abbott & McKinney, 2013).

Procedures

These research questions were answered through a quantitative survey, with some open-ended response opportunities. Data was collected electronically, distributed and collected during the months of October through December of 2020. These months were chosen for survey distribution with the consideration that principals and assistant principals would be less inundated with school-related tasks after the beginning of the school year. The survey was distributed at a time when Oklahoma, like most of the United States, was responding to rising numbers of COVID-19 cases and most school districts within the state were engaged in contact tracing or pivoting from in-person to distance learning. Accordingly, the window for response submissions was left open for nine weeks in order to provide enough time for principals to respond.

A link to an electronic Qualtrics® survey (a draft of which can be found in Appendix A), was emailed to principals and assistant principals across the state of Oklahoma. In order to gain a highly representative sample, a sample frame was generated from the email addresses of all school principals and assistant principals in Oklahoma were acquired from the administrator directories found on the Oklahoma State Department of Education website. The most recent directory was from the previous school year, 2019-2020. Initially, the directory provided 2,597

email addresses for individuals listed as assistant principals or principals. Analysis of those addresses found that there were 301 duplicates that were deleted from the distribution list. Survey distribution revealed that 229 of those email addresses were bounced back because they were no longer valid. Another 15 recipients replied to say they still worked in the same district, but now help different positions other than principal or assistant principal. This, coupled with those principals and assistant principals who retired or sought employment in other districts or career fields, yielded a final estimate of approximately 2000 survey recipients. This number is in conflict with the estimates released in recent years by the Oklahoma State Department of Education, which stated there were 1900 principals in Oklahoma (Palmer, 2019). Similarly, the National Center for Educational Statistics (2014) most recent report stated that there were 1,789 public schools in Oklahoma.

Recipients were sent a form email which provided an overview of the research project, an explanation of its potential value, and a link that, when clicked, redirected the recipient to the Qualtrics® survey. The survey began with recipients being required to give consent to participate in the study. It also stated that responses were anonymous and that there were no unique identifiers within the survey. Follow-up emails were sent every two weeks as a reminder to participate. In order to reach as many respondents as possible, the survey was also distributed by email through principal networks associated with the Oklahoma State School Boards Association and the Cooperative Council for Oklahoma School Administration. There was no incentive provided for participation.

Study Sample

After the data collection window was over, response collection was stopped in Qualtrics and data was transferred to Statistical Package for the Social Sciences (SPSS). Of the total

number of principals and assistant principals solicited to participate in the survey, 212 submitted responses. Of those 212 principals and assistant principals, 187 of them fully completed the survey. Table 2 displays the demographic characteristics of the participants including in the final sample.

Table 2

Demographic characteristics of survey participants.

Characteristic	Sample (n=187)	Population (N=1800)
Title		
Principal	61%	64.6%
Assistant Principal	39%	35.4%
Urbanicity		
Rural	21.4%	72.6%
Suburban	40.1%	12.1%
Urban	38.5%	15.3%
Grade Level		
Elementary (K-6)	44.9%	54.8%
Secondary (7-12)	55.1%	45.2%
Years of Experience		
1-5	34.2%	-
6-10	28.3%	-
11-20	28.3%	-
21-30	9.2%	-

Measures

District Supports

Broadly speaking, the independent variable in this research study is district supports. For this study, district supports were defined as the activities or services provided by a school district office to principals in order to support or improve their job performance. Because there are no existing formal measures to operationalize the independent variable of "district supports," commonly mentioned district mechanisms and district-level administrator actions were taken from the existing literature. The literature review of the present study included a review of 62

empirical research studies related to district or school leadership effectiveness. From that review, consistent factors or mechanisms that had been utilized by districts to support and develop principals were grouped by major themes. This process yielded six major themes: (1) mentoring, (2) professional development, (3) supervisor feedback, (4) goal clarity and instructional coherence, (5) autonomy over decisions and resources, and (6) networking and support networks. Fourteen survey questions were developed from these six themes, with approximately 2 items associated with each theme. Those survey questions were developed as Likert items with responses varying on a 1-6 scale, ranging from never (1) to frequently (6) and focused on the specific types of support in each theme/category, the frequency of which the support occurred, and the perceived quality of the support. These district factor measures correspond with survey items 7-20 on the questionnaire. For the regression analysis (described in more detail below), the first two items for each type of support, types of support and frequency, were combined to create a value of support "intensity," which was defined as the product of the number of different types of support under each category provided and the frequency with which they were provided.

Support for Principals' Basic Psychological Needs

Because there were no known existing measures for district support of principals, items from the Principal Supports for Teacher Psychological Needs (PSTPN) survey using in Olsen (2017) were adapted in order to measure the dependent variable, principal's psychological needs. The original PSTPN measure was developed in order to understand the degree to which teachers experience the actions of their principal as being need supporting (Olsen, 2017). Since then, it has been applied to understanding how leader support of teacher psychological needs can affect teacher burnout, organizational commitment, and intent to leave the school and profession (Ford et al., 2019). This survey was selected because of its established, psychometrically-validated

properties. For this study, instead of measuring principal support of teachers' basic psychological needs, the items were adapted to measure principals' perceptions of district support for their basic psychological needs. Each survey question was developed as a Likert item with responses varying on a 1-6 scale, ranging from strongly disagree (1) to strongly agree (6). The nine survey items measuring principals' psychological needs can be found in Appendix A along with the full survey. Each psychological need corresponds with three of the nine survey items. Principals' competence support corresponds with survey items 21-23, autonomy support corresponds to items 24-26, and relatedness corresponds with items 27-29. These nine items will subsequently be referred to as District Support of Principals' Psychological Needs (DSPPN). For the purpose of this study, "principals" will be used to refer to both principals and assistant principals.

Desired Supports

Two open-ended questions were also included on the survey to allow respondents to describe any supports that have been provided to them by their district office and have not been captured within the survey or supports they wish were provided to them by their district (items 30-31).

Control Variables

The survey also includes items intended to capture the respondents' role within the school, years of experience, urbanicity, and elementary or secondary assignment. While no existing research supports the selection of these four categories as controls for the regression analysis, they were chosen because of the researcher's practice in the field and were affirmed by other practitioners in subsequent cognitive interviews. They were items 2-6 on the questionnaire.

Because the items measuring factors and actions for district supports had never been used or validated, they underwent a cognitive interview process (pilot study). The cognitive interview

is a method used in the social sciences to empirically understand how individuals process and respond to survey questionnaires (Lavrakas, 2008). Cognitive interviewing is used within applied social research in order to pretest specific questions and decide how they should be altered, so they can be more understandable and thus more likely to capture the desired information from respondents. For this study, initial cognitive interviews were conducted with five principals within a particular suburban school district. These principals were chosen with respect to variables such as years of experience, grade-level, and job title. Afterward, modifications to the questionnaire were made before being submitted for further cognitive interviews to five other administrators in three other districts with contrasting district characteristics (urban and rural). Further modifications were made based on principal feedback before being used on the final survey that was distributed to the intended recipients.

Because DSPPN is a new measure derived from an existing one, it was subject to a series of procedures and tests to assess its validity and reliability. A review of DSPPN was included in the cognitive interview process already described in order to assess it content validity. Interviewees affirmed that the items adequately represented the intended variable. A factor analysis was also conducted on DSPPN to determine the construct validity and criterion-related reliability. Factor analysis of the DSPPN measure yielded all factor loadings above .80. Lastly, Cronbach's alpha reliability for the measure was .957.

Analytic Procedures

An overview of the analytic approach used to answer the three study research questions is summarized in Table 3 below. Overall, the survey data was transferred from Qualtrics® to SPSS, version 26 for analysis. For all analyses discussed below, these data were first cleaned and then all study variables were examined for normality, missingness, and outliers.

RQ1: *What is the current landscape of district supports being provided to Oklahoma school principals?*

To answer the first research question, descriptive statistics were run on the survey data relating to the supports that respondents reported currently receiving. Descriptive statistics are appropriate to answer a research question when the aim is to summarize the findings from a particular sample, in this case, school principals in Oklahoma (Warner, 2012). Using SPSS, this descriptive analysis included measures of frequency, central tendency, dispersion, and position for each of the district support measures. These summary statistics provided an understanding of the supports Oklahoma principals currently receive from their respective district offices.

Additionally, visualizations were generated to exemplify the variation in needs that principals reported to receive from their district offices, based on whether they were a principal or assistant principal, their years of administrative experience, whether they worked at an elementary or secondary-level school, and their school district's urbanicity.

RQ2: *What current principal-reported district-level supports are associated with support of principals' basic psychological needs?*

An OLS multiple linear regression was run to answer the second research question. A multiple linear regression has been identified as an appropriate statistical test when the aim is to determine the effect of two or more independent variables on an independent variable (Warner, 2012). I began by preparing the data for the linear regression. For each category of support, a new variable was calculated labeled "support intensity" that would quantify the value of that type of support principals had received. As mentioned above, this variable was calculated by types of support and frequency, were combined to create a value of support "intensity," which was defined as the product of the number of different types of support under each support category

and the frequency with which it was provided. Lastly, Dummy variables for each of the control variables were created. In these cases, the holdout groups were: assistant principals, secondary principals, and rural principals.

Table 3

Overview of the research design

	Research Question	**Analytical Approach**	**Data Sources**
Research Question 1	What is the current landscape of district supports being provided to Oklahoma school principals?	Quantitative: Descriptive Statistics	Principal survey responses
Research Question 2	What current principal-reported district-level supports are associated with support of principals' basic psychological needs?	Quantitative: Multiple Linear Regression	Principal survey responses
Research Question 3	What supports do Oklahoma principals report to value and want from their district offices to assist them in their work?	Qualitative: Thematic, open-ended coding	Principal survey responses

For the dependent variable, after factor analysis confirmed the construct validity of the measure, the nine items of DSPPN were added together into a composite measure for analysis. The same process was followed to create separate dependent variables for the DSPPN competence, autonomy, and relatedness subscales so that the relationships between the predictor variables and these subscales could be analyzed as well.

Next, I conducted a preliminary data screening in SPSS in which I checked the assumptions of a multiple regression. Histograms revealed a non-normal distribution of the dependent variable, DSPPN. To address the positive skewness of the data, the dependent variable data was squared. While normal distribution of the dependent variable would be preferred, transformations such as this have been deemed acceptable for linear regression, so long as the sample size exceeds 50 (Stevens, 2002). Scatterplots revealed that there was a linear relationship between each of the independent variables and the dependent variable, and the correlations table showed R-values ranging from .227 to .438. The relationships between independent variables were weak, with the highest being an R-value of .309. The collinearity statistics revealed tolerance levels were greater than .10 for all variables and the variance inflation factor values were all less than 2.0. Inspection of the normal probability plot found a relatively normal distribution of residuals for the dependent variable. The scatterplot revealed one extreme outlier case outside the critical values of 3 and -3.

Missing data was infrequent, and was therefore handled using listwise deletion. The variable with the highest frequency of missingness was Networking Intensity, mostly due to how it was calculated: many survey respondents reported to have not received any encouragement to network or collaborate with colleagues, thus their reported intensity was zero. To address loss of power in the models, the variable Network Intensity was removed from the analyses with DSPPN, DSPPN competence, and DSPPN autonomy as the dependent variables. Network intensity was included in the final regression because it demonstrated a statistically significant relationship with the dependent variable, DSPPN relatedness.

RQ3: *What supports do Oklahoma principals report to value and want from their district offices to assist them in their work?*

To answer the third research question, descriptive statistics were run on the survey items related to the supports principals desire to receive from their school districts. The same analytical approach used for the first research question was replicated for the third research question. Additionally, the open-ended survey item that asked, "What other supports from your district office do you feel would be beneficial to your work and why?" were manually coded into five categories. Descriptive statistics were then run on the new quantified responses.

Limitations of Study Design

This study has limitations in its design. First, as a correlational study, in no way does this study intend to make causal claims about the relationship between the variables being studied. Likewise, it is a cross-sectional study and, consequently, the findings may be influenced to some degree by when they were captured. Second, this was a study of principals in a single state, Oklahoma. It is possible that the findings of this study are subject to the specific social, cultural, or economic forces present within Oklahoma. The findings reported here are thus not generalizable beyond this context.

