The Glass Ceiling in K-12 Education: How Career Paths, Knowledge, Skills, Abilities, and Barriers Affect Females in the Superintendency

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Abstract

The purpose of this study was to determine the career paths of female superintendents and the extent they agree they were selected because the board of education believed specific characteristics apply to them and they possessed specific knowledge, skills, and abilities. Additionally, the purpose was to determine the extent female superintendents perceived they had experienced barriers during their careers as school leaders. The researcher investigated the perception of women superintendents from across the United States. Results showed that career paths that have supported the current female superintendents' entry into the superintendency in the United States are that of elementary principal and other district-level positions. After analyzing results of the female superintendents' perceptions regarding characteristics their board of education believed applied to them, this researcher found that superintendents mildly agreed or agreed that the board of education believed they held all but two characteristics listed in the survey. They mildly agreed they were selected because the board believed they were politically aware. However, female superintendents mildly agreed or agreed that they were selected for the superintendency because the board of education believed the following characteristics applied to them: assertive, confident, competitive, decisive, family-oriented, nurturing, proactive, resilient, and risk-taker. Female superintendents agreed they were selected for the superintendency because the board of education believed the following characteristics applied to them: competent, concerned about personnel, confident, cooperative, fair & firm, goal-oriented, intelligent, and problem-solver. Finally, although participants reported numerous barriers faced, experiencing the barrier of personal anxieties about the effect of a career on family during their careers as

school leaders and the “old boys’ network” were the only two barriers experienced frequently or somewhat frequently by the participants in this study. Implications for action include providing feedback to female educators with goals of being a superintendent, university preparation programs, state department of education, and professional organizations that positively impact females in the superintendency while assisting current superintendents. Recommendations for future research include updating the survey, using the same survey in a mixed-methods study, and differentiating perceptions of White women and women of color.

Dedication

This dissertation is dedicated to Team Renk and the support you have shown me throughout this degree. To my husband, Matt Renk, you have taken on even more family and household work without hesitation or complaint. To our adult sons and grandchildren, Kyler, Kaleb, Carter, and Hadleigh, I look forward to giving you so much more time and attention! To my teenage daughter, Jordi, you have taken on more responsibility at home and even helped me find hundreds of emails for female superintendents to help keep me on schedule. I am so proud that you continue our family's tradition of strong women. To my parents, Irv Mitchell, Richard VanWey, and especially my mother, Deborah K. VanWey, thank you for starting that tradition.

I also dedicate this dissertation to the gyms and stadiums where I wrote while watching my daughter play volleyball, basketball, and run track, to the cars in which it was written on the way to visit family or attend activities, and even to the homecoming dance bathroom where I created five pages of frequency tables while on principal duty. I look forward to not always being known as the woman with her computer. While that dedication is a little tongue-in-cheek, it also speaks to the sacrifices women may have to make to accomplish their goals and have a family, and it is fitting, given the topic of this work.

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I also want to thank the women superintendents across the United States who participated in my study, especially those who reached out to share their experiences or support for this work. As one participant stated, "Us girls have to stick together!"

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Chapter 1

Introduction

The concept of *women's work* has several different connotations. The first relates to domestic and childcare work within the home, and the second relates to paid employment where professions are dominated by either women or men (Tallerico & Blount, 2004). Roles stratified by gender are the third form of women's work. For example, in public PreK-12 education, men are more likely to be superintendents, despite most teachers being female (Tallerico & Blount, 2004).

In 2020, of the 13,728 school superintendents in the United States, 1,984 were women (Glass, 2000). Fourteen and one-half percent of superintendents were female, despite 76% of all educators being women (Perry, 2020). Although the percentage had increased from 1.3% in the early 1970s, by 2015, the superintendency remained male-dominated (Connell et al., 2015). The American Association of School Administrators (AASA) Decennial Study of the Superintendent found that the percentage of female superintendents had risen incrementally from 24.1% in 2010 to 26.68 in 2020 (Tienken, 2021).

