Superior Superintendents: Examining the Gendered Difference of Instructional Competencies Among Superintendents in Ohio

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ABSTRACT

Female superintendents across the nation comprise approximately 27% of the population (Finnan et al., 2015), while female teachers account for approximately 75% of the population (Robinson et al., 2017). In Ohio, the gender gap between male and female superintendents is more pronounced with 16.8% of superintendents identifying as female at the time of this survey (Buckeye Association of School Administrator, 2020).

Research has shown that superintendent responsibilities have shifted from a managerial focus to a focus on curriculum and instruction (Kowalski et al., 2010; Leithwood et al., 2013; Maeroff, 2010). This study sought to further explore the gendered difference of superintendents by exploring the instructional competencies needed to be a superintendent in the 21st century as well as the pathway taken to the position.

This mixed methods study used an electronic survey with quantitative questions as well as qualitative open-response questions. Findings revealed that there is a gendered difference in superintendent competencies, and females rate themselves higher in the curriculum and instruction competencies of the NELP standards. In Ohio, there is also a gendered pathway to the superintendency, and females were more likely to hold positions that provide background and experience in curriculum and instruction responsibilities. This research provides evidence to support that females have the background to be strong curricular superintendents that can directly impact both district and student success.

Keywords: superintendents, superintendent competencies, gender gap, female superintendents, pathway to the superintendency, gatekeepers, and superintendency preparation

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CHAPTER I

INTRODUCTION

> The pool of female leaders may be deep and wide, but few are able to make the tough trip upstream. (Dana & Bourisaw, 2006a, American Schoolboard Journal, 27)

In a school district, there is no leadership position that is more influential than the position of superintendent. The position of superintendent directly impacts the overall success of a school district (Kowalski et al., 2010; Maeroff, 2010; Marzano & Waters, 2006; Tallerico, 2000). In fact, Marzano and Waters (2006) found a direct correlation between superintendent effectiveness and student achievement with a positive correlation of .24. Through this position, the superintendent impacts hiring decisions at both the building and district level. It is imperative that highly qualified individuals are chosen for the role of superintendent as this position directly impacts student success.

Over time, the role of superintendent has evolved to place a stronger emphasis on instructional leadership (Kowalski et al., 2010; Maeroff, 2010). Current superintendents are instructional leaders in addition to managers. This shift has caused a need for superintendents to develop an understanding of curriculum and instruction.

In the position of superintendent, there is also a gender disparity resulting in a significant lack of females in the role. Females account for 76% of teachers (Berry, 2013) and only 27% of superintendents nationally (Finnan et al., 2015). This continued gender gap highlights the inequality present when considering the role of superintendent.

Research suggests that females have a stronger background in curriculum and instruction than many of their male counterparts (Finnan et al., 2015; Reid, 2020; Shakeshaft et al., 2007). Women tend to lead with an instructional focus. This includes

working with teachers to ensure instructional competencies and understandings as well as creation of instructional programming. This may actually suggest that women have a stronger focus on curriculum and instruction than men, which may better qualify them to lead as superintendents in 21st century districts (Brunner & Kim, 2010). Considering both the need for social equity and the background of female leaders, it becomes increasingly important to further close the gap for females ascending to the superintendency.

There is a misconception that adding more women to the lower positions in an organization will naturally allow more women to rise to top positions over time.

> Just as a fish does not realize it lives in water, school leaders and education policy makers often fail to see that even after decades of mainstream acceptance of equal opportunity workplaces, public education careers and promotion pipelines continue to be shaped by narrow gender norms. (Maranto et al., 2018, p. 1)

The field of education has clearly shown that simply having female teachers does not equate to female superintendents over time. There are many assumptions to this theory including a lack of gender bias and an assumption that males and females have similar qualifications (Kellerman & Rhode, 2017). Despite this, Kellerman and Rhode explained that we can begin to combat this through inclusive searches and more education. Why do we need to consider females for the position of superintendent? In an interview, Melissa Conrath stated that we need qualified women leaders in the position to prevent creating a "disservice to public education" by denying them access based on gender alone (Kilpatrick, 2018). In order to reduce gender bias and strive toward equity, we must further consider this issue. The issue of gatekeeping also highlights the importance of

identifying the job qualifications necessary for superintendents in the 21st century. As school board members and search firm consultants begin to expand their definition of a 21st century superintendent to include an emphasis on curriculum and instruction, it will allow more women to be considered for this role.

Problem Statement

The role, expectations, and responsibilities of the superintendent have changed over time. To be a 21st century superintendent, it is imperative that individuals understand curriculum and instruction. Leithwood et al. (2013) explained that high performing schools directly correlated with schools that placed emphasis on curriculum and instruction. Reid (2020) further explained that to lead school reform and impact academics, superintendents must address academic success through visioning and organizational supports linked to a solid curricular foundation. In order for superintendents to become effective instructional leaders, they must possess a strong background in curriculum and instruction.

To further complicate this issue, research suggests that there is a gendered difference in the way that male and female superintendents lead. Males lead with a business-oriented or managerial style, while females lead with a collaborative approach focused on improving instructional components (Björk, Kowalski, et al., 2014; Grogan & Shakeshaft, 2013; Sergiovanni, 2013). This provides implications for the ability of superintendents to effectively lead related to their gender. Additionally, the pathway that males and females take to the superintendency may impact their background knowledge and understanding of curriculum and instruction.

Much of the current research pertaining to women in the superintendency focuses on the barriers that exist and how to overcome them. As outlined by Gresham and Sampson (2017), there is a need to further research in the area of women superintendents, and specifically research that extends beyond previous topics of inequity, discrimination, and barriers. As evidenced through the review of literature, knowledge of curriculum and instruction is a newer area of focus for superintendents. Maranto, Trivitt, et al. (2017) discovered that there was a lack of criteria in superintendent contracts regarding academic criteria used in evaluations with only 9 of 115 contracts evaluated including any type of academic criteria. This demonstrates the need for additional evidence to support the critical need for curriculum and instruction as a focus area.

The superintendent is arguably the most influential and important curricular leader for the school district. The organizational structure of school districts gives the superintendent unique access to school board members, building administrators, as well as the community at large (Bird et al., 2013). This position gives the superintendent the opportunity to affect change. If we want to begin to improve academic outcomes across our schools, it is imperative that the use of academic-related criteria becomes standard when hiring and evaluating superintendents.

Presently there is a gap in the research related to the curriculum and instruction competencies of superintendents. Synergistic Leadership Theory (SLT) considers multiple dimensions of leaders. When linked to SLT, the further exploration of competencies provides insight into how superintendents can effectively lead in 21st century school districts. This study examined superintendents' self-perception concerning

their knowledge of curriculum and instruction and how that knowledge developed through their pathway to the superintendency.

It is critical to understand how the pathway to the superintendency and background experiences can shape the curriculum and instruction understanding of the primary leader of our districts. The National Educational Leadership Preparation (NELP) standards have a strong focus on curriculum and instruction woven throughout their standards but are intentional in the fourth standard, Learning and Instruction.

> A district-level leader must have the knowledge and skills to evaluate, design, cultivate, and implement coherent systems of curriculum, instruction, supports, assessment, and instructional leadership. This includes knowledge of how to evaluate, design, and implement curricula, instructional technologies, and other supports for student programs and how to evaluate, design, and cultivate systems of support, coaching, and professional development for principals and other school and district leaders. (National Educational Leadership Preparation [NELP], 2018, p. 17)

A strong leader must have the ability to design, implement and evaluate curriculum in a way that allows for success of all students. This in-depth understanding of curriculum and instruction was cross referenced with the pathway to superintendency and leadership style to determine intersectionality.

Research in this area will help future leaders to further understand how the curriculum standards link to leadership in order to increase promotion of females to superintendent roles. Higher education institutions can use this information when crafting leadership programs and recruiting female candidates. As Dana and Bourisaw (2006b)

noted, preservice educational programming can be an essential component to preparing successful female leaders. Superintendency preparation programs must also revisit their curriculum. Specifically, the curriculum of these preparation programs needs revision to include the presence of women when considering the curriculum and instruction delivery models (Skrla et al., 2000).

Statement of Purpose

The purpose of this study was to examine the position of superintendent to critically review competencies in curriculum and instruction using the NELP Learning and Instruction standard and component subscales to determine if there is a gender difference. When considering the gendered differences of leaders in the superintendency, it is important to first understand the current instructional competencies necessary for success in the position. Further, this study examined pathways to the superintendency to determine if certain positions better prepare superintendents for the curriculum and instruction demands of the position.

The National Policy Board for Educational Administration (NPBEA) created standards for district level administrators called the National Educational Leadership Preparation (NELP) Program Recognition Standards in 2018. Consideration of these standards in relation to the qualities of a successful leader in 21st century schools reveals the necessary competencies. Recognizing the necessary competencies will allow females to overcome invisible barriers in advancing to the superintendency, and will shed light on quality recruitment, hiring, and retention practices for both male and female superintendents.

Research Questions

The research questions for this study include:

1. Is there a difference in superintendent learning and instructional self-reported competencies based on the newly developed NELP standard for learning and instruction between male and female superintendents?
2. Is there a gender difference in the pathway to superintendency in Ohio?
3. Do specific positions better prepare superintendents for the curriculum and instruction demands of the position?

Overview of Methodology

To explore these questions, a mixed-methods approach was used. Quantitative research via a survey was used to collect self-reported superintendent competencies. These results were further explored with the use of open-ended qualitative questions at the end of the survey.

The survey used consisted of a 26-item research-developed questionnaire. To create this instrument, the researcher used the learning and instruction components of the NELP Standards for District Leaders and the Synergistic Leadership Theory (SLT). The use of these components helped to identify superintendents' perception of competencies necessary for successful leadership outcomes. Further, the use of SLT provided insight into leadership styles while allowing for specific voices and perspectives of female leaders (Irby et al., 2002).

Superintendents of traditional public school districts in the state of Ohio were the targeted audience. Participants were sent the electronic survey using the SurveyMonkey

platform via an email. Results were secured within the system, and follow-up emails were sent to those who did not respond initially.

Results of the survey were analyzed using SPSS, a statistical analysis system. Factor analysis was used to analyze groups of variables. Data was also analyzed using a Multivariate Analysis of Variance (MANOVA) to examine the relationships between variables to explore gender differences. This allowed the researcher to explore the relationship between curriculum and instruction competencies, gender, the pathway to the superintendency, and leadership style as defined by components of SLT. Qualitative analysis including coding of responses was used to further analyze the open-ended questions.

Rationale and Significance

It is important for school district leaders to represent our diverse population and provide representative proportionality to females in the education field. Diversity can directly impact the overall effectiveness of a company. Companies that have gender diversity within their executive teams outperform others by 21% and are more likely to be profitable by 27% (Hunt et al., 2018). District human resource departments and superintendent search agencies can use this research to promote, recruit, and retain female leaders.

School boards also need to reexamine the necessary qualifications for superintendents in the 21st century. School board members must be cognizant of gender-biased practices or policies that may be unintentionally influencing decisions (Dana & Bourisaw, 2006a). School board members need to recognize and then begin to change these practices to allow for the best candidates to succeed. This begins to close the gender

gap for superintendents and allows recognition of the unique leadership characteristics and traits that allow female leaders to be effective.

Practices and beliefs can change over time. Yukl (2010) noted that circumstances may cause values and beliefs to change, which then impacts leadership behaviors causing them to change as well. It is imperative that as the position of superintendent shifts to a focus on curriculum and instruction to improve student achievement that we closely examine the competencies of superintendents and the background necessary to be successful.

Researcher Assumptions

There is an assumption that superintendents must have a strong understanding of curriculum and instruction in order to be effective. This is an important distinction from a superintendent who hires a competent leadership team to a superintendent who has the background understanding him or herself. Student performance coincides with positive conditions; through effective practices, a leader has the capability to directly impact student learning (Leithwood et al., 2013). The superintendent must be able to create practices that best allow student learning to exist. Further, Maeroff (2010) found that it is more important for the superintendent to personally have this understanding so there is not a need to depend or rely on the actions of others. Instructional leadership reaches high levels of success when combined with competencies in curriculum and instruction.

Definition of Key Terminology

21st century: current educational time period that places emphasis on collaborative learning with a leadership emphasis on curriculum and instruction. There

are also workplace norms of gender equity inherent in 21st century settings (Maranto et al., 2018).

At-risk: districts that are achieving below expected levels of student achievement. This can be due to high levels of poverty, lack of appropriate funding, high levels of minority student populations, etc. (Björk, Browne-Ferrigno, et al., 2014).

Confidence gap: the gap between male and female confidence levels that can attribute to one's willingness to apply for new and higher-level positions (Kay & Shipman, 2014).

Glass ceiling: the idea that women can only ascend to a certain level of leadership within an organization before hitting an imaginary barrier that prohibits them from further ascension (Gresham & Sampson, 2017).

Glass cliff: built on the glass ceiling, the glass cliff is the phenomenon that females are more likely to be promoted in organizations that are failing or otherwise at risk in an effort to save it (Ryan & Haslam, 2004).

Good old boys' network: the cultural norm that males help other males to ascend to high level positions while simultaneously prohibiting females from entering the same positions. This bias may result in females adopting male characteristics to break this barrier (Connell et al., 2015; DiCanio et al., 2016).

Inequity: related to gender, inequity is the unfair treatment of females. This can manifest as unequal pay, inability to obtain leadership positions, and gender bias as examples (Gresham & Sampson, 2017).

Inequality: social disparity that exists due to the uneven proportion of females in the superintendency (Robinson et al., 2017).

Organization of the Dissertation

This dissertation examined recent literature in order to investigate the historical gender gap within education and to define leadership and the qualifications and competencies required for superintendents in 21st century school districts. Through a review of the research, the researcher explored barriers and gatekeepers that exist for female superintendents. This information explains the problem and the research method used in chapter 3.

Summary

Knowing that the position of the superintendent is directly related to the overall success of a school district, it is important that the individual in this position possess the necessary curriculum and instruction background experiences and competencies to be effective. This study explored the pathway to the superintendency combined with superintendent's curriculum and instruction competencies to determine patterns and trends. Additionally, this study brings the gender differences of superintendent competencies to light as a means to continue gender equality conversations.

CHAPTER II

REVIEW OF LITERATURE

The superintendent is arguably the most influential and impactful leadership role within a school district. Superintendents "inherit at once both opportunity and responsibility and how they execute their leadership challenges may go a long way toward determining their success in their districts" (Bird et al., 2013, p. 38). Through oversight of educational and operational systems, it is ultimately the responsibility of the superintendent to ensure student success. It is, therefore, imperative that highly qualified superintendents fill the position.

When considering the role of the superintendent, it is also important to understand the gender gap within education. In American schools, there is a disparity between the number of female teachers and the number of female superintendents. Females make up approximately 76% of teachers across our nation (Berry, 2013), yet females represent only 27% of superintendents (Finnan et al., 2015). This gender disparity creates an imbalance of power within our educational system. With the proportion of females as superintendents at 23% in 2012, it will take almost 80 years for proportional representation to be attained if it continues to increase by .7% annually (Wallace, 2015). If not directly addressed, this imbalance will persist for decades to come. There are many reasons for this gendered difference, including both internal and external barriers that women face. It is imperative that we understand these barriers in an effort to address and correct them.

Significant barriers exist with gatekeepers to the position, including school boards and search firms that tend to hire males over females. Tallerico (2000) pointed out that

school board members and search firm consultants define qualifications for the superintendency based on outdated patriarchal ideals that do not reflect leadership skills or current realities. School boards and search firms are critical components of the U.S. education system, and it is imperative that they are able to prioritize student achievement in order to improve educational outcomes. This will ensure that they hire superintendents who possess the necessary curriculum and instruction competencies to be successful leaders in 21st century schools.

The recurring theme of the pathway to the superintendency is also important to examine. Currently, the pathway to the superintendency is considered a barrier for females. Females are more likely to hold elementary positions and central office positions before advancing to superintendent, while men are more often secondary teachers, secondary principals, and then superintendents (Brunner & Kim, 2010; Davis & Bowers, 2019). This is seen as a barrier for women because they are less likely to have opportunities to advance in this pathway. Further, significant research suggests that school boards and search firm consultants further perpetuate the importance of the male dominated pathway by emphasizing the importance of management and financial skills (Maranto, Teodoro, et al., 2017).

Despite the research that suggests that the pathway is a barrier for females, there is also evidence to support that the pathway that females take should actually be considered an asset. Robinson et al. (2017) identified positions including master teacher, coordinator, or assistant superintendent with a focus on curriculum as common for females. These positions offer females background in curriculum and instruction that may better prepare them for the superintendency. “The term normal needs a new definition -

one that includes experiential preparedness in curriculum and instruction" (Brunner & Kim, 2010, p. 286). If we reconsider the best pathway to the position, this will help women to overcome this barrier and instead turn it into an asset.

When further considering the competencies required for qualified superintendents, research shows that for superintendents in the 21st century, curriculum and instruction must be a focus (Kowalski et al., 2010; Leithwood et al., 2013; Maeroff, 2010). This is a shift from previous expectations that focused on the managerial style of leadership to an instructional focus. Hattie (2015) explained that instructional leaders have the largest impact on student achievement. This suggests that we must begin to shift our thinking when examining the role of the superintendent to focus heavily on curriculum and instruction.

Research suggests that there is a gendered difference in leadership styles between how males and females lead. Females adopt a more shared or collaborative leadership style that focuses on problem solving and collaboration (Grogan & Shakeshaft, 2013; Sergiovanni, 2013). Females also focus on curriculum and instruction as a means to improve student success (Björk, Kowalski, et al., 2014). This may be a result of evidence that shows that females are more likely than males to have a stronger background in curriculum and instruction. In opposition to a more hierarchical leadership style, this puts females in a position to develop more collaborative practices and processes tied to curriculum and instruction.

Research focused on the history of women in education, discriminatory practices, and barriers that women face when advancing to the superintendency provides insight into the challenges for females aspiring to the superintendency and sets the foundation for

this study. This study sought to examine the necessary curriculum and instruction competencies of superintendents while exploring the gendered difference. Review of superintendent backgrounds and pathway to the position gave insight into the way in which gender impacts and influences these competencies.

Theoretical Framework

In mixed-methods research, the theoretical framework is used to frame the study (Creswell, 2009). When exploring gender differences, it is common to use a feminist perspective to frame the problems associated with this research. Although this theory serves as the foundation for much of the research, it is also important to explore the Synergistic Leadership Theory (SLT) which has since emerged from the Feminist Theory and expands the theory to specifically explore leadership. This is an important component because "assessing women's leadership with outdated, male-normed theories and criteria of management and leadership are rendered ludicrous" (Marshall, 2003, p. 215). It is important to consider the female perspective in a way that gives voice to the female leader.

The Gatekeeper Theory is also introduced as a foundational component to this research. This theory explores how school boards and search firms can act as gates that prohibit access to the superintendency for females. This theory provides deeper understanding of additional barriers and constraints that women face which prohibit them from entering the position of superintendent.

When combined, these theories provide insight into the complexities that females face when advancing to superintendent and further explain why many do not take this path. These perspectives shape the subsequent perspective used in this research and were

considered during the methodology of the questions created, subjects surveyed, and data collected (Creswell, 2009). The combination of these theories provides the lens that shapes this research.

Synergistic Leadership Theory

Leadership theories are historically gendered and dominated by the masculine world. Irby et al. (2002) closely examined leadership theory to identify gaps and explore the magnitude of male dominance. Through an exploration of 24 commonly taught leadership theories at the collegiate level, Irby et al. determined which theories included a female perspective and were generalizable to female leaders. This research defined what made a leadership theory and determined that there was a gap in the current research. Using this understanding, Irby et al. developed the Synergistic Leadership Theory (SLT) in 1999 that became the first new leadership theory of the 21st century. SLT replaced traditional theories and allowed for diversity and inclusion. Instead of a reactive approach, SLT aimed to include females by adding a new theory to the previously male-centric leadership theory available (Ardovini et al., 2010). This was an important development for female leaders because it gave new perspectives and voice to females. For the first time, females could use SLT to validate their leadership behaviors and feelings in a way previously not possible.

SLT focuses on four main factors: (a) attitudes, beliefs, and values, (b) leadership behavior, (c) external forces, and (d) organizational structure (Irby et al., 2002). SLT uses these external factors as a measure of success actualized by a leader. Each factor contains sample components including characteristics, behaviors, or influences that may define a leader (see Figure 1). No one factor is more important than another; instead, SLT

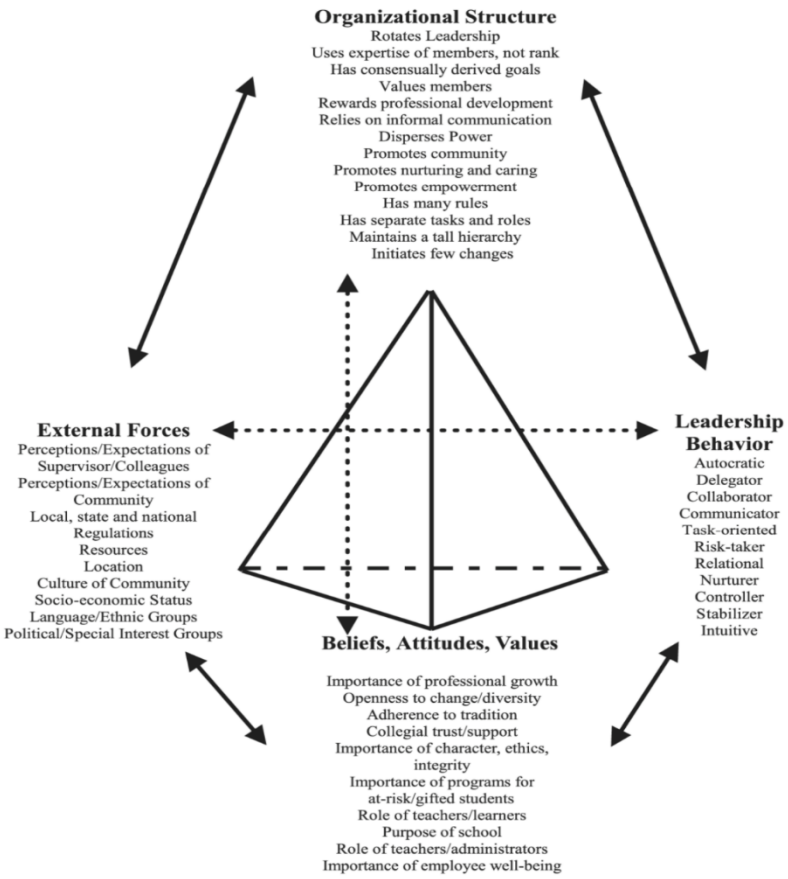
explores how factors work together. It is different from other theories in that it is gender inclusive but also purposefully acknowledges the leadership behaviors exhibited by females.

Several aspects of SLT make it unique, including the fact that it gives a voice to all genders and previously marginalized groups (Brown & Irby, 2003). Additionally, there are several assumptions that arise from this theory:

- Successful leadership is the interaction among leadership behavior, organizational structure, external forces, and attitudes, beliefs, and values.
- Women bring a particular set of leadership behaviors to leadership positions.
- No theory/model exists in current literature that is all inclusive of feminine leadership behaviors or women's perspectives.
- Feminine leadership style encompasses characteristics of the transformational leader.
- The more feminine leadership behaviors one exhibits, the more aligned he/she will be with a postmodern organizational type. (Ardovini et al., 2010, p. 27)

Figure 1

Tetrahedral model of SLT



Note. The four domains include two-way directional arrows connecting each domain to the others. This demonstrates the interconnectivity of these elements. Each element has several examples; however, these are not all encompassing. From "The Synergistic Leadership Theory," by B. Irby, G. Brown, J. Duffy, and D. Trautman, 2002, *Journal of Educational Administration, 40*(4), p. 313.

Sanchez and Thornton (2010) identified these unique characteristics of SLT as a possible strategy for female leaders to succeed because of its unique ability to transcend previously established patriarchal constructs and ideas of leadership.

Feminist Theory Compared to SLT

Through the creation of SLT, authors sought to eliminate the historical gender inequities faced by women leaders. When compared to feminist theory, SLT offers a different perspective uniquely tied to leadership, but it is important to note that SLT embeds feminist theory. Feminist theory in education focuses on the historical events that cause underrepresentation of females in the superintendency (Tallerico & Blount, 2004). Review of historical events give insight into commonalities and themes. Feminist theory "encompasses the economic, political, and social causes of gender equality" (Schafer, 2018, p. 9). While feminist theory considers the reason for a gender discrepancy, by itself, feminist theory does not also fully explore why females are quality leaders. Brown and Irby (2003) explained that the leadership factor of SLT embeds feminist theory because women leading with a feminist perspective develop relationships with others. Some common characteristics considered to be uniquely feminine include collaboration and interpersonal skills (Ardovini et al., 2010). By purposely including these characteristics, SLT embraces the traditional feminist theory by eliminating previous leadership constructs that may have marginalized females and contributed to societal gender inequities. This unique ability to blend leadership and feminist theory makes SLT even more meaningful to female leaders than work only grounded in feminist theory because of its focus on females as leaders.

Validation of SLT

Ardovini et al. (2010) conducted a validation study of SLT to determine its application to the field and validate its usefulness as a leadership theory. Through their study, Ardovini et al. determined that females in the role of superintendent utilize a

combination of the four factors as a way to focus on and see the big picture of education. Inherent in SLT is a strong understanding of curriculum and instruction, especially in the beliefs, attitudes, and values, and how it intersects with organizational structure. In their validation study, Ardovini et al. noticed that female leaders were apt to discuss the importance of student achievement and were very student focused in general. The overall perceptions of males and females in the survey found interactions among the factors regardless of gender, which validated the theory as an interactive theory for all and supports the differences between male and female leadership styles (Ardovini et al., 2010). This reinforces the gendered differences inherent in leaders.

It is important to closely examine leadership theory because it directly impacts organizational performance. In a meta-analysis review of 270 research studies conducted by Danisman et al. (2015), they examined 18 different leadership styles to determine the effect of each on organizational performance. Through their analysis, they found a medium positive effect when considering the impact of leadership on overall performance of the organization (Danisman et al., 2015). The impact that the leader has on performance is a critical component.

Knowing that leadership can greatly impact organizational performance, it is important to explore how women leaders produce successful outcomes. Use of SLT can provide insight into how women lead. Sanchez and Thornton (2010) also suggested that the use of SLT can be a strategy for women to overcome barriers to gender equity. By further examining the dichotomous elements of SLT in relation to a superintendent's leadership preference, one can further determine the individual's leadership style and how it intersects with gender and the pathway to the superintendency.