Third, there were limitations related to the study sample. While sizeable, the survey response rate was limited, with 187 of the approximately 1800-1900 eligible recipients who were solicited completing the survey. It was difficult to accurately determine the response rate, as the original distribution list from the Oklahoma State Department of Education that was used was from the previous school year. Nonetheless, a response rate of approximately 10% can be of concerns in quantitative research, as it can introduce selection bias and reduce statistical power, making it difficult to identify significant relationships within the data (Warner, 2012). In spite of

this limitation, other related studies have experienced similar response rates. A 2012 study found that the average response rate of web-based surveys of principals in the state of Michigan ranged between 15 and 45 percent (Jacob & Jacob, 2012).

Further, this study employed volunteer sampling, in which participants self-selected to respond to the survey after it was sent to them via email. A common weakness of volunteer sampling is that the researcher has no control over the sample composition, and it is likely that the survey respondents are more opinionated about the topic of study than others that elected not to respond. This may result in under-coverage of the sample, which, in this study, may result in only obtaining data from principals who have received very strong or very weak support from their district supervisors. Similarly, concerns about a lack of anonymity may result in social desirability bias in which respondents over report or under report the support provided to them by their district administrators. In this study, 78.6% of survey respondents reported to be principals in urban or suburban districts, while the most recent statistics reported that only 27.4% of the schools in Oklahoma were labeled as urban or suburban (NCES, 2014). Conversely, rural principals only made up 21.4% of the survey respondents, while 72.6% of Oklahoma schools were labeled as rural. While urban and suburban schools are more likely to have more than one principal at their sites, this contrast suggests that the survey responses might favor urban and suburban perspectives.

Fourth, this research is subject to several limitations related to the validity and reliability of the survey. As previously mentioned, the items comprising district supports were developed by the author by extracting common type of district support for principals present within the existing literature. While steps were taken to address the validity and reliability of the focal

measures and the survey items more generally, the measure DSPPN was modified from an existing measure and has never been used in a previous study.

Chapter Five: Results

This study explored the types of supports that Oklahoma school principals and assistant principals report that districts provided to them and examined how those supports corresponded with principals' basic psychological need support. The study was guided by the following research questions:

1. What is the current landscape of district supports being provided to Oklahoma school principals?
2. What current principal-reported district-level supports are associated with support of principals' basic psychological needs?
3. What supports do Oklahoma principals report to value and want from their district offices to assist them in their work?

This chapter presents the results of the data analysis and is organized by research question.

RQ 1: *What is the current landscape of district supports being provided to Oklahoma school principals?*

Table 4 presents principals' responses to the types of support they receive from their district offices. The table is arranged with the rows displaying the five broad types of support shown to be provided by districts, as presented in the literature review. The various subtypes of each support are presented below. The columns display the responses of the total sample of principals, followed by a breakdown of the responses based on the various demographic features of the respondents. Each data point represents the percentage of principals who reported to receive that particular support.

Table 4

The percentage of principals, organized by subcategory, who have received the type of support from their district office.

Types	Total	Princ.	Asst. Princ.	Rural	Suburban	Urban	Elem.	Sec.
Mentoring								
Class Walkthroughs	44.4	39.5	52.1	33.3	38.7	75	44	44.7
Formal Meetings	80.2	82.5	76.7	68.1	84	95	77.4	82.5
Using Data	66.3	67.5	64.4	50	70.7	87.5	63.1	68.9
Delivering Feedback	59.4	62.3	54.8	51.4	61.3	70	60.7	58.3
Professional Development								
University Coursework	11.2	12.3	9.6	5.6	18.7	7.5	13.1	9.7
Third-Party Conferences	85.6	88.6	80.8	81.9	90.7	82.5	89.3	82.5
District Trainings	78.6	74.6	84.9	59.7	86.7	97.5	73.8	82.5
Goal Setting								
Expectations	67.9	64.9	72.6	62.5	73.3	67.5	66.7	68.9
Performance Targets	47.6	44.7	52.1	43.1	49.3	52.5	48.8	46.6
Assessments	57.2	57.9	56.2	50	60	65	57.1	57.3
Context of District Goals	70.6	71.9	68.5	61.1	74.7	80	70.2	70.9
Instructional Philosophy	57.8	57	58.9	44.4	65.3	67.5	59.5	56.3
Autonomy								
Hiring	71.7	79.8	58.9	63.9	78.7	72.5	73.8	69.6
Course Offerings	37.4	44.7	26	41.7	38.7	27.5	34.5	39.8
Teacher Scheduling	73.8	81.6	61.6	76.3	72	72.5	72.6	74.8
Funds for Improvement	39	48.2	24.7	22.2	42.7	62.5	47.6	32
Technology	38	41.2	32.9	51.4	26.7	35	46.4	31.1
Instructional Methods	69.5	76.3	58.9	76.4	60	75	66.7	71.8
Networking and Collaboration								
District Networking	72.2	75.4	67.1	63.9	82.7	67.5	75	69.9
Out-of-District Networking	47.1	54.4	35.6	55.6	52	22.5	45.2	48.5
District-Wide Collaboration	70.1	72.8	65.8	66.7	73.3	70	65.5	73.8

As is evidenced in Table 4, overall principal responses indicate that the most common support provided by districts to principals and assistant principals was professional development that is facilitated by a third-party source, with 85.6% of all principals reporting to have received the support. The second most common support, with 80.2% of all principals reporting having

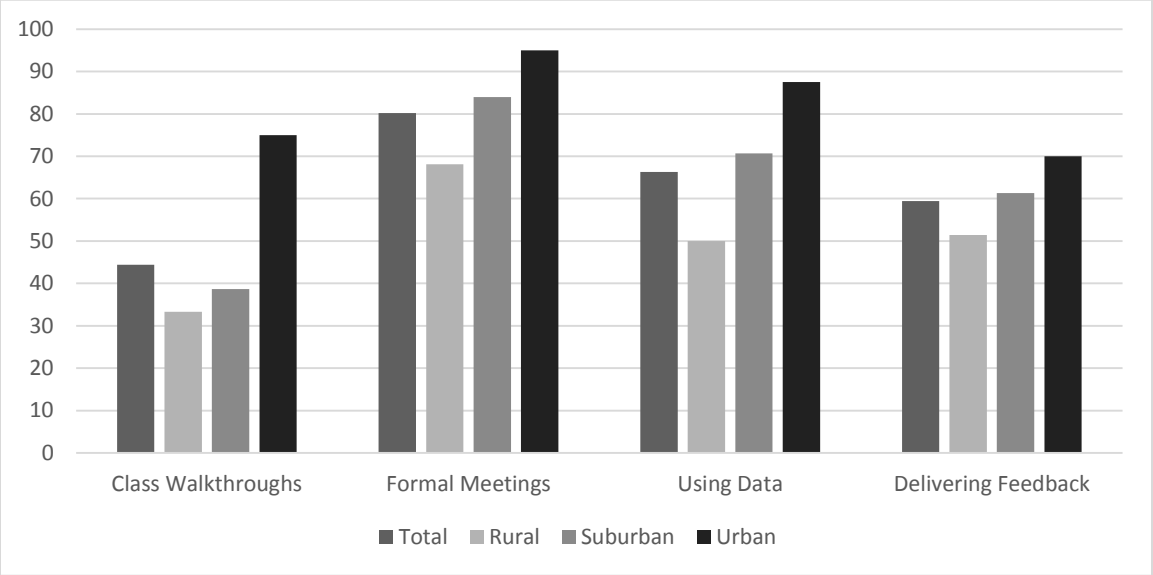
received it, was having formal meetings with a mentor. The third most common support was district-provided professional development, with 78.6% of all respondents having received it. Over seventy percent of all principal respondents also report to have received autonomy over teacher scheduling (78.6%), encouragement to participate in networking within their district (72.2%), autonomy over hiring decisions (71.7%), an explanation of how their work fits within the context of district goals (70.6%), and encouragement to participate in district-wide collaboration (70.1%) from their district administration. The least common supports provided to principals were access to university coursework (11.2%), granting autonomy over the course offerings provided at a site (37.4%), and granting autonomy over the technology that was provided and utilized at a site (38%).

While there is value in viewing the types of support being provided to all principals and assistant principals, there is also much to be learned about the variation in the types of support being provided to principals, based on their context. In order to more clearly examine and compare the different types of support being provided to all principals, as well as analyzing them based on their job title (principal or assistant principal), school urbanicity (rural, suburban, or urban), and school level (elementary or secondary), the following figures are provided. Figures 1-5 present the percentages of principals who have received the particular type of support from their district office. Each figure represents one of the five broad types of support. The subtypes of that support are listed along the x-axis of each graph and each bar represents one of the demographic subtypes of the principal respondents (i.e., title, school urbanicity, and school level). The y-axis represents the percentage of principals who reported to receive that particular support.

Figure 1 shows the percentage of all principals who have received mentoring support and the percentage according to the principals' various school urbanicity. As a whole, the most common type of mentoring support provided by districts was formal meetings with a mentor where job-related responsibilities are discussed (80.2%), followed by mentoring on how to use data (66.3%) and delivering feedback (59.4%).

Figure 1

The percentage of principals who have received mentoring support organized by school urbanicity.



There is variation in the types of mentoring support being provided to principals, based on their district's urbanicity. Urban principals reportedly received more mentoring opportunities than their rural or suburban counterparts. Urban principals received twice as much mentoring on how to conduct classroom walkthroughs (75% compared to 38.7% of suburban and 33.3% of rural principals). Ninety-five percent of urban principals reported to meet formally with their mentors to discuss matters of practice, as compared to 84% of suburban and 68.1% of rural principals. More urban principals also reported to receive mentoring on how to use data to make

decisions (87.5%) and how to deliver effective feedback (70%) than do rural or suburban principals. Suburban principals received the second highest percentage of mentoring support, with how to conduct classroom walkthroughs being the only support where less than half of principals received mentoring (38.7%).

Figure 2

The percentage of principals who have received professional development opportunities from their district office organized by school urbanicity.

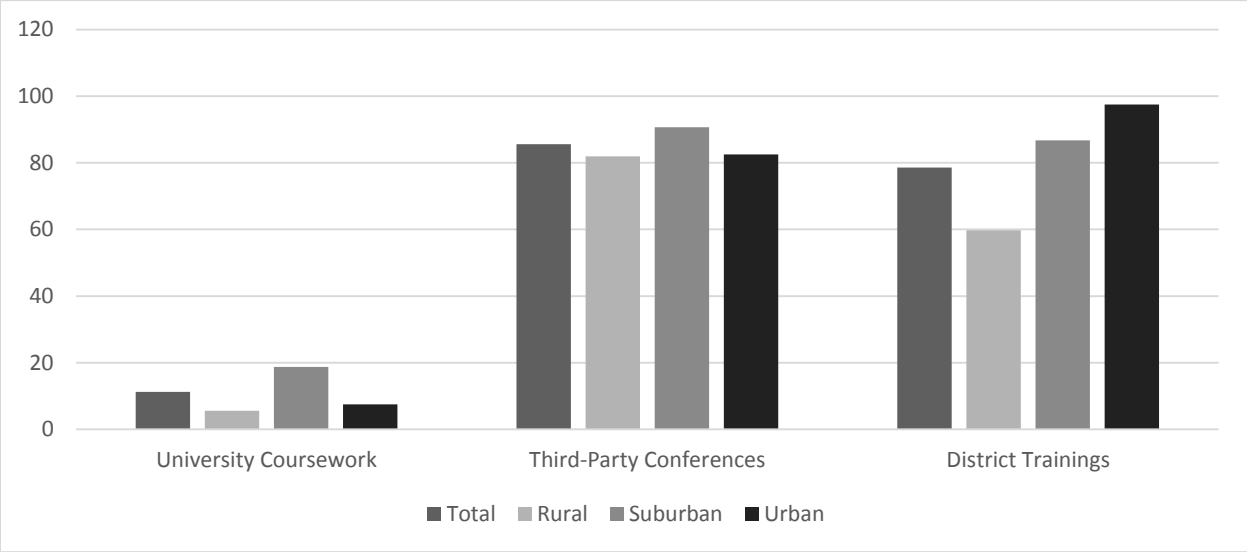


Figure 2 shows the percentages of principals who have received professional development opportunities from their districts. When looking at the entire principal sample, the most common professional development opportunity provided to principals is attending third-party training or conferences (85.6%), followed by district-provided training (78.6%). Only 11.2% of principals reported their district had provided them with the opportunity to complete university coursework. The greatest variation in professional development offered to principals was variable, according to a school's urbanicity. In regards to taking university coursework, 18.7 % of suburban principals were provided the opportunity, as compared to only 7.5% of urban

principals and 5.6% of rural principals. The other clear disparity in professional development opportunities provided to principals is seen in the opportunity for training provided by their district. Almost 98% of principals in urban districts had received some form of professional development from their district office, as compared to only 59.7% of rural principals.