Research has shown that the superintendency is traditionally considered *man's work* for two primary reasons identified in the literature. Tallerico & Blount (2004) asserted that the century of male domination in the superintendency is an example of work stratified by gender, with males traditionally taking the roles that are higher paid management positions. Additionally, "the workplace has to be virtually all women for women to be promoted to supervisory positions" (Lorber, 1994, p. 199). The term used to describe this phenomenon was coined "the glass ceiling" and defined as the "invisible—

but impenetrable— barrier between women and the executive suite, preventing them from reaching the highest levels of the business world regardless of their accomplishments and merits" (Federal Glass Ceiling Commission, 1995, p. iii). The superintendency remains the glass ceiling in public-school education. Another reason may be due to prejudice. Bernal et al. (2017) contended that women leaders are viewed as weak and less intelligent than men and viewed as more likely to use emotion rather than data to make decisions. Prejudice against women is "ever present" (Bernal et al., 2017, p. 51).

There have been both internal and external barriers to women becoming superintendents. The Federal Glass Ceiling Commission (1995) defined internal barriers as workplace structures that create barriers for those who wish to join higher levels of leadership. Obermeyer (1996) defined external barriers as obstacles that may hinder advancement to the next level of management on an individual's career path, including sex-role stereotyping, sex-role socialization, career socialization, organizational characteristics, and devaluation of women. Some females report exiting the superintendency due to "tokenism, marginalization and isolation" (Tallerico & Blount, 2004, p. 9). Participants in a study conducted by Walker (2019) reported wanting upcoming female superintendents to know that

> gender bias does exist and aspiring female superintendents need to be aware that they must work harder, continuously prove themselves, and understand that both females and males have been conditioned to work under the leadership of males and, therefore, research has found that successful women will be liked less by both genders. (p. 94)

Macarie and Moldovan (2012) attributed the lack of females in superintendent roles to the restriction of "women's access to top-level positions from the moment they become members of an organization by their integration in non-strategic departments (human resources, public relations) that are not considered a recruitment pool for top managers" (pp. 158-159).

Background

From the beginning of the school superintendency, males in the role have been prevalent. School-district superintendencies began in the mid-19th century, charged with and focused on ensuring academic quality for their district's students. When the United States moved from an agrarian society to an industrial one, district superintendents became managers of much larger districts in urban areas (Björk et al., 2014). In 1901, Ella Flagg was appointed as one of the first female grammar school principals and then as superintendent of Chicago Schools in 1909. During this time, superintendents were either elected or appointed, and 9-11% were women (Blount, 1998). By 1930, the suffrage movement gained the right to vote for women (Shakeshaft, 1989). Once women began voting, the number of women in the superintendency increased and appointing male superintendents became more common. From there, the number of female superintendents increased or decreased depending on the availability of men for the job (Montz & Wanat, 2008). During the great depression, a lack of jobs for men led to women being dismissed and barred from the position. When men went to war during World War I and II, the number of female superintendents rose to 9% (Shakeshaft, 1999). As men returned following World War II, the number of women dropped consistently until only 1.3% of superintendents were women in the 1970s (Blount, 1998).

Since the 1980's educational reform movement, the superintendent role has become increasingly like a chief executive officer in corporate America (Björk et al., 2014). Their initial role of ensuring academic excellence shifted over the years into a managerial role and then into a social and political role.

> Roles that were prominent in one era were eclipsed in another, but none of these roles has disappeared. Rather, they became less conspicuous as dictated by a shift in demands on the office or by the determination of the school boards and communities they served. (Björk et al., 2014, p. 2)

Despite the evolution of the role of the superintendent, men are still more likely to be a superintendent. The number of women in the superintendency is even lower for women of color. Although women account for 76% of the teacher workforce, only 11% are women of color (Chiefs for Change, 2019). Societal challenges affecting women across many industries include leadership being a male role, bias about women having the skills needed for the position, conflicts with managing a home and a school district, bias from school boards and search companies, and the difficulty of the job itself (Chiefs for Change, 2019). Ibarra et al. (2013) reported that prejudice against women in organizations and society disrupts the cycle that creates leaders and additional steps must be taken to make women part of the leadership cycle.

Education has been cited as one of the slowest industries to accept female leaders, while it should be a model for other industries (Olsen, 2005). The more women that become superintendents, the more likely school boards and communities will see superintendents of either gender as normal (Wickham, 2007). However, for "transformational changes to occur, an understanding and awareness of gender issues in

educational leadership must also occur" (Sanchez & Thornton, 2010, p. 2). There is a significant difference between the number of women in educational leadership and those in the classroom (Sanchez & Thornton, 2010).