Gatekeeper Theory

In the simplest terms, a gate constricts what is able to flow through it. When applied to people, gatekeepers are the individuals who control access to the gate through decision making (Lewin, 1947). Lewin proposed that gates exist within channels. These gates, controlled by gatekeepers or individuals in key positions, can constrict or limit one's ability to move through a channel. Further, Lewin suggested that gatekeepers may have biases, and that their beliefs and attitudes may contribute to their willingness to open or close gates. This theory is the gatekeeper theory.

When applied to the superintendency, gatekeeping theory consists of the individuals or processes that restrict access to the position. For superintendents, this may include an application, interview, or recruitment. Dana and Bourisaw (2009b) identified that both school boards and search firms can act as gatekeepers to the superintendency. Numerous hidden qualifications exist for superintendent candidates. Despite the qualifications printed on job descriptions, "school board members' and consultants' behind-the-scenes definitions of candidate quality rely more on hierarchies of prior job titles than on particular leadership skills" (Tallerico & Blount, 2004, p. 12). Many of those surveyed placed significant value on secondary principals, which can become a gate for females since these positions are more likely filled by male candidates (Tallerico & Blount, 2004). Further, Tallerico and Blount identified that cultural norms also exist that perpetuate sexism at the gate. It is important to recognize these potential gates when examining the ability for females to ascend to the superintendency.

Females in the Superintendency

The disparity between the number of male and female superintendents has persisted through time. Even though the field of teaching is predominately female, males fill most administrative roles, and the difference is even more significant when considering the superintendency.

This gender gap exists for many reasons, including both internal and external factors. Internal barriers include work-family balance, lack of confidence, lack of aspiration or motivation, stress, and challenges of the position (Robinson et al., 2017; Shakeshaft et al., 2007). These barriers prohibit some women from aspiring to or applying for the position. Gender prejudice also continues to be an issue, and women face the glass ceiling. School boards and search firms play a significant role in the selection of candidates and perpetuate gender bias (Dana & Bourisaw, 2016a). These entities can become gatekeepers that further restrict females' ability to move into the position of superintendent. Despite the many barriers that exist, mentoring and networking can be extremely advantageous to females to overcome both internal and external barriers.

Significant research exists to suggest that women and men also hold different educational positions as they ascend to the superintendency. These gendered pathways serve as an additional barrier if search firms and school boards have preconceived notions of what pathway best prepares an individual for the position.

The background and pathway of male and female leaders are essential considerations when defining what leadership entails in 21st century schools. Review of the updated National Educational Leadership Preparation (NELP) Program Recognition Standards in 2018 gives further insight into the instructional competencies required for

today's superintendents. Using these competencies, it becomes evident that superintendents require a strong background in curriculum and instruction. Brunner and Kim (2010) further suggested that the background, pathway, and curriculum expertise of women may, in fact, make them more qualified for the role of superintendent in today's school districts.

The History of Women in Education

> The question is: Where are the women?
> -Margaret Grogan, *Voices of Women Aspiring to the Superintendency, (1996)*

Since the emergence of the superintendency in the 1800s, there has been a discrepancy between the number of males and females in the position. In 1930, a mere 11% of superintendents were female (Tallerico & Blount, 2004). Beginning in 1970, when research in this area began to intensify, it became apparent that females were significantly underrepresented in the superintendency when compared to their male counterparts. Tallerico and Blount noted through their research that the number of female superintendents hit a low in 1970 with 3.4% due to school consolidation and sexual divisions in the superintendency that mirrored those of other occupations at the time. This number began to climb again after 1970, but it was a slow process. The 2000 American Association of School Administrators (AASA) annual survey had the largest response rate recorded with 2,262 responses, and only 12% of superintendent respondents identified their gender as female (Glass et al., 2000). Even though this number represented a relative high, females were still considerably underrepresented.

As a profession, teaching has been a predominantly female field. Berry (2013) noted that throughout history, the marginalization of women was commonplace, as evidenced by women receiving fewer wages than their male counterparts for similar

work. Beginning in the 19th century, American females began to dominate the education field because they fit the nurturing stereotype expected of teachers by society. Berry described the custodial responsibilities often expected of female teachers as a part of the history of teaching as a profession. In addition, it was socially acceptable for school boards to pay them less money (Maranto et al., 2018). This continued devaluation of females as leaders in organizational life has made it difficult for women to gain authority and acceptance, and become leaders within the school setting (Berry, 2013). Although this stereotype has begun to shift, women still represent 76% of the teaching profession and yet policy makers often make decisions that demonstrate the devaluation of female leaders (Berry, 2013). This has significant implications for all current and aspiring female leaders.

When transitioning from the teaching field to leadership roles, stereotypes and devaluation only intensify as fewer women hold leadership positions. We have made significant advances and women hold more administrative positions than they had in the past; however, they are still underrepresented when compared to female teachers. In 2011-2012, elementary teachers were female at 90%, while only 66% of elementary principals were female (Maranto et al., 2018). The percentages are more drastic at the high school level. 63% of high school teachers are women, while only 48% of secondary school principals are women (Maranto et al., 2018). This gender gap shows the continued disparity for women in administrative positions.

In the superintendent role, the gender gap only continues to widen. This gap begins with the ability of candidates to earn the position. Males who applied for superintendent positions obtained them at slightly higher than a 70% success rate

compared to a 30% success rate for females (Muñoz, Mills, et al., 2014). Even if females apply for the position, this demonstrates that they may not be successful in getting the job.

When considering percentages of females in the superintendent position, the disparity is much larger than the gap for building level administrators. According to the 2015 Mid-Decade Study conducted by the American Association of School Superintendents, female superintendent respondents accounted for 27% of the population nationally (Finnan et al., 2015). While this number is higher than the nationally reported averages 15 years earlier, it still demonstrates a large discrepancy. Nationally, the average is up a mere 2% from data collected in 2010 (Finnan et al., 2015). This lack of forward progress is more alarming when compared to a teaching field that is still predominantly female at 75% according to Robinson et al. (2017). Considering the number of female teachers, the number of female superintendents should be approximately 75% higher than their male counterparts. The fact that the actual percentage of female superintendents is closer to the inverse of this number presents a fairness and equity issue. Additionally, the lack of female superintendents leads to a lack of diverse superintendent viewpoints across the nation. The increase of female superintendents from 12% in the 1990s to 22% in 2006 would create disparity until the year 2035 when equity would reach 50/50 (Derrington & Sharratt, 2009). Despite the slight upward swing, women remain a significant minority.

As a state, Ohio falls significantly short of these national percentages. Buckeye Association of School Administrator (2020) data showed that during the 2018-2019 school year, 15.4% of superintendents were women, the percentage dropped to 14.6%

during the 2019-2020 school year, and raised to 16.8% during the 2020-2021 school year. American Association of School Administrators (AASA) data over the years showed that the national percentage of female superintendents has grown from approximately 13% in 2000 to 27% in 2015 (Finnan et al., 2015; Glass et al., 2000). The approximate 15-16% of female superintendents in Ohio demonstrates that as a state, Ohio is more than 15 years behind the national average and is not making significant gains to close the gender gap.

Discrimination While in the Superintendency

Unfortunately, attaining the position is only the first step in overcoming gender bias. In a study conducted by Bañuelos (2008), female superintendents reported that "they were aware of their gender from the time they got dressed for work in the morning" (p. 28). Gender bias takes on many forms from the more obvious of inappropriate touching to subtle comments and disrespectful behaviors. "They [female superintendents] are told to smile more, their appearances are critiqued, and they can face harsh treatment when they assert their authority" (Superville, 2016a, p. 16). Males do not face this same scrutiny. Female superintendents perceived that their school boards were more demanding of them and asked more questions (Bañuelos, 2008). This implies that school board members treat male and female superintendents differently due to gender. In fact, 71% of the women interviewed believe that their gender impacted their overall evaluation in some way (Bañuelos, 2008). If, however, women instead try to conform to the societal norms associated with male superintendency, opposition may still exist. Muñoz, Pankake, et al. (2014) explained that this occurs due to the negative perception caused by the gendered definition associated with the superintendent position when women try to

conform to previously male-centric norms; however, if women try to change the norms and shift the gendered definition, that has negative connotations. This puts women in a difficult no-win position.

To further examine sexism affecting superintendents, Skrla et al. (2000) conducted a research study to discover patterns of sexism, silence, and solutions. In their study, several themes emerged linking sexism to the superintendency. All female participants held qualifications for the position, however, they all reported frequent questioning of their competency due to their gender (Skrla et al., 2000). This continued questioning may be a direct result of school boards not fully understanding the qualifications needed for a superintendent in the 21st century, or it may be a result of implicit gender bias and the uncertainty of board members to have faith in a female superintendent to perform work previously considered better suited to males. Other themes that emerged from the research of Skrla et al. were that women felt sex-role stereotypes were present in the form of assumptions, expectations, and intimidation by board and community members. Although these practices are concerning, the women involved often do not voice their concerns.

Networking and Discrimination

Further discrimination is evident in the good old boys' network (Derrington & Sharratt, 2009; Glass et al., 2000; Kelsey et al., 2014). Daniel Domenech, executive director of the AASA, explains that the boys club impacts females when males in decision making positions hire other males (Ramaswamy, 2020). This practice of sex discrimination occurs when networking and connections benefit men but not women (Derrington & Sharratt, 2009). Both male and female superintendents are aware of this

hidden network in school districts. In fact, over 50% of superintendents surveyed nationally during the AASA survey acknowledged that the good old boys' network is still a practice (Glass et al., 2000). This practice becomes a discriminatory barrier for women while allowing men to succeed. Further, Glass et al. (2000) suggested that search consultants are often members of this hidden network. The hidden network also still persists in many districts, and some women perceive it to be the reason that male candidates ascend to positions over female counterparts. According to a study conducted by Kelsey et al. (2014), women face stereotypes and the good old boys' network that impact their ability to further navigate the system. Navigating this network can become a significant challenge for females.

Discrimination exists relative to the type of superintendent positions that females do attain. Women are more likely than their male counterparts to work in districts with a higher percentage of people of color or districts with a large population of students who are experiencing homelessness or students with disabilities (Finnan et al., 2015; Robinson et al., 2017). This suggests that high-need districts are more likely to hire females over males than districts that have lower needs. This phenomenon is referred to as the glass cliff that suggests that women are more likely to be promoted in high need organizations with the expectation that they are able to fix it (Ryan & Haslam, 2004). In the field of education, this occurs when females are superintendents in high need or at-risk districts. Sampson et al. (2015) researched school districts across the state of Texas during the 2013-2014 school year. In their research, Sampson et al. discovered that women were more likely to be superintendents of urban districts (22%) and in central suburban districts (26%). Further, females may be more likely to be hired by districts with less

financial stability. AASA survey data demonstrated that female superintendents are "less optimistic about the economic stability of their district" than male superintendents (Rogers & McCord, 2020, p. 15). Female superintendents in the field also recall scenarios in which women serve in higher-needs districts. Superintendent Bruckner explained that her school board hired her to turn the community around and school board members noted that she "meant business" (Superville, 2016a). Conclusions drawn from these data suggest that the leadership style of women lend themselves to be more effective in high-need districts than males. This continued gender inequity further demonstrates the gap between male and female superintendent positions.

Gender prejudice continues to be an issue, which causes women to face the glass ceiling (Dana & Bourisaw, 2006b; Gresham & Sampson, 2017). This suggests that discrimination causes women to peak in leadership roles prior to advancing to the superintendency. Interestingly, we do not know how deep this bias truly runs because the literature does not fully capture women either. In a review of educational administration literature, Jones (1990) discovered that almost one fourth of published articles failed to test for or report gender differences and only 4% provided enough evidence to support a gender difference hypothesis. This may indicate either a perceived lack of importance or simply a lack of inquiry in this area. This too has begun to shift in the past decade, but much of the research still exists in dissertations (Shakeshaft et al., 2007). There is much speculation about why there is a lack of gender specific research. Potential reasons vary, but the evidence is clear that we need to do a better job of learning from women in the field in an effort to overcome barriers.

Gender Disparity in Salary

The difference between salaries for male and female superintendents also reveals discrimination. According to data from the 2019-2020 AASA Superintendent Salary Study, the median income for females is $138,125 and the maximum is $325,000, while the median income for males is $141,217 and the maximum is $357,418 (Rogers & McCord, 2020). Superintendents' salary typically depends on the size of their district. Nationally, AASA data showed that almost 70% of females surveyed served in districts with fewer than 3,000 students, which accounts for the bottom two categories out of eight (Rogers & McCord, 2020). The salary discrepancy may speak to the types of districts that hire male or female candidates. It may also reflect the ability of males and females to bargain for a higher salary and receive adequate compensation once offered a position. D'Agostino et al. (2019) discovered that only 20% of accredited institutions offered a course in negotiations, although some claimed to include these topics within other courses. Although the ability to negotiate is not taught to either gender, research does suggest that males and females differ in their ability to ask for raises and promotions. Babcock and Laschever (2003) found that women ask less often than men with only 7% of women negotiating their salary compared to 57% of men. Continued disparity in salary may be linked to negotiation skills or the willingness to negotiate in general.

The gendered motivation for attaining the position in the first place may also provide insight into the salary discrepancy. Interestingly, males spoke to the topic of salary increase as a factor while women did not (Muñoz, Mills, et al., 2014). Females instead identified self-development and growth, moving to the position to obtain a

leadership opportunity, and the position being an opportunity for service as reasons for aspiring to the position (Muñoz, Mills, et al., 2014).

Additional Barriers to the Superintendency

Significant research exists to support numerous barriers in place for female superintendents. As with the shifts in cultural expectations and societal norms, the barriers experienced by women have also changed through the years. Barriers began to shift between 1993 and 2007 from external barriers such as sex role stereotyping, discrimination, and lack of mentors in 1993 to self-imposed barriers including motherhood and family obligations (Derrington & Sharratt, 2009). This may suggest that women were not seeking the position.

Despite this, Derrington and Sharratt also recognized that two of the most prominent barriers for aspiring female superintendents included the presence of the good old boys' network and school boards acting as gatekeepers due to lack of knowledge of female qualifications. This demonstrates that external barriers still existed for women. This shift from societal discriminatory practices to a combination of self-imposed and external barriers including gatekeeping marks an era in need of education.

There are many reasons why women currently may be underrepresented in the superintendent position. After reviewing results from the 2000 AASA survey, Glass (2000) outlined six major reasons including:

1. They are not in positions that typically lead to the superintendency.
2. They may not have the credentials.
3. They are not as experienced in fiscal management.
4. They are not interested in the position for personal reasons.

5. They enter the field of education for reasons other than pursuing leadership opportunities.
6. They enter administrative positions later in their career.

These reasons included both internal and external factors and may also include deeper implications of explicit or implicit sexual bias.

Pathway to the Superintendency

The first barrier identified by Glass (2000) suggested that women are not in the correct positions to ascend to the superintendency. This implies that the pathway to the superintendency is important for advancement. Females are more typically elementary teachers and have fewer opportunities to move up the ladder (Glass, 2000). Glass claimed that elementary teachers are not as likely to become superintendents, and that elementary schools are less likely to have athletic coaching positions available. The assumption is that coaching or other opportunities only available at middle or high schools are prerequisites to the superintendency. Brunner and Kim (2010) challenged this statement because it heavily implies that women should take the same pathway as men. Men tend to take a more direct route to the position, whereas women take a more complex and varied pathway. Men typically advance to the superintendency by serving first as secondary principal, while women tend to hold a district-level position first (Brunner & Kim, 2010; Davis & Bowers, 2019). If women follow a different pathway from men, it may serve as a barrier itself.

The pathway division for males and females begins with principal positions. Fewer females have principal roles at both the elementary level and high school level when compared to the number of female teachers. Maranto et al. (2018) explained that

90% of elementary teachers are female, yet only 66% are principals and 63% of high school teachers are female, and yet only 48% are principals. Glass (2000) contended that this high percentage of women in elementary positions does not provide women with the positioning to become superintendent, because 75% of superintendents did not teach at the elementary level. Instead, Glass noted that the most common positions leading to the superintendency were either assistant principal or high school department chair. The primary pathways to the superintendency begin through assistant principal positions not often found in elementary buildings, department positions not often found in elementary buildings, and the high school principal position itself. This places female elementary teachers in positions unlikely to advance to the superintendency and may contribute to the overall number of female superintendents.

Credentials

In regard to training and qualifications, advancement to the superintendency is only possible with state superintendent certification and a university degree beyond a bachelors. Credible prior experience is also necessary, but this is more arbitrary and individual school boards define it differently. There is also a presumption that obtaining a doctoral degree is important and preferred in many job postings. Grogan (1996) noted that 36% of superintendents held a doctoral degree, and yet in 2007, 67.5% of doctoral degrees in the education field were held by females (Grogan & Shakeshaft, 2013). This demonstrates that women are qualified if holding a doctoral degree is recognized as qualification. According to the Council of Graduate Schools annual report, women earned more doctoral degrees than men with a percentage of 52.2%, which marks the fourth consecutive year that women have out-earned men in this regard (Perry, 2013).

Perry also noted that women earned more bachelor's degrees than men with 60% of bachelor's degrees earned by women. In the field of education, 74.5% of enrolled graduate level students are female (Perry, 2013). These statistics clearly demonstrate the overrepresentation of females in graduate studies compared to their male counterparts, and yet this does not translate into more superintendent positions. It may attribute instead to women's desire to over qualify themselves in order to have a better chance of being selected for top positions.

Grogan (1996) interviewed women to determine why women aspiring to the superintendency obtained higher degrees, and the women suggested that their reasons included keeping every door open, not giving a reason for a school board to say no, and the perception that it was necessary. Many of those without it referenced that it may, in fact, be necessary or helpful to advancement. In a survey conducted by Walker (2018) this trend also holds true for Ohio; 78% of female respondents agreed that "advanced degrees are necessary for my success" by responding with a 3 or higher on a 5-point scale. Interestingly, Freeley and Seinfeld (2012) discovered through in-depth interviews with former superintendents that the pathway, positions, and qualifications did not matter as much as the experience. All of those interviewed, although they all had their doctorate, explained that these factors were not as important as the experiences that built on personal qualities and skills along the way (Freeley & Seinfeld, 2012). This supports that females have the qualifications for the position, but that their experiences are the most important preparation.

Fiscal Management

The career path that most females take to the superintendency does not include extensive background in fiscal management. Glass (2000) explained that this can become a barrier to females because women do not understand fiscal management to the same degree as men. In fact, half of females surveyed had central office experience, but few had experience in financial positions (Glass, 2000). This lack of credentials becomes a barrier for women. Women reported that they are not viewed as strong managers by school board members (82%) and that they are not viewed as being able to manage district finances (76%) (Glass, 2000). It is presumed that being able to manage finances is an important qualification needed for the position. In an interview, superintendent Contreras stated that "by the time we become superintendents, we have more years of experience and education, often more degrees [than men], but we are questioned about our ability to handle the district's finances" (Superville, 2016b, p. 2). Despite certifications or experience, lack of financial understanding can be a barrier for women.

Lack of Interest

It is a common misconception that women are either not interested in the position for personal reasons, or that women do not earn the necessary credentials for the position. Although some internal factors may impact a female's decision to apply for the position, recent research shows that is not often the case. In a survey of current superintendents and assistant superintendents, 94% of respondents reported that having paid help at home was not a major consideration when applying for the superintendent position, and 88% reported that having extended family members available to help with childcare was not a major consideration either (Sperandio & Devdas, 2015). This could indicate self-reliance

in terms of household responsibilities, or a preexisting sharing of responsibilities that is already in existence. The one internal barrier that women did cite as prohibitive was proximity to work and willingness to move their family. Of those surveyed, 91% indicated that proximity between home and school was an important or very important consideration, and 78% of respondents also indicated that they would not be willing to commute farther than one hour away from their home (Sperandio & Devdas, 2015). Location may still be a consideration for females, but that does not indicate that they are not interested in the position. In fact, research conducted by Glass (2000) suggested that approximately 40% of female central office administrators expressed interest in the position of superintendent (Brunner & Kim, 2010). This shows that women are interested in being superintendents, and it implies that other factors may be acting as barriers.

Reasons for Pursuing the Position

Glass (2000) suggested that the stress of the superintendency coupled with traditional gendered societal norms that females would rather spend time with family than work may contribute to the lack of females in the superintendency. Stress is an indisputable part of the position. Long days was a commonly identified stressor with all women working more than a 50-hour work week and 42.7% of females reported stress within a month (Robinson & Shakeshaft, 2015; Robinson & Shakeshaft, 2016). Females are less likely to aspire to the role of superintendency, which may be due to perceived or actual bias (Maranto, Teodoro, et al., 2017; Muñoz, Mills, et al. 2014). This supports the idea that gender inequities and barriers may prevent women from applying for the position.

Despite the stress of the position, however, many women still aspire to be superintendents. It is important to examine the reasons why women do seek the position. Muñoz, Mills, et al. (2014) questioned superintendents and other central office administrators to determine the reason why individuals pursued a superintendent's certificate, and respondents noted reasons including career advancement and salary increase. Gendered differences were also present. Females explained their career advancement in terms of student achievement, while males explained their career advancement as a next step; however, both males and females noted the importance of student intervention as a critical part of the position (Muñoz, Mills, et al., 2014). This implies that men took the position as a next step in their career, while women advanced to help improve student outcomes. This supports the concept that women do aspire to the position, but may have different reasons for doing so when compared to males.

Age Upon Entering the Superintendency

Brunner and Kim (2010) suggested that Glass's assumption about females entering the superintendency later than males as a barrier demonstrated implicit biases. The median age for males and females has gotten closer over time. In the 2019-2020 AASA Salary Study, the median age of female respondents was 52, while the median age of male respondents was 52.5 (Rogers & McCord, 2020). Further, this extra time in the classroom may be beneficial to women in the long run. Brunner and Kim argued that when considering all three categories of preparedness, women were prepared for the position of superintendent. There are negative connotations and myths regarding female superintendents that have created gendered societal norms. Because the study included a male perspective of male-centric roles, most women responded that barriers did exist,

while men may not even have been aware of their presence (Brunner & Kim, 2010). This demonstrates that there are barriers for women; however, it is difficult to fully determine what those barriers actually are. It further suggests that the barriers identified by Glass may not be fully reflective of women in the field.

Confidence of Women and Ability to Take Risks

Confidence and inability to take risks can also be a barrier for female superintendents. The ability to take risks is an important characteristic when ascending to the superintendency because to learn is to risk. As Barth (2013) noted, risk is necessary for success. Despite this need for risk-taking, women often shy away from taking risks. Research indicates that women may have more self-doubt when it comes to their qualifications for this type of position. Males are more likely to move into a position whether qualified or not, while females may not feel ready and are less likely to apply (Kay & Shipman, 2014; Mohr, 2014; Superville, 2016a). Kay (2017) referred to this phenomenon as the confidence gap and described how males will overestimate their abilities by approximately 30% while females underestimate their abilities. This underestimation of abilities can become a significant barrier for females.

The confidence gap can manifest in various ways. It is often self-reported by women as a lack of confidence and has been a common barrier identified since the 1980s (Shakeshaft et al., 2007). Kay (2017) explained that women frequently have a lower perception of their own self-worth and consequently underestimate their abilities. Kay stated that even when qualified, and sometimes even more qualified than their male counterparts, women's lack of confidence can act as a barrier. In a study conducted by Muñoz, Pankake, et al. (2014), the majority of the women interviewed knew that they

would attain the position but also recognized the resilience necessary to do so. Of those interviewed who were currently or previously a superintendent, several stated that they did not actively pursue the position (Muñoz, Pankake et al., 2014). This may also suggest that women are less likely to take a risk in pursuing a position, but instead are only willing to take one when actively recruited. Kay also explained that, "perfectionism, risk aversion, fear of failure, and overthinking" are common culprits that lead women to question their own abilities (p. 3). These self-doubts, linked to mistaken perceptions about the actual hiring process, contribute to the underrepresentation of women in the superintendent role.

This explains the gendered initiative to apply for positions. A male will look over the list and apply if he has approximately 60% of the outlined qualifications, whereas a female will only apply for a position if they are 100% qualified (Kay, 2017; Kay & Shipman, 2014; Mohr, 2014). This identifies a lack of confidence more than a lack of actual qualifications.

Gatekeepers to the Superintendency

Discrimination continues to be an issue for females and may even contribute to their inability to get in the door. One of the many barriers that women face is that school board members and search firms can act as gatekeepers that hire male candidates over females. As explained through the Gatekeeper theory, these entities can literally block access to the superintendency for female candidates (Lewin, 1947). School board members and search firms use outdated patriarchal ideals and qualifications for the position of superintendent that do not represent 21st century learning and the need for

instructional leadership (Tallerico, 2000). This impacts the ability of candidates to begin the process of becoming superintendent.

According to data collected by The Council of School Superintendents in New York State, aspiring superintendents were most likely to learn of positions through posted advertisements, however, 29% of participants noted that they were directly invited by a board member to apply (Terranova et al., 2016). This highlights the important role that board members can play in the recruitment process.

Because school boards and search firms greatly impact the hiring of superintendents, it is crucial that they are able to prioritize, and ultimately improve, student achievement. Instead, by acting as gatekeepers, school board members and search firms significantly impact the hiring of female superintendents, and may ultimately impact the hiring of superintendents qualified for 21st century outcomes.

School Boards of Education. School boards have a challenging and essential function to select the best candidate in order to further the success of their district. School board members may harbor implicit biases that contribute to their hiring practices. Despite the fact that many school board members claim to be gender neutral, they hold implicit biases that impact their decisions and can determine the candidates that advance through the process (Bernal, 2020). In fact, Glass (2000) noted that one main reason for women not attaining the position of superintendent is that school boards will not hire them. These biases of school board members, even if implicit, may prohibit them from selecting the best candidate.

In addition to the disconnect regarding qualifications, school boards may favor male candidates for other reasons as well. According to an interview with Jack Conrath, it

is more difficult for women to advance to the superintendency if the school board is predominantly male because people tend to hire others that look like them and males tend to hire those within their network of contacts (Kilpatrick, 2018). These positions of school boards and search firm consultants, often filled by white males who inherently search for a candidate that looks like them, create gates to the superintendent position that women cannot easily enter (Dana & Bourisaw 2016b; Enfield & Gilmore, 2020). This barrier becomes higher if those individuals have preconceived notions about gender and the superintendency.