Figure 3

The percentage of principals who have been engaged by their district offices in forms of goal setting, as organized by school urbanicity.

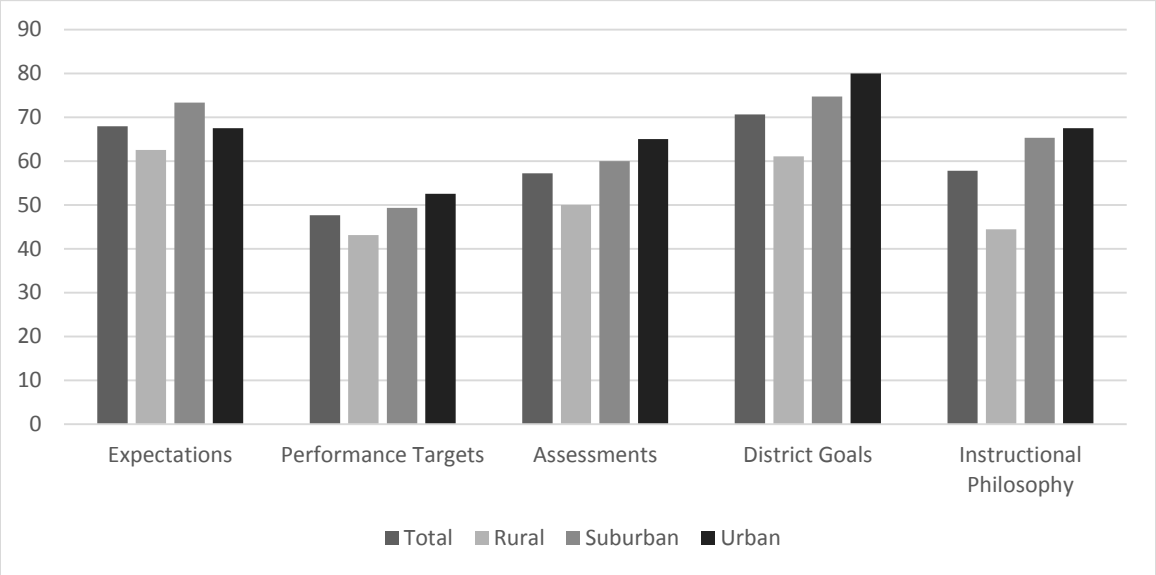


Figure 3 represents the percentage of principals who have been engaged by their district offices in various forms of goal setting, the most common being aligning principal's job tasks with district goals (70.6%) and setting clear expectations about the work that the principal is expected to do (67.9%). Again, urban districts appear to capitalize on goal setting opportunities the most, followed by suburban, and then rural districts. The greatest variation can be seen in the percentage of principals who feel they have a clear understanding of the district's instructional philosophy and the teaching methods that should be encouraged. Almost 68% of urban principals

and 65.3% of suburban principals reported having been engaged by their district office in their instructional philosophy, as compared to only 44.4% of rural principals.

Figure 4 demonstrates the different types of autonomy support provided to principals, as organized by their job title. As a whole, far more principals were granted autonomy around how teachers are scheduled to teach (73.8%), the hiring practices at their schools (71.7%), and the instructional methods employed at their sites (69.5%) than they were around how funds are used to improve instruction (39%), what types of technology are utilized at their sites (38%), and which courses are offered to students (37.4%). When analyzing subgroups, the most interesting comparisons in autonomy support existed between principals and assistant principals. While not surprising, more principals reported to receive autonomy from their district offices in all six subcategories than did assistant principals.

Figure 4

The percentage of principals who feel their district offices grant them autonomy in aspects of their job, organized by job title.

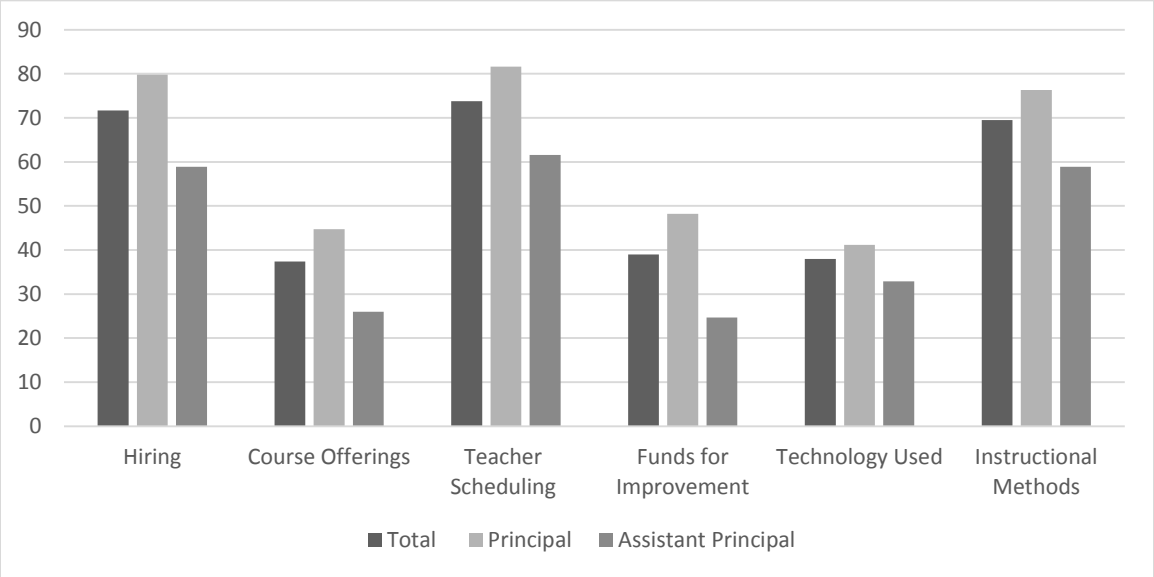
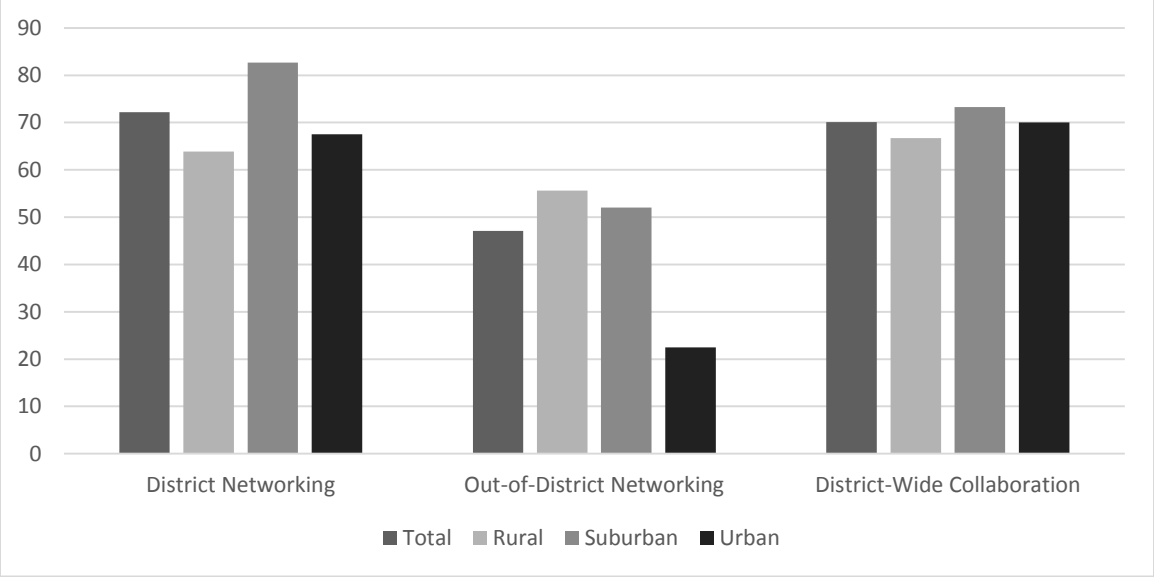


Figure 5 shows the percentage of principals who felt that their district offices encouraged them to network and collaborate with other administrators in, and outside of, their districts. Analyzed as a whole, it appears that districts are more likely to encourage principals to engage in networking and collaboration with individuals within their district, as opposed to with those in other districts. Seventy-two percent of principals reported that their districts encouraged them to cultivate relationships and professional learning networks with other administrators in their districts and 70.1% said that their district encourages a district-wide culture of collaboration and support among their colleagues. Conversely, only 47.1% of principals felt that their district

Figure 5

The percentage of principals who feel their district offices encourage them to network and collaborate with other administrators.



offices encouraged them to cultivate relationships and professional learning networks with external colleagues. This contrast is most clearly seen among urban districts and principals. While approximately the same percentage of urban principals reported to receive encouragement to network and collaborate with colleagues within their district, less than a quarter (22.5%) felt

they received the same encouragement with administrators from other districts. Twice as many rural and suburban principals felt encouraged to network outside of their district (55.6% of rural and 52% of suburban principals).

Table 5

The percentage of principals who have received support, organized by subcategory and frequency.

Types	Total	Princ.	Asst. Princ.	Rural	Suburban	Urban	Elem.	Sec.
Mentoring								
Never	15	14.9	15.1	22.2	13.3	5	15.5	14.6
One time	10.7	7.9	15.1	5.6	10.7	20	9.5	11.7
Once per year	12.3	10.5	15.1	13.9	14.7	5	10.7	13.6
2-3 times per year	22.5	21.9	23.3	26.4	25.3	10	19	25.2
Monthly	27.3	27.2	27.4	19.4	26.7	42.5	28.6	26.2
Weekly or more often	12.3	17.5	4.1	12.5	9.3	17.5	16.7	8.7
Professional Development								
Never	10.2	10.5	9.6	20.8	5.3	0	9.5	10.7
One time	8.6	10.5	5.5	12.2	8	2.5	10.7	6.8
Once Per Year	28.9	27.2	31.5	27.8	34.7	20	26.2	31.1
2-3 times per year	32.6	31.6	34.2	29.2	37.3	30	33.3	32
Monthly	16.6	16.7	16.4	6.9	13.3	40	16.7	16.5
Weekly or more often	3.2	3.5	2.7	2.8	1.3	7.5	3.6	2.9
Supervisor Feedback								
Never	4.3	4.5	4.1	4.2	5.4	2.5	8.4	1
One time	4.3	3.6	5.5	8.5	2.7	0	3.6	4.9
Once per year	29.2	28.6	30.1	32.4	24.3	32.5	28.9	29.4
2-3 times per year	40.5	46.4	31.5	33.8	47.3	40	38.6	42.2
Monthly	11.4	9.8	13.7	11.3	10.8	12.5	12	10.8
Weekly or more often	10.3	7.1	15.1	9.9	9.5	12.5	8.4	11.8

Another important component of support, in addition to the types of support offered by school districts to their principals, is the frequency at which those supports are offered. How often these supports are being offered to principals is another aspect that should be known in order to better grasp the current landscape of supports being offered by district offices. Table 4

and Figures 6 through 9 depict principals' perceptions of how often supports were being provided to them by their district offices. Table 5 is arranged with the broad types of mentoring listed in bold in the far-left column, with the six different degrees of frequency listed below each of them. Mentoring, professional development, and supervisor feedback were the only types of support that were analyzed by frequency because they are the ones whose effectiveness is more closely associated with how often they are provided. The headings in the top row display the responses of the total principal respondents followed by the subcategories of job title, urbanicity, and school level, just as they were in Table 4.