The number of female superintendents in the United States has increased incrementally from 1.3% in the early 1970s (Connell et al., 2015) to 26.67% in 2020 (Perry, 2020). The drop from 2019 to 2020 may have been COVID-19-related (Chiefs for Change, 2019). Rafal-Baer (2020) purported that the COVID-19 pandemic might have negatively influenced the proportion of female superintendents. In March 2020, 37% of the largest school districts in the country hired new superintendents and 70% of those replacements were men. The percentage of male superintendents increased in those districts from 65% to 69% (Rafal-Baer, 2020). The National Superintendents Roundtable (2021) reported that in a survey of 400 district leaders, many superintendent respondents reported facing so much adversity during the COVID-19 pandemic, from hostile social media to threats of physical violence, that 63% considered quitting during the 2020-2021 school year. See Table 1 for the percentage of female superintendents from 2010 to 2020.

Table 1

Percentage of Female Superintendents, 2010-2020

Year	Percentage of Female Superintendents
2010	24.10
2011	27.40
2012	28.70
2013	26.93
2014	28.28
2015	28.13
2016	28.13
2017	29.43
2018	28.75
2019	30.09
2020	26.67

Note. Adapted from *School Superintendents Demographics and Statistics in the US*, by Zippia, 2022 (https://www.zippia.com/school-superintendent- jobs/demographics/).

Statement of the Problem

Glass (1992) referred to the superintendency as "the most male-dominated executive position of any profession in the United States" (p. 8), and Bernal et al. (2017) reported that "men dominate the superintendent role" (p. 1). To understand the underrepresentation of women in the superintendency throughout the United States, women in the role of current superintendents should be studied to understand the career paths that led to the achievement of the superintendents, the skills, knowledge, and

abilities they perceive as being critical to their success, and the barriers they have faced. Unfortunately, while there are numerous studies regarding female superintendents in specific states, the number of studies investigating female superintendents throughout the United States is limited. Most research focused on barriers to the superintendency. Few focused on the paths those who have gained access have taken, and the skills they gained that they perceived helped them overcome those barriers. Leaders in the education system need to understand how to create a more conducive climate for women to be better represented in the superintendency.

Purpose of the Study

The overall purpose of the study was to investigate U.S. female superintendents' perceptions of their career paths; characteristics, knowledge, skills, and abilities that helped them gain access to the superintendency; and the barriers they faced along the way. The first purpose was to determine what perceived career paths supported the female superintendents' entry into the superintendency in the United States. The second purpose was to investigate United States female superintendents' perceptions regarding characteristics their board of education believed applied to them. The third purpose was to determine the extent to which female superintendents in the United States agree they were selected because the board of education perceived they demonstrated and possessed specific knowledge, skills, and abilities. Finally, the fourth purpose was to determine the frequency of the barriers experienced by female superintendents in the United States during their careers as school leaders.

Significance of the Study

The significance of the study is that the results of this analysis can be used in future decision-making regarding females in the superintendency. Female educators can prepare themselves to be chosen for the superintendency, and university leadership programs can better prepare women for the superintendency. The results may provide insight into how to prepare successfully for a future in the superintendency for other aspiring females. Additionally, districts and states can implement programs that create opportunities for strong female educators to move into district leadership.

Delimitations

"Delimitations are self-imposed boundaries set by the researcher on the purpose and scope of the study" (Lunenburg & Irby, 2008, p. 134). This quantitative study was designed to investigate female superintendents' perceptions to understand better how aspiring female school leaders may also be successful in achieving the superintendency. The following delimitations were placed on the study:

1. Due to the nature of the study, only current female superintendents were solicited as participants.
2. This study was limited to those superintendents who completed the survey.
3. This study was completed during the 2022-2023 school year.

Assumptions

According to Lunenburg and Irby (2008), "Assumptions are postulates, premises, and propositions that are accepted as operational for purposes of the research" (p. 135). The following assumptions were made concerning this research study:

1. Participants were current superintendents at the time the survey was completed.
2. Participants completed the online survey themselves.
3. Participants responded honestly.
4. Participants understood the questions.
5. Participants were concerned with contributing to a body of research that could be helpful to aspiring female superintendents.