In an effort to gain a more recent perspective focused on school board members and their attitudes and beliefs, Jarrett et al. (2018) conducted a more comprehensive study. Based on Byrne's (1971) theory that individuals gravitate toward those with similar beliefs and attitudes, Jarrett et al. (2018) looked to see if board members' gender and candidates' professional experience impacted resume screening decisions. Although their results showed that gender did not influence board member's decision to interview a candidate, and there was no significant evidence to support a gender-similarity attraction between the candidate's gender-similarity with the board member, they did find significant evidence to support that the candidate's professional background affected the school board member's decision to offer an interview (Jarrett et al., 2018). Although these results may seem to disprove gender bias on the surface, they further support the need to examine the pathway to superintendency in an effort to ensure that women and men have the same opportunities for advancement. It also assumes that women are applying for superintendent positions at a proportional rate. Further, this research

validates the need to educate school boards on the qualifications necessary for superintendents to be successful in the 21st century.

Search Firms. Another potential layer when considering gatekeepers to the superintendency are the search firms hired by boards of education. A major responsibility of a school board is to hire the superintendent, who serves as the leader of the district. Maeroff (2010) explained that this places significant pressure on school boards to understand the requirements of the position and be able to correctly identify the best candidate. For this reason, some school boards may rely on search firms to help with this task (Maeroff, 2010). This adds another layer of potential gatekeepers with their own implicit biases. Tallerico (2000) explained that search firms are the first gatekeepers that control screening processes, whereas school boards are gatekeepers that decide which the candidates selected as finalists. Dana and Bourisaw (2006a) described one administrator's recount of an overheard conversation, "two retired superintendents-turned-search-consultants were talking about their work. 'Most of these districts aren't ready for a woman superintendent,' one of them said, 'but we should probably put one in the finalist pool anyway'" (pp. 27-28). Allowing a female into the candidate pool as a token candidate further exemplifies the power that search firms have as gatekeepers to the superintendency. Despite this example, the candidate pool will often not include women at all (Muñoz, Pankake et al., 2014). Inability to enter the candidate pool demonstrates the gate that this presents to women.

Search firms hire consultants that are best able to identify potential candidates. Many of these consultants are white males that are former superintendents. In the Glenn and Hickey (2009) study, out of the 61 participating consultants, 91.8% were male,

86.9% were white, 47.5% were in their 60's with 88.5% over 50 years of age, and 44.1% served as superintendent. Since it is human nature to gravitate toward others that look like us, it is not surprising that this appears to happen with superintendent candidates as well. "Individuals tend to use their own judgements about what is effective and successful" (Glenn & Hickey, 2009, p. 4). As with school boards, this follows the similarity-attraction relationship as described by Byrne (1971) that explains that individuals gravitate toward those with similar beliefs and attitudes to their own. Further, it may explain why male search firm consultants, especially those who formerly served as superintendents, are more likely to recommend other male candidates with similar backgrounds.

These implicit biases related to qualifications can influence a search firm's recommendations to the school board. If hidden gender biases are a factor, the candidate pool given to the board of education might not be fully representative and may exclude women. Tallerico (2000) explained that there is an "unwritten set of selection criteria that shape superintendent search and hiring practices… [that] manifest themselves behind the scenes in private conversations and interviews critical to the applicants' advancement in recruitment and selection processes" (p. 37). There is not a lot of research pertaining to the practices of search firms and how gender bias may influence decisions, but we do know that search firms and school boards can be significant barriers for females.

Gatekeepers and the Pathway to Superintendency. Search firms share similar beliefs to school boards when it comes to the qualifications that they look for in a superintendent. Close examination of the pathway to superintendency that males take in comparison to females provides insight into why there is still gender inequality among

superintendents. When asked, search firm headhunters described a preferred pathway to the superintendency that includes 3-5 years as a teacher followed by a secondary school principal for 3-4 years, and then attaining a small district superintendency followed by a larger district superintendency (Tallerico, 2000). Glass (2000) noted that males are more likely to be high school teachers that have stepping stone opportunities to the superintendency such as assistant principal or building level leader. This puts males at an advantage over females because they are more likely to move into a pathway that leads to the superintendency.

Females are at a disadvantage if they do not hold the high school principal position. Glenn and Hickey (2009) found that 36% of search firm consultants who participated in a study identified the position of high school principal as the best foundational position for a superintendent candidate. When further examining search firm consultant beliefs, there are differences between male and female consultants as well. Interestingly, male superintendent search firm consultants reported that the position of high school principal was the most beneficial position to prepare candidates for the superintendency at 39%, while none of the female participants responded that it was the most beneficial position (Glenn & Hickey, 2009). Maranto et al. (2018) explained that gendered stereotypes exist that suggest that the superintendent position is a better position for males, specifically those who have previously served as high school principals. Serving as high school principal provides management skills through working with a large staff, dealing with athletics, and working with a larger budget (Maranto, Teodoro, et al., 2017). This statement fits with the outdated view of the superintendent as a manager. The most common pathway to the superintendency for women includes a career path of

teacher, elementary principal, central office administrator, and then superintendent (Robinson et al., 2017; Shakeshaft et al., 2007). The lack of females to ascend through the high school principal position may impact their ability to ascend at all due to bias or stereotypes held by search firms. In Ohio, this poses a unique challenge for women because the ratio of male to female high school principals is approximately 4 to 1 (Schaefer, 2018). If search firms in Ohio use this as a prerequisite to the superintendency, women will be at a severe disadvantage.

Davis and Bowers (2019) further confirmed that the most common pathway to the superintendency consisted of those earning their certification while serving as a building principal and then moving straight to the superintendent position with 36.94% of individuals in their study following this path. The second most common pathway included a stop at the assistant superintendent position, encompassing an additional 14.70% of individuals studied (Davis & Bowers, 2019). The responsibilities of the assistant superintendent position may vary greatly from district to district, but this is much more likely to be a position that focuses on the curricular and instructional needs of the district. This demonstrates the necessity for re-examining the qualifications and pathway to the superintendency with a 21st century focus.

Mentoring to Overcome Barriers

If not present for females, mentoring can be a potential barrier to the superintendency; however, when present, it can also be a tremendous asset. Gresham and Sampson (2017) conducted an in-depth analysis of dissertation literature reviews and discovered that 84% of dissertations related to female superintendents included low numbers of females in the superintendent position as a major barrier. This theme served

as the umbrella under which all other themes fell and suggests that lack of female role models is a common barrier for most women. This may be because women do not have positive female mentors to help them along the way.

When implemented; however, mentoring can help women ascend to the superintendency and ensure their success once in the position (Bynum, 2015; Connell et al., 2015; Dunbar & Kinnersley, 2011; Hopkins, 2012). Mentoring experiences are important for both males and females; however, mentoring has a 7.5 times larger impact on females (DiCanio et al., 2016). This demonstrates the importance of mentoring to overcome barriers for females.

The structure and logistics of mentoring can take on various forms. If a female has a female mentor within her own district, she is 29 times more likely to seek advancement, whereas males are 6.5 times more likely to seek advancement (DiCanio et al., 2016). There are also many ways that mentoring can occur. Mentoring experiences can be either formal or informal (Bynum, 2015). One might assume that formalized mentoring opportunities are necessary; however, women benefit more from informal mentorship (Bynum, 2015; Connell et al., 2015). Simply having an informal mentorship may not always be enough though. Crosby-Hillier (2012) found that current superintendents felt satisfaction with mentoring experiences and preparation programs while aspiring superintendents wished that they had more meaningful mentoring connections. When mentoring reaches this deeper level of support, it becomes more of a sponsorship. Women note that successful mentors offer opportunities or educational experiences that build confidence and ultimately allow for further career advancement

(Reid, 2020). This may demonstrate that those without meaningful mentoring opportunities may not be able to ascend to the superintendency.

The use of professional networks is also beneficial to female leaders. Connell et al. (2015) found that 89% of females surveyed agreed that their mentor or professional supports helped them to network and build relationships. This need for strong relationships is essential to success for many females. Females need the opportunity to talk and share their experiences about sensitive issues that males might not be able to relate to with other females, but it is also important for females to talk with males as many of their mentors are males (Domenech, 2012).

Domenech (2012) also noted that despite the need for mentoring, women tend to be tough critics of each other. Arvate et al. (2018) further examined the effects of female managers and found that a woman elected mayor hired or promoted more females to top-managers. This speaks to the importance of relationships, especially related to women in leadership. The research of Arvate et al. further suggested that women do not intentionally block other women from attaining higher level positions, and instead suggested that the role model effect is influential. As Kelsey et al. (2014) explained, women need to encourage others and be a role model. Through support and mentoring, women can begin to overcome the barriers and ascend to the superintendency.

Leadership

The definition of a leader has shifted over time but continues to be difficult to define. Heifitz (1994) contemplated the difficulty surrounding defining leadership because of the many definitions and contexts used around the term “leader.” Many definitions of a leader contain heroic-like qualities that make leadership unattainable (V.

Robinson, 2013). The fact that males and females lead differently further complicates the definition of a leader.

When considering the position of superintendent, it is important to identify the competencies required of a leader in the 21st century. The superintendent is the most influential position within a school district, so it is essential that current superintendents lead with these competencies in mind.

It is imperative that superintendents have a strong background related to curriculum and instruction in order to be an instructional leader and positively impact student achievement. When examining how one comes to possess a strong curriculum background, one must consider previous experience. The pathway that individuals take on their journey to the superintendency can greatly impact their background, knowledge, and understanding of curriculum and instruction.

NELP Leadership Standards for the Superintendency

It is critical to explore the 2018 NELP leadership standards to gain insight into the leadership qualifications necessary for 21st century superintendents. Coupled with SLT, these standards will give recruiters, higher education institutions, and school boards a better understanding of the necessary competencies necessary for the superintendent position. There are eight standards included in the district level:

- mission, vision, and improvement
- ethics and professional norms
- equity, inclusiveness, and cultural responsiveness
- learning and instruction
- community and external leadership

- operations and management
- policy, governance, and advocacy and
- internship (NPBEA, 2018, p. i).

These standards place heavy emphasis on relationships and data-informed decision-making that leads to instructional shifts and improved student outcomes.

As our society continues to shift, more accountability has been placed on educational leaders to ensure that all students are successful both academically and socially. “No longer is it enough to manage district finances, keep the buses running on time, and maintain a safe and efficient district office” (NPBEA, 2018, p. 1). Educational leaders must also create learning opportunities that allow students to demonstrate success in varied forms so that they can choose their preferred pathway after graduation.

This a dramatic shift from the managerial-centered superintendent positions of the past. Further, the NELP standards emphasize the need for a deep level of understanding related to curriculum through the development of Standard 4: Learning and Instruction. The learning and instruction standard contains four component subscales:

- Component 4.1 Program completers understand and can demonstrate the capacity to evaluate, design, and implement high-quality curricula, the use of technology, and other services and supports for academic and non-academic student programs.
- Component 4.2 Program completers understand and can demonstrate the capacity to collaboratively evaluate, design, and cultivate coherent systems of support, coaching, and professional development for educators, educational professionals, and school and district leaders, including themselves, that

promote reflection, digital literacy, distributed leadership, data literacy, equity, improvement, and student success.

- Component 4.3 Program completers understand and can demonstrate the capacity to design, implement, and evaluate a developmentally appropriate, accessible, and culturally responsive system of assessments and data collection, management, and analysis that support instructional improvement, equity, student learning and well-being, and instructional leadership.
- Component 4.4 Program completers understand and demonstrate the capacity to design, implement, and evaluate district-wide use of coherent systems of curriculum, instruction, assessment, student services, technology, and instructional resources that support the needs of each student in the district. (NPBEA, 2018, p. 17)

These subscales highlight the importance of not only understanding curriculum-related situations but also the ability to design and create curriculum and systems to allow students to achieve academic success. There is also a need for the ability to create and implement systems of curriculum that allow for teacher and student success. This goes far beyond the ability to choose appropriate resources but also includes the ability to build systems that analyze data and allow for instructional leadership. It is crucial that current and future superintendents understand these qualifications in order to achieve success in the superintendency across Ohio.

Curriculum knowledge is at the center of leadership in education today. When applying relevant knowledge, leaders need to focus on student-centered leadership (V. Robinson, 2013). This focus implies that the superintendent, as primary leader within a

school district, must understand how students learn and have knowledge of the evidence-based practices that support effective teaching practices. In addition to understanding the research, a quality leader must also be able to apply principles through the context of leadership, including coaching, providing feedback, and observations (V. Robinson, 2013). This deep understanding allows for better selection of curricular materials, student grouping, and other important educational decisions.

It is critical that the superintendent have this knowledge to ensure that all educational decisions are appropriate for student success and implementation occurs with fidelity. "The superintendent is the only job title with the positional authority to orchestrate the intentional meshing of actors and script toward future improvement" (Bird et al., 2013). Even if the superintendent has a team to help implement such decisions, the responsibility to ensure success lies heavily on the superintendent. The superintendent must be an instructional leader, as well as a problem-solver in order to effectively lead a school district (Maeroff, 2010). Maeroff explained that although it is possible for a superintendent to lead with knowledge of curriculum and instruction by hiring knowledgeable staff to support this area, it is more beneficial if the superintendent also has this knowledge base to ensure success and not depend on others.

Leadership for 21st Century Superintendents Linked to Curriculum Knowledge

The role of the superintendent continually changes and evolves as our society changes and education reform becomes a priority. Educational reform, beginning with the publication of *A Nation at Risk* in 1983, put a greater emphasis on the need for public schools to improve student achievement (Björk, Brown-Ferrigno, et al., 2014). These waves of educational reform spurred additional roles and responsibilities for

superintendents. This is important to note because, as Björk, Brown-Ferrigno, et al. explained, there is a relationship between the "social, economic, and political conditions, public expectations, and superintendent roles" that will continue to change the position into the future (p. 460).

As we look to the leadership qualifications necessary for a superintendent to lead a school district in the 21st century, there is an even greater importance placed on teaching and learning. When examining leadership styles, Robinson et al. (2008) determined that the overall effect size of an instructional leader is .42, which is significantly higher than .11 for transformational leaders. This means that current superintendents must lead with a strong focus on instruction. Hattie (2015) explained that there are seven characteristics of instructional leaders, with the primary characteristic being that leaders need to "understand the need to focus on learning and the impact of teaching" (p. 38). This further emphasizes the importance of an instructional leader to impact student achievement.

There is also a high correlation between high quality instruction and school achievement. As Leithwood et al. (2013) explained, high performing schools place a heavy emphasis on curriculum, instruction, and learning. In order for schools to focus heavily in these areas, it is imperative that the leader facilitate the work through goal setting, creating a culture of learning, and monitoring progress. Further, a successful leader must also identify and provide focused professional development that is appropriate for teachers and learners. Collaboration is imperative to allow teachers to work toward unified goals as they continue to learn and grow through professional development (Hattie, 2015; Leithwood et al., 2013). This links back to the characteristics

of a servant leader who is able to build a culture of trust to motivate others. When exploring the intersectionality of school improvement with leadership, findings show that when a superintendent leads with an authentic mindset, others within the organization find inspiration and improvement practices become evident (Bird et al., 2013). Superintendents leading with authenticity are also more likely to value the opinions of others and process information to move toward action.

Leithwood et al. (2013) described the conditions necessary to create high-performing schools and explained how leaders can help to improve those conditions through exploration of four categories: rational, emotional, organizational, and family and community conditions. In rational school conditions, Leithwood et al. described the need for routine organization that includes a focus on teaching, learning, and sound instructional practices. Mindset, or the belief that success is possible, coupled with high expectations are key philosophies necessary for rational school conditions to thrive. Organizational work conditions lead to achievement through the established structures, policies, and work conditions that allow for productive practice (Leithwood et al., 2013). Mindset and drive encompass the importance of external factors in relation to achievement.

Superintendents must also be able to solve complex problems. This applies to the ability to put ideas into practice and getting support from others. V. Robinson (2013) explained that solutions intertwine with learning goals and cannot exist in isolation. For solutions to be viable, the superintendent must also create conditions that allow for the solution with little push back. This implies that they must fully understand the problem and openly communicate with others. There is a hidden assumption that in order to solve

problems within a school district, the superintendent must understand the types of educational decisions necessary for success, as well as working knowledge of the best practices surrounding such decisions.

Quality leaders must have a strong understanding of instructional practices. Superintendents must have managerial skills, but in order to be a truly effective leader, they must also have knowledge of pedagogy and be able to apply it in various situations. When conducting classroom observations, a leader needs to know what to look for and how to give effective feedback to improve practice (V. Robinson, 2013). Strong understanding of evidence-based instructional practices will also help the leader to ask the right questions when making educational decisions including textbook and resource selection or student grouping.

Strong communication and people-skills are also important qualifications for the superintendent. This is inherent in both their ability to solve complex problems and put ideas into practice to help students learn as well as their ability to build relational trust. The ability to work with others is critical to success. "Different from the *power over* style of male leadership, female leadership of *power through and to others* builds community for the success of students and could be observed more closely for its contribution to the improvement of schools" (Muñoz, Pankake, et al., 2014, p. 766). Through communication, a strong superintendent will get feedback about ideas and also listen to others in order to create solutions that are favorable to all. It is also important for the leader to care for and respect others in order to build the trust needed to earn support (V. Robinson, 2013).

Superintendents need to be big-picture thinkers in order to create solutions to complex-problems. To solve problems, one must consider all possible outcomes, work with others, and use knowledge of best-practices to create solutions that will be sustainable and instructionally sound. None of this is possible without an in-depth understanding of curriculum and instructional practices.

In order for schools to show improvements in student outcomes, it is important for central office leaders to not simply talk about teaching and learning, but act on it as a central basis of their work (Honig et al., 2010). Honig et al. further explained that in high performing districts, the superintendent impacts the overall success of the district either individually or through a shared capacity. Even though it can be a shared responsibility, the superintendent ensures success through effective monitoring and communication (Honig et al., 2010). This explains the importance of the superintendent role of stewardship. Leadership in the 21st century cannot exist without curriculum knowledge and understanding. It is a logical conclusion then that a successful leader must have a strong background in curriculum.

When considering the competencies necessary for a successful superintendent in the 21st century, it points heavily to communication, relationships, and a focus on instruction. This has strong implications for female leaders, because women embody these qualities. Grogan (1996) noted females identified three main categories when asked what about their strengths: (a) people skills, (b) reflective approaches to administration with a focus on instruction, and (c) the offer of alternative perspectives to problem solving and decision making (p. 138). These competencies of female leaders fit the need for the 21st century superintendent.

Superintendents demonstrate an understanding of this shift in their primary responsibility. Glass et al. (2000) found in the 2000 AASA report that 40% of superintendents surveyed reported that their primary responsibility was to be an educational leader. This statistic jumped significantly to 60% of superintendents just 10 years later in 2010 (Kowalski et al., 2010). The role is becoming more and more focused on educational leadership, which is directly related to teaching and learning. It is important to further examine this understanding to discover the competencies necessary to fulfil this job responsibility. Additionally, it is important to ensure that all parties responsible for hiring superintendents also have a similar understanding.

School Boards and the Needed Shift of Superintendent Competencies

School boards greatly impact the overall effectiveness of a school district. In fact, Shober and Hartney (2014) noted the importance of school board members and concluded in their research that there is a positive correlation between student achievement and school board members who create a vision and have knowledge of academic standards and outcomes. Lee and Eadens (2014) further supported this claim and explained that low performing school boards have fewer orderly meetings that spend less time focused on student achievement. That is to say that when school board members place a heavy emphasis on curriculum and instruction through creation of a common vision and goals, student achievement improves. Despite this, there is also evidence to support that this is not standard practice for many school boards. School board members place a heavy emphasis on organizational and managerial duties and most do not include academic duties or goals in their expectations as evidenced through contract provisions

(Maeroff, 2010; Maranto, Trivitt, et al., 2017). Even though there is a need to focus on curriculum and instruction, many school boards focus on outdated managerial priorities.

Superintendent Contracts in Ohio

When looking at contracts in the state of Ohio, a similar trend occurs. The Buckeye Association of School Administrators (2011) released a sample contract for superintendents to review when negotiating or accepting a position. In this sample contract, the evaluation section clarifies the creation of a written evaluation annually with the first report prior to December 1st; however, there is no section related to specific criteria for evaluation. Although student achievement is not prevalent in the contract, there is a clause for a student achievement incentive. The duties section includes:

> Superintendent shall direct and assign teachers and other employees of the schools under his/her supervision, shall assign pupils to grade levels and buildings, shall organize, reorganize, and arrange the administrative and supervisory staff, both instructional and non-instructional as best serves the Board. (Buckeye Association of School Administrators, 2011, p. 2)

There is no further mention of curriculum, standards, or academics in the contract, but instead a strong focus on the managerial tasks associated with the position. This focus on managerial tasks instead of instruction shows that school boards' thinking related to the job responsibilities or qualifications of the superintendent has not yet shifted.

Traditional Views of Leadership

In the early years of the position, the superintendent position focused on managerial tasks. Because of this, school boards also focused on these skills to hire and evaluate the position. Grogan (1996) noted that in 1968 when the American Association

of School Administrators and the National School Boards Association published materials to help school boards with the selection of a superintendent, the qualifications focused on managerial aspects of the job. Yukl (2010) described the work of a manager as hectic, reactive, and political. This part of the superintendency focuses on the day-to-day operations and ability to react to situations. This focus has not changed over time. 71% of superintendents that participated in the annual New York survey noted that "boards view the primary role of the superintendent to be day-to-day management and administration" (Terranova et al., 2016, p. 29). Despite the changing emphasis put on school districts to improve instructional outcomes, school boards have not shifted their understanding of the primary roles of the superintendent.

There is a distinct difference between a leader and a manager. Gardner (2013) defined a manager as one who "holds a directive post in an organization, presiding over the processes by which the organization functions, allocating resources prudently, and making the best possible use of people" (p. 19). This is a stark contrast from a leader or a leader/manager who thinks long-term in a global way that allows for change and implementation of a shared vision (Gardner, 2013). Despite this difference, school board members looking for someone to manage the district perpetuate the need for a manager over a leader. This may be due to a lack of understanding related to all of the various aspects of the role of superintendent. Shober and Hartney (2014) found that school board members are generally knowledgeable about the position and district responsibilities except for in-depth knowledge regarding curriculum and instruction. Instead, they have more general knowledge related to the business or managerial tasks including finance and bargaining (Shober & Hartney, 2014). Interestingly, this managerial focus is shared by

both effective and ineffective boards of education. Terranova et al. (2016) found that effective boards prioritized the role of manager (73%) but also included the role of curriculum and instruction (12%), while ineffective boards did not include the role of curriculum and instruction as a primary role at all. This demonstrates the need to closely examine the role of the superintendent from the perspective of the school board.

The focus of school boards on the managerial tasks of the superintendent may also begin to explain the gender discrepancy in the position if boards perceive males to be better suited to managerial tasks. Maeroff (2010) examined some of the reasons that school boards may favor males with backgrounds in athletic coaching positions in favor of females with curriculum backgrounds. Maeroff's theory includes the nature of school that prohibits outsiders from entering classrooms, or what he refers to as classroom instruction that is "invisible to members of school boards" (p. 18). In contrast, many school board members frequent sporting events. This suggests that school board members may not understand the many aspects of the curricular nature of the position and therefore do not value it as a necessary competency. In a survey of board members, Shober and Hartney (2014) found that 19.9% had an accurate understanding of academic standards; however, the misconceptions and misunderstandings in this area were more significant than other areas. School boards are a critical component of U.S. education systems, and it is vital that they are able to prioritize student achievement in order to improve educational outcomes. In fact, Shober and Hartney also found that in districts where board members do have a more thorough understanding of academic achievement, the district is more likely to achieve higher outcomes. If school board members do not understand the curricular needs of a school district, they can become gatekeepers, thus

preventing females from advancing to the superintendent position. Further, if school board members do not fully understand the curricular demands of the position, they will not prioritize these essential instructional competencies, and it may also have a negative impact on student success.

School board members may not choose female candidates for superintendent due to their perceived lack of ability to manage finances (Glass, 2000; Muñoz, Pankake, et al., 2014). This demonstrates the overreliance of school board members to focus on the managerial aspects of the position. In the 2019-2020 AASA superintendent survey, 41.5% of participants noted that student performance was linked to the superintendent performance evaluation (Rogers & McCord, 2020). This percentage was significantly higher than it was in 2018-2019 when it was 34%. Although this trend is encouraging, it is still significantly less than it should be. Further, there is a gender disparity between male and female expectations.

The focus on the superintendent as manager is beginning to shift over time. Kowalski et al. (2010) found through a survey of superintendents that the role of superintendent as communicator was the most valued role (85%) by school board members, however, the second most valued role was superintendent as manager (78.5%) with an emphasis on responsibilities with budgets, operations, and facilities. Although the role of communicator fits into the female leadership style, the role of manager does not. This has implications for female superintendents. As Dana and Burisaw (2016a) noted, this can lead to shorter tenure for female administrators.

Almost half of women surveyed reported that their instructional leadership contributed to their being in the position, while only 24% of males made this same claim

(Glass et al., 2000). This gap closed by 2019-2020 with 44% of females identifying student performance linked to their performance outcomes compared to 41% of males (Rogers & McCord, 2020). Although it has closed over time, this disparity emphasizes the disconnect between what school boards appear to look for in a candidate and the current requirements of a superintendent. Since curricular responsibilities tied to academic outcomes tend to be a strength of female candidates, one can hypothesize that the absence of these qualifications from superintendent job postings may dissuade female candidates from applying for the position as they may feel unqualified or unprepared. Instead, school board members should be focusing on the curricular aspects of the position.

A Need for Curriculum Qualifications

When considering the superintendent in the 21st century school, the role has shifted to a focus on curriculum. “Effective instructional leaders don’t just focus on student learning. They relentlessly search out and interrogate evidence of that learning” (Hattie, 2015, p. 37). This shift requires superintendents to be curricular and instructional leaders.

How Males and Females Lead

Different leadership qualities and characteristics describe leaders, and it is important to note that there is a gendered difference to leadership. When considering the female superintendent, many individuals associate the position of superintendent with a male style leadership (Grogan, 1996). Because the superintendency is historically associated with male leaders, this raises concerns for female leaders.

Male and female superintendents often exhibit different leadership styles and this can affect the success of an organization. Grogan and Shakeshaft (2013) explained that males tend to adopt a leadership style that is business-oriented and not educationally driven, while women are more likely to create an environment that allows for problem-solving and communication through a shared or collaborative leadership style. These differences in leadership style greatly impact how a superintendent leads. Women also are more likely to create committees and advisory boards to hear from a variety of voices (Grogan & Shakeshaft, 2013). This suggests that males prefer to lead individually while females focus on relationships.