Figures 6-8 depict how frequently principals reported to receive mentoring, professional development, and supervisor feedback support from their district office. Respondents were asked "How frequently has your district provided you with mentoring or coaching?", "How frequently has your district provided professional development activities specifically for principals, distinct from those provided to teachers?", and "How frequently have you spent time with your supervisor in which you discuss your performance?" Respondents were able to respond on a six-item Likert scale that ranged from "Never" to "Weekly or more often." To more easily compare results, responses were simplified into three categories: "Never," "Infrequently (once per year or less often)," or "Frequently (2-3 times per year or more often)." These categories were chosen to be consistent with what is known about best practice in professional development and training which holds that one foundational element is sustained duration of delivery (Desimone, 2009)

Figure 6 presents the frequency in which principals reported to receive mentoring from their direct supervisor. Across the entire sample, only 15% of principals said they had never received any form of mentoring with their direct supervisor, with 62% reporting they had been mentored at least 2-3 times per year. The subcategory who received frequent mentoring the least

often was assistant principals, with only 54.8%. Stated in another way, 45.2% of assistant principals reported to have never been mentored or had only been infrequently mentored. Comparatively, 66.6% of principals, reported to be mentored frequently. Urban principals reported to receive the highest levels of frequent mentoring, at 70%. The greatest number of principals to report to have never received mentoring of any sort was rural principals, at 22%.

Figure 6

The percentage of principals who report to receive mentoring from their direct supervisor, organized by frequency.

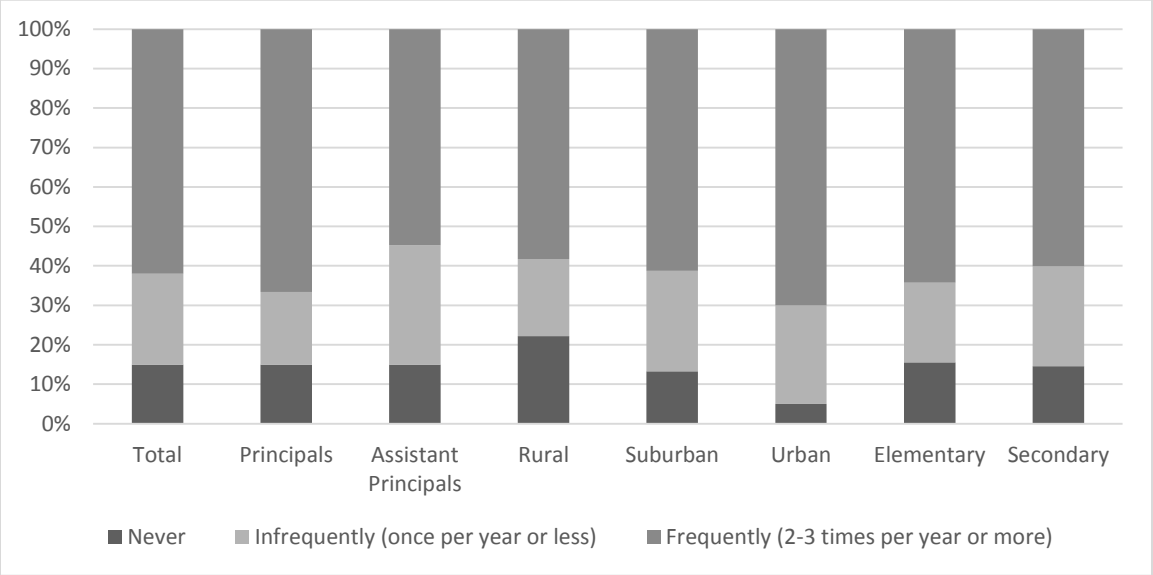


Figure 7 shows the frequency in which principals reported to receive professional development opportunities, distinct from those offered to teachers. Just over one half of all principals said they had frequently received such professional development and an additional 37.5 % said their district had provided it infrequently. More urban principals reported to receive frequent targeted professional development (77.5%) than any other subgroup. Not a single urban principal reported to have never received targeted training. The other 22.5% said they had

received it infrequently. Rural principals again had the highest percentage of respondents who said they had never received targeted professional development, at 20.8%.

Figure 7

The percentage of principals who report to receive professional development opportunities from their direct supervisor, organized by frequency.

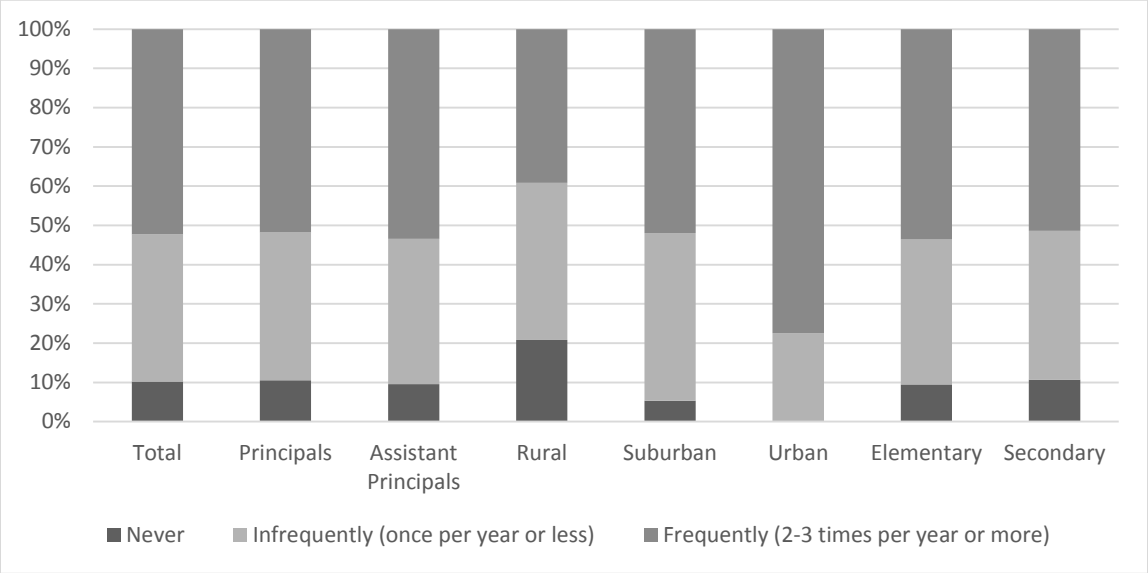
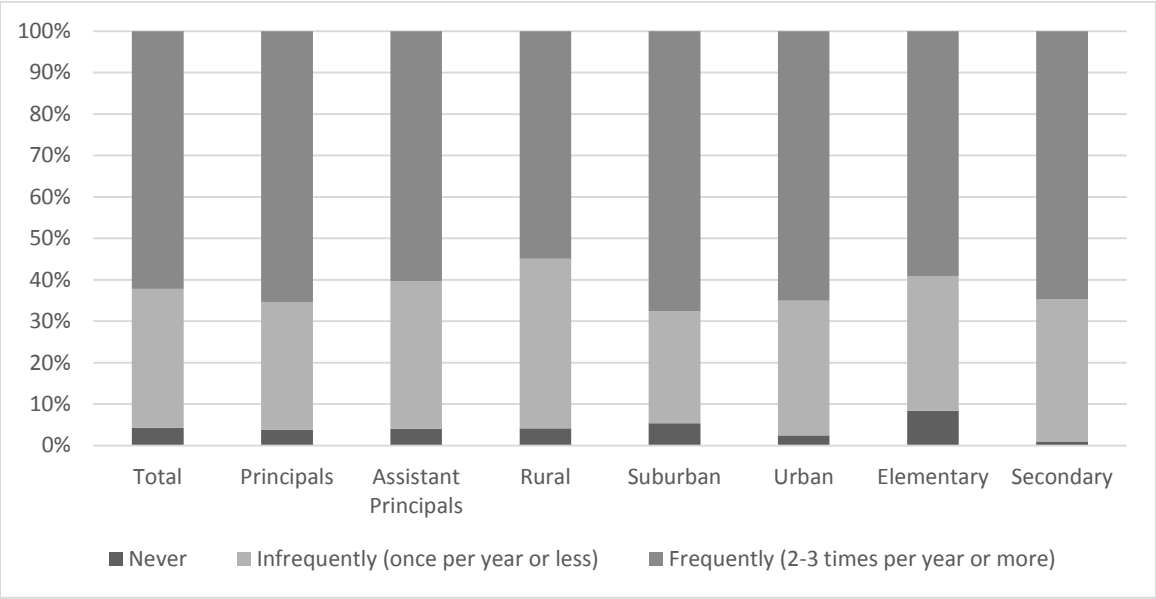


Figure 8 displays the frequency in which principals reported to spend time with their direct supervisor and discuss matters of the principal's performance. Just over 62% of all respondents said they had frequently received such feedback from their supervisor. Only 4.3% reported they had never received supervisor feedback. More suburban principals reported to receive frequent feedback (67.6%) than any other group by urbanicity. Rural principals received the least amount of frequent feedback, at 54.9%. Analyzed by job title, almost 68% of head principals reported to receive frequent feedback from their direct supervisor, who they defined as their superintendent, assistant superintendent, or another person such as an instructional leadership director. In contrast, only 60.3% of assistant principals reported to receive frequent feedback from their direct supervisor, who they defined as their head principal.

Figure 8

The percentage of principals who report to receive professional feedback from their direct supervisor, organized by frequency.



RQ 2: *What current principal-reported district-level supports are associated with support of principals' basic psychological needs?*

Recall that this research question was answered primarily by means of OLS multiple regression with the dependent variable DSPPN and its subscales. In setting the stage for this analysis, Table 5 depicts the descriptive statistics and correlation results between the variables considered for the linear regression.

Table 6 presents the results of the multiple regression between the six predictor variables (the last five variables in the first column), as identified in the literature review, and the outcome variable, District Support of Principals Psychological Needs (DSPPN) (top of column 2). The three constructs that comprise DSPPN; competence, autonomy, and relatedness (seen on the final three columns) were also run as dependent variables in order to better identify how each independent variable influenced each of the constructs within the greater context of DSPPN.

Table 6

Descriptive Statistics and Zero-order Correlations for Multiple Linear Regression Variables.

	M	SD	1	2	3	4	5	6	7	8	9	10
1. DSPPN	19.73	4.93	-----									
2. Asst. Princ.	.65	.48	.12**	-----								
3. Elementary	.45	.50	.05	.26***	-----							
4. Urban	.23	.42	-.01	-.06	.03	-----						
5. Suburban	.42	.50	.07	-.21**	-.20*	-.43***	-----					
6. Mentoring	12.55	7.00	.20~	.12	.01	.27***	.04	-----				
7. PD	7.38	3.33	.19**	-.01	.02	.28***	.11	.47***	-----			
8. Feedback	14.10	7.60	.23~	.06	.09	.24***	-.02	.46***	.61***	-----		
9. Goal Setting	13.68	7.17	.39***	.04	-.04	.05	.14~	.39***	.38***	.46***	-----	
10. Autonomy	15.73	7.44	.27***	.29***	.07	-.04	-.01	.26***	.28***	.19*	.37***	-----
11. Networking	9.95	3.93	.29***	.19*	.03	-.19*	.19*	.13*	.17*	.19*	.39***	.35***

Note. M and SD represent the mean and standard deviation, respectively.
***indicates significance at $p < .001$; **indicates significance at $p < .01$; *indicates significance at $p < .05$; ~ indicates significance at $p < .10$

The model's control variables are listed as the first four rows under "Variables." The years of administrative experience variable was ultimately excluded from the model because its relationship to the outcome was negligible. The standardized beta coefficient is provided for each measure, along with the p-value, demonstrating the statistical significance. As mentioned in the tables notes, each of the "intensity" measures were created by multiplying the sum of the given supports that had been provided to principals by the frequency of the support or the perceived quality of the support, depending on the appropriateness for that given variable. The bottom section of the table presents the adjusted R-squared, the model's statistical significance, and the sample size of the particular model.

DSPPN

Results of the regression between the independent variables and DSPPN revealed an adjusted R-squared of .239 and a significance of $p < .001$. The most significant relationship with DSPPN was Goal Setting Intensity, $\beta = .255$, $p < .01$. There was also a marginally significant relationship between DSPPN and mentoring intensity ($\beta = .082$, $p < .10$) and autonomy intensity

(β =.164, $p < .10$). It should be noted that networking intensity was removed from the model because it resulted in a higher number of lost cases (N=130) without adding value to the model (i.e., it was non-significant).