Research Questions

Creswell (2020) stated that research questions are one of the "signposts to carry the reader through a plan for a study" (p. 154). Research questions explored in this study are:

RQ1

What are the perceived career paths that have supported the current female superintendents' entry into the superintendency in the United States?

RQ2

To what extent do female superintendents agree they were selected because the board of education believed specific characteristics apply to them?

RQ3

To what extent do female superintendents in the United States agree they were selected because the board of education perceived they demonstrated and possessed specific knowledge, skills, and abilities?

RQ4

To what extent do female superintendents in the United States perceive they have experienced barriers during their careers as school leaders?

Definition of Terms

The following definitions were provided to guarantee understanding of these terms throughout the study.

Barrier

Dulac (1992) defined a barrier as any obstacle that is believed to hinder the employment of women as school superintendents.

Career Path

Shakeshaft (1989) defined career path as the positions held prior to becoming a superintendent that are common to a group of individuals.

Elementary School Principal

The U.S. Department of Education (2008) defined an elementary school as Grades 1-7 with variations, and heads of schools as principals. For this study, the principals of schools containing any combination of preschool through sixth grades are defined as elementary principals.

External Barrier

Obermeyer (1996) defined an external barrier as an obstacle that may hinder advancement to the next level of management on an individual's career path, including sex-role stereotyping, sex-role socialization, career socialization, organizational characteristics, and devaluation of women.

Glass Ceiling

The Federal Glass Ceiling Commission (1995) defined the glass ceiling as an impenetrable barrier that blocks the upward mobility of women and minorities.

High School Principal

The U.S. Department of Education (2008) defined a high school as Grades 9-12 with variations, and heads of schools as principals. For the purpose of this study, the principals of schools that include Grades 9-12 were considered high school principals.

Internal Barrier

The Federal Glass Ceiling Commission (1995) defined internal barriers as workplace structures that create gates and barriers for those who aspire to ascend to higher levels of leadership.

Middle School Principal

The U.S. Department of Education (2008) defined a middle school as Grades 5-9 with variations, and heads of schools as principals. For the purpose of this study, the principals of schools that include Grades 7 and 8, regardless of other grade combinations, are considered middle school principals.

Superintendent

A superintendent of schools serves the board of education as its chief executive officer, assisting the board in conducting its business and directing the day-to-day operation of the school district (Björk et al. 2014).

Organization of the Study

The first chapter of this study established the components of the study, including background for the study, statement of the problem, the purpose of the study, the

significance of the study, delimitations and assumptions, research questions, and the definition of terms. Chapter 2 is a review of relevant literature to the research questions. This chapter includes the history of gender inequality in school leadership and why gender equality in school leadership matters. It also includes a review of the literature regarding barriers and internal and external factors that are barriers, including career paths, confidence, work/life balance, gatekeepers, and discriminatory practices. Chapter 2 also includes support, mentoring, and skills perceived as important to women in the superintendency. Chapter 3 reviews the study's design and the methodology used to conduct the research. The results of the data analysis using the results of the study are reported in Chapter 4. Chapter 5 includes a study summary, the findings related to the literature, and the conclusions.

Chapter 2

Review of the Literature

The existing literature regarding the representation of females in the school superintendency is reviewed in this chapter. The history of gender inequality in education and the workplace provides data on the underrepresentation of women in educational leadership positions. It also provides data on why women in the superintendency matter. This chapter provides research regarding females' barriers as they ascend into leadership and the superintendency, including career pathways and internal and external barriers. Literature regarding the skills perceived to be important by women superintendents is also reviewed in this section.

The History of Gender Inequality in School Leadership

School administration has traditionally been a male-dominated field. School systems have customarily had male principals and superintendents supervising female teachers, with those female teachers supervising the children (Miller et al., 2006). Until the late 18th century, all teachers were men, and in the Colonial period, women were allowed to teach only very small children and were paid only a small fraction of what male teachers were paid (Shakeshaft, 1989). When teaching began requiring certification and longer terms, the few men willing to work for the low pay teachers received began quitting the profession, and women were hired as teachers (Shakeshaft, 1989). Following World War II, due to the opportunity to attend college on the GI Bill and the increase of athletic coaching as an option for teachers, men entered jobs in teaching. They continued progressing into the principalship and superintendency (Rousmaniere, 2013).