Most women are not *heroic*, as we often categorize men. Instead, women tend to lead by example and build strong relationships with others. In fact, when asked, women report that their people skills or relationships, problem-solving skills, and focus on curriculum and instruction were their top three strengths (Grogan & Shakeshaft, 2013). Women tend to work collaboratively and are able to listen to others, which allows them to solve complex problems and build relational trust. Elias (2018) described women as "empathic listeners" who focus on collaboration and relationships to build success through empowerment of others (p. 176). This allows females to build cohesive teams of high functioning individuals. Unfortunately, this carries a negative connotation for those in the role of superintendent. "While the female code of caring for others is perfect for the classroom, this mind-set creates conflict in the boardroom where decisions are made based on who plays golf with whom instead of who cares about whom" (Dana & Bourisaw, 2006b, p. 93). This disconnect between perceived leadership style for the superintendency and leadership style for most females contributes to the gender gap.

Women lead differently than their male counterparts in other ways as well. Sergiovanni (2013) discussed how female leaders easily adopt the servant or stewardship leadership style. Those who lead with a stewardship leadership style lead from values and principles that motivate others to action through a culture of trust and support. Women tend to be servant leaders by nature, in contrast with their male counterparts who tend to be more authoritative. Kelsey et al. (2014) explained that servant leadership is a key style used among female leaders as a way to develop leadership within others. Sergiovanni relates this to the difference between male and female psychological fulfillments; whereas males tend to gravitate toward individual relationships, power, and accomplishing goals, women gravitate toward successful relationships, shared goals, creativity and building connections. Males must work toward becoming servant leaders and females must recognize and embrace the characteristics that make them a strong servant leader. Utilizing the three characteristics of female leaders, women can use relationships to build a trusting community built on strong relationships and focus strongly on instructional techniques to ensure sound teaching practices (Sergiovanni, 2013).

In a recent study, evidence suggests that females are more qualified than males to effectively lead organizations. Zenger and Folkman (2019) found that managers rate females higher than males at every level when asked about effectiveness. Using 19 leadership capabilities, women ranked higher than males on 17 (Zenger & Folkman, 2019). It is evident that women are capable leaders who possess the necessary qualifications for the position.

Björk, Kowalski, et al. (2014) explained that female leadership includes four main characteristics: (a) establishing collaborative practices, (b) understanding and use teaching and learning, (c) leading with a transformational approach, and (d) striving to achieve academic success with students. This focus enables female leaders to consider the unique needs of each student to ensure success. Similar to the work of Sergiovanni, these characteristics focus on service, collaboration, and a strong foundation in teaching and learning. This forces us to look more closely at the leadership style that is actually most beneficial for current superintendents leading districts in the 21st century.

The Curricular Pathway to the Superintendency

The career path that males take varies greatly when compared to the path of most females. This is important to consider because prior positions provide experiences and background understanding. If it is important for superintendents to have a strong background related to curriculum and instruction, we must closely examine the experiences they have and their pathway to the superintendency.

Despite these potential blocks in the pathway for women, significant evidence exists that the pathway that females take may actually make them more prepared for the 21st century superintendency. Females tend to focus their career path on curriculum-oriented positions. “Women are more likely to have been a master teacher, a district coordinator, and an assistant superintendent - positions that often indicate a focus on curriculum” (Robinson et al., 2017, p.4). According to a study of female superintendents conducted by Connell et al. (2015), most females hold administrative positions that relate to curriculum and instruction, especially early in their career. Males, on the other hand, are more likely to have building level administration. Robinson et al. also noted that

questions within the Mid-Decade Survey in 2015 lead to the conclusion that women felt that their curriculum knowledge and background led to their hire, while men responded that they felt that their personal characteristics and administrative experiences led to their hire. The pathway to the superintendency is beginning to shift and now focuses heavily on curriculum and instruction. The largest expectation of a school board in 2007 was for the superintendent to be an educational leader with strong knowledge of curriculum and instruction at 41.3% (Brunner & Kim, 2010). Brunner and Kim further identified that women in central office positions often had a curricular foundation with 49% of female central office administrators serving as assistant superintendents of curriculum and instruction. Based on these pathways, it is also evident that the background and experience of these positions are significantly different.

When considering the pathway to the superintendency, women often take a different path than their male counterparts. In response to Glass's (2000) research concerning women in the superintendency, Brunner and Kim (2010) concluded that women meet and exceed the necessary qualifications and that their significant training in curriculum and instruction may, in fact, give them an advantage. It is also important for our administrative leadership preparation programs, boards of education, and superintendent search firms to determine if this path is best to prepare superintendents in the 21st century or if revision of this path is necessary.

Women are less likely to go into administration as early as males. In addition to this, women tend to stay in the role of teacher longer than their male counterparts. "Women have more years of teaching experience than men (15 years versus 5 years) and are older when appointed to administrative positions (median age 40 for women, 32 for

men)" (Lunenburg & Ornstein, 2014, p. 637). This information may also suggest, however, that women have a longer time to develop their curricular skills within the classroom before moving to an administrative role. Maranto, Teodoro, et al. (2017) confirmed that although women take longer to move to the position of superintendent, they do have more experience in curriculum positions and additional opportunities for professional development. When compared to their male counterparts who reportedly have more experience with athletic coaching, it poses a question about the necessary skills and qualifications that are necessary for the position of superintendent (Maranto, Teodoro, et al., 2017).

Females are more likely to serve in curriculum roles. In fact, females are 4-16% more likely to have held positions with curricular focus including department chair or curriculum specialist (Maranto, Teodoro, et al., 2017). As Reid (2020) found, all five of the superintendents interviewed held a district level position and had overseen academics in some capacity before advancing to the role of superintendent. These positions provide experiences that help to prepare leaders for the curricular demands of the superintendency. Further Maranto, Teodoro, et al. explained that female principals participate in professional development experiences more often than males. This strong curriculum background indicates that females have more experience and professional development in the areas of curriculum and instruction. The AASA 2015 Mid-Decade Survey further supports this finding and Robinson et al. (2017) noted that women superintendents are more likely than males to have expertise in curriculum and instruction that is applicable to the position. This expertise in curriculum and instruction

is an important and critical qualification for the superintendency as it can help to prepare females to make educational decisions that can ultimately close achievement gaps.

In schools that need significant academic support, the need for a strong curricular leader is even more important. Honig et al. (2010) found that there is a strong need for central office staff to focus on teaching and learning in order to move the work forward. Further, results from their study reveal that all central office employees significantly impact achievement and must develop supports districtwide that support teaching and learning (Honig et al., 2010). School leaders must have a deep understanding of curriculum and instruction in order to prioritize needs and ultimately improve the overall condition of the school. Further, leaders must set clearly communicated high learning expectations for all students (Leithwood et al., 2013).

Women recognize their strength as curricular leaders. In the 2015 national AASA survey, women reported that school boards hire them for their knowledge of curriculum and instruction, and they rank curriculum high in terms of necessary qualifications (Finnan et al., 2015). Finnan et al. also noted that 34.3% of females identify curriculum knowledge as a factor that contributes to overall effectiveness in the superintendency, in comparison with 12.6% of males. This shows that although not prioritized when considering the actual qualifications for superintendent, women are more reflective of the importance of curricular understanding. Interestingly, when women leave the position of superintendent, one of the four main reasons cited in a study by K. Robinson (2013) was that it was not the job she thought it would be. When reflecting on why the job was not as anticipated, women reflected that it was largely due to a lack of emphasis placed on

curriculum and instruction (K. Robinson, 2013). Women are prepared and able to be curricular and instructional leaders in the superintendency.

Is there a better pathway to the superintendency for the 21st century leader? Brunner and Kim (2010) would argue that "given the current focus on academic achievement, alternative routes to the superintendency may be superior to the historical norm" and include curriculum and instruction as a primary focus (p. 285). This has significant implications when it comes to superintendent preparation programs. A shift is necessary to place importance on positions that offer curriculum and instruction background and knowledge above previously important positions. Based on experience, women have the background to be successful considering this shift. Of the women from the 2000 Glass study, 49% were assistant superintendents of curriculum and instruction (Brunner & Kim, 2010). This shows that women have the background to be successful superintendents.

Summary

Research has outlined the qualifications of a successful superintendent for the 21st century. With the changing emphasis of qualifications for superintendents, we must closely examine how current superintendents are leading and if they have the essential competencies needed. The challenge then becomes identifying the qualifications that are gender specific in an effort to determine if there is a gender difference for those leading schools in the 21st century.

Based on these qualifications, is there a gender difference that makes one gender more qualified for the superintendency? As we consider the new pathway to the

superintendency, what curriculum qualifications do current superintendents have that qualify them for the positions they hold?

CHAPTER III

METHODOLOGY

The purpose of this study was to document superintendents' competencies related to curriculum and instruction and gendered differences. Much research has been done with respect to the challenge for females to become superintendents and the barriers that women face when advancing. Further, there is research to support what competencies are necessary for successful superintendents in the 21st century. This study sought to further this research to explore what competencies current superintendents have and how the gendered pathway that males and females take to the position may help to prepare them.

Methodology helps us to better understand the world around us through analysis (Trochim & Donnelly, 2008). Through the use of research questions, study design, and carefully selected participants, a survey instrument was used to carry out procedures that would be analyzed. These methodology components helped to further research in the area of superintendent competencies through a gender lens.

This methodology chapter sought to explain the research question, research design, participation, instrument, procedure, and the data analysis of this quantitative study.

Research Purpose

The purpose of this study was to investigate the curriculum and instructional capacities of current superintendents in Ohio to determine if a gendered difference was present. The SLT was examined in conjunction with the NELP standards to determine the overall leadership style of participants. In order to fully understand this topic, the researcher also reviewed additional descriptive measures including superintendent

background, educational experience, and other demographic information. This study also examined the pathway to the superintendency to determine if certain positions better prepare superintendents for the curriculum and instruction demands of the position.

The dependent variables for this study were the self-reported competency subscales based on the NELP Standards for District Leaders component subscales in learning and instruction, and the pathway to superintendency. These dependent variables were outcome variables that reflect the hypothesized relationship examined in this research. The independent variable was gender, which was used to compare groups to the dependent variables.

Research Questions

RQ1. Is there a difference in superintendent learning and instructional self-reported competencies based on the newly developed NELP standard for learning and instruction between male and female superintendents?

RQ2. Is there a gender difference in the pathway to superintendency in Ohio?

RQ3. Do specific positions better prepare superintendents for the curriculum and instruction demands of the position?

Research Hypotheses

In order to test for competency differences between male and female superintendents, the researcher examined their self-reported ratings and generated the following hypothesis:

H1: Females will self-report higher levels of competencies based on the NELP component subscales in learning and instruction.

In order to test for pathway differences between male and female superintendents, the researcher examined their educational background and generated the following hypotheses:

H2: More females will hold positions that offer more background in curriculum and instruction, such as instructional coach or curriculum, than males.

In order to test for the positions that superintendents feel best prepared them for the curriculum and instruction demands of the position, the researcher examined the open-ended responses from superintendents to look for similarities.

H3: Positions such as academic or instructional coach, curriculum director, and assistant superintendent will be identified as positions that better prepare superintendents for the curriculum and instruction demands of the position.

Research Design

Research design includes the ability to take broad assumptions and use data collection and analysis to make further meaning (Creswell, 2009). This study was a sequential mixed-methods procedure. Mixed-methods research allows for a more comprehensive review of data through a broad generalization of results followed by a more detailed view of participants (Creswell, 2009). This allowed the researcher to begin with a quantitative design to test the hypotheses and then further explore this topic through detailed qualitative exploration of open-ended questions. The open-ended questions were used to explain the quantitative results.

Since this research study specifically explored gendered differences, methods for feminist research were considered. There has been much debate over the effectiveness of qualitative versus quantitative research in relation to feminist research. In relation to

female studies, various researchers have argued for one method over another or the use of a mixed-methods approach. Despite this, qualitative research still seems to be the preferred method. Wambui (2013) explained that qualitative research is often preferred for women's studies because it better captures the female voice. This is because qualitative research by nature provides detailed descriptions of experiences that allow further understanding of behaviors (Crosby-Hillier, 2012). In more recent years, however, the best methodology for female research has been challenged.

The use of quantitative research is a catalyst for introducing complex issues such as gender equality and social justice. Miner-Rubino and Jayaratne (2007) identified several advantages when using quantitative methods in feminist research. Quantitative survey research can be used to bring light to social justice issues, it is easy to communicate quantitative data, it helps to identify patterns of oppression that can be useful to bring about social change, and it allows access to larger numbers of individuals and perspectives. These advantages allow for deep conversations surrounding the issues of feminist research.

Harnois (2013) contended that quantitative research can be used to enhance qualitative research. By using both quantitative and qualitative, both perspectives are acknowledged and validated. Jayaratne and Stewart (2008) advocated for the use of mixed methods in female studies whenever possible and practical. This allows the researcher to provide a deeper level of analysis. Creswell (2012) noted that a mixed-methods approach is useful "to obtain more detailed, specific information than can be gained from the results" (p. 535). The use of a mixed-method provided a large quantity of data while also presenting additional insight and explanation as to the results. These

comprehensive data gave a more detailed and thorough account of the social phenomenon. Further, Grogan and Shakeshaft (2013) noted that both qualitative and quantitative approaches are useful in studies on women leaders and that there has been an increase in the amount of mixed method studies in this area from approximately 5% in 1985-1990 to approximately 13% in 2001-2005.

To best capture a large quantity of data while also giving voice to females, it was determined that a mixed-methods approach would be best suited to this research study. These advantages most closely align with the purpose of applying Synergistic Leadership Theory as the survey was used to provide further insight into each leader's capacities and leadership style.

The quantitative portion of the study used a survey research design to quantify opinions of superintendents. Survey research was used because of the economy of the design, ability to quickly collect data, and the ability to use a small sample to make inferences about a larger population. Survey research allows the researcher to

> administer a survey a sample or to the entire population of people to describe the attitudes, opinions, behaviors, or characteristics of the population… [and] interpret the meaning of the data by relating results of the statistical test back to past research studies. (Creswell, 2012, p. 376)

The survey was cross-sectional and data were collected during one period of time. Data from the survey were collected through the use of a self-administered questionnaire using an Internet survey administered online. When considering survey research, it is important to consider gender as an institution and not each individual person. Specifically, research

focused on the four component subscales of the fourth NELP standard learning and instruction.

Despite the intentional use of quantitative data, there is also an advantage to utilizing qualitative data in regard to this topic. To further capture the importance of a qualitative perspective, there were two open-ended questions at the end of the questionnaire. This use of a mixed-methods design is highly effective for gender research. The use of open-ended questions can be used to understand how female superintendents felt prepared or faced challenges as they ascended to their position and how their experiences can be deconstructed to determine similar themes that may lead others to success.

Target Population

The target population for this study was superintendents in Ohio. The target population was drawn from participating superintendents across all districts within the state of Ohio.

Sample and Sampling Method

The population included in this study consisted of all traditional public school district superintendents in the state of Ohio employed during the 2020-2021 school year. Public schools are defined as "funded by public tax dollars" (ODE, 2020a, para. 1). Public schools were used for this study because other non-traditional or private schools do not always identify a superintendent, or the role is different. The focus of Ohio was used because Ohio has traditionally had fewer female superintendents when compared to the national average. In 2020, the Ohio Department of Education identified 611

individual public schools in Ohio per the Ohio Department of Education's Ohio Education Directory System (ODE, 2020b).

Participants were obtained using a listserv available through the Ohio Department of Education Ohio Educational Directory System (OEDS), making it a purposive and single-stage sample. Data in this system are public record. To ensure access to all superintendents, a formal records request was made to the Ohio Department of Education for this information. All superintendents across the state were contacted to participate in this study to ensure that all district typologies and geographic regions within the state of Ohio were included. Demographic information was included in the survey to further examine data related to demographic characteristics.

Fowler (2014) noted that to ensure a 95% confidence interval with a 3% error, 200 participants were needed. There were 611 public school districts with a total of 608 unique superintendents in the state of Ohio at the time of this study. In order to reach 200 of the 608 available superintendents in the state, a response rate of at least 32.9% was necessary. It is further important to note that since the percentage of female superintendents across the state was 16.8%, that the sample size of female participants was small.

A web-based questionnaire through SurveyMonkey was used for convenience and efficiency. To protect the identity of the participants, the anonymous responses option was used in SurveyMonkey to ensure confidentiality. Creswell (2012) noted that the use of technology is common within quantitative research and "provides an easy, quick form of data collection" (p. 159). Multiple contacts were made through additional emails to ensure that the 32.7% was reached. SurveyMonkey calculated the response rates and

automatically sent follow-up emails to participants who had not responded by a specified date.

Instrumentation

Development of the Instrument

A 26-item questionnaire was administered using SurveyMonkey. The instrument used consisted of a researcher-developed survey based on the learning and instruction components of the NELP Standards for District Leaders and the Synergistic Leadership Theory (see Appendix C). The researcher created this survey from the literature review by using constructs from what was learned. It was important for the researcher to create a survey for many reasons. The NELP standards were developed in 2018, so research using these updated standards is just beginning. In the updated district-level standards, "the district level standards place increased emphasis on the role of the district-level educational leader in instructional leadership" (University Council for Educational Administration, n.d., What's New? Section, para. 3, n.d.). It was important to capture superintendent perception of competencies using these updated standards since they define the current role of the superintendent. Research further emphasized that the responsibility shift of superintendents that now requires a heavy emphasis on curriculum and instruction is recent (Brunner & Kim, 2010; Maranto, Teodoro, et al., 2017). The researcher-developed survey captured the importance of curriculum and instructional competencies through the creation of questions aligned to each of the NELP sub-component areas (see Table 1).

Additionally, it was important for the researcher to create a survey that captured the leadership style of superintendents through the analysis of SLT. Irby et al. (2002)

created SLT in an effort to fill a gap that allows for female leadership in a way previously unavailable. Analysis of SLT also provided insight into general leadership style while allowing for leadership traits commonly associated with females to further come to light. Each component of the survey links back to one or more areas of SLT (see Appendix D). This provided evidence to suggest the overall leadership style of participants. The instrument created combined the curriculum and instruction components of the NELP leadership standards with SLT to provide insight into the superintendent position previously not explored.

The survey consists of three sections:

1. National Educational Leadership Preparation (NELP) Program Standards questions
2. open-ended questions
3. general demographic questions

Section 1

The learning and instruction standard is the fourth standard of eight in the NELP Standards for District Leaders. Questions in the first survey section covered superintendent comfort level with the instructional criteria outlined in the four component subscales:

- Component 4.1 Program completers understand and can demonstrate the capacity to evaluate, design, and implement high-quality curricula, the use of technology, and other services and supports for academic and non-academic student programs.

- Component 4.2 Program completers understand and can demonstrate the capacity to collaboratively evaluate, design, and cultivate coherent systems of support, coaching, and professional development for educators, educational professionals, and school and district leaders, including themselves, that promote reflection, digital literacy, distributed leadership, data literacy, equity, improvement, and student success.
- Component 4.3 Program completers understand and can demonstrate the capacity to design, implement, and evaluate a developmentally appropriate, accessible, and culturally responsive system of assessments and data collection, management, and analysis that support instructional improvement, equity, student learning and well-being, and instructional leadership.
- Component 4.4 Program completers understand and demonstrate the capacity to design, implement, and evaluate district-wide use of coherent systems of curriculum, instruction, assessment, student services, technology, and instructional resources that support the needs of each student in the district. (NPBEA, 2018, p. 17)

Questions related to the NELP learning and instruction standard used an interval response scale to collect participant responses though a self-reported perception survey. Survey questions used a 1 to 5 Likert response scale with 1 being *not at all comfortable* and 5 being *very comfortable*. According to Trochim and Donnelly, scaling allows the researcher to determine dimensions of research and allows for a single score (2008). Use of a Likert scale can be further used to perform an analysis using descriptive statistics and correlation regarding participants' attitudes, beliefs, and leadership style.

The attitudes, beliefs, and leadership style of participants were linked to SLT through analysis of each NELP survey component (see Appendix D). Each NELP component of the survey linked back to at least one component of the SLT, specifically focused on beliefs, attitudes, and values, leadership behavior, and organizational structure. The way in which these factors intersect provided insight into the overall leadership style of participants.

Each component subscale included 3-5 questions (see Table 1). Questions were derived from the language used in the NELP standards themselves. The scores on these scales were treated as interval-level scales and were analyzed using parametric statistics.

Analysis of these questions provided awareness into the competencies held by current superintendents and their leadership style. When shared with school boards and search firms in conjunction with research to support the competencies needed for superintendent leadership in the 21st century, this information will provide evidence to dismantle the gatekeeper theory.

Table 1

Standards Aligned to Survey Questions

NELP Standard 4 Component	Aligned Survey Questions
Component 4.1: Program completers understand and can demonstrate the capacity to evaluate, design, and implement high-quality curricula, the use of technology, and other services and supports for academic and non-academic student programs.	2. How comfortable are you in your ability to **evaluate** curricula and the use of technology for academic and non-academic student programs? 3. How comfortable are you in your ability to **propose designs** for improving the quality, coordination, and coherence among curricula for academic and non-academic student programs? 4. How comfortable are you in your ability to **implement** the district's curriculum plan for improved academic and non-academic student programs (related to high-quality curricula)? 5. How comfortable are you in your ability to evaluate the district's plan for technology use for improved academic and non-academic student programs (related to evaluate technology use)?
Component 4.2: Program completers understand and can demonstrate the capacity to collaboratively evaluate, design, and cultivate coherent systems of support, coaching, and professional development for educators, educational professionals, and school and district leaders, including themselves, that promote reflection, digital literacy, distributed leadership, data literacy, equity, improvement, and student success.	6. How comfortable are you in your ability to **evaluate** the coordination, coherence, and relevance of the district's systems of support, coaching, and professional development for educators, educational professionals, and leaders? 7. How comfortable are you in your ability to develop a plan for **cultivating** systems of support and professional development that promote improvement, and student success? 8. How comfortable are you in your ability to **implement** systems of support and professional development?
Component 4.3: Program completers understand and can demonstrate the capacity to design, implement, and evaluate a developmentally appropriate, accessible, and culturally responsive system of assessments and data collection, management, and analysis that support instructional improvement, equity, student learning and well-being, and instructional leadership.	9. How comfortable are you in your ability to **design** a process for formative and summative assessments of learning that supports instructional improvement? 10. How comfortable are you in your ability to **evaluate** the coordination and coherence among assessments and use of data to support instructional improvement? 11. How comfortable are you in your ability to **design** a developmentally appropriate system of assessments and data collection, that support instructional improvement and student learning? 12. How comfortable are you in your ability to develop a plan for **implementing** the system of assessments and data collection, management, and analysis?

NELP Standard 4 Component	Aligned Survey Questions
Component 4.4: Program completers understand and demonstrate the capacity to design, implement, and evaluate district-wide use of coherent systems of curriculum, instruction, assessment, student services, technology, and instructional resources that support the needs of each student in the district.	13. How comfortable are you in your ability to **engage** appropriate staff in gathering, synthesizing, and using data to evaluate the quality in the district's academic and non-academic services? 14. How comfortable are you in your ability to **propose** designs and implementation strategies for improving coordination and coherence among the district's academic and non-academic systems? 15. How comfortable are you in your ability to **use** technology to monitor district curriculum, instruction, and results? 16. How comfortable are you in your ability to use performance management systems to monitor, analyze, implement, and evaluate district curriculum, instruction, and services, assessment practices, and results?

Section 2

The open-ended questions in the survey provided deeper understanding of the respondent's pathway to the superintendency, as well as insight into their perceived curriculum and instruction preparation. The questions used for this purpose were:

2. How do you feel your pathway to the superintendency prepared you for the position?
3. Explain how your previous position(s) either prepared or did not prepare you for the curriculum and instruction demands of the superintendency.

The researcher used content analysis to code these qualitative questions. Open-ended questions on a survey can also result in bias. They "do not allow for standardization of items with fixed responses" (Nardi, 2006, p. 69). To overcome this limitation, a list of categories was used to code responses (see Appendix E).

The use of these questions provided additional evidence for the researcher to determine the pathway to the superintendency and which specific positions best prepared

candidates for the curriculum and instruction competencies necessary for leadership in the 21st century. This information will provide further insight for school boards and search firms to ensure that previous positions considered priorities as prerequisites fit the demands of the position. This will help to eliminate the gatekeeper theory that currently places females at a disadvantage compared to males.

Section 3

The demographic survey questions used a check the option and multi-option variable response form. These were used to gauge participant demographic information in order to determine trends related to gender. This information further identified the pathway taken by superintendents across the state. Demographic information included questions related to the school district represented in the form of district typology, school size, and economic status as represented by free and reduced lunch percentages. Personal demographic information questions included age, ethnicity, gender, years of teaching experience, degree(s) attained, licensure area including curriculum background, and previous educational experience.

Question 26 states, "What position(s) did you hold prior to becoming a superintendent?" This question was reviewed in conjunction with the open-ended questions to further determine the pathway to the superintendency taken by each participant.

Internal and External Validity and Reliability

The survey was administered during a one-month administration window (giving participants two weeks to respond initially, and two additional weeks to respond after a

reminder was sent) in order to increase validity and reliability by ensuring that the pool of candidates remained consistent and completed the survey within a specified time frame.

To increase participant trust in the researcher, demographic questions were included at the end of the survey instead of the beginning. Demographic questions can be considered intrusive and thus intimidate participants from responding. Leggett (2017) noted that placing demographic questions at the end of the survey allowed participants to respond to more important questions before becoming fatigued. By instead putting the Likert scale questions at the beginning, the researcher was also able to quickly establish the importance of the survey through substantive questions. This helped to build trust between the research and the survey participants.

The large representative sample size used in this study increased the external validity. External validity is the degree to which results can be generalized to other people and places (Trochim & Donnelly, 2008). This study is generalizable to other superintendents. While this research is specific to superintendents, findings may also provide insight to support women in all leadership positions.

The content validity of the survey was established through the creation of survey questions based on language directly from the NELP standards. Content validity was increased through a review of the draft questionnaire by a measurement expert-professor of research methods and a leadership expert. They provided review to determine if the items were aligned with NELP standards, for question clarity, and for response direction. The open-ended questions of the survey were determined after speaking with former superintendents, serving as leadership experts in the field, to determine common themes

from their experiences. Feedback from experts was used to adjust the questions for clarity, content, and purpose.