Table 7

Results of the OLS Multiple Regression of DSPPN and its Subscales.

Variables	**DSPPN**		**Competence**		**Autonomy**		**Relatedness**	
	β	*p*	β	*p*	β	*p*	β	*p*
Constant	**14.6**	**.001*** **	**13.31**	**.001*** **	**15.41**	**.001*** **	**14.9**	**.001*** **
Assistant Principal	**.270**	**.002** **	**.199**	**.019** **	**.252**	**.005** **	**.282**	**.003** **
Elementary	.032	.677	.026	.735	.019	.810	.070	.409
Urban	**-.195**	**.043***	**-.186**	**.055~**	-.162	.107	-.131	.246
Suburban	-.040	.672	-.057	.543	-.001	.991	-.067	.518
Mentoring Intensity	**.160**	**.082~**	**.165**	**.075~**	.131	.173	.103	.319
PD Intensity	-.052	.612	-.095	.357	-.034	.752	.034	.762
Feedback Intensity	.175	.100	**.207**	**.052~**	.142	.202	.057	.619
Goal Setting Intensity	**.255**	**.007** **	**.295**	**.002** **	**.187**	**.056~**	.125	.230
Autonomy Intensity	**.164**	**.061~**	**.112**	**.201**	**.186**	**.042***	**.179**	**.065~**
Networking Intensity	-		-		-		**.194**	**.046***
Adjusted R^2	.239		.233		.165		.160	
Sample Size (N)	142		142		142		130	

Note. [a]Principals, rural urbanicity, and secondary grade level were reference categories. Each intensity variable was created by multiplying the sum of the types of supports being provided in each category by the frequency of the support or the perceived quality of the support.

***indicates significance at $p < .001$; **indicates significance at $p < .01$; *indicates significance at $p < .05$; ~ indicates significance at $p < .10$

Analysis by DSPPN Subscales

Examining the effects of DSPPN in the aggregate is informative, but it also begged the question of how each of the supports were more directly related to perceptions of the individual psych needs supports of competence, autonomy, and relatedness. Analysis revealed that the predictor variables also explained a statistically significant portion of principals' basic psychological need of competence. The model had an adjusted R-squared value of .233 and significance of $p < .001$. Goal setting as a support was again the most significant relationship

with the measure of principals' competence, β =.295, $p < .01$. Feedback intensity, β = .207, $p < .10$ and mentoring intensity, β = .165, $p < .10$, again showed a marginally significant relationships with competence. Networking intensity was also omitted from this model for the same reasons as explained before.

With DSPPN autonomy subscale as the outcome, the predictor variables also explained a portion of its variance, $R^{2} = .165$, $p < .001$. As might be predicted, the autonomy intensity support had the greatest statistically significant relationship with the dependent variable, autonomy, β = .186, $p < .05$. Also marginally significant was goal setting intensity, with, β = .186, $p < .10$. Again, networking intensity was not included in this model.

In the final model in the table, the outcome subscale of DSPPN relatedness the chosen set of predictors of support also explained a portion of its variance, R^2=.160, p <.001. The networking intensity variable was included in this model because analysis showed that it was significant at $p = .046$ and a standardize beta coefficient of .194. Autonomy intensity was also found to be marginally significant with β = .179, $p < .10$.

RQ 3: *What supports do Oklahoma principals report to value and want from their district offices to assist them in their work?*

Table 7 presents the degree of value that principals reported to find in the supports provided by their district offices. Respondents were asked questions like "How valuable was the mentoring or coaching provided to you by your district in supporting your work?" and were able to respond on a six-item Likert scale that ranged from "Not at all valuable" to "Extremely valuable." The table is arranged in the same manner as Tables 3 and 4, and each data point represents the percentage of principals who found the particular support to be of value. Observed as a whole, principals found the most value in being granted autonomy over decisions and

resources and in opportunities for networking and collaboration. Just over 85% of principals found autonomy very valuable or extremely valuable and 80.5% of principals found networking and collaboration very valuable or extremely valuable. The least value was placed on professional development, with only 41.4% of principals finding it very or extremely valuable.

Table 8

The percentage of principals, organized by subcategory, who report to find value in the surveyed supports.

Types	Total	Princ.	Asst. Princ.	Rural	Suburban	Urban	Elem.	Sec.
Mentoring								
Not at all valuable	10.3	12	7.6	12.5	9.9	7.7	11.3	9.6
Slightly valuable	12.1	9.3	16.7	15.6	11.3	7.7	11.3	12.8
Moderately valuable	28.2	25	33.3	29.7	28.2	25.6	23.8	31.9
Very valuable	32.8	36.1	27.3	32.8	31	35.9	40	26.6
Extremely valuable	16.7	17.6	15.2	9.4	19.7	23.1	13.8	19.1
Professional Development								
Not at all valuable	9.4	7.3	12.5	13.4	8.1	5	6.2	12
Slightly valuable	15.5	14.7	16.7	19.4	14.9	10	13.6	17
Moderately valuable	33.7	33	34.7	28.4	37.8	35	33.3	34
Very valuable	32	33	30.6	37.3	27	32.5	37	28
Extremely valuable	9.4	11.9	5.6	1.5	12.2	17.5	9.9	9
Supervisor Feedback								
Not at all valuable	10.2	10.5	9.7	11.1	10.8	7.5	10.8	9.7
Slightly valuable	16.1	17.5	13.9	19.4	10.8	20	16.9	15.5
Moderately valuable	24.7	25.4	23.6	19.4	28.4	27.5	24.1	25.2
Very valuable	31.2	30.7	31.9	37.5	27	27.5	36.1	27.2
Extremely valuable	17.7	15.8	20.8	12.5	23	17.5	12	22.3
Goal Setting								
Not at all valuable	7.1	7.2	7	10.1	6.8	2.5	8.5	6
Slightly valuable	13.2	16.2	8.5	18.8	9.6	10	8.5	17
Moderately valuable	26.4	24.3	29.6	20.3	30.1	30	30.5	23
Very valuable	42.9	39.6	47.9	43.5	41.1	45	45.1	41
Extremely valuable	10.4	12.6	7	7.2	12.3	12.5	7.3	13
Autonomy								
Not at all valuable	1.6	.9	2.9	1.4	2.7	0	1.2	2
Slightly valuable	2.7	2.6	2.9	1.4	2.7	5	1.2	4
Moderately valuable	10.3	6.1	17.1	9.9	5.5	20	9.6	10.9
Very valuable	50	50	50	53.5	52.1	40	53	47.5
Extremely valuable	35.3	40.4	27.1	33.8	37	35	34.9	35.6
Networking and Collaboration								
Not at all valuable	1.1	1.8	0	1.4	0	2.6	2.4	0
Slightly valuable	6.5	6.1	7	6.9	5.4	7.7	6	6.9
Moderately valuable	11.9	8.8	16.9	9.7	13.5	12.8	9.6	13.7
Very valuable	42.7	43	42.3	48.6	37.8	41	42.2	43.1
Extremely valuable	37.8	40.4	33.8	33.3	43.2	35.9	39.8	36.3

In order to more easily compare results among the subgroups, responses to the value of these supports were simplified to only three categories: "Not at all valuable," "Somewhat valuable," and "Very valuable." The original Likert item, "Not at all valuable," stayed the same. The original items, "Slightly valuable" and "Moderately valuable," were combined and renamed, "Somewhat valuable." The original items, "Very valuable" and "Extremely valuable," were combined and renamed, "Very valuable." Figures 9-11 report the specific findings from the analysis of the subgroups after these responses were recoded.

Figure 9

The percentage of principals who report to receive value from mentoring opportunities.

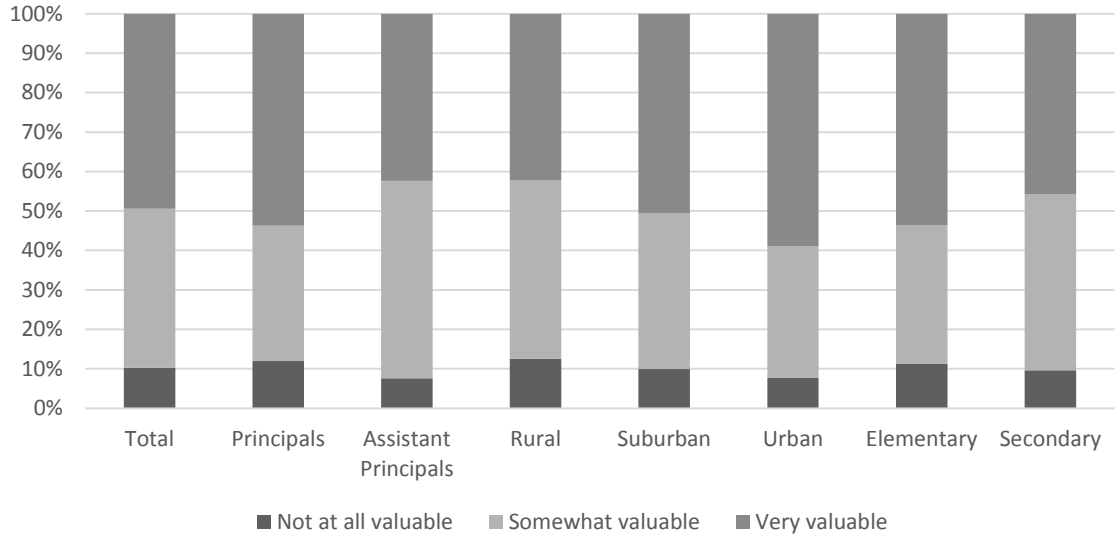


Figure 9 depicts how valuable principals found the mentoring provided by their district office to be. As a whole, only 49.4% of all respondents felt that mentoring was very valuable. As compared to the other district supports, the highest percentage of principals (10.3%) found mentoring to be not at all valuable. Analyzed by job title, a higher percentage of principals found mentoring to be very valuable than did assistant principals (53.7% compared to 42.4%). More urban principals found their district's mentoring to be very valuable (59%) than did suburban

(50.6%) or rural principals (42.2%). Lastly, a higher percentage of elementary principals (53.6%) found mentoring very valuable than did secondary principals (45.7%).

Figure 10

The percentage of principals who report to receive value from professional development opportunities.

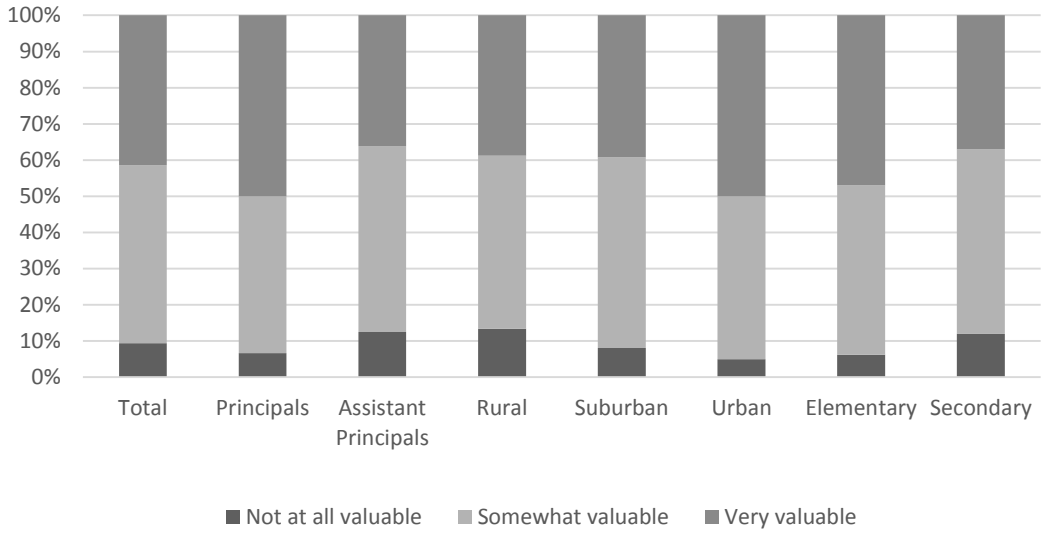


Figure 10 shows principals' perceptions of how valuable they found the professional development opportunities provided by their district office. When looking at all principal respondents, professional development received the lowest percentage of principals who found the support to be very valuable (41.4%) and the highest percentage of principals who found it to be somewhat valuable (49.2%). Analyzed by title, more principals found professional development opportunities to be very valuable (55%) than did assistant principals (36.1%). Similarly, only 12.5% of assistant principals found professional development to be not at all valuable. When comparing responses by urbanicity, half of urban principals found professional development to be very valuable, as compared to suburban (39.2%) and rural principals (38.8%).

Likewise, a higher percentage of elementary principals found professional development to be very valuable then did secondary principals (46.9% as compared to 37%).

Figure 11 depicts the degree of value that principals placed on autonomy supports provided by their district office. As stated before, 85.4% of all principals found autonomy supports to be very valuable, the highest of any support. Only 1.1% of all principals found autonomy supports to be not at all valuable. There were a higher percentage of principals (90.2%) who found autonomy supports very valuable than did assistant principals (77.1%). Also, more elementary principals found autonomy supports to be very valuable; than did secondary principals (88% compared to 77.4%).

Figure 11

The percentage of principals who reported to receive value from autonomy supports.

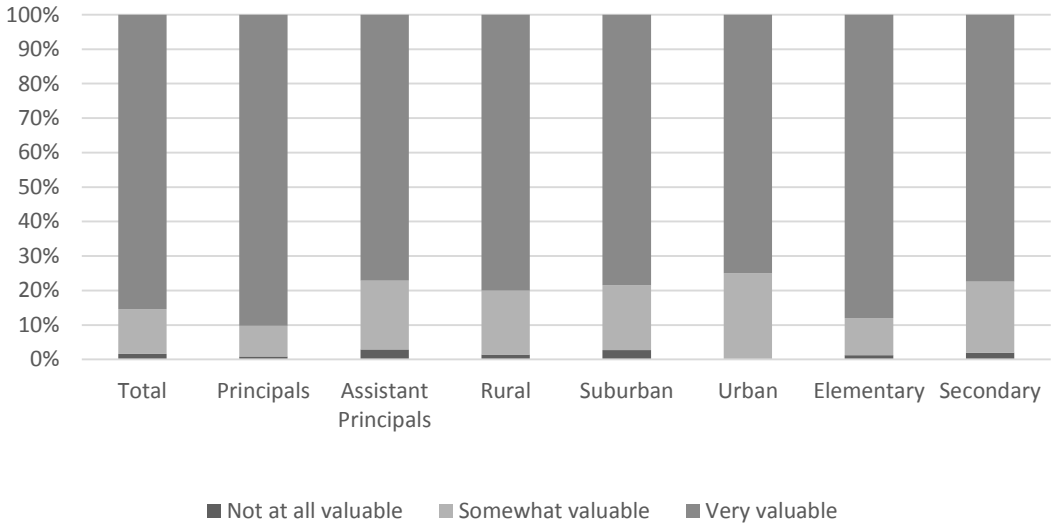


Table 8 presents the supports that principals most want to receive from their district offices, but currently do not. Each value represents the percentage of reporting principals who wanted to receive the particular type of support from their district office. The two types of support that principals most desire from their districts were professional development (29.5%)

and networking and collaboration opportunities (26.2%). Supervisor feedback was the least desired support, at only 1.6% of principals desiring it.

Table 9

The percentage of principals, organized by subcategory, who wished they received particular support from their district office.

Types	**Total**	**Principal**	**Asst. Princ.**	**Rural**	**Suburban**	**Urban**	**Elem.**	**Sec.**
Mentoring	14.8	13.3	16.1	11.8	10.5	20	19	12.5
Professional Development	29.5	30	29	29.4	26.4	32	14.3	37.5
Supervisor Feedback	1.6	3.3	0	5.9	0	0	4.8	0
Goal Setting	16.4	20	12.9	17.6	31.6	4	14.3	17.5
Autonomy	11.5	16.7	6.5	5.9	10.5	16	19	7.5
Networking and Collaboration	26.2	16.7	35.5	29.4	21	28	28.6	25

There was some variation among the subtypes of principals in regards to the supporters they wished they received from their district offices. Twice as many assistant principals desired to have more networking and collaboration opportunities than did principals (35.5% as compared to 16.7%). Almost three times as many secondary principals reported wanting more professional development opportunities than elementary principals (37.5% compared to 14.3%). Twice as many urban principals (20%) reported wanting mentoring opportunities than suburban (10.5%) and rural principals (11.8%). In regards to goal setting, 31.6% of suburban principals wanted more opportunities, as compared to only 17.6% of rural principals and 4% of urban principals.

Chapter Six:

Discussion, Implications, and Suggestions for Future Research

The purpose of this study was to explore the types of supports that were being provided to Oklahoma principals by their district offices and investigate what types of supports those principals valued and desired from their district offices. This aim also sought to redress the lack of inquiry into principals' perceptions of what district supports added value to their growth and development and allowed them to perform their job better. Additionally, this study endeavored to examine the relationship between the district supports being provided to principals and the principals' self-reported levels of basic psychological need. In this chapter, I will discuss the key findings from the study as they relate to these aims. I will first layout a summary of key findings, followed by a more in-depth analysis of the study results, as organized by research question. I will conclude the chapter by offering suggestions for future research and discuss possible implications for future policy and practice.

Summary of Key Findings

The results of the empirical analysis provided many interesting takeaways about the supports provided by school districts to principals, the supports that principals value from their district offices, and an inceptive view of the possible relationship between those supports and principals' basic psychological needs. The results indicate that the vast majority of participating principals already receive numerous types of support from their district offices, with the most common supports being third-party offered professional development, formal mentoring opportunities with their supervisor, and district-led professional development. The majority of principals also reported to receive many supports frequently, with the most common being supervisor feedback on principals' job performance, mentoring opportunities, and professional

development. The analysis also revealed that the supports presented in this model explained roughly a quarter of the variation of principals' basic psychological needs. Within the model, the most significant variables with explanatory power were goal setting, autonomy, and networking. Supervisor feedback and mentoring also displayed marginally significant relationships. Lastly, in asking what supports principals would like, the results show that principals place higher value on autonomy support, as well as networking and collaboration opportunities, than other supports already provided by their districts. Interestingly, their most desired support from their district offices was additional professional development, followed by networking and collaboration opportunities. There were also many smaller findings about the differences that exist between principals and the supports they receive, as distinguished by their job title and their school's urbanicity.

Discussion of Key Findings

Below is a more comprehensive discussion of the findings of this study. The analysis follows the research questions in the order they have been previously arranged. The majority of the explanations provided in the narrative are speculative, but attempts have been made to connect the results with Self-Determination Theory and literature reviewed for this study.

RQ 1: *What is the current landscape of district supports being provided to Oklahoma school principals?*

As discussed previously, very few studies have directly examined the quantity and quality of supports they report to receive from their district offices (see Johnson, Kaufman, and Thompson, 2016 for an exception). No known studies have ever examined the district supports provided to principals in Oklahoma. As a whole, the greatest number of Oklahoma principals reported to receive district support in the form of attending third-party professional development

conferences, followed by attending formal meetings in which job-related responsibilities are discussed, and workshops or trainings provided by district staff. These findings are consistent with those of Johnson, Kaufman, and Thompson (2016). They found that 77% of principal respondents reported being offered professional development by their district offices in a school year. While they did not collect data on whether or not districts provided third-party professional development, they did find that 78% of first-year principals and 41% of veteran principals (defined as those with three years of experience or more) reported to have district-provided mentoring opportunities.

Collectively, these findings are not surprising. There are a wide range of companies and publication houses that solicit principals to attend their workshops and conferences. Likewise, with 30 of the 50 Unites States, including Oklahoma, requiring principal evaluations annually, it is no surprise that Oklahoma principals report they have discussed job-related responsibilities with their supervisors (Ross & Walsh, 2019). It also makes sense that the majority of district offices in Oklahoma would offer regular professional development to their principals in order to keep them apprised of information or training that is relevant within the district.

Also consistent with previous research is the disparity between district-provided supports based on school district size and urbanicity. The results of this study showed that, with a few exceptions, urban principals received more supports from their districts than suburban or rural principals. In those exceptions, more suburban principals reported receiving opportunities to take university coursework and third-party conferences, having goal-setting expectations, and being encouraged by their district to engage in out-of-district networking than urban and rural principals. Even in regards to autonomy support, which urban districts are not generally known for excelling in, urban principals were given more say over instructional methods, how teachers

were scheduled to teach, and how funds would be allocated in order to improve student performance than their suburban and rural counterparts (see Table 4). This aligns with previous findings that expressed that large, urban school districts are more likely to offer supports like mentoring, professional development, and principal evaluations to their principals (Johnson, et al., 2016; Mitgang et al., 2013). It is logical that urban principals would receive more supports from their district offices. Urban districts are most often larger and thus have a larger district office with more district staff who have the ability to plan or facilitate a greater number of supports than could be done in a suburban or rural setting.

RQ 2: *What current principal-reported district-level supports are associated with support of principals' basic psychological needs?*

The results of this study suggest that there is a statistically significant relationship between the types of district support identified in this study [(1) professional development; (2) mentoring; (3) goals clarity, structure, and instructional coherence; (4) autonomy over decisions and resources; and (5) networking and collaborative support structures] and the levels of principals' basic psychological needs. This is an encouraging finding, given that the goal of this study was to conduct an initial exploration in the new line of inquiry proposed by Ford, Lavigne, Fiegener, and Si (2020) about how districts can better support principals' needs, through the theoretical lens of self-determination theory (SDT). While these results are only correlational, they do serve as initial evidence about the relationship between the supports that school districts provide to their principals and their principals' basic psychological needs. These district supports may, in fact, serve as the social-contextual factors that influence the frustration, thwarting, or support of principals' basic psychological needs of autonomy, competence, and relatedness (Ryan & Deci, 2000). This evidence serves as the first step in supporting the theory that these

district supports can play a role in improving principals' well-being and autonomous motivation and reducing negative outcomes such as burnout.

The results of this study also shed light on which of the district-level supports are associated with the support of principals' basic psychological needs. Goal Clarity, Structure, and Instructional Coherence demonstrated the strongest relationship with the overall DSPPN measure. Goal setting exhibited the strongest relationship with principals' sense of competence. This finding aligns with previous district effectiveness studies which have identified vision setting and instructional coherence as possible means of promoting principals' competence (Marsh et al., 2005; Supovitz, 2006). Goal setting may create the type of performance alignment that ensures principals' work is the "right work" (Honig & Rainey, 2015). Principals are more likely to feel competent in their work when they are clear about how they are expected to perform and have been given clear guidelines about what is expected of them, how they will be assessed, and how their work fits within the larger context of the district's goals. Ultimately, this aligns with findings from SDT literature which indicate that increasing principals' sense of competence can positively affect their sense of well-being, effectiveness, satisfaction, and meaningfulness (Deci & Ryan, 2000; Deci & Vansteenkiste, 2004; Graves & Luciano, 2013; Lynch et al., 2005; Van den Broeck et al., 2010). As Deci and Ryan (2017) described, when individuals are without structure they are likely to struggle to identify the actions that are required for success, which ultimately deflates their feelings of confidence. By providing clarity and clear structure to principals, district offices may serve as a mechanism that can increase their sense of competence.

District support for principal autonomy over decisions and resources also demonstrated a statistically significant relationship with DSPPN. More specifically, it exhibited a higher

correlation with district support for principals' autonomy and relatedness. This suggests it is of benefit for districts to allow their principals to make decision about the strategies and allocation of resources that will most directly influence their work. This may include autonomy over hiring, staffing, curriculum and instruction selection, fund allocation, and technology adoption. Other studies have also demonstrated that autonomy support can provide beneficial effects for both principals and their schools. One study found that when principals are provided higher levels of autonomy, they also experience higher levels of job satisfaction and greater levels of commitment to their organization (Chang et al., 2015). These positive effects felt by individual principals may have compounding effects on the schools they serve. One comparative case study found that on average, the schools of principals who had been granted greater levels of autonomy had better levels of student performance and were more successful at closing the achievement gap among at-risk students than their colleagues serving in more centralized districts (Ouchi, 2006). This aligns with research into district effectiveness which has reported district–wide benefits associated with providing greater autonomy support to school leaders (Augustine et al., 2009; Bottoms & Schmidt-Davis, 2010; Knapp et al., 2010).