The survey was a self-reported perception survey. This posed a potential threat to reliability as it reported "only what people think rather than what they do. Sometimes the response rates are low, and researchers cannot make claims about the representativeness of the results to the population" (Creswell, 2012, p. 403). To overcome this potential threat, reliability of the scale was measured using Cronbach's Alpha. When using factor analysis, Cronbach's alpha can help to validate the survey instrument (Field, 2018). This allowed the researcher to ensure internal validity of the scale. Internal consistency of the subscales used in the survey using Cronbach's alpha was .929 with ranges from .920 to .928 (see table 2), which indicates a high level of consistency. A Cronbach's Alpha close to or above .70 to .80 suggests a reliable and valid instrument (Field, 2018).

Table 2

Cronbach's Alpha by Question

Component		Question	α
4.1	2.	How comfortable are you in your ability to **evaluate** curricula and the use of technology for academic and non-academic student programs?	.924
	3.	How comfortable are you in your ability to **propose designs** for improving the quality, coordination, and coherence among curricula for academic and non-academic student programs?	.922
	4.	How comfortable are you in your ability to **implement** the district's curriculum plan for improved academic and non-academic student programs (related to high-quality curricula)?	.923
	5.	How comfortable are you in your ability to **evaluate** the district's plan for technology use for improved academic and non-academic student programs (related to evaluate technology use)?	.927
4.2	6.	How comfortable are you in your ability to **evaluate** the coordination, coherence, and relevance of the district's systems of support, coaching, and professional development for educators, educational professionals, and leaders?	.923
	7.	How comfortable are you in your ability to develop a plan for **cultivating** systems of support and professional development that promote improvement, and student success?	.922
	8.	How comfortable are you in your ability to **implement** systems of support and professional development?	.924
4.3	9.	How comfortable are you in your ability to **design** a process for formative and summative assessments of learning that supports instructional improvement?	.924
	10.	How comfortable are you in your ability to **evaluate** the coordination and coherence among assessments and use of data to support instructional improvement?	.923
	11.	How comfortable are you in your ability to **design** a developmentally appropriate system of assessments and data collection, that support instructional improvement and student learning?	.920
	12.	How comfortable are you in your ability to develop a plan for **implementing** the system of assessments and data collection, management, and analysis?	.922
4.4	13.	How comfortable are you in your ability to **engage** appropriate staff in gathering, synthesizing, and using data to evaluate the quality in the district's academic and non-academic services?	.928
	14.	How comfortable are you in your ability to **propose** designs and implementation strategies for improving coordination and coherence among the district's academic and non-academic systems?	.921
	15.	How comfortable are you in your ability to **use** technology to monitor district curriculum, instruction, and results?	.926
	16.	How comfortable are you in your ability to use performance management systems to monitor, analyze, implement, and evaluate district curriculum, instruction, and services, assessment practices, and results?	.927

To further ensure reliability, the survey instrument remained consistent and scores from the survey were stable and consistent. Standardized measurement was used to ensure consistency across respondents.

Factor analysis further increased the internal validity of the study as well. This was accomplished through the ability of factor analysis to measure underlying groups of variables (Field, 2018). Analysis demonstrated how survey questions mapped back to the NELP standards and SLT. The use of factor analysis also allowed for reduction of variables making it more manageable and reliable.

Data Collection Procedures

Data were collected using a survey questionnaire. Youngstown State University policies and guidelines were followed. Prior to administration of the survey, the researcher received approval from the Youngstown State University Institutional Review Board (IRB) to distribute the survey and collect data. The survey was administered electronically to participants using the online data collection tool SurveyMonkey. Advantages to using electronic surveys include ease of use and easy collection of data. Nardi (2006) also explained that using electronic programs allows for quicker coding of responses than those done by hand, which can eliminate errors. Despite these advantages, disadvantages may also exist. Using online questionnaires may impact overall response rate and quality of responses (Nardi, 2006). To overcome these disadvantages, questions were clear and concise, and there were a minimal number to ensure accuracy of participant responses.

The survey was administered electronically and included an introduction letter (see Appendix A). The list of superintendents in Ohio was obtained through a public

record list of superintendents attained through Ohio Department of Education OEDS. A formal public record request to the Ohio Department of Education was used to access the email addresses of all superintendents with missing information in OEDS. Participants were emailed a direct link to the survey. Questions were answered using radio button selections for all questions except for the two open-ended questions.

Survey responses were collected anonymously to reduce participant risk. To ensure that the survey was anonymous, the option to make responses anonymous was checked in the SurveyMonkey system. By doing so, SurveyMonkey excluded all email and IP addresses from the results.

The survey link was distributed to all superintendents at the same time. It was open for a two-week time frame. Since the response rate was not at a statistical level, the survey link was sent again two weeks later to those who had not responded or who had not fully completed the survey. A reminder was also sent the week that the survey closed to further increase the response rate. The survey took participants approximately 10 minutes to complete. After the survey closed and results were compiled, SurveyMonkey automatically analyzed the response rate.

Data Analysis Methods

The data collected related to superintendent curriculum and instruction competencies and their pathway to the superintendency were analyzed using several methods. Data for this study were collected through the secure online platform SurveyMonkey and then downloaded into an excel spreadsheet. SPSS, a statistical analysis program, was used to further analyze the data.

Descriptive statistics were used to report the overall n size of respondents and to identify the percentage of male and female participants. Descriptive statistics also provided insight into the demographic variables present. Crosstabs were used to identify the gendered difference in demographic questions.

To determine correlations and predictions among variables, inferential statistics were also used. Linear regression was used to determine the mean for each Likert scale question by gender. Factor analysis was used to explore the relationships between curriculum and instruction competencies, gender, the pathway to the superintendency, and leadership style as defined by components of the SLT. Factor analysis allows for analysis of groups of variables to measure an underlying variable (Field, 2018). Curriculum and instruction leadership competencies, as the underlying variables, were identified through this process. The use of factor analysis also allowed the researcher to reduce the data set to a manageable size (Field, 2018). This allowed all factors to be calculated simultaneously to determine relationships, and it decreased the amount of potential errors.

After factors were determined, a Multivariate Analysis of Variance (MANOVA) was used to examine the differences between them. A MANOVA allows for analysis of several outcome variables (Field, 2018). This allowed all factors to be calculated simultaneously to determine relationships, and it decreased the amount of potential errors. Individual regressions were also run to compare results.

Quantitative data collection and analysis were used to further examine and explain the survey results. Statistical procedures were used to compare responses from male participants with female participants. Scores were summed by component subscale

to determine the perspective of each participant. To analyze the multi-select questions, a variable set was defined and analyzed using crosstabulation.

To analyze the open-ended questions, content analysis using a list of categories ensured consistency of results (see Appendix E). Responses were organized by theme to review preparedness, and previous positions. These were then cross-referenced with gender to determine patterns.

Data Storage

Digital data are stored in a storage room in a locked file cabinet at Youngstown State University Beeghly College of Education for at least three years. SurveyMonkey data were linked to the researcher's YSU account. Digital files were stored in a password protected Dropbox account that is only accessible by the researcher and sub-investigator at Youngstown State University. These procedures are all aligned with the guidelines set forth by both the APA and Youngstown State University.

Limitations

The participants in this study included superintendents but did not include other central office or building level leaders. The percentage of female superintendents in Ohio was 16.8% at the time of this research, so there were significantly more male than female participants. Only superintendents in Ohio were included in the survey. Non-traditional structures such as charter schools were not included. Another limitation was the limitation for survey research as the questionnaire was self-reported by participants. Kelley et al. (2013) noted that disadvantages of survey research include the lack of researcher focus, lack of depth related to the topic, and response rate. Further, it is

possible that responders were either predisposed to respond to individuals with strong feelings on the topic presented. This may result in a social desirability concern.

Assumptions

There is an assumption that a background in curriculum and instruction is necessary for a superintendent to be successful. It can be argued that a superintendent needs to hire qualified individuals as cabinet level directors and therefore may not need to have this knowledge him or herself. Research has shown, however, that due to the important and impactful nature of the superintendency, it is important for the superintendent to have a strong understanding of curriculum and instruction in order to provide instructional leadership (Kowalski et al., 2010; Leithwood et al., 2013; Maeroff, 2010; Maranto, 2018). This allows the superintendent to impact student success within the district directly and without relying on others to do so.

Summary

The purpose of this study was to explore the curriculum and instruction competencies of superintendents by gender and further explore the pathway that superintendents took to get to the position. This study was a sequential mixed-methods design that allowed for the quantitative analysis of data and the in-depth understanding provided through two qualitative open-ended questions. Participants included all superintendents in the state of Ohio. Participants completed the researcher-developed questionnaire via SurveyMonkey. Questions allowed the researcher to conduct analysis of participant self-reported comfort with the learning and instruction components of the NELP Standards for District Leaders and SLT. Further demographic information was included to aid the researcher in conducting further analysis.

Threats to reliability and validity were minimized by having a short time frame for participants to complete the survey and ensuring standardized measurement. The large sample size allowed this information to be generalizable. Further, the survey was developed by seeking input of professors and leadership experts to maintain content validity.

Assumptions were made related to the necessary competencies needed for superintendents to be successful. Literature suggests the competencies required for superintendent success and clearly shows the importance of the superintendent as leader within the district.

This study fills a gap in research to better define the current competencies necessary for superintendents by exploring the gendered difference in background and the pathway that best prepares aspiring superintendents. This is important to understand as we continue to close the gendered gap of superintendents and further ensure that superintendents have the necessary skills to improve student achievement.

CHAPTER IV

RESULTS

This study sought to closely examine the superintendent role to determine the curriculum and instruction competencies of current superintendents. Using the NELP Learning and Instruction standard, the researcher further explored the competencies of superintendents to determine if there was a gender difference. This study also explored the pathway taken to the superintendency to determine if there was a gender difference. Additionally, this study explored positions that best prepared superintendents for the curriculum and instruction demands of the superintendency. Data were gathered from current superintendents across the state of Ohio through a web-based survey focused on the instructional competencies of superintendents. The survey instrument was based on the learning and instruction components of the NELP Standards for District Leaders (see Appendix C) as well as the Synergistic Leadership Theory (see Appendix D). The survey data were then analyzed through the use of Statistical Package for Social Sciences (SPSS). Open-ended response questions were coded, organized, and analyzed by theme (see Appendix E) to determine the pathway and positions that superintendents felt best prepared them for the curriculum and instruction demands of the position.

This chapter contains sections titled: description of study participants, demographic data, analysis of data by research question, and summary. Each section within this chapter is considered using data analysis. The description of study participants and demographic data are analyzed using quantitative methods, while the analysis of data by research question is analyzed by using a combination of quantitative and qualitative

methods. The summary of this chapter provides an overview of the data collected and the results of the survey.

Description of Study Participants

The survey was sent via SurveyMonkey to 608 superintendents across the state of Ohio. The total response was 127, resulting in an 20.9% response rate. To increase the survey response rate, SurveyMonkey automatically sent a reminder email to participants that had not responded or not completed the survey two weeks after the survey opened. An additional reminder was sent the week the survey closed to remind participants of the survey deadline.

Of the original emails sent, six bounced back, accounting for 1% of the target population. An additional 18 superintendents, or 3%, opted out of the survey. 112 participants began the survey after completing the initial consent form. The sample error increased due to the low number of completed questionnaires (Trochim & Donnelly, 2008). With the total unique population of 608 superintendents and 112 partially or fully completed surveys, the margin of error dropped to between 8-9% with a 95% confidence level (Israel, 1992). In order to have a 95% confidence interval with a 3% error rate, as originally planned, 200 participants were needed (Fowler, 2014). It is also important to note that Fowler argued against considering the population size or determining a percentage of the population and instead relying on the confidence interval and error rate instead.

Upon completion, the survey was reviewed for accuracy and responses were within range. Missing data were accounted for in the results. The survey was presented

with Likert scale questions first, followed by the open-ended questions, and then the general demographic questions.

Missing data were highest for the open-ended questions. The Likert scale questions in section 1 were completed by 112 participants for all questions covering the NELP Standards in components 4.1, 4.2, 4.3, and 4.4 with the exception of the final question related to component 4.2, or question number 8, on the survey. This question related to professional development had 111 responses. For the open-ended questions in section 2, 109 participants responded to the first question, or question number 17 on the survey, and 108 participants responded to the second question, or question number 18, on the survey. One participant stopped the survey at the beginning of the open-ended responses and did not continue. Despite this dip in responses for the open-ended questions, 111 participants completed each of the demographic questions in section 3 with the only exception being that 109 participants responded to the question of licenses currently held, or question number 25 on the survey. This resulted in 111 participants that completed the entire survey. Table 3 identifies the number of responses for each question as well as those that were skipped. SurveyMonkey automatically identified any skipped responses and created percentages for the number of responses by question.

Table 3

Number of Survey Participants by Question

Section Number	Question Number	Responses	Skipped
N/A	1	127	0
1	2	112	15
1	3	112	15
1	4	112	15
1	5	112	15
1	6	112	15
1	7	112	15
1	8	111	16
1	9	112	15
1	10	112	15
1	11	112	15
1	12	112	15
1	13	112	15
1	14	112	15
1	15	112	15
1	16	112	15
2	17	109	18
2	18	108	19
3	19	111	16
3	20	111	16
3	21	111	16
3	22	111	16
3	23	111	16
3	24	111	16
3	25	109	18
3	26	111	16
3	27	111	16

The first question skipped appeared to be random as the content and format of this question was similar in nature to the preceding and following questions. The number of individuals that skipped questions 17 and 18 jumped slightly. This was likely due to the open-ended nature of these questions in section two. It is not uncommon for open-ended response questions to have a lower response rate as these take more time to complete (Leggett, 2017). One participant did not resume the survey after this section. The next

question skipped, question number 25, may have been purposeful as it related to licenses held by the participant. It is possible that the participants did not see the license they held on the list of choices and therefore skipped the question. Since these questions were skipped by no more than four individuals from those that began the survey, it did not greatly impact the data. Although 127 superintendents completed the electronic consent form, there were 112 participants that completed at least one section of the survey. A total of 111 superintendents, or 18.3% of the population across the state, completed the survey through the final question.

The survey was distributed to superintendents during the fall of 2020, when Ohio was experiencing high levels of infections due to the global COVID-19 pandemic. Overall, response rates on surveys remained stable during this time (Dean, 2020). Despite this, the stress of the pandemic for superintendents may have impacted their participation. Just one week after the close of the survey, 204 school districts were completely remote and an additional 171 were hybrid, as reported by Governor DeWine (Orner, 2020). The additional stress level of superintendents across the state and added logistics to deliver instruction in a remote or hybrid setting could have influenced the ability or desire of superintendents to complete the survey. Educational leaders defined their stress and anxiety levels as high, with 95% of top emotions identified during a two-week study classified as negative (Burstein, 2020). Despite the circumstances, 111 superintendents in Ohio completed the survey. Even though this resulted in a lowered margin of error, the response rate was still relatively high given the state of affairs.

Demographic Data

Demographic data were included in the survey in order to provide context for the responses and to answer the research questions. A total of nine demographic questions were included in section three. Demographic questions provided insight into the background of the superintendents that completed the survey.

Table 4 outlines the demographic details as reported by participants related to district typology. The majority of superintendents worked in rural districts at 47.8%, and the second largest percentage were from small towns at 18.0%. According to ODE data, 37.9% of districts in Ohio were categorized as rural, and 32.8% were categorized as small towns (ODE, 2020c). This indicated that a larger number of superintendents from rural districts participated in the survey and a smaller number of superintendents from small town districts participated in the survey. Percentages for suburban were proportional to state averages with 20.2% of districts classified as suburban (ODE, 2020c) and 16.2% of participating superintendents representing suburban districts. With 16.2% of participating superintendents from urban districts, this also was disproportionate compared to the 9.0% of school districts classified as urban (ODE, 2020c). This suggests that proportionally, more urban and rural superintendents completed the survey. Both females (39.3%) and males (50.6%) were most likely to serve in a rural district.

Table 4

Descriptive Statistics and District Typology of Participants

District Typology	Gender				Total	
	N Female	% of 28	N Male	% of 83	N	%
Rural	11	39.3%	42	50.6%	53	47.8%
Small town	3	10.7%	17	20.5%	20	18.0%
Suburban	7	25.0%	11	13.3%	18	16.2%
Urban	7	25.0%	11	13.3%	18	16.2%
Other	0	0%	2	2.4%	2	1.8%

The most common age of participants was between 45 to 54 at 47.8%. This coincides with national averages for the median age of superintendents. Table 5 outlines these percentages. During the 2019-2020 school year, the median age for female superintendents was 52.5 and the median age for male superintendents was 52 nationally (Rogers & McCord, 2020). In Ohio, the majority of female participants fell within the 55 to 64 age range (42.9%), yet the majority of males (50.6%) were within the 45 to 54 age range. This indicates that female superintendents are slightly older on average than their male counterparts and are older than national averages.

The majority of respondents were Caucasian at 93.7%. This percentage was proportional to state averages of Caucasian superintendents; approximately 95% of Ohio superintendents were identified as white in 2017 (Gilchrist, 2017). Further, this coincides with national averages as 92.5% of superintendents chose white as their race in the 2019-2020 AASA Superintendent Salary & Benefit Survey (Rogers & McCord, 2020). This suggests that minority superintendents were not predisposed to respond to the survey. More African American females (14.3%) completed the survey than African American males (3.6%). Further percentages are seen in Table 5.

Table 5

Descriptive Statistics and Demographic Characteristics of Participants

Demographic Information	Gender				Total	
	N Female	% of 28	N Male	% of 83	N	%
Age Group						
25 to 34	0	0%	0	0%	0	0%
35 to 44	4	14.3%	13	15.6%	17	15.3%
45 to 54	11	39.3%	42	50.6%	53	47.8%
55 to 64	12	42.9%	25	30.1%	37	33.3%
64 or older	1	3.6%	3	3.6%	4	3.6%
Ethnicity						
Caucasian	24	85.7%	80	96.4%	104	93.7%
African American	4	14.3%	3	3.6%	7	6.3%
Asian	0	0%	0	0%	0	0%
Hispanic	0	0%	0	0%	0	0%
Multiracial	0	0%	0	0%	0	0%
Other	0	0%	0	0%	0	0%

Almost one quarter of survey participants identified as female at 25.2%. According to Buckeye Association of School Administrator (2020) data showed that 16.8% of superintendents in the state of Ohio were female. Due to the title of the survey, it is possible that females were predisposed to respond to the survey. This larger sample size does give voice to females across the state. Table 6 shows the distribution of female and male respondents.

Table 6

Descriptive Statistics and Gender of Participants

Gender	N	%
Female	28	25.2%
Male	83	74.8%
Other	0	0%

Additional demographic data were collected to further identify the common pathway to the superintendency. This information is outlined in Table 7. As seen here,

most participants spent 3-8 years teaching prior to their first leadership position, with the majority (34.2%) in the 6-8 year range. Most female superintendents spent 6-8 years in the classroom first (42.9%), with the second highest at 9-11 years (18.9%), while most male superintendents spent 3-5 years (31.3%) teaching first with the second highest category at 6-8 years (31.3%). When added together, however, both females (57.1%) and males (62.7%) spent between 3-8 years teaching prior to moving to the superintendency.

Over half of participants (54.1%) earned their master's degree as the highest degree attained, and an additional 39.6% earned their doctorate. Significantly more females (53.6%) earned their doctorate as their highest degree attained when compared to males (34.9%). Although 0% of females indicated educational specialist as their highest degree attained, 8.4% of males selected this option. Table 7 outlines the highest degree attained by gender.

Table 7

Descriptive Statistics and Preparation for the Superintendency

Demographic Information	Gender				Total	
	N Female	% of 28	N Male	% of 83	N	%
Yrs. teaching prior to first leadership position						
3-5	4	14.3%	26	31.3%	30	27.0%
6-8	12	42.9%	26	31.3%	38	34.2%
9-11	5	17.9%	14	16.9%	19	17.1%
12-15	3	10.7%	11	12.3%	14	12.61%
16-18	4	14.3%	3	3.6%	7	6.3%
19-21	0	0%	2	2.4%	2	1.8%
22-25	0	0%	1	1.2%	1	.9%
More than 25	0	0%	0	0%	0	0%
Highest degree attained						
Bachelor's	0	0%	0	0%	0	0%
Master's	13	46.4%	47	56.6%	60	54.1%
Doctorate	15	53.6%	29	34.9%	44	39.6%
Educational specialist	0	0%	7	8.4%	7	6.3%

A variety of licenses were held by participants, but the majority (34.9%) held an adolescent to young adult 7-12 license, as seen in Table 8. When considering the licenses typically held by high school teachers, either the adolescent to young adult 7-12 license or the high school education 9-12 license typically indicate high school teachers. More males held these licenses with 37.3% indicating that they held the adolescent 7-12 license and an additional 28.9% indicating that they held the high school education 9-12 license for a total of 66.3%, while 25% of females held the adolescent 7-12 license and an additional 21.4% indicated that they held the high school education 9-12 license for a total of 46.5%. This demonstrates that males are almost 20% more likely to have held a high school license than females prior to moving to the superintendency. When considering positions typically held by elementary teachers, either elementary education PK-3 or elementary education K-8 or PK-8, 31.2% of participants chose at least of the typical elementary teaching licenses (one chose both). Almost half of females (42.9%) held an elementary license prior to becoming superintendent, while 26.5% of males held the elementary K-8 or PK-8 license and 1.2% of males held the PK-3 license. This indicates that females were approximately 15% more likely to hold an elementary license than males.

This is similar to the discrepancy between the number of participants that held an elementary principal license (53.2%) compared to those that held a high school principal license (73.0%). Table 8 includes this information. Females (60.7%) were more likely than males (50.6%) to hold an elementary principal license. This trend reversed when considering high school principal licenses with 57.1% of females holding this license and 78.3% of males holding this license. This further indicates that females are more likely to

have an elementary background than males who are more likely to have a high school background.

When considering a background in curriculum and instruction, few participants held licenses or endorsements to directly support this work, as seen in Table 8. When considering these licenses or endorsements, teacher leaders, literacy or math specialists, and curriculum, instruction, and professional development would prepare superintendents for the curriculum and instruction demands of the position. Together, 12.6% of unique participants held a minimum of one of these licenses or endorsements. When considering the gendered difference of these licenses or endorsements, it became apparent that females were more likely to hold each. Females held licenses or endorsements as teacher leaders at 7.1%, literacy or math specialists at 3.6%, and curriculum, instruction, and professional development at 17.9%, while males held licenses or endorsements as teacher leaders at 0%, literacy or math specialists at 0%, and curriculum, instruction, and professional development at 8.4%. In total, females held 28.6% of these licenses, while males held a mere .8%. This demonstrates that females were more likely than their male counterparts to pursue a license or endorsement that would provide background in curriculum and instruction components.

Table 8

Descriptive Statistics and Licenses Held Prior to the Superintendency

Demographic Information	Gender				Total	
	N Female	% of 28	N Male	% of 83	N	%
Licenses held						
Elementary education PK-3	0	0%	1	1.2%	1	.9%
Elementary K-8 or PK-8	12	42.9%	22	26.5%	34	31.2%
Middle childhood education 4-9	6	21.4%	8	9.6%	14	12.8%
Adolescent to young adult 7-12	7	25%	31	37.3%	38	34.9%
High school education 9-12	6	21.4%	24	28.9%	30	27.5%
Multi-age Pk-12 (not IS)	0	0%	11	13.3%	11	10.1%
Intervention specialist	3	10.7%	7	8.4%	10	9.2%
Career-technical	1	3.6%	2	2.4%	3	2.8%
Related services	1	3.6%	3	3.6%	4	3.67%
Fine arts	0	0%	2	2.4%	2	1.83%
Additional licenses/endorsements held						
Reading K-12	7	25%	4	4.8%	11	9.9%
Technology	0	0%	2	2.4%	2	1.8%
Teacher leader	2	7.1%	0	0%	2	1.8%
Literacy or math specialist	1	3.6%	0	0%	1	.9%
Curriculum, instruction, & PD	5	17.9%	7	8.4%	12	10.8%
Pupil services administration	1	3.6%	2	2.4%	3	2.7%
Principal elementary	17	60.7%	42	50.6%	59	53.2%
Principal middle	18	64.3%	52	62.7%	70	63.1%
Principal high	16	57.1%	65	78.3%	81	73.0%
Superintendent	28	100%	83	100%	111	100%

Analysis of Data by Research Question

Using the data acquired from the survey, the researcher used the statistical methods outlined in chapter 3 to analyze the results. Results were analyzed using the Statistical Package for Social Sciences (SPSS) software. The results were then organized by research questions.

Research Question #1

The first research question focused on the NELP standards for learning and instruction. This research question sought to determine the variance between male and female responses on the component subscale questions.

RQ1: Is there a difference in superintendent learning and instructional self-reported competencies based on the newly developed NELP standard for learning and instruction between male and female superintendents?

H1: Females will self-report higher levels of competencies based on the NELP component subscales in learning and instruction.

To answer this question, the researcher used a multivariate analysis of variance (MANOVA). This helped the researcher to further understand the differences in self-reported competencies on the NELP survey questions and gender. To conduct this analysis, the subscale questions measuring superintendent competencies were the dependent variables and gender was the independent variable. The mean response to each question delineated by gender can be seen in Table 9.

Table 9

Mean and MANOVA Statistics for Survey Subscale Questions by Gender

Survey Subscale Question	Mean Score			Sig.
	Female	Male	Diff.	
2. How comfortable are you in your ability to **evaluate** curricula and the use of technology for academic and non-academic student programs?	4.54	4.06	.48	.00**
3. How comfortable are you in your ability to **propose designs** for improving the quality, coordination, and coherence among curricula for academic and non-academic student programs?	4.36	3.90	.46	.00**
4. How comfortable are you in your ability to **implement** the district's curriculum plan for improved academic and non-academic student programs (related to high-quality curricula)?	4.57	4.27	.3	.01*
5. How comfortable are you in your ability to **evaluate** the district's plan for technology use for improved academic and non-academic student programs (related to evaluate technology use)?	4.25	4.10	.15	.32
6. How comfortable are you in your ability to **evaluate** the coordination, coherence, and relevance of the district's systems of support, coaching, and professional development for educators, educational professionals, and leaders?	4.50	4.22	.28	.04*
7. How comfortable are you in your ability to develop a plan for **cultivating** systems of support and professional development that promote improvement, and student success?	4.46	4.12	.34	.02*
8. How comfortable are you in your ability to **implement** systems of support and professional development?	4.63	4.30	.33	.01**
9. How comfortable are you in your ability to **design** a process for formative and summative assessments of learning that supports instructional improvement?	4.14	3.90	.24	.18
10. How comfortable are you in your ability to **evaluate** the coordination and coherence among assessments and use of data to support instructional improvement?	4.36	4.08	.28	.05*
11. How comfortable are you in your ability to **design** a developmentally appropriate system of assessments and data collection, that support instructional improvement and student learning?	4.14	3.83	.31	.10
12. How comfortable are you in your ability to develop a plan for **implementing** the system of assessments and data collection, management, and analysis?	4.07	4.02	.05	.78
13. How comfortable are you in your ability to **engage** appropriate staff in gathering, synthesizing, and using data to evaluate the quality in the district's academic and non-academic services?	4.46	4.45	.01	.88

Survey Subscale Question	Mean Score			Sig.
	Female	Male	Diff.	
14. How comfortable are you in your ability to **propose** designs and implementation strategies for improving coordination and coherence among the district's academic and non-academic systems?	4.25	4.04	.21	.18
15. How comfortable are you in your ability to **use** technology to monitor district curriculum, instruction, and results?	4.36	4.02	.34	.03*
16. How comfortable are you in your ability to use performance management systems to monitor, analyze, implement, and evaluate district curriculum, instruction, and services, assessment practices, and results?	3.96	3.96	0	1.0

Note. **= $p < .01$, *= $p < .05$

The differences between female and male responses varied from 0 to .48. Female participants responded higher on all survey questions with the exception of question 16, where the mean response was the same for both females and males. Responses for eight of the questions demonstrated statistical significance and seven did not demonstrate statistical significance.

Despite the fact that all questions did not demonstrate statistical significance, the questions that did demonstrate statistical significance all had a higher mean score for females than males. The average of the mean differences for the eight statistically significant questions was .35 on a 5-point scale. This demonstrated that females rated themselves much higher than males on each of these questions. This further showed that females rated themselves higher when self-reporting competencies related to curriculum and instruction. The NELP component area that females rated themselves the highest when compared to their male counterparts was component 4.1 dealing with ability to evaluate, design, and implement curriculum to support student learning.

Results from the MANOVA showed that there was a statistically significant difference between participant self-reported competencies on the NELP standard for

learning and instruction between male and female superintendents, F (15, 94) = 1.95, p = .027; Wilks' Λ = .762, partial η^2= .24. Since $p < .05$, this demonstrated statistical significance. The effect size was .24, which indicated that 24% of the variance in the competency subscale questions is attributed to gender. This demonstrated a medium to large effect size (Watson, 2020).

In order to fully answer RQ1, it was also important to determine the underlying common factors. Exploratory factor analysis was conducted using SPSS. This allowed the researcher to determine the groups of variables that were highly interrelated. The 15 subscale questions were entered into a principal component analysis (PCA) to determine the number of factors. Kaiser's criterion suggests that factors with eigenvalues greater than or equal to 1 (Field, 2018). Three factors were identified based on eigenvalues of 1 or higher. This suggested that the 15 original questions or variables measured 3 underlying factors. These can be seen in Table 10.

Table 10

Eigenvalues & Percentages of Variance for Survey Subscale Questions

Factor	Eigenvalue	% of Variance
1	7.604	50.695
2	1.330	8.868
3	1.180	7.868

To further identify the underlying factors, a rotated matrix output was used in SPSS using a varimax method. The varimax method worked to minimize the number of variables linked to each component (Field, 2018). This identified which questions were linked to each of the three newly identified factors. Rotated component factor weights should be higher than .512 with a sample size of 100 and an absolute value of .4 or higher

(Field, 2018). Using .50 as a cut-off, the researcher was able to reduce the scale and eliminate all co-correlates. Correlates of .512 or higher are noted in Table 11. Questions with component factor loadings above the .512 cut-off can be seen in Table 11. Eleven of the 15 questions remained at a .6 or higher cut-off, indicating a high level of correlation.

Table 11

Rotated Component Matrix Eigenvalues of .50 or Higher for Survey Subscale Questions

Question	Factor		
	1	2	3
2			.705*
3			.506
4	.594*		
5			.816*
6	.699*		
7	.741*		
8	.831*		
9		.831*	
10		.774*	
11		.839*	
12		.803*	
13	.715*		
14	.518*		
15			.738*
16	.543*		

Note. *Indicates factors that remained at .512 cut-off

Further examination of the components revealed new definitions of the subscale questions. Construct 1 focused on the systems in place to support academic achievement, including providing professional development and coaching support to staff. The researcher redefined this construct as *Academic Systems*. Construct 2 focused on assessment and data use to monitor programming. These correlated with the original NELP Component 4.3 subscale questions. The researcher redefined this construct as *Data and Assessment*. Construct 3 focused on technology, with the exception of question number 3. Question 3 had the lowest eigenvalue at .506 and had co-correlates for the

other two components as well. Excluding question 3, the researcher redefined construct 3 as *Technology*.

When considering the gendered difference in self-reported competencies based on the underlying factors, females rated themselves the highest on construct 3, technology. These questions focused on one's ability to utilize technology in order to both evaluate and design curriculum and monitor results of its success.

The underlying factors were added to SPSS as variables in order to determine their statistical significance. A MANOVA was run on the underlying factors to determine the interaction between the independent variables of the survey subcomponent questions and the dependent variable gender. There was not a statistically significant interaction effect between gender and the underlying factors identified as constructs, $F(3, 106) = 2.609$, $p = .055$; Wilks' $\Lambda = .931$, partial $\eta^2 = .069$.

Analysis of variance (ANOVA) results were analyzed to determine that gender had a significant effect on Factor 3. Table 12 summarizes the univariate effects on the factors.

Table 12

Univariate Effects of Gender on Factor Scores

Factor	df	M^2	F	Sig	η^2
1. Academic Systems	1	2.04	2.04	.16	.02
Error	108	1.00		.506	
2. Data and Assessment	1	.68	.66	.42	.01
Error	108	1.02			
3. Technology	1	4.90	5.02	.03*	.04
Error	108	4.89			

Note. *= $p < .05$

The results of the ANOVA revealed that there was no effect between responses of males and females related to Factor 1 Academic Systems. $F(1, 108) = 2.043$, $p > .05$; partial $\eta^2 = .019$. Similarly, results revealed that there was no effect between responses of males and females related to Factor 2 Data and Assessment. $F(1, 108) = .663$, $p > .05$; partial $\eta^2 = .006$. There was, however, an effect between responses of males and females related to Factor 3 Technology. $F(1, 108) = 5.021$, $p < .05$; partial $\eta^2 = .044$.

When analyzing the self-reported competencies regarding curriculum and instruction, women scored higher than males on the mean average of each question with the exception of one question where the difference of mean averages was 0. A MANOVA indicated that differences existed between the self-reported competencies and participant gender and demonstrated that there was statistical significance. An ANOVA was used on each of the factors to determine which factors were affected by gender. Results showed that only the factor of Technology was affected by gender at a statistically significant level.

Based on the information collected, the researcher accepted the hypothesis that females did self-report higher levels of competencies based on the NELP component subscales in learning and instruction.

Research Question #2

Research question 2 focused on the pathway to the superintendency to determine if there was a gendered difference.

RQ2: Is there a gender difference in the pathway to superintendency in Ohio?

H2: More females will hold positions that offer more background in curriculum and instruction, such as instructional coach or curriculum director, than males.

To explore this question, the researcher analyzed survey question number 27: What position(s) did you hold prior to becoming a superintendent? Since this question was multi-select, it was important to first define the variable set and analyze the data using multiple response cross tabulation. This allowed the researcher to identify the number of males and females that had previously held each position. The totals and percentages can be found in Table 13.

Table 13

Results of Multiple Response Crosstabulation of Previous Position(s) Held by Gender

Previous Position	Gender				Total	
	N Female	% of 28	N Male	% of 83	N	%
Classified Staff	1	3.6%	4	4.8%	5	4.5%
Related Services	1	3.6%	1	1.2%	2	1.8%
Teacher	25	89.3%	72	86.7%	97	87.4%
Specialist or Coach	7	25.0%	7	8.4%	14	12.6%
Athletic Director	0	0%	16	19.3%	16	14.4%
Consultant	5	17.9%	4	4.8%	9	8.1%
Elem. Admin.	13	46.4%	34	41.0%	47	42.3%
MS. Admin.	11	39.3%	46	55.4%	57	51.4%
HS. Admin.	15	53.6%	57	68.7%	72	64.9%
Human Resources	3	10.7%	6	7.2%	9	8.1%
Pupil Services	3	10.7%	9	10.8%	12	10.8%
Curriculum Director	18	64.3%	24	28.9%	42	37.8%
Asst. Superintendent	17	60.7%	19	22.9%	36	32.4%

As evidenced by Table 13, there was a difference between the pathway for females when compared to males. The number of participants who had served as elementary principal was 42.3% and the number of participants who had served as high school principal was 64.9%. Further it demonstrates that males (68.7%) were more likely than females (53.6%) to have served as high school principal while females (46.4%) were more likely than males (41.0%) to serve as elementary principals. These data show that the pathway to the superintendency in Ohio is more likely to travel through the high school principal position than an elementary principal position. Figure 2 shows the

percentages of each position previously held. This provided insight into the pathway that an individual may take to the superintendency based on their gender.

A larger number of participants held positions typically associated with curriculum and instruction responsibilities, including instructional specialist or coach (12.6%), educational consultant (8.1%), and curriculum and instruction central office administrator (37.8%). Additionally, 43.2% of participants (48 of 111) included one or more of these positions in their response. Depending on the district, the position of assistant superintendent may also have curriculum and instruction responsibilities. If included as a position to prepare superintendents with a background in curriculum and instruction responsibilities, the total number of participants that held one or more of these positions increased to 51.4% (57 of 111).

When considering the gender difference, a higher percentage of females held positions typically associated with curriculum and instruction responsibilities than males. More females were coaches (25%) compared to males (8.4%), more females were consultants (17.9%) compared to males (4.8%), and more females were curriculum directors (64.3%) compared to males (22.9%). Although the position of assistant superintendent varies greatly from district to district, it is often a position that holds curriculum and instruction responsibilities. Females greatly outnumbered their male counterparts by having previously held this position with females at 64.3% compared to males at 28.9%.

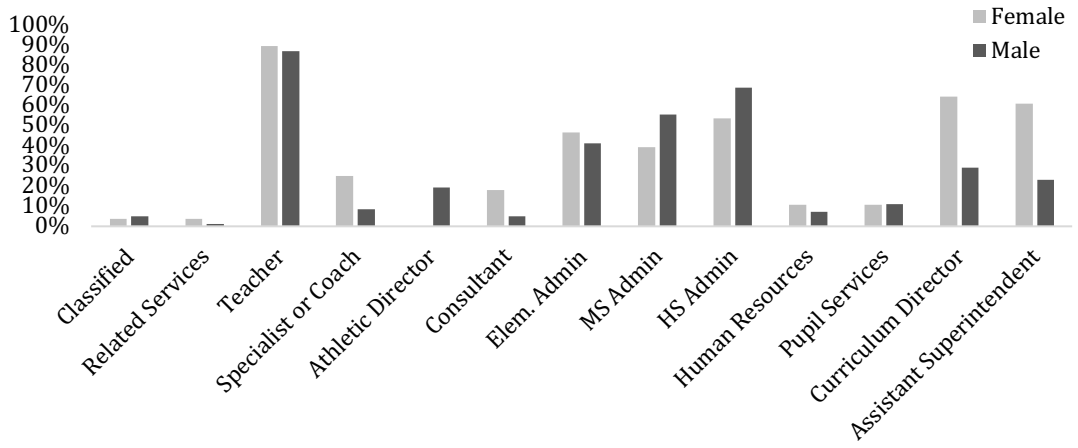
Conversely, males were more likely to be athletic directors (19.3%) compared to females (0%). Interestingly, the percentage of females and males who previously served as elementary principal were similar, but there was a larger gap between the number of

females who had served as high school principal (53.6%) compared to the number of males who had served as high school principal (68.7%).

Results of data analysis demonstrate that there is a difference in pathway between male and female superintendents in Ohio. There was a significant association between the previous positions held and gender ($X^2(13) = 46.8, p < .001$).

Figure 2

Percentages of Previous Positions Held by Gender



Other Identified Themes

The open-ended survey question 17 provided additional insight into the pathway taken to the superintendency. In addition to the pathway as outlined in Figure 2, participant responses highlighted the importance of coursework and the presence of a mentor to help with preparation. The importance of having varied positions in order to gain experience and background was also identified by male and female participants. Table 14 illustrates these additional pathway components. This information was analyzed using coding based on categories that arose from defined constructs (see Appendix E). Based on this information, responses were organized by theme.

Table 14

Additional Pathway Preparation by Gender

Preparation	Gender				Total	
	N Female	% of 28	N Male	% of 81	N	%
Coursework did prepare	2	7.1%	12	14.8%	14	12.8%
Coursework did not prepare	2	7.1%	6	7.4%	8	7.3%
Mentor	3	10.7%	7	8.6%	10	9.2%
Varied positions/responsibilities	4	14.3%	4	4.9%	8	7.3%

Coursework. Interestingly, 22 respondents mentioned coursework as an instrumental part of their pathway to the superintendency, however, there were mixed opinions about how well it helped to prepare them for the position. Those who felt that their coursework did not prepare them often noted that their coursework did not provide the necessary hands-on experiences needed. One male participant noted that, "in my opinion the two most valuable experiences were being a high school principal and a curriculum director for multiple years. The course work provided a base, but there is no substitute for the experiences these two positions provided." This speaks to the importance of on-the-job training and experience that cannot be taught in a classroom.

Coursework Specifically Identifying Curriculum and Instruction. Several participants also specifically referenced curriculum and instruction as part of their coursework. One male noted that, "my doctoral degree in curriculum prepared me more than anything else. The Superintendent classes did not prepare me at all." This infers that the extensive research in curriculum was more beneficial than general superintendent preparatory coursework.

Females also referred to their coursework in conjunction with curriculum and instruction. One female explained that there was not enough curriculum preparation in

her classes, while another said that a PhD in literacy helped to prepare her for the superintendent position.

Importance of a Mentor. Another recurring theme that arose related to the pathway to the superintendency was the importance of a mentor along the way. This was important to both male (8.6%) and female (10.7%) participants. One female participant explained that, "I had several mentors which allowed me to observe multiple leadership styles." This indicates that having a mentor is a helpful learning experience to provide examples of leadership styles.

The importance of having a mentor to prepare, offer support, and provide opportunities was also evident in the comments. This sentiment was shared by male and female respondents that discussed the importance of a mentor. One male said that:

> I feel that the experiences that I had as a principal and as a mentee with the previous district superintendent were more impactful than my licensure program. To be fair, being a superintendent encompasses so many elements that I'm not certain any pathway could prepare you entirely. With that in mind, I believe the most important preparation for being a superintendent is learning how to identify resources and develop a network to provide support when faced with a new challenge.

This highlights the importance of having a network of support in addition to a solid pathway. Mentors are an important layer that add support and guidance to superintendents.

Varied Positions. When referencing the pathway to the superintendency, several participants noted that it is also important to hold varied positions. This was identified by

14.3% of females and 4.9% of males. One female said that "the varied experiences I had along the way have helped me tremendously as I have learned to navigate the superintendency." This demonstrates the importance of having many different positions to experience different aspects of the job. Another female participant expanded on this to include the importance of understanding multiple positions within the district. She said that "all the different positions throughout the district each played a role in my success/pathway - I truly believe the more you walk in your team's shoes the more you have the organizational awareness needed to be successful." These comments suggest that it is better to take a pathway with more stops along the way. If a superintendent holds more positions, he or she will have more background and experience to respond to situations and to best make decisions. This is important to consider when examining the gendered pathway to the superintendency.

The evidence collected allowed the researcher to accept the hypothesis that females will hold positions that offer more background in curriculum and instruction, such as instructional coach, teacher leader, or curriculum director than males.

Research Question #3

The third research question focused on the open-ended survey questions to determine what position(s) helped to prepare superintendents for the curriculum and instruction requirements of the superintendency. This information was analyzed using content analysis based on categories that emerged from the constructs (see Appendix E). Based on this information, responses were organized by theme.

RQ3: Do specific positions better prepare superintendents for the curriculum and instruction demands of the position?

H3: Positions such as academic or instructional coach, curriculum director, and assistant superintendent will be identified as positions that better prepare superintendents for the curriculum and instruction demands of the position.

Survey question 18 provided insight into the position(s) that best prepared superintendents for the curriculum and instruction demands of the position. Analysis of the open-ended survey questions revealed that numerous positions were identified. Responses were coded and each position mentioned was recorded. Responses can be seen in Table 15.

Table 15

Curriculum Preparation Positions by Gender

Previous Position	Gender				Total N	Total %
	N Female	% of 28	N Male	% of 81		
Teacher	5	17.9%	22	27.5%	27	25.0%
Consultant	2	7.1%	0	0%	2	1.9%
Building Admin.	12	42.9%	46	57.5%	58	53.7%
Human Resources	0	0%	1	1.3%	1	.9%
Pupil Services	3	10.7%	3	3.8%	6	5.6%
Curriculum Admin.	14	50.0%	15	17.5%	28	25.9%
Asst. Superintendent	3	10.7%	4	5.0%	7	6.5%

Building level administration positions were grouped together because several participants included multiple building level positions, such as high school assistant principal and high school principal, or even elementary principal and high school principal. Overall, the position of building level administrator was the most frequently identified (53.7%) as providing the necessary background for the curriculum and instruction demands of the superintendency. Despite it being the highest overall, it was much higher for males (57.5%) compared to females (42.9%). Females reported curriculum roles including curriculum director and curriculum coordinator to be the most beneficial with 50% of females identifying this role. Males ranked this significantly

lower with only 17.5% identifying this role as beneficial. Interestingly, no males or females identified coaching roles as being beneficial, and only 7.1% of females identified consulting positions as being beneficial. The position of assistant superintendent was identified as helping to prepare individuals for the curriculum and instruction demands of the superintendency (6.5%), but again this percentage was higher for females (10.7%) than it was for males (5%).

As participants identified the position that best prepared them for the curriculum and instruction demands of the superintendency, several also reflected on their pathway to determine if they were in fact prepared. One female participant noted the importance of her deep level of experience with curriculum as an instructional consultant:

> I am certain if I had not worked for six years as an instructional consultant, my answer and my experiences would be less positive when it comes to ta[l]king about preparation for this vital component of the superintendency. While being a principal also helps to build important competencies, getting time to concentrate on teaching and learning is worth its weight in gold. I really think preparation programs should include more in this area.

This demonstrates the importance of a strong background in curriculum and instruction prior to moving to the superintendency.

Not all respondents felt prepared for the curriculum and instruction demands of the superintendency. One male participant explained that his previous positions did not prepare him for the curriculum and instruction demands of the position. He mentioned that:

My previous positions did not prepare me as well for the curricular aspects of the superintendency as I would have liked when looking back at it now. However, as I stated above, that was not the expectation for me in my previous positions. This suggests that either a different pathway or different experiences may have better prepared him for the superintendency.

Other participants noted that they were prepared for the curriculum and instruction demands of the superintendency through positions not typically associated with curriculum and instruction, including building level administration. One male explained this by saying, "I served as both a high school and elementary principal. I believe that the rigors of curriculum and instruction are much higher for principals than they are for superintendents." Another participant explained this by explaining that "[being a] building principal provided insight on how to move forward, to assess, to revise, and to collaborate with others to implement." Despite this, others experienced building level administration differently and mentioned that it did not prepare them for curriculum and instruction. One male noted that his, "experience as a building principal was focused on managing the building, not on becoming an instructional leader." This demonstrates the varied experiences that each individual had in each position, which suggests that it is not the position itself that prepares one, but instead the experiences while in the position.

Other Identified Themes

Through analysis of the open-ended response questions, additional themes emerged that provided insight into the preparation for the superintendency. Superintendents discussed the importance of collaboration or having a team to do the

work. They also discussed the importance of the various curriculum committees and professional development opportunities as well as participating in the evaluation process that helped to prepare them for the curriculum aspect of the job. Further, superintendents discussed the importance of varied experiences as well as the need for on-the-job experiences that cannot be taught in a classroom. Table 16 illustrates these additional preparation themes.

Table 16

Additional Preparation Themes by Gender

Preparation	Gender				Total	
	N Female	% of 28	N Male	% of 81	N	%
Collaboration	1	3.6%	7	8.8%	8	7.4%
Committees/PD	5	17.9%	14	17.5%	19	17.6%
Evaluation Process	2	7.1%	5	6.3%	7	6.5%
Varied Experiences	5	17.9%	6	7.5%	11	10.2%
On the Job Experience	0	0%	3	3.8%	3	2.8%

Collaboration. A recurring theme that emerged was the need for collaboration. Eight of the responses included the importance of hiring a competent team or individual with a strong background in curriculum and instruction. Of these eight participants, seven of them were male. One male individual said that, "truthfully, as a superintendent, I have other positions that direct those programs. It is important, but not my sole responsibility." This demonstrates that even though the superintendent had a strong background in curriculum and instruction, it was not the only responsibility of his role.

Another superintendent reflected on the fact that he did not have a strong background in curriculum and instruction, which made it important for him to hire someone who did. "My strengths are personnel, school community relations and finance. I hired an Assistant Superintendent who has a real strength in teaching and learning. He

oversees most of the curriculum and instruction work in our district." This demonstrates the need for the superintendent to know his or her own areas of strength and to create a team that supports the areas of weakness. Other participants also highlighted the need to rely on their leadership team. It is not possible for any superintendent to know all aspects of the job, but it is critical that they have the right people in place to support the process. This is important to understand because it suggests that not all superintendents have noticed a shift to focus more heavily on curriculum and instruction.

Committees/Professional Development. The importance of continued professional development was included in the responses of 19 participants. Several superintendents noted that committees they were on as teachers helped to prepare them for the curriculum and instruction demands of the superintendency. One participant noted that, "as a teacher, I served on various building committees which evaluated, mapped and implemented curriculum and that experience has been very helpful." This demonstrates that curriculum experiences began as a teacher. Another superintendent expanded on this notion by stating that:

> I was provided numerous opportunities to be involved in Strategic Planning, Ohio Improvement Process, Curriculum Committees and Technology Committees that focus on the instructional strategies, plans, and supports to provide overall success. The training, planning and development focused on staff and students.

These comments help to explain the high percentage of superintendents who identified the role of teacher as a position that helped to prepare them for the curriculum and instruction demands of the superintendency. It explains that experiences within each

position can vary. This suggests that teachers interested in pursuing a leadership role need to be actively involved in committees and professional development.

One superintendent recalled the importance of continued professional readings for personal growth. He mentioned that:

> I am also a reader. One of my mottos is: If you don't read you can't lead. My admin team and I read together all the time, and our principals read with their faculties. The books and the reading almost always initiate the change process.

This demonstrates that professional development continues in each position, even in the superintendency. This is important because it emphasizes that learning never ends, even in the top positions.

The focus on professional development and committee involvement also indicates that an individual can expand their experiences in each position by taking on additional responsibilities. It further suggests that professional learning is an important piece of continued growth necessary for success.

Evaluation Process. Another theme that emerged was the importance of the evaluation process and how it can be used to help administrators hone their curriculum expertise while also improving the craft of others. One individual noted that:

> My previous positions taught me to understand the importance of student engagement in learning, authentic formative and summative assessment, alignment of learning expectations and learning activities, and the importance of teacher and administrative evaluations that coach individuals and help them grow.

This demonstrates how building administrators used the evaluation process to further their own understanding of curricular demands. Further, it shows how administrators use the evaluation process to help grow their teachers. A second participant responded that:

> I feel that my previous experience as a building principal prepared me for the demands at that time. I am a big proponent of the OPES and newly developed OTES 2.0 for the purpose of self-reflection on instructional practice and curriculum development with regard to standards. This has help[ed] to have rich and deeper conversations with building personnel directly involved with lesson delivery and student success.

This again demonstrates how the evaluation process is used for both professional growth and understanding of the curriculum and instruction demands of the position. It suggests that the evaluation process is important for professional growth of both the evaluator and the teacher being evaluated.

Varied Experiences. Similar to responses to research question 2, responses to research question 3 also included the need for varied experiences. This was important to both female and male participants, but females included this in their responses (17.9%) more than males (7.5%). Comments in this area included that experiences were "board and diversified" and "experiences of multiple district level teams, positions, and leadership roles." This became an important theme because it highlights the need for superintendents to hold multiple roles. One female participant explained that "my multiple positions prepared me on the academic side", while another noted that "Each of those positions provided an understanding of the educational process." This indicated that having varied positions helped to build different experiences to prepare superintendents

for the curriculum and instruction demands of the superintendency. It implies that there is not one position that prepares one for the position.

On the Job Experience. The final theme that emerged from the open-ended responses was the notion that no coursework or position could fully prepare superintendents for the curriculum and instruction demands of the position. This theme was only identified by male candidates as 3.8% of males suggested that on-the-job experience was needed to be fully prepared for the position. Two participants explained this by stating that, "not[hing] really prepares you better than actually being on the job" and "on-the-job training is required". A third participant noted that, "the principalship helped me the most prepare me for curriculum and instruction demands but [it] was learning 'on the job'." This further indicates that some experiences are the most beneficial to providing preparation for the superintendency.

These comments help to bring further clarification and understanding to the reason that many participants identified teaching and building level administrative positions as being preparatory for the curriculum and instruction demands of the superintendency.

Based on the data collected, the researcher rejected the hypothesis that positions such as academic or instructional coach, curriculum director, and assistant superintendent were identified as positions that better prepare superintendents for the curriculum and instruction demands of the position. Although these positions were identified more often by females than males, it became evident that the types of experiences one had while in each position was more important than the position itself.

Summary

Chapter IV presents the results of the study. Research findings show that there is a gendered difference in the self-reported competencies of the NELP standards. Overall, females rated themselves higher on these curriculum and instruction competencies with a variance of 0 to .48. There was a statistically significant difference between participant self-reported competencies on the NELP learning and instruction questions and participant gender as evidenced by a MANOVA. Factor analysis further revealed three factors. There was a statistical significance between one of these factors, technology, was affected by gender.