The current study provides evidence to support these notions that when district offices provide autonomy-enhancing supports, principals experience a greater sense of choice and freedom over their work. Evidence has shown that autonomy supportive contexts increase individuals' sense of autonomy and volition in their work activities (Rigby & Ryan, 2018; Slemp et al., 2018) When principals have a greater sense that they are acting from their own interests and integrated values, they are more intrinsically motivated to engage in their work. of According to SDT, this will result in a greater sense of well-being, intrinsic motivation, and job satisfaction (Deci & Ryan, 2000).

The empirical evidence also suggests there is a link between autonomy supports provided by the district and principals' sense of relatedness. While there is less explicit existing research on this relationship, there may be some theoretical explanation to support this finding. A defined key component of relatedness is a sense of reciprocal trust between groups or individuals (Ryan & Deci, 2017). In order for an individual to feel a sense of relatedness, he or she must have associated experiences of trust, warmth, or bonding with the other individual or group. In schools, trust has been found to play an important role in healthy principal-principal supervisor relationships (Thessin, 2019). Trust between district and school leaders has also been identified as requisite for meaningful reform to occur (Johnson & Chrispeels, 2010). School districts providing principals with autonomy requires an underlying degree of trust that the principal is competent and worthy of the trust. According to SDT, when individuals' basic needs, such as relatedness, are satisfied in the workplace, the results are greater trust in the organization, overall job satisfaction, and a greater passion for work (Deci et al., 1989; Ryan et al., 2010; Vallerand, 20015). It may be that such signs of trust result in a reciprocated sense of relatedness between the principals and district office.

Lastly, the results of the regression analysis also indicated a marginally significant relationship between networking and collaboration opportunities and principals' sense of relatedness. In this domain, principals reported on whether their district office encouraged them to cultivate relationships and professional learning networks with other administrators from their districts, encouraged them to cultivate relationships with and professional learning networks with administrators from other districts, and encouraged a culture of district-wide collaboration and support among their colleagues. Multiple studies have shown that principals' sense of relatedness is increased when they have supportive and collaborative relationships with their district leaders

(Bottoms & Fry, 2009; Leithwood, 2011; Thessin, 2019). Principals' sense of relatedness has also been enhanced when networking and collaboration is established between district office staff and principals in the pursuit of establishing learning goals and improving instructional practices (Honig & Rainey, 2014; Portin et al., 2009; Togneri & Anderson, 2003). All of these pursuits facilitated by the district office place principals in opportunities where the can communicate and problem-solve with other district and site leaders. Such opportunities likely serve to create a sense of belongingness to other individuals in the school community (Deci & Ryan, 2002) and that the principal is committed to the mission or purpose of the organization (Stone & Ryan, 2009). The results from this study further indicate that school districts can also cultivate this sense of relatedness by encouraging principals to create their own personal learning networks with school leaders outside their district.

RQ 3: *What supports do Oklahoma principals report to value and want from their district offices to assist them in their work?*

The highest percentage of principals reported to find value in receiving autonomy supports and having opportunities to network and collaborate with others, both within and outside their school districts. This aligns with the results from the analysis in Research Question 2, which found that autonomy support had a significant relationship with DSPPN, as well as its subscales of autonomy, and relatedness and the marginal relationship found between networking and relatedness. The value placed on these two supports speaks to principals' psychological needs for both autonomy and relatedness. Furthermore, the alignment between principals' value placed on networking and autonomy supports and the empirical evidence on the relationship between the two supports and DSPPN may suggest that they are both potential levers to be used in order to enhance principals' basic psychological needs.

Only 53.5% of principals said that they found goal setting to be extremely or very valuable in the support of their work. This is interesting, consider that Goal Clarity, Structure, and Instructional Coherence demonstrated the strongest relationship with DSPPN and a statistically significant relationship with principals' need for competence. This suggests that while principals may not place great value on activities such as setting clear expectations about their work or how their work aligns with the district's goals or instructional philosophy, those activities may be the necessary support structures that define and bring meaning to principal's work. It may be that goal setting and instructional coherence serve as the mechanisms for "defined autonomy" coined by Waters and Marzano (2006) and supported by several other studies (Bottoms & Schmidt-Davis, 2010; Knapp et al., 2010) in which highly supportive districts provide their principals autonomy while also offering a clearly defined vision, expectations, and structures for principals.

The district support valued by the least number of principals was professional development, with only 41.4% reporting to find it very or extremely valuable. Similarly, results of the regression analysis found that professional development was the only type of district support to have a negative relationship with DSPPN. These results would suggest that professional development should be approached by district leaders with caution when considering its usefulness with the principals in their districts. However, results from this study also found that professional development was the support that the most principals felt would be beneficial to their work, with 29.5% desiring more opportunities. Likewise, two of the three supports most principals reported to receive were professional development opportunities, third-party conferences and district-led professional development. Over half of principals also reported

to receive professional development opportunities from their district office 2-3 times per year or more.

What is to be made of these conflicting findings? A possible interpretation for this may be that professional development has been the most convenient and readily available tool for districts to utilize in supporting their principals. District-led professional development allows for district leaders to disseminate information quickly and to appear as competent and knowledgeable to their site leaders. From principals' perspectives, third-party professional development can be alluring as it affords them an opportunity to travel offsite and to find the antidote for improvement that is "out there." In reality, this study may imply that professional development is limited in its utility with principals. While it may have its function, it is not always the answer and may have a negative effect on principals' psychological needs. This highlights the importance suggested by other studies that professional development for principals should be job-embedded (Darling-Hammond et al., 2007; Stucher et al., 2017) and specific to the needs and goals of the individual principal and (Grissom & Harrington, 2010; Spillane et al., 2009).

Implications for Policy and Practice

Policy

One of the implications of this study in regards to public policy lies in considerations for principal evaluation. The empirical evidence generated from this study have provided some initial steps in affirming the notion that districts can play a role in supporting principals' well-being and motivation to do their work. This study also has shown that not all districts provide the same types of supports or provide them with the same frequency. There is an opportunity for policymakers to implement principal evaluations that not only assess principals' performance,

but also encourage districts to have conversations about principals' needs and provide supports such as those referenced in this study.

In 2019, the National Council on Teacher Quality reported that 30 states require annual principal observations, down from 34 in 2015. Some researchers have pointed out that even when evaluation measures are in place for principals they are "generally inconsistent, unaligned with standards for good practice, not relevant to principals' main goals and responsibilities, and generally not valid or rigorous" (Connelly, 2012). Policymakers are taking many different approaches to create an evaluation system that adequately measures principals' performance and contribution to school improvement and student achievement. It is outside the purview of this study to comment or critique at length the different approaches to principal evaluation measures. However, this study may provide an initial demonstration that, in order to influence school improvement, federal and state policies should not only rely on principal evaluation as an accountability lever. It may also be viewed as a component of a larger effort that encourages districts to support principals' well-being and professional growth.

This study also provides implications for superintendent preparation programs and state and national superintendent organizations. Similar to principals, the expectations and responsibilities placed on superintendents have continued to grow in recent decades. They too are expected to be knowledgeable and proficient in a wide range of skills and disciplines that includes everything from collective bargaining to human relations. In larger districts, many of these same skills are required of assistant superintendents or directors who assume some of these roles for the superintendent. This study suggests there are benefits in district leaders also being knowledgeable of theories of human motivation and how they can be applied to the supports that are provided by the district office. The responsibility for educating prospective superintendent

candidates falls on doctoral programs and superintendent preparation programs. Likewise, state and national superintendent organizations can work to keep superintendents and district leaders apprised of new research in the field.

Practice

There are many practical implications resulting from this study. First, this research has elicited two types of district support that have demonstrated a significant positive relationship with principals' basic psychological needs support - goal setting and instructional coherence, and support of principals' autonomy. This, along with evidence provided by previous studies, suggests that district offices may consider utilizing these supports as potential levers to support their principals' basic psychological needs, particularly their needs for competence and autonomy.

Suggestions about how districts offices can go about setting clear goals and developing instructional coherence have already been elaborated on in earlier chapters. It is also worth noting again that more research needs to be conducted in order to better understand which of these specific supports bring about increases in DSPPN. This being said, the evidence from this study suggests that over half of the principals surveyed work in districts where clear expectations are developed (61.8%), they know how their performance will be assessed (51.9%), they know how their work fits within the district's goals (63.2%), and they have clear conceptions about the district's instructional philosophy and teaching methods (51.4%). For the districts who do not already utilize the supports, the evidence from this study, along with the conclusions drawn from previous works in district effectiveness literature (Bottoms & Schmidt-Davis, 2010; Darling-Hammond, 2007; Leithwood & Jantzi, 2008) indicates that there may be considerable benefits for putting these actions into place, both for their principals' well-being and their students'

academic success. Less than half of the principals reported that clear performance targets were set by their district (43.4%). This too may be a tool that districts can use to support principals' needs for autonomy and competence, though it stands to reason that these performance targets should be implemented in the spirit of growth and improvement, as opposed to competition and accountability (Springboard Schools, 2006; Togneri & Anderson, 2008).

Likewise, the evidence from this study, along with the abundance of evidence from existing literature, suggests that districts should consider increasing the levels of autonomy they provide to their principals. Results from this study suggest that the majority of principals already receive autonomy with regard to hiring (63.7%), teacher scheduling (65.6%), and how principals go about improving instructional methods (62.3%). Evidence from this study also indicated that autonomy support was the most valued type of support districts could provide, with 85% of principals saying it was "very or extremely valuable" in aiding to improve their work. All three of these practices are also backed by existing literature which have demonstrated the numerous benefits in district effectiveness case studies (Augustine et al., 2009; Bottoms & Schmidt-Davis, 2010; Honig & Rainey, 2012; Ouchi, 2006; Supovitz, 2006; Wohlstetter et al., 2013). The other three types of autonomy support- autonomy over course offering (33%), autonomy over funds used for improvement (35.4%), and autonomy over technology utilized (34%) - demonstrated less prevalence among principals in this study. This may be due to several factors, including constraints that district offices have in allocating certain types of funds to the site level, depending on their revenue source. These three types of autonomy are also mentioned less often in the district effectiveness literature (see exceptions in Adamowski et al., 2007; Wohlstetter et al., 2013). They may still be possible sources of autonomy support, but districts should consider the implications of their utilization. As with all types of autonomy support, research suggest that

districts should proceed with offering a healthy balance of autonomy and structure (Bottoms & Schmidt-Davis, 2010; Knapp et al., 2010; Waters & Marazano, 2006).

Lastly, the evidence from this study suggests that districts might be wise to facilitate networking and collaboration opportunities for the principals in their districts. In addition to the moderately significant finding that these supports improve principals' sense of relatedness, they also were the second most valued form of support reported by principal respondents (80.5%). It appears that the majority of principals already receive some of these supports from their districts. Sixty-five percent of principals reported that their district encouraged them to cultivate relationships with other administrators from their districts and 62.3% said their district encouraged a culture of district-wide collaboration and support among colleagues in their districts. The benefits of these supports that alter previous conceptions and view the district office and site leaders as an organization of learners and shared problem-solvers have also been described in previous case studies (Chrispeels et al., 2008; Honig & Rainey, 2014; Portin et al., 2009). While only 42 percent of principals reported that their districts encouraged them to cultivate relationships and professional learning networks with administrators from other districts, recent research indicates this too may be an avenue for districts to improve their principals' feelings of autonomy and competence (Cone, 2010; Intator & Scribner, 2008; Marland, 2012; UCLA Education Evaluation Group, 2011).

Limitations

As is the case in all research, there are limitations with this study. First, the data for this study was collected in the fall and winter of 2020, amidst concerns surrounding the spread of the COVID-19 virus. At the time the survey was distributed, many schools in Oklahoma were either in full-time distance learning or were vacillating between distance learning and in-person

learning. As a result, many principals and assistant principals were dealing with additional stressors and responsibilities, such as contact tracing. This undoubtedly influenced the sample size of the study and potentially their responses. Attempts to account for this were made by extending the survey response window through December, but some demographic groups, such as rural principals, were clearly underrepresented. This may limit the generalizability of the findings.