Results show that there is a common pathway to the superintendency. This includes approximately 3-8 years of teaching, followed by an administrative position. Females are more likely to hold positions typically associated with curriculum and instruction responsibilities. Female superintendents are more likely to have had a role as a coach (25%) compared to male superintendents (8.4%). Female superintendents served as consultants (17.9%) more often than male superintendents (4.8%). There is a significantly higher percentage of female superintendents that served as curriculum directors (64.3%) compared to male superintendents (22.9%). Although the position of assistant superintendent does not always include curriculum and instruction responsibilities, female superintendents were more likely to hold that role as well (64.3%) compared to males (28.9%). No matter what path superintendents take to the position, both males and females recognize the importance of mentors along the pathway and the need for professional development.

Multiple positions were identified in the research findings as positions that best prepare individuals for the curriculum and instruction demands of the superintendency. Overall, the highest rated position was a building level administrative role (53.7%); however, males rated it higher (57.5%) than females (49.2%). Females ranked curriculum roles, such as curriculum director, highest with 50.0% of female participants identifying these roles as the best preparation for the curriculum and instruction demands of the superintendency. Males, on the other hand, ranked curriculum roles at 17.5%. Males and females identified the need for superintendents to have a strong team to support the work, and professional development was again noted as an important component to help prepare superintendents for the curriculum and instruction demands of the position.

CHAPTER V

SUMMARY OF THE STUDY

This study provided further insight into the gendered difference of the superintendency in Ohio. The role of superintendent has evolved over time. To be an effective superintendent in the 21st century, it is important to have a strong background in curriculum and instruction (Kowalski et al., 2010; Maeroff, 2010). This study sought to explore the competencies of superintendents in Ohio to determine if there was a gendered difference in the curriculum and instruction competencies. Examination of these competencies also provided understanding of leadership styles of participants. Synergistic Leadership Theory was used to explore the leadership style of survey participants based on the results of each NELP component. SLT gives perspective and voice to female leaders through inclusion of leadership behaviors that are uniquely female (Ardovini et al., 2010). This provided the researcher understanding of the leadership style of female participants based on their competency ratings.

To further understand the background of Ohio's superintendents, this study also sought to explore the pathway taken by male and female superintendents. If the pathway one takes to the superintendency can serve as an obstacle (Glass, 2000), it is important to determine how the pathways differ for male and female superintendents. If, instead, the pathway to the superintendency serves as preparation to build background, knowledge, and experiences, it is important to better understand which pathway to take that leads to success.

The third major topic explored in this research study was to identify the positions that best prepare superintendents for the curriculum and instruction demands of the

superintendency. Although previous research explored the common pathway to the superintendency and the positions most valued by school boards and search firms, the best position to prepare for the superintendency was not included. This lack of information creates a problem for aspiring superintendents who want to ensure they have the best experiences to prepare for the position.

The findings of this chapter are organized into sections including summary of findings, analysis of each research question, discussion, significance of the study, recommendations for practice, recommendations for future research, and the conclusion. Analysis of the general demographic information provides background and context for the research questions. Each research question is carefully analyzed by connecting the results to previous research in literature. This forms the basis for the overarching discussion and significance of the study. Based on the information gathered from this research, recommendations for practice are suggested to help contextualize the results and determine how they are useful for individuals as well as on a more global scale. Recommendations for future research arose from gaps in this research and are considered to help further this work. Finally, the chapter concludes with a summary that synthesizes the most important elements of this research.

Summary of Findings

The summary section analyzed the results of demographic information that provided background and understanding of the results of the study. Gendered differences became apparent in the demographic information and better contextualized the superintendents whocompleted the survey.

To better understand the context of the results, it was also important for the researcher to explore the impact that the timing of this survey may have had on the results. Because this survey was distributed during the COVID pandemic, the phenomenon of COVID was necessary to further explore.

Demographic Information

Demographic information from the survey revealed that the gendered differences of the superintendency begin when considering demographic background information of superintendents. When considering the gatekeeper theory that school boards and search firms prioritize specific qualifications and backgrounds of superintendents, it also becomes evident that females must overcome additional obstacles to reach the position of superintendent.

Nationally, women are more likely than males to work in rural districts (Dana & Bourisaw, 2006a). When considering district typology, 60% of females serve in rural districts (Lemasters & Roach, 2012; Rogers & McCord, 2020). Of participating superintendents in this study, 39.3% served in rural districts, which is significantly lower than the national average. When compared to other district typologies, the majority of Ohio female superintendents do still serve in rural districts. Superintendents in rural districts often wear many hats and are expected to perform the job of what may be many positions in a larger district (Lemasters & Roach, 2012). It would be expected then, that superintendents in rural districts would also have more responsibilities with curriculum and instruction. This is important to note because even though women in Ohio are less likely than those nationally to serve in rural districts, they still have significant experiences with curriculum and instruction.

The idea that women are more likely to serve in rural districts was refuted by Sampson et al. (2015) who found that the majority of women served in major urban areas. This was also not supported by this study as only 25% of participating superintendents served in urban districts. Instead, there is a distribution of females across all district typologies in Ohio.

Females represented 25.2% of respondents, while males represented 74.8%. To better understand this gendered completion rate, it was important to scale the responses. With 16.8% female during the 2020-2021 school year (Buckeye Association of School Administrators, 2020), this meant that 27% of the female superintendents across the state completed the survey. This may indicate that females were predisposed to complete the survey.

This study showed that females were less likely than males to enter the superintendency within the first 3-5 years of teaching with 14.3% of females entering the superintendency with only 3-5 years of teaching experience compared to 31.3% of males. This coincides with research from Glass (2000) that explained that females enter the superintendency later in life, and Lunenburg and Ornstein (2014) that found that females teach for an average of 15 years compared to males who teach for an average of 5 years prior to moving into a leadership role and then to the superintendency. The majority of females in this study entered the superintendency after teaching for 6-8 years. This could be a potential barrier for females in Ohio because search firm consultants prefer candidates who teach for 3-5 years prior to moving to administration (Tallerico, 2000).

National data have shown that the average age of superintendents has become closer for males and females over time. The median age for males was 52.5 and the

median age for females was 52 in the 2019-2020 AASA Salary Study, which demonstrated that this gap was closing (Rogers & McCord, 2020). Despite these national statistics, the average age of superintendents in Ohio is not similar for males and females. The majority of males fell into the 45-54 age range (50.6%), while the majority of females fell into the 55-64 age range (42.9%). This demonstrates that females in Ohio fall behind national averages in this area. Despite this potential barrier, Brunner and Kim (2010) argued that this extra time in the classroom and the fact that females enter the superintendency later in life actually is an advantage for them because it gives more time to learn and prepare for the position.

When considering licenses held, this study demonstrated that females are much more likely to hold an elementary license (42.9%) compared to males (26.5%). This gap continued when considering principal licenses with females more likely to hold an elementary principal license (60.7%) compared to males (50.6%). Glass (2000) found that it is more difficult for elementary teachers to become superintendents. Again, this survey demonstrates that females may be at a disadvantage if this stereotype is held. Examination of the high school principal position further identifies the potential for gender discrimination in Ohio. This survey showed that 57.1% of females held a high school principal license, while 78.3% of males held this license. This further suggests that females in Ohio are at a disadvantage because search firm consultants prefer a candidate with high school principal experience (Tallerico, 2000).

This study provided insight into the curriculum and instruction background of female and male superintendents in Ohio. Females held licenses or endorsements as teacher leaders (7.1%), literacy or math specialists (3.6%), and curriculum, instruction,

and professional development (17.9%), while 0% of males held licenses or endorsements as teacher leaders or literacy or math specialists, and 8.4% of males held licenses or endorsements in the areas of curriculum, instruction, and professional development. This suggests that females seek additional licenses or schooling in areas that support and better prepare them for curriculum and instruction demands. Research supports this finding and suggests that females have a stronger background in curriculum and instruction (Grogan & Shakeshaft, 2013; Björk, Kowalski et al., 2014).

When it came to preparation for the superintendency, many females in Ohio (53.6%) prioritized the importance of holding a doctorate, while only 34.9% of males held this degree. This coincides with national statistics that suggest that more females hold doctoral degrees than males (Grogan & Shakeshaft, 2013; Perry, 2013). National averages for females holding doctoral degrees in 2013 was 52.2%, which mirrors the statistics found in this study (Perry, 2013). Allred et al. (2017) suggested that women earn advanced degrees as a way to demonstrate interest in leadership positions. This implies that females feel that they need higher degrees in order to remain competitive for these tops positions. In a 2018 Ohio study, 78% of females indicated that advanced degrees were needed in order for later success (Walker, 2018). Grogran and Shakeshaft (2011) further supported this claim that females seek higher degrees to increase their skill set. This speaks to the desire of females to hold additional degrees that may not be required in order to further qualify themselves for the position.

Lambie et al. (2013) found a direct correlation between doctoral students with further research courses and experience, such as publication, had higher levels of self-efficacy in these areas. Since female superintendents are more likely to earn their

doctorate than males, it stands to reason that they would have a higher self-efficacy related to instructional leadership. This is important to note as it may have impacted self-reported competencies.

Impact of COVID on Survey Results

The phenomenon of COVID also impacted this study. Dean (2020) indicated that response rates were not significantly impacted by COVID and were higher in some instances, especially for online surveys. It is important to note, however, that additional time should be given to highly stressed populations in order to maintain these response levels (Dean, 2020). Despite these national statistics, the stress level for superintendents in Ohio is higher now than ever. DeWitt (2020) found that 94% of school leaders experienced increased levels of stress since the onset of COVID, and Harris (2020) explained that the stress of COVID has changed the leadership role within schools and that school leaders must work through the stress to continue to provide meaningful instructional opportunities for students. These additional stressors for superintendents to shift to online or hybrid instruction may have impacted the survey response rate.

Interestingly, preliminary research further suggested that females actually handled the COVID crisis better than males with women producing higher leadership effectiveness ratings during the pandemic (Zenger & Folkman, 2020). Zenger and Folkman expanded on the understanding of the glass ceiling to the glass cliff to explain that women may be put in difficult situations because of their ability to succeed despite obstacles. The presence of COVID may actually have produced further evidence that females are better in crisis than males. Harris (2020) suggested that school leaders moved toward distributed leadership during COVID as a necessary means to deal with the

challenges of the pandemic. This collaborative leadership style is more natural for females (Grogan & Shakeshaft, 2013). Again, this shift in leadership also put females at an advantage since it was a more natural transition. This could have affected the results of this study if female superintendents experienced a heightened sense of efficacy due to their leadership during the pandemic.

Research Question #1

To analyze the self-reported curriculum and instruction competencies, it was first necessary to determine how accurate the results were. Research suggests that humans tend to overestimate their abilities (Mayo, 2016). This suggests that all of the responses slightly inflated participant actual competencies. Further research suggests that there is a gender divide related to self-assessment as well.

Torres-Guijarro and Bengoechea (2016) discovered that women tend to judge themselves harsher than men and found that they self-assess lower than their actual abilities. This may imply that women are more self-aware, or it may link back to the confidence gap. Scherpereel and Bowers (2008) further explained that women are likely to underrate themselves in the areas of "decision making, collaboration, and self-management" on self-evaluations when compared to males (p. 174). This suggests that females are less likely to acknowledge instructional competencies. Kay (2017) explained that males will overestimate their abilities by approximately 30% while females underestimate their abilities. This suggests that males should have scored higher than females in the competency scores. Since the converse was true, this may indicate that females are actually stronger in the competency skills outlined in the survey than reflected in the results.

Social desirability may have also impacted the self-reported competency rating. Males adjust their opinion of themselves based on the opinion that others have of them (Torres-Guijarro & Bengoechea, 2016). This is important to note because research suggests that our society believes that males are better suited to the position of superintendent (Maranto et al., 2018). If males believe that they are better suited to the position and adjust their opinion accordingly, this may also indicate that males may have overestimated their abilities on the competency questions. This further indicates that females actually have a stronger background in curriculum and instruction as demonstrated by the NELP component questions. This supports the work of Zenger and Folkman (2019) who suggested that females rank higher than males on leadership capabilities.

It is important for leaders to accurately reflect their abilities when self-assessing because this links to self-reflection and ultimately can contribute to student achievement. Whitt et al. (2015) explained that a superintendent's ability to accurately portray instructional leadership capacities linked to student success can contribute to school reform through self-reflection and changes in behavior. Consequently, if a superintendent fails to accurately portray instructional leadership capacities, it may contribute to lack of success.

Examination of Survey Subscale Questions

Component 4.1 had the highest average difference between female and male self-ratings with three of the four differences statistically significant. The highest areas were the ability to evaluate curricula and propose designs for improving curricula. This component focuses on the ability of the leader to understand the curriculum in order to

develop supports that support academic achievement. Implementation of programs and curriculum to support learning is also a critical part of this element. It is not surprising that this area was high for women, as women do focus on curriculum and instruction (Grogan & Shakeshaft, 2013). Björk, Kowalski et al. (2014) also noted that understanding and use of teaching and learning was a strength of females. This links to the Beliefs, Attitudes, and Values domain of SLT and suggests that women prioritize and recognize the importance of curriculum as a means to student success.

The second highest area when considering the mean average difference was component 4.2. This component focused on professional development. In order to provide professional development, this component also explored the leader's capacity to work collaboratively to support others. According to this study, females were more likely than males to support professional development and work collaboratively with others. Ardovini et al. (2010) supported that female leaders are collaborative by nature. NELP component 4.2 also specifically states that distributed leadership is necessary to fully attain the essence of the skills outlined in this component. When it comes to collaboration, research suggested that women are more likely to form committees, collaborate, and develop relationships (Elias, 2018; Grogan & Shakeshaft, 2013). This is important because it also links to distributed leadership. As Mombourquette (2017) explained, distributed leadership is attained the more leadership is shared through a sense of community and collaboration. Leithwood et al. (2004) further explained that holistic distributed leadership includes learning for each individual through collaborative processes. Females are more apt to lead with a shared or collaborative leadership style (Grogan & Shakeshaft, 2013). This coincides with the results from this study. It further

supports the SLT domain of Leadership Behavior and suggests that females are more likely to adopt a distributed leadership style. Regarding the SLT domains of Beliefs, Attitudes, and Values as well as Organization Structure, this study suggests that females prioritize the importance of professional development and provide opportunities for staff to learn and grow. Research supports that women prioritize the need for professional development over males (Duncan, 2012; Maranto, Teodoro, et al., 2017). Further, research supports that females also participate in professional development more than males (Maranto, Teodoro, et al., 2017). Because women are more likely to participate in professional development, it also follows that they prioritize professional development for others.

NELP component 4.3 focused on the areas of assessment and data. This is important because the use of formative and summative assessments can be a successful way to improve student understanding of standards by making data-driven decisions about learners (Leithwood et al., 2004). Further, the use of data is necessary to determine how students are progressing toward achievement (Mombourquette, 2017). This component had the third highest average mean difference between males and females. Responses in this area suggest that women are more comfortable with their ability to create systems of support, through assessments and data collection, that promote student learning. This is supported by research that suggested that female school leaders were more proficient in data-based decision making and receive higher ratings related to their overall understanding (van Geel et al., 2019). This relates to the SLT component of Beliefs, Attitudes, and Values in that female leaders place importance on providing opportunities for students to learn and grow as evidenced by data.

Component 4.4 had the smallest difference of average mean scores when comparing females and males. Through this component, there is an understanding that leaders use technology and performance management systems to ensure that the system is working effectively. This relates to system-level thinking in order to ensure success of learners. The data collected in this survey suggest that women are better at creating and supporting these systems. This is supported by research because principal systems thinking is associated with participatory leadership, and females tend to focus more on these types of interpersonal relationships (Benoliel et al., 2020). The questions in this section also focus on the need to support all learners through the creation of these coherent systems. Women also focus on student achievement and prioritize success for all students (Ardovini et al., 2010; Björk, Kowalski, et al., 2014). This component links to several domains of SLT. Component 4.4 provides understanding of the SLT domain of Organizational Structure in that it placed emphasis on collaborative structures, which also connected to the SLT domain for Leadership Behavior focused on collaboration and communication. Women tend to embrace a collaborative or shared leadership style (Grogan & Shakeshaft, 2013; Björk, Kowalski, et al., 2014). The findings of this study confirm these leadership differences. Component 4.4 also gives insight into the SLT domain for Beliefs, Attitudes, and Values as female leaders demonstrate the importance of systems of support required to allow all students to learn and grow.

As seen in this study, the leadership behaviors demonstrated by female superintendents show multiple aspects of female leadership. The behaviors identified through analysis of NELP component 4 also validate the interaction of the factors and give insight into how they work together to provide leadership behaviors with the female

perspective. This study further supports research by Ardovini et al. (2010) that found that female leaders focused on student achievement as evidenced by SLT. The leadership competencies ratings of this study highlight this aspect of female leadership.

It is also important to note that three of the questions specifically mentioned the use of technology. Question number 2 included the use of technology to evaluate curricula, and question number 15 included technology as a way to monitor curriculum. These questions included the use of technology as a tool or resource to improve the ability of the leader to implement curriculum. Both questions rated females much higher than males and were statistically significant with a mean difference of .48 and .34, respectively. Question number 5 also included technology, but this question included technology itself as the way to improve student programs. This question did have a higher mean for females than males by .15 but was not statistically significant. In the area of technology, females have lower self-efficacy regarding computer skills and assume tasks to be more difficult (Beyer, 2014). This suggests that females would rate themselves lower than males on the competency sections involving technology skills. Since this survey was completed during the COVID pandemic, the dramatic shift in instructional practices may have impacted the way that superintendents responded to these technology questions. One unique aspect of COVID is that it forced building and district leaders to "extend their role of instructional leader to digital instructional leader" (Pollock, 2020, p. 38). This may have impacted responses to the instructional competency survey questions as it has shifted the way in which leaders contextualized instruction. Further, the heavy reliance on technology during the 2020-2021 school year may have

changed the way that superintendents considered the technology-related questions by increasing their self-perception in this area.

It is important to consider these technology questions because school leaders need to be technology leaders as well. In fact, Change (2012) found that principals who cultivated a technology learning environment experienced a positive impact on both teacher effectiveness and student achievement. Principal leadership in the area of technology also improves the technology literacy of teachers (Change, 2012). This research suggests that female superintendents are better than males at cultivating a technology learning environment and using technology as a means to improve student achievement.

Research Question #2

This study revealed that there is a gendered difference in the pathway to the superintendency in Ohio. This is important to explore because as Glass (2000) suggested, the positions that females have make it difficult for them to move to the position of superintendent. This study further demonstrated that the pathway that is typically taken by females in Ohio may create additional barriers for females looking to advance to the superintendency. This links back to the gatekeeper theoretical framework. The pathway that many female superintendents took to the position of superintendency in Ohio did not coincide with gatekeeper ideal pathways, which may have served as an additional barrier for them to overcome.

Female respondents served as elementary principal (46.4%) more often than males (41.0%). Additionally, males were more likely to serve as high school principal (68.7%) than females (53.6%). This coincides with research that suggests that men

typically advance to the superintendency by serving first as secondary principal (Brunner & Kim, 2010; Davis & Bowers, 2019). It further identifies a barrier for female superintendents in Ohio since 36% of search firm consultants identified the high school principal position as the most important preparatory position for superintendent candidates (Glenn & Hickey, 2009). If search firms and school boards hold this outdated belief that the high school principal is the most important position, it could serve as an additional gate for females. This also supports Glass's (2000) claim that women are not in the correct positions to advance to the superintendency.

Despite the traditional pathway serving as a barrier to female superintendents in Ohio, this study provides hope that an alternative pathway can better serve aspiring female leaders. The pathway of female superintendents in this study demonstrated that females are more likely to build a strong foundation in curriculum and instruction when advancing to the superintendency.

Females were more likely to hold positions typically associated with curriculum and instructional responsibilities in this study. When compared, more females were coaches (25% compared to 8.4%), more females were consultants (17.9% compared to 4.8%), more females were curriculum directors (64.3% compared to 22.9%), and more females were assistant superintendents (64.3% compared to 28.9%). These significant gender differences demonstrate that females in Ohio traveled on a pathway that provided ample background in the areas of curriculum and instruction. The notion that females are more likely to have positions that focus on curriculum and instruction prior to moving to the superintendency is grounded in research. Brunner and Kim (2010) found that women were more likely to serve as assistant superintendents overseeing curriculum and

instruction, and Robinson et al. (2017) also noted that females were more likely to serve as master teacher, coordinator, or assistant superintendent with a focus on curriculum and instruction. Maranto, Teodoro, et al. (2017) also discovered that women are 4-16% more likely to hold positions with a curricular focus than males.

One theme that arose from this study was the need for both males and females to have a mentor to support them as they moved along their pathway. Both males and females noted this in their open-ended responses; 8.6% of males and 10.7% of females referred to the importance of mentors. DiCanio et al. (2016) noted that although the presence of mentors can be impactful to both males and females, mentoring had a 7.5 times larger impact on females.

Another theme that emerged from this study was the need for participants to have varied positions and responsibilities in order to fully gain the experiences to be prepared for the superintendency. One survey participant explained the importance of holding varied positions along the path to the superintendency:

> All the different positions throughout the district each played a role in my success/pathway - I truly believe the more you walk in your team's shoes the more you have the organizational awareness needed to be successful.

This research supports that females take a varied and diverse pathway to the superintendency. The varied pathway of females is supported in research as "women's career pathways are complex and diverse, while men's career pathways are simple and concentrated (Brunner & Kim, 2010). Davis and Bowers (2019) further found that males are more likely to stay at the campus level while females followed more varied pathways that included the assistant superintendent position.

This research supports that females have a stronger background in curriculum and instruction based on the pathway they took to the superintendency. This study also demonstrates that females are less likely to serve as high school principal, which is considered a more favorable pathway. Gender stereotypes related to the pathway to the superintendency may contribute to the large gender disparity in Ohio. Despite these obstacles, this research provides further evidence that if a background in curriculum and instruction is viewed more favorably in the state of Ohio, females will be better positioned to advance to the superintendency.

Research Question #3

The intent of the third research question was to determine what position(s) best prepared superintendents for the curriculum and instruction demands of the position. The most common position cited was building level administration, although this was higher for males (57.5%) than females (42.9%).

The highest rated position identified by females was a curriculum role, including curriculum director and curriculum coordinator with 50% of participants identifying this position as being one of the most beneficial to prepare one for the curriculum and instruction demands of the superintendency. This coincides with research that suggests that women feel that curriculum and instruction is a strength (Finnan et al., 2015; Grogan & Shakeshaft, 2013) and that females are more likely to serve in central office roles such as curriculum directors or assistant superintendents in charge of curriculum (Davis & Bowers, 2019). Roles such as these are likely to provide additional experience with curriculum initiatives and data review that help to build a background in curriculum and instruction.

Collaboration

The open-ended response questions highlighted the need for collaboration when in the role of superintendent in order to be fully prepared for the curriculum and instruction demands of the position. This was more important for males (8.8%) than females (3.6%). Many of the respondents that included this theme spoke to the importance of having a team to help carry out responsibilities. One participant noted that, "my strengths are personnel, school community relations and finance. I hired an Assistant Superintendent who has a real strength in teaching and learning. He oversees most of the curriculum and instruction work in our district." This demonstrates that he recognized his personal areas of strengths and ensured that he had the right team to fill the gaps in his areas of expertise. Maeroff (2010) explained that while the superintendent can lead without the knowledge of curriculum and instruction by hiring a component team, it is more beneficial for the superintendent to have this background him or herself in order to ensure success and not need to rely on others. This is an important theme because it further speaks to the need to shift this thinking so that superintendents understand the importance of having a background in curriculum and instruction.

Preparation

From the research, it became apparent that superintendents also identified other aspects of preparedness beyond the positions held. This links to the research of Brunner and Kim (2010) that identified three categories for preparedness: 1) formal preparation and training, 2) experiential preparation through career or other experiences, and 3) personal attitude toward the position. In addition to qualifications and pathway, experiences and attitude must also be considered. The themes that emerged of evaluation,

committees/professional development, varied experiences, and on-the-job preparation all spoke to the additional aspects of preparation that go beyond formal preparation and training.

Participants reflected on the committees and professional development that they had along the way that provided curriculum understanding. One participant noted that, "as a teacher, I served on various building committees which evaluated, mapped, and implemented curriculum and that experience has been very helpful," and another cited involvement in "Strategic Planning, Ohio Improvement Process, Curriculum Committees and Technology Committees that focus on the instructional strategies, plans and supports to provide overall success." Other superintendents in this study recognized the importance of the evaluation process as a means to provide experiences related to curriculum and instruction. One participant noted that experience with evaluations, "has help[ed] to have rich and deeper conversations with building personnel directly involved with lesson delivery and student success." These experiences allowed superintendents to build an understanding of curriculum and instruction beginning at the teacher level. This is important because it further identifies the need for superintendents to provide leadership opportunities within their schools for teachers to have these experiences. Shakeshaft et al. (2007) explained that this is a strength of female superintendents who lead with an instructional focus by working with teachers to provide opportunities and supports that ensure that they understand the instructional competencies and are able to create effective instructional programming.

When considering how this relates to professional development, it is also important to note that females place an importance on professional development

(Duncan, 2012). It is important that superintendents continue to provide these experiences so that teachers and administrators are fully prepared should they decide to advance to the role of superintendent.

Experiences

Other themes that emerged from this study were the importance of having varied experiences and the importance of on-the-job experience. These themes are also related to preparation. Interestingly, both males and females in this study referenced a variety of positions when asked which position best prepared them for the curriculum and instruction demands of the position. Female participants, however, were more likely to include the importance of holding various positions at 17.9% compared to males at 7.5%. One female participant explained that, "my multiple positions prepared me on the academic side", while another noted that, "each of those positions provided an understanding of the educational process." This may insinuate that the position is not as important as the experience. This supports the findings of Bernal et al. (2017) that identified that for females, different positions help to prepare superintendents if they were effective leaders and able to gain knowledge while in each of those roles. Although there may not be one position that can be identified as the most important to prepare future superintendents, it is important for superintendents to instead hold a variety of positions in which they can learn all aspects of the position. This includes the need for superintendents to hold positions, whether at the teacher level, building level, or central office level during which they can serve as a curriculum leader to further develop the skills and competencies necessary to lead a district from the curriculum perspective. Bernal et al. also discovered that for females, their effectiveness as a leader was the most

important preparation gained from each position held and that it was not tied to the amount of time they held the position. This again supports the understanding that the knowledge and experience gained from each position is critical to future success as a superintendent.

The final theme that emerged was the importance of on-the-job training and experience. It is interesting to note that this was only included in the responses of males (3.8%). This was reflected throughout the open-ended responses including, "not[hing] really prepares you better than actually being on the job", and "on-the-job training is required." The importance of experiential learning supports the findings of Versland (2013) who found that self-efficacy is developed through authentic instructional opportunities for individuals to collaborate and build relationships. Findings from this study that suggest this is more important for males refutes previous research that suggested that on-the-job experiences were more important for female leaders (Davis et al., 2013). This may suggest that females felt more confident with their preparation related to curriculum and instruction and thus did not need additional on-the-job training in this area.

Discussion

This study provides insight into the leadership competencies of male and female superintendents. Although these competencies were self-reported and cannot stand alone as evidence, the results provide information related to the gendered differences in competencies as well as leadership style.

Maranto et al. (2018) suggested that the strong curriculum and instruction background of females may actually better equip them to be successful through

instructional leadership as superintendents. This study further supports that female superintendents in Ohio do in fact have stronger backgrounds in curriculum and instruction as evidenced by their higher self-ratings on curriculum and instruction competencies as well as their pathway to the position that included more positions that typically provide more curriculum and instruction background and experience. This is important because the current perception of society is that females are inferior in relation to their intelligence (Bernal, et al., 2019). This forces us to further consider the competencies that are necessary for superintendents in the 21st century. If, as suggested by Kowalski et al. (2010) and V. Robinson (2013), the role of the superintendent has shifted to an instructional leader with a focus on curriculum and instruction, it is imperative that we shift the outdated perception that a superintendent is a manager. Based on the results of this study, this shift would suggest that females are better prepared to be superintendents. This coincides with research from Maranto et al. (2018) that the curriculum and instruction background of females may better prepare them to be instructional leaders required of the position than males.

Further, this study demonstrated that the pathway taken by male and female superintendents has gendered differences. Males in Ohio are more likely to advance to the superintendency through the high school principal position. Further, results showed that females are more likely to serve in curriculum roles including coaches, consultants, curriculum directors, and assistant superintendent. This again forces us to consider the necessary competencies required for superintendents in the 21st century. If we value background in curriculum and instruction, it forces us to consider that the traditional pathway may not best prepare superintendents for the curriculum and instruction

demands of the position. Brunner and Kim (2010) argued that we need to consider a new pathway to the superintendency that prioritizes the importance of curriculum and instruction. If we make this shift, this study further supports that females are better prepared for the superintendency because of their stronger background in curriculum and instruction built from their pathway to the position.

Interestingly, this study concluded that there is not one position that best prepares superintendents for the curriculum and instruction demands of the position, but instead the experiences of each position were the most important. This supports the work of Freeley and Seinfeld (2012) who suggested that pathway, positions, and qualification did not matter as much as experiences. Females identified the curriculum role as the best preparation, but the overall results of this question were varied. Instead, this study suggests that the experiences that individuals have in each position are more important than the position itself. Davis and Bowers (2019) found that if we presume that one position does in fact better prepare superintendents for the position, current data suggest that males are more prepared after serving as a building level administrator, while females need to serve in a central office position before demonstrating preparedness. This poses several unique questions including the need to better determine which competencies are actually most important for superintendents in the 21st century. Further research in this area may be needed before the best preparation positions can be identified.

Significance of the Study

Research supports that the position of superintendent is critical to the success of the district and specifically student achievement (Kowalski et al., 2010; Maeroff, 2010;

Marzano & Waters, 2006; Tallerico, 2000). This study adds to the current body of research in that it further identifies the importance of a strong curriculum background for superintendents and the pathway to build that experience. When further considering the competencies required for qualified superintendents, research shows that for superintendents in the 21st century, curriculum and instruction must be a focus (Kowalski et al., 2010; Leithwood et al., 2013; Maeroff, 2010). It is evident from research and supported in this study that females have a stronger background in curriculum and instruction (Maranto, Teodoro, et al., 2017). This study further supports that females have higher competency ratings in curriculum and instruction based on the NELP standard.

Results of this study confirm that the superintendents in Ohio followed a different pathway based on their gender. This confirms previous research that suggests that males are more likely to move to the superintendent position from the high school principal position, and females are more likely to serve as an assistant superintendent first (Brunner & Kim, 2010; Davis & Bowers, 2019). Instead, this study confirms that women have a stronger background in curriculum and instruction based on positions held. This is significant because it becomes evident that we need to closely examine the best pathway to the superintendency to determine if females should take the same path as males, or if there is a better path all together.

It is important to continue research in this area to determine the best pathway for females to take and how to best prepare them for the superintendency. Research suggests that females are stronger leaders than males, especially in top management positions (Folkman, 2015). We need to begin to shift thinking about what competencies are needed for the 21st century superintendent in order to develop new pathways to the position and

break stereotypes that the superintendent is a manager instead of a leader. This is important because without females in the position of superintendent, we will continue to perpetuate "male-oriented understandings, priorities, and approaches" (Gullo & Sperandio, 2020, p. 6). We must begin to explore additional ways to encourage females to take these top positions that go beyond only exploring the barriers.

Recommendations for Practice

Preparation programs must further explore gendered issues related to educational administration and the superintendency. Specifically, preparation programs must consider how males and females lead and the implications that these leadership styles may have on districts. Further, preparation programs must examine the curriculum competencies necessary for leadership in the 21st century and ensure that aspiring superintendents have the necessary skill set to be successful and positively impact student achievement.

Women may feel limited in their instructional competencies, especially when provided feedback. Mayo (2016) found that when provided peer feedback, men continued to overestimate their competencies, while women became more self-aware and aligned their competencies more closely to that of the feedback from their peers. In preparation programs, this is important because we do not want to further limit or dissuade females from advancing to the superintendency while providing support, feedback, and preparation.

The results of this study also highlight the importance of curriculum experiences for teachers and building level administrators. Preparation programs lack consistency and provide different experiences based on numerous factors (Brunner & Kim, 2010). This may explain the mixed results found in this survey related to how well coursework helped

to prepare superintendents for the curriculum and instruction demands of the position. The importance of experiential learning is highlighted by this study through participant responses that demonstrated all of the different experiences that helped to prepare them for the superintendency. As Davis et al. (2013) discovered, programs that embed experiential learning theories have the potential to provide experiences that are more beneficial and ultimately provide more leadership expertise. This study demonstrated that the experiences that superintendents have directly impact their later preparedness for the position. This supports the research of Versland (2016) who explained that educational leaders gained self-efficacy through collaborative experiences that were long term and focused on building relationships. This is important not only for preparation programs to consider, but also for current superintendents. Superintendents and school leaders must prioritize the importance of professional development and provide opportunities for future leaders to learn in their various positions.

Another important recommendation is for traditional gatekeepers, school boards and search firms, to reconsider the necessary qualifications for superintendents in the 21st century. Research suggests that school boards prioritize management tasks and daily operations (Terranova et al., 2016). This creates a gender-biased practice because gatekeepers consider previous positions that focus on managerial tasks an asset. Instead, we need to shift gatekeepers to understanding the importance of instructional leadership. Shober and Hartney (2014) suggested that this bias may be due to the lack of curriculum and instructional knowledge of school board members. To mitigate this, school board members and search firms need professional development and training relative to instructional components of the educational system. Through this process, school board

members and search firms will expand their understanding of the many facets of the superintendency and be better prepared to hire the best candidates.

Recommendations for Future Research

This study further identified the competencies necessary for superintendents in the 21st century linked to SLT leadership dimensions. Since both the NELP leadership standards and SLT are relatively new constructs, more research in this area is needed. Statistical significance was only able to be established for 8 of the 15 questions, and the population size completing this survey did not reach a 5% margin of error with a 95% confidence level. This further suggests that recreation of this survey would be helpful to provide more generalizable results.

Another potential area for future research would be to expand on the instructional competencies of female superintendents by conducting a qualitative study with female superintendents in a focus group. This would provide insight into female perception of the competencies needed for the superintendency while also giving voice to female superintendents across the state.

As Torres-Guijarro and Bengoechea (2016) suggested, females are harsh critics of their abilities and self-assess themselves lower than their actual abilities. Future research would be helpful to determine the actual level of competencies on each of these survey questions based on gender. To conduct this research, one could survey central office administrators to have them report the competency rating of their superintendent to determine if self-perceptions mirror the perceptions of others. This would provide additional information to support the competencies of superintendents.

Another aspect of this work could be explored to identify how self-efficacy correlates with instructional competencies. This study supported prior research that females were more likely to earn their doctoral degree than males. There is a need to identify if there is a direct correlation between females who earn higher degrees and self-efficacy, and how it impacts instructional competencies. This would enhance the work of Lambie et al. (2013) who explored the correlation between doctoral students and self-efficacy in the area of research to explore how this relates to educational leaders.

Based on this research, there is a need to further explore the bias of school boards and search firm consultants. Tallerico and Blount (2004) suggested that school boards and search firms often rely on unwritten definitions of candidate qualifications for the position. It is important to further identify these hidden beliefs for school board members and search firm consultants in Ohio to determine if these act as additional gates for females aspiring to the superintendency. A qualitative study with school board members or search firm consultants would provide further insight into these areas. It would help to determine why candidates were or were not chosen to advance to subsequent rounds during the interview process.

There is also a need to further examine the role of search firm consultants in Ohio. Who are the outside consultants? How many school boards employ them? What do they look for in a candidate? An analysis of the search firm consultants would provide answers to these questions. As Glenn and Hickey (2009) discovered, most search firm consultants are white male former superintendents. It is necessary to determine who the search firm consultants are in Ohio to determine if the makeup of these organizations further creates gender discrimination for females. If search firm consultants in Ohio are predominantly

white male former superintendents, it would be important to explore the possibility of similarity-attraction relationship (Bryne, 1971) to determine if the background of the consultants itself contributes to the gender gap in the superintendency. Research in this area would also provide additional understanding as to the competencies and pathway positions prioritized by search firm consultants.

A final area of further research could be to examine the depth that current superintendent preparation programs prepare superintendents for the curriculum and instruction demands of the position. As seen in this study, participants noted the importance of preparation programs and several mentioned that their programs did not prepare them for the curriculum and instruction aspect of the job. This may need to extend beyond traditional internships as a traditional internship would only provide insight into how things are currently done by current superintendents (Brunner & Kim, 2010). If we instead seek to provide experiential learning related to the importance of curriculum and instruction, which may not be plausible for some current superintendents for a variety of reasons, it may force high education institutions to rethink how to provide these authentic experiences. One participant said that, "getting time to concentrate on teaching and learning is worth its weight in gold. I really think preparation programs should include more in this area." This demonstrated that the program did not focus in this area as much as was needed. Responses also indicated the importance of on-the-job experiences, which suggest the importance of experiential learning and the need for programs to focus on the theory of andragogy. If programs do not focus on experiential learning, participants may not feel as though they are prepared for the superintendency based on their coursework. A quantitative study could be conducted to determine the

number of courses that area superintendent preparation programs include that specifically focus on curriculum and instruction and the degree to which they are experiential. This would help to further enhance the experiences that aspiring superintendents have as they prepare for the position.

Conclusion

The position of superintendent is critical because it directly impacts instructional success (Whitt et al., 2015). The position of superintendent is imperative to the overall success of the district. It is therefore essential that the most qualified person be chosen for the position. This means that we need to develop systems that emphasize the necessary competencies and background necessary for the position that will be most likely to lead to successful outcomes. It is important that we shift the perception that being hired as the superintendent is more about who you know than what you know.

Based on the analysis of how the NELP component standards overlap with the Synergistic Leadership Theory, additional assumptions can be made about the gendered difference between superintendents.

Arriaga et al. (2020) noted that because males are more likely to be in leadership roles, we tend to build stereotypes of effective leaders based on their traits, behaviors, and competencies. We instead need to shift this thinking to bring to light the leadership traits, behaviors, and competencies that are uniquely female. These qualities not only have prepared females to lead our school districts; they may actually propel student achievement. “Once a more transformational leadership style is viewed as more successful and typical, women leaders might be more highly valued and sought after” (Arriaga et al., 2020).

It is our obligation to continue to challenge the outdated beliefs that women are not ready for the position of superintendent or that they do not want it as a way to excuse lack of female representation. Instead, we must critically examine the competencies that are best suited to the superintendency and the pathway and preparation necessary to best prepare individuals for the position. Critical examination of these areas will force change in our hiring practices, outdated gatekeeper practices, and the way we approach superintendent preparation courses. Through this process, we will begin to close the gender gap while also ensuring that superintendents of all genders have the best chance at success.

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APPENDICES

APPENDIX A

SURVEY COVER LETTER

Dear Superintendent,

You have been invited to participate in a graduate research study conducted by Heather Miller, Coordinator of Curriculum and Instruction at the North Ridgeville City Schools and a doctoral graduate student at Youngstown State University. The topic for this research is *Examining the Gendered Difference of Instructional Competencies Among Superintendents in Ohio.*

The superintendency is a changing field and now places heavy emphasis on the understanding of curriculum and instruction. Further, the National Policy Board for Educational Administration (NPBEA) created standards for district level administrators called the National Educational Leadership Preparation (NELP) Program Recognition Standards in 2018. Consideration of these standards in relation to the qualities of a successful leader in 21st century schools reveals the necessary qualifications for superintendents. This survey will allow the researcher to identify commonalities and generalizations among superintendent qualifications based on the updated standards.

Your voluntary participation in this survey is greatly appreciated, and all results will be kept confidential. This survey should take about 10 minutes to complete. Thank you again for your time.

Sincerely,

Heather Miller

APPENDIX B

ONLINE SURVEY CONSENT FORM

You are invited to take part in a research study titled *Superior Superintendents: Examining the Gendered Difference of Instructional Competencies Among Superintendents in Ohio*. This study is being conducted by Heather Miller, a doctoral student at Youngstown State University. You were selected to participate because you are an acting superintendent at a public school district in the state of Ohio.

The purpose of this study is to identify and examine your self-perception of comfort level of curriculum competencies using the NELP Learning and Instruction standard and component subscales capacities necessary for successful superintendents in the 21st century. If you agree to participate in this study, you will be asked to complete the following pages.

Page 1 - Online survey consent form

Page 2 - National Educational Leadership Preparation (NELP) Program Standards Self-Reflection

Page 3 - Open-ended questions

Page 4 – Demographic questions

The survey should take approximately 10 minutes to complete. You may not benefit from participation in this study; however, we hope that through the self-reflection of your own competencies regarding curriculum and instruction or your individual pathway to the superintendency, you will gain meaningful information.

We believe that this study has no risks, however, the use of the online platform can include the possibility for a breach of confidentiality. To minimize this potential, we will use the secure platform, SurveyMonkey, and ensure that the system is set to make responses anonymous. This will prohibit email addresses and IP addresses from being collected and help to maintain confidentiality. No one, including the researcher, will know that you participated in the study.

Your participation in this study is completely voluntary, and you can discontinue the survey at any time.

If you have any questions about this study, you may contact the researcher, Heather Miller, at (216) 409-1504 or the Doctoral Chair, Dr. Jane Beese at (330) 941-2236. If you have questions about your rights as a research participant, please contact the Office of Research Services at YSUIRB@ysu.edu or (330) 941-2377.

Thank you for your participation!

1. Please complete the electronic consent below:

ELECTRONIC CONSENT: By clicking "I agree" below you are an adult who is at least 18 years old, have read and understood this consent form and voluntarily agree to participate in this study.

I Agree I Do Not Agree

APPENDIX C

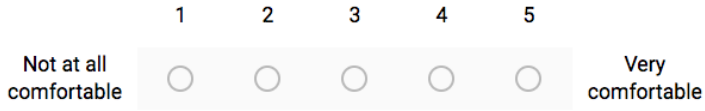
SURVEY FOR CURRENT SUPERINTENDENTS

Directions: Please answer the following questions to the best of your ability.
Part 1: National Educational Leadership Preparation (NELP) Program Standards Self-Reflection
The following questions are based on the August, 2018 NELP Learning and Instruction standards (standard 4).

Component 4.1: Program completers understand and can demonstrate the capacity to evaluate, design, and implement high-quality curricula, the use of technology, and other services and supports for academic and non-academic student programs.

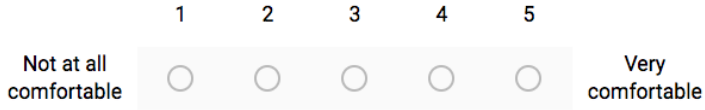
2. How comfortable are you in your ability to **evaluate** curricula and the use of technology for academic and non-academic student programs?

3. How comfortable are you in your ability to **propose designs** for improving the quality, coordination, and coherence among curricula for academic and non-academic student programs?



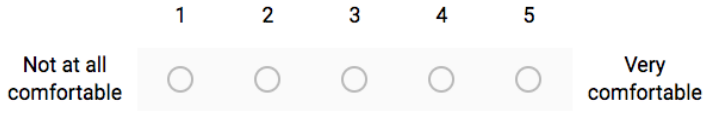
4. How comfortable are you in your ability to **implement** the district's curriculum plan for improved academic and non-academic student programs (related to high-quality curricula)?

5. How comfortable are you in your ability to **evaluate** the district's plan for technology use for improved academic and non-academic student programs (related to evaluate technology use)?

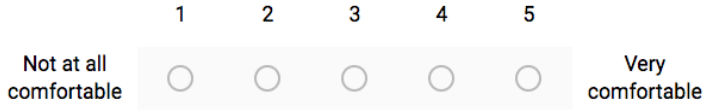


Component 4.2: Program completers understand and can demonstrate the capacity to collaboratively evaluate, design, and cultivate coherent systems of support, coaching, and professional development for educators, educational professionals, and school and district leaders, including themselves, that promote reflection, digital literacy, distributed leadership, data literacy, equity, improvement, and student success.

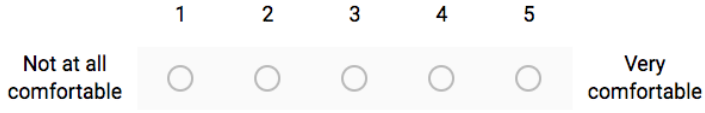
6. How comfortable are you in your ability to **evaluate** the coordination, coherence, and relevance of the district's systems of support, coaching, and professional development for educators, educational professionals, and leaders?



7. How comfortable are you in your ability to develop a plan for **cultivating** systems of support and professional development that promote improvement, and student success?

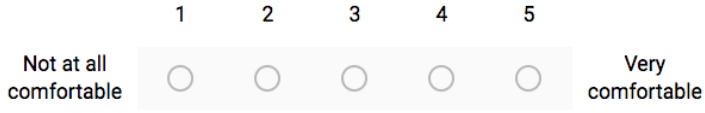


8. How comfortable are you in your ability to **implement** systems of support and professional development?

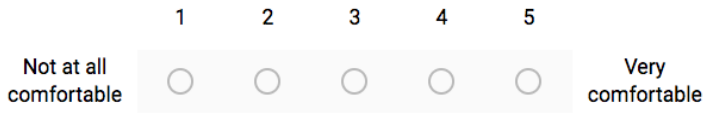


Component 4.3: Program completers understand and can demonstrate the capacity to design, implement, and evaluate a developmentally appropriate, accessible, and culturally responsive system of assessments and data collection, management, and analysis that support instructional improvement, equity, student learning and well-being, and instructional leadership.

9. How comfortable are you in your ability to **design** a process for formative and summative assessments of learning that supports instructional improvement?



10. How comfortable are you in your ability to **evaluate** the coordination and coherence among assessments and use of data to support instructional improvement?



11. How comfortable are you in your ability to **design** a developmentally appropriate system of assessments and data collection, that support instructional improvement and student learning?

12. How comfortable are you in your ability to develop a plan for **implementing** the system of assessments and data collection, management, and analysis?

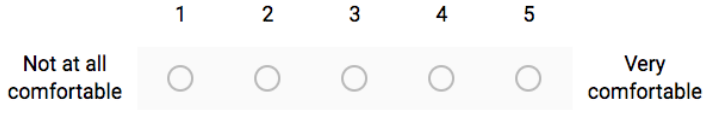
Component 4.4: Program completers understand and demonstrate the capacity to design, implement, and evaluate district-wide use of coherent systems of curriculum, instruction, assessment, student services, technology, and instructional resources that support the needs of each student in the district.

13. How comfortable are you in your ability to **engage** appropriate staff in gathering, synthesizing, and using data to evaluate the quality in the district's academic and non-academic services?

14. How comfortable are you in your ability to **propose** designs and implementation strategies for improving coordination and coherence among the district's academic and non-academic systems?

15. How comfortable are you in your ability to **use** technology to monitor district curriculum, instruction, and results?

16. How comfortable are you in your ability to **use** performance management systems to monitor, analyze, implement, and evaluate district curriculum, instruction, and services, assessment practices, and results?



Part 2: Open-ended questions
Please respond to the following questions based on your experiences.

17. How do you feel your pathway to the superintendency prepared you for the position?

18. Explain how your previous position(s) either prepared or did not prepare you for the curriculum and instruction demands of the superintendency.

Part 3: General Demographic Questions
Please answer the following questions regarding your district and educational background.

19. What is your school district typology?
    - ❑ Rural
    - ❑ Small town
    - ❑ Suburban
    - ❑ Urban
    - ❑ Other

20. What is your age group?
    - ❑ 25 to 34
    - ❑ 35 to 44
    - ❑ 45 to 54
    - ❑ 55 to 64
    - ❑ 65 or older

21. What is your ethnicity?
    - ❑ Caucasian
    - ❑ African American
    - ❑ Asian
    - ❑ Hispanic
    - ❑ Multiracial
    - ❑ Other

22. What is your gender?
    - ❑ Female
    - ❑ Male
    - ❑ Other

23. How many years did you teach prior to your first educational leadership position?
- ❑ 3-5 years
- ❑ 6-8 years
- ❑ 9-11 years
- ❑ 12-15 years
- ❑ 16-18 years
- ❑ 19-21 years
- ❑ 22-25 years
- ❑ More than 25 years

24. What is the highest level of degree that you hold?
- ❑ Bachelor's
- ❑ Master's
- ❑ Doctorate
- ❑ Educational specialist

25. What licenses do you hold? (Check all that apply)
- ❑ Elementary education PK-3
- ❑ Elementary K-8 or PK-8
- ❑ Middle childhood education 4-9
- ❑ Adolescence to young adult 7-12
- ❑ High school education 9-12
- ❑ Multi-age PK-12 (not including intervention specialist)
- ❑ Intervention specialist
- ❑ Career-technical
- ❑ Related Services
- ❑ Fine Arts

26. What additional licenses/endorsements do you hold? (Check all that apply)
- ❑ Reading K-12
- ❑ Technology
- ❑ Teacher leader
- ❑ Literacy or math specialist
- ❑ Curriculum, Instruction & Professional Development
- ❑ Pupil Services Administration
- ❑ Principal Elementary
- ❑ Principal Middle
- ❑ Principal High
- ❑ Superintendent

27. What position(s) did you hold prior to becoming a superintendent? (Check all that apply)
    - ❑ Classified staff member
    - ❑ Related service provider
    - ❑ Classroom teacher
    - ❑ Instructional specialist or coach
    - ❑ Athletic director
    - ❑ Educational consultant
    - ❑ Building level administrator elementary
    - ❑ Building level administrator middle school
    - ❑ Building level administrator high school
    - ❑ Human resources central office administrator
    - ❑ Pupil services central office administrator
    - ❑ Curriculum and instruction central office administrator
    - ❑ Assistant superintendent

APPENDIX D

SECTION 2 SURVEY QUESTIONS LINKED TO SLT

NELP Standard 4 Component	Aligned SLT Domain
Component 4.1: Program completers understand and can demonstrate the capacity to evaluate, design, and implement high-quality curricula, the use of technology, and other services and supports for academic and non-academic student programs.	**Beliefs, Attitudes, and Values** Importance of curriculum for student achievement
Component 4.2: Program completers understand and can demonstrate the capacity to collaboratively evaluate, design, and cultivate coherent systems of support, coaching, and professional development for educators, educational professionals, and school and district leaders, including themselves, that promote reflection, digital literacy, distributed leadership, data literacy, equity, improvement, and student success.	**Organization Structure** Provides opportunities for professional development **Leadership Behavior** Use of distributed leadership **Beliefs, Attitudes, and Values** Importance of professional development
Component 4.3: Program completers understand and can demonstrate the capacity to design, implement, and evaluate a developmentally appropriate, accessible, and culturally responsive system of assessments and data collection, management, and analysis that support instructional improvement, equity, student learning and well-being, and instructional leadership.	**Beliefs, Attitudes, and Values** Importance of providing opportunities for all students to learn and grow as evidenced by data
Component 4.4: Program completers understand and demonstrate the capacity to design, implement, and evaluate district-wide use of coherent systems of curriculum, instruction, assessment, student services, technology, and instructional resources that support the needs of each student in the district.	**Organizational Structure** Collaborative structures that promote community **Leadership Behavior** Collaborator & Communicator **Beliefs, Attitudes, and Values** Importance of systems of supports for all students to learn and grow

APPENDIX E

CONSTRUCTS, RESEARCH, AND OPEN-ENDED QUESTIONS

Construct	Definition	Research Question	Open Ended Question
Career Pathway	There is a traditionally defined pathway to the superintendency and failure to follow it could impact one's ability to ascend to the position; males and females tend to follow different pathways (Davis & Bowers, 2019).	Is there a gender difference in the pathway to superintendency in Ohio?	How do you feel your pathway to the superintendency prepared you for the position?
Curriculum Positions that Prepare Superintendents	Brunner and Kim (2010) note that the pathway to the superintendency is beginning to shift and the traditional pathway needs to be redefined to focus heavily on curriculum and instruction preparedness.	Do specific positions better prepare superintendents for the curriculum and instruction demands of the position?	Explain how your previous position(s) either prepared or did not prepare you for the curriculum and instruction demands of the superintendency.

APPENDIX F

IRB APPROVAL LETTER

HSRC 0124-21

Diana Fagan <dlfagan@ysu.edu>
Tue 11/3/2020 2:27 PM

To: Jane Beese <jbeese@ysu.edu>; Heather Miller <hmiller03@student.ysu.edu>
Cc: ckcoy@ysu.edu <ckcoy@ysu.edu>; Karen H Larwin <khlarwin@ysu.edu>

Dear Investigators,

Your protocol "Superior superintendents..." has been reviewed and is deemed to meet the criteria of an exempt protocol, category #2. You will be surveying Ohio public school Superintendents. You will be using Survey Monkey to collect the responses. No identifying information will be gathered.

The research project is now approved, and you can begin the investigation immediately. Please note that it is the responsibility of the principal investigator to report immediately to the YSU IRB any deviations from the protocol and/or any adverse events that occur. Please reference protocol #0124-21 in all correspondence about the research associated with this protocol.

Good luck. Dr. Fagan, YSU HSRC