Second, at the time of the study was designed, the final three survey questions were developed to give respondents an opportunity to reply to open-ended questions about other types of supports they had received from their districts, other district supports they felt would be beneficial, and types of supports they wished they had received during their district's response to the spread of the COVID-19 virus. It was hoped that these open-ended responses would give principals an opportunity to articulate their personal thoughts about these questions and provide a more in-depth and nuanced view of their perspectives. Because of the length of the survey, or perhaps their position at the end of the survey, the majority of the responses that were received were brief or did not receive responses at all. As a result, the decision was made to not use the survey items that inquired about supports not mentioned in the survey and about supports during the responses to COVID-19. The responses regarding other supports that would be beneficial to their work were still included, open-ended coded, and included in the final data set and analysis.

Lastly, there were limitations in the development, and ultimately utilization in the data analysis, of the Network Intensity variable. As mentioned previously in Chapter Four, the process for calculating network intensity resulted in a considerable number of missing values for this variable. This resulted in decisions about how to account for the missing data and how to include network intensity into the regression models. Upon review, the researcher would develop

another process for the measurement of that variable in order to avoid these unforeseen difficulties and to obtain a more accurate representation of the variable.

Suggestions for Future Research

This study served as an initial empirical investigation of a focused line of research into district support of principals proposed by Ford et al. (2020) that uses theories of human motivation to provide a richer, more nuanced understanding about the relationship between district supports and principal motivation. While this study has provided a glimpse into the relationships between individual district supports and principals' basic psychological needs, there are still many opportunities for future research to dive deeper into understanding which particular supports activate principals' needs satisfaction. For example, this study demonstrated that setting goals had a significant positive influence on principals' need for competence. Future studies could begin to explore which particular district actions, such as developing instructional coherence, setting clear performance expectations, and setting the principal's work within the context of district goals, provided the greatest enhancement of competence satisfaction.

By identifying a set of variables that explains a portion of DSPPN, this study has also laid the groundwork for potential qualitative studies to be conducted in the future. Such studies could begin to explain the "how and why" of particular district supports and their role in activating and/or supporting principals' basic psychological needs. There could be great value in gaining a better understanding of the underlying reasons and motivations for why certain district supports activate principals' needs. This qualitative research could be done with focus groups within individual districts or, given some of the findings from this study about the variation in district supports based on school urbanicity and job title, it could be conducted as case studies from multiple districts. Questions of particular interest remaining for the researcher are "Do principals

and assistant principals benefit from the same types of district supports in the activation of their basic psychological needs?" and "How do principals from rural, suburban, and urban school districts differ in the district supports they need in order to fulfill their basic psychological needs?" Studies such as these would more deeply reveal current prevailing views principals have about district support. There are many more opportunities such as these to make deeper connections between Self-determination Theory and the different types of support districts can provide to their principals. There are also many opportunities for this study to be replicated in the future. As already described, there were limitations that were revealed as the current study's procedures were being executed. Future researchers could replicate the study on a larger scale within and across other states to gain a more accurate depiction of the relationship between district support and DSPPN. As Oklahoma is situated in its own particular context, it would also be valuable to see the study replicated in another state in order to determine how generalizable the findings are when compared to the unique contexts of other states or regions. Regional or national studies could also bring in a larger sample, providing greater explanatory power.

Because this study was conducted in the midst of school districts responding to the spread of COVID-19, it might be beneficial for future researchers to replicate the study in Oklahoma in order to determine how much variation in findings exists based on the time the data were collected. As already demonstrated, the principalship is an already stressful job. Great value could be found in exploring how much additional stress and anxiety existed amongst principals in the fall and winter of 2020, as compared to a "normal" school year.

While this study did generate a regression model that demonstrated a statistically significant explanation of DSPPN, there is still plenty of opportunity to identify additional district support variables that also contribute to DSPPN. This study only provided an initial

investigation into contributing variables and there could be types of support not yet present in the literature which are consequential. Future researchers could conduct their own literature reviews and draw from their own personal experiences in order to configure their own model that provides greater explanation to DSPPN. A question of personal interest remaining for the researcher lies in investigating the components that enhance principals' feelings of relatedness. The work of principals and assistant principals can be very isolating. The current study only identified a small, marginally significant relationship between autonomy supports and networking and collaboration opportunities they provided, and DSPPN. Future studies should seek to identify the other district mechanisms that support principals' feelings of relatedness to district leaders and the organization as a whole. Additionally, consideration should be given as to what informal district actions influence principals' perception of basic psychological needs support.

Future research should also attempt to explore other theoretical frameworks that could be applied to the relationship between district supports and principals' needs and motivation. Ford, Lavigne, Fiegener, and Si (2020) have proposed multiple theories of human motivation that could be used to analyze this relationship, in addition to Self-Determination Theory. These include Self-Efficacy Theory, Expectancy-Value Theory, Attribution Theory and Goal Theory. Each of these theories would provide different insights into the relationship that exists between districts and principals, as well as insights into what activities or contexts support principals' well-being and motivation. The authors' have already provided a host of suggestions for initial lines of research for each of the motivational theories.

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Appendix A: DSPPN Survey

Demographic Information

Q1 What is your title?

- Principal
- Assistant principal
- Another title (If selected, please provide your title)

Q2 How many years of administrative experience do you have?

- 2 or fewer years
- Between 3 and 5 years
- Between 6 and 10 years
- Between 11 and 20 years
- 21 or more years

Q3 Are you currently an administrator at an elementary (PK-6th grade) or secondary (7th-12th grade) school?

- Elementary
- Secondary

Q4 What is your school district's urbanicity?

- Urban
- Suburban
- Rural

Q5 Who is your direct supervisor?

- Superintendent
- Site principal
- Another person (If selected, please provide that person's title)

Mentoring

Q6 What types of mentoring or coaching activities has your supervisor provided to you? Check all that apply.

- Classroom walkthroughs
- Formal Meetings in which job-related responsibilities such as instructional leadership were discussed
- Discussions about how to use data
- Discussions about how to deliver feedback or have difficult conversations

Q7 How frequently has your supervisor provided you with mentoring or coaching?

- Never
- One time
- Once per year
- 2-3 times per year
- Monthly
- Weekly or more often

Q8 How valuable was the mentoring or coaching provided to you by your supervisor in supporting your work?

- Not at all valuable
- Slightly valuable
- Moderately valuable
- Very valuable
- Extremely valuable

Professional Development

Q9 What types of professional development opportunities have been provided by your district? Check all that apply.

- University coursework
- Third-party seminars or conferences
- Workshops or trainings provided by district staff
- Other

Q10 How frequently has your district provided professional development activities specifically for principals, distinct from those provided for teachers?

- Never
- One time
- Once per year
- 2-3 times per year
- Monthly
- Weekly or more often

Q11 How valuable has the professional development your district has provided for principals been for supporting your work?

- Not at all valuable
- Slightly valuable
- Moderately valuable
- Very valuable
- Extremely valuable
-

Supervision

Q12 How frequently have you spent time with your supervisor in which you discuss your performance?

- Never
- One time
- Once per year
- 2-3 times per year
- Monthly

- Weekly or more often

Q13 How valuable was the feedback provided to you by your supervisor in supporting your work?

- Not at all valuable
- Slightly valuable
- Moderately valuable
- Very valuable
- Extremely valuable

Goal Clarity and Instructional Coherence

Q14 Which of these goals and expectations has your supervisor set for you? Check all that apply.

- I have clear expectations about the work I need to do
- I have clear performance targets set for the work I am expected to do
- I know how my performance will be assessed
- I know how my work fits within the district's goals
- I have clear explanations about the district's instructional philosophy and teaching methods

Q15 How valuable are these goals and expectations that have been set for you by your supervisor in supporting your work?

- Not at all valuable
- Slightly valuable
- Moderately valuable
- Very valuable
- Extremely valuable

Autonomy over Decisions and Resources

Q16 In which of these domains do you feel like your district has given you autonomy as an administrator? Check all that apply.

- How teachers and support staff are hired
- The courses that are offered at your site
- How teachers are scheduled to teach
- How to allocate funds to support instructional improvement
- The technology that is utilized at your site
- The instructional methods utilized at your site

Q17 How valuable is having autonomy over these decisions and resources in the support of your work?

- Not at all valuable
- Slightly valuable
- Moderately valuable

- Very valuable
- Extremely valuable

Networking and Support Structures

Q18 In what ways does your district encourage networking and collaboration with colleagues? Check all that apply.

- They encourage me to cultivate relationships and professional learning networks with other administrators from my district
- They encourage me to cultivate relationships and professional learning networks with administrators from other districts
- They encourage a culture of district-wide collaboration and support among my colleagues

Q19 How valuable are networking and collaboration with other colleagues in the support of your work?

- Not at all valuable
- Slightly valuable
- Moderately valuable
- Very valuable
- Extremely valuable

District Support of Principals' Basic Psychological Needs

Q20 In reflecting upon my formal and informal interactions and conversations with my direct supervisor, I feel he/she celebrates my growth as an educator.

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

Q21 In reflecting upon my formal and informal interactions and conversations with my direct supervisor, I feel he/she provides valuable feedback that helps me improve my leadership.

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

Q22 In reflecting upon my formal and informal interactions and conversations with my direct supervisor, I feel he/she instills confidence in my ability to do my job well.

- Strongly disagree

- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

Q23 In reflecting upon my formal and informal interactions and conversations with my direct supervisor, I feel he/she listens to my opinions and ideas.

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

Q24 In reflecting upon my formal and informal interactions and conversations with my direct supervisor, I feel he/she explains the rationale behind decisions that are made.

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

Q25 In reflecting upon my formal and informal interactions and conversations with my direct supervisor, I feel he/she trusts me to solve problems in the way I see fit.

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

Q26 In reflecting upon my formal and informal interactions and conversations with my direct supervisor, I feel he/she is someone I am able to be open with at school.

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

Q27 In reflecting upon my formal and informal interactions and conversations with my direct supervisor, I feel he/she cares about me as a person.

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree

- Strongly agree

Q28 In reflecting upon my formal and informal interactions and conversations with my direct supervisor, I feel he/she makes me feel like I am part of a team.

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

Q29 In reflecting upon my formal and informal interactions and conversations with my direct supervisor, I feel he/she makes me feel like I am part of a team.

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

Open-Ended Questions

Q30 Please describe any other forms of support you have received from your district office that have helped you be successful in your role, that have not been expressed in this survey. Also, expound on why you found those supports to be beneficial.

Q31 What other supports from your district office do you feel would be beneficial to your work and why?

Q32 In addition to these, what other supports would you like to see provided to you by your district in response to the COVID-19 pandemic?

Appendix B: IRB Approval

The UNIVERSITY of OKLAHOMA

Institutional Review Board for the Protection of Human Subjects

Approval of Initial Submission – Exempt from IRB Review – AP01

Date: September 15, 2020 **IRB#:** 12413

Principal Investigator: Fielding Lyle Elseman **Approval Date:** 09/15/2020

Exempt Category: 2

Study Title: Principal Perceptions of District Support in Oklahoma: What They Get, What They Want, and its Relationship to Psychological Needs Satisfaction

On behalf of the Institutional Review Board (IRB), I have reviewed the above-referenced research study and determined that it meets the criteria for exemption from IRB review. To view the documents approved for this submission, open this study from the *My Studies* option, go to *Submission History*, go to *Completed Submissions* tab and then click the *Details* icon.

As principal investigator of this research study, you are responsible to:

- Conduct the research study in a manner consistent with the requirements of the IRB and federal regulations 45 CFR 46.
- Request approval from the IRB prior to implementing any/all modifications as changes could affect the exempt status determination.
- Maintain accurate and complete study records for evaluation by the HRPP Quality Improvement Program and, if applicable, inspection by regulatory agencies and/or the study sponsor.
- Notify the IRB at the completion of the project.

If you have questions about this notification or using iRIS, contact the IRB @ 405-325-8110 or irb@ou.edu.

Cordially,

Ioana Cionea, Ph.D.
Vice Chair, Institutional Review Board