Women seeking administrative positions have had to face biased school boards comprised of men. Shakeshaft (1999) reported the words of Elwood Cubberley in a 1929 school administration textbook that those who should not be on school boards were "inexperienced young men, unsuccessful men, retired men, politicians, uneducated or ignorant men, saloon keepers, and all women" (p. 106). Blount (1998) explained that while women became teachers, men wanted control of the more respected and salaried administrative roles within school systems. Societal and political structures and practices have kept these separations. The power, then, resides in changes within these structures and practices. Those gendered norms have led to research suggesting that men and sometimes women continue to have unconscious biases. Those biases lead to consciously rejecting the stereotype of men as powerful leaders but making unconscious evaluations of leadership characteristics that are stereotypically male (Hill et al., 2016), resulting in more male leaders. These stereotypical characteristics include masculinity equating with leadership capabilities while femininity does not, males as the dominant sex, staff responding differently to the same leadership style contingent on the gender of the leader, and women lacking effective leadership qualities (Thompson, 2000). Fuller et al. (2018) showed that hiring often includes discriminatory practices that diminish opportunities for women and is most likely to occur at the secondary-school level. When men oversee these committees, these practices continue to impede the advancement of females at the secondary and district levels. In contrast, the research and writing help show gender inequity in educational leadership, but the research itself might not be impactful. Grogan (2005) suggests the following actions are necessary to create equality in educational leadership:

- state and federal agencies and foundations must fund more research on the topic;
- women and men researchers need to take the topic more seriously and bring renewed critical perspectives and energy to it;
- women in positions of leadership must talk about the joy they derive from their work;
- women and men in positions of power in educational systems must deliberately mentor more women and especially more women of color;
- pre-service women teachers must be directed towards leadership to remain close to teaching and learning;
- women leaders must talk about and think creatively with other women of ways to couple family responsibilities with administration;
- compensation for superintendents must increase to attract the highly qualified women central office administrators who are already relatively well paid;
- gender power differentials in educational administration must be acknowledged. (p. 27)

Shakeshaft (1989) asserted that research on the difference between men and women in educational leadership has been viewed from the male lens. Hesitant to point out differences, those researchers who wanted people to be accepting of women leaders were reporting that there were no differences; however, "describing male and female behavior as 'equally effective' is saying something very different from 'identical to'" (Shakeshaft, 1989, p. 168). Thompson (2020) found no significant disparities in effectiveness, and despite differences in leadership style, men and women were equally

successful as educational leaders. That men and women educational leaders are equally successful contrasts with the idea that some people view masculinity as worthy of leadership and femininity as not worthy of leadership. Thompson's study utilized a leadership orientation survey using a 5-point scale that asked participants to rate their leaders on four frames: Structural Frame, Human Resource Frame, Political Frame, and Symbolic Frame. Participants also rated leaders on their effectiveness using a four-point scale based on: Human Relations, Internal Process, Rational Goals, and Open Systems. Thompson (2020) discovered that, regardless of gender, leaders who exhibited certain behaviors or had leadership styles were perceived as effective.

The number of female superintendents is increasing. In 2019, 26.68% of superintendents were women, up from 13.1% in 2000 (Perry, 2020). In 1998, the likelihood of male teachers reaching the superintendency was one in 40, and the odds of female teachers reaching it was one in 1,667 (Chiefs for Change, 2019). While it is improving, the perpetual glass ceiling still exists in most business, politics, and education areas. In 2014, the Center for American Progress projected it would be 2085 before women achieved equality with men in leadership positions in the United States (Warner, 2014). Parker et al. (2015) reported that 40% of Americans see women held to higher standards and the reluctance by companies to employ women for top roles as explanations for why there are not more women in top leadership roles. Reasons more commonly blamed, including family obligations, inexperience, or weakness, were less frequently identified as important obstacles to female leadership.

Women's attempts to gain a superintendent position may be affected by the glass ceiling, but those who ascend to the superintendency can be affected by the glass cliff.

Ryan and Haslam (2005) coined the term glass cliff to describe the phenomenon of women being more likely to be hired in an organizational crisis and then blamed if the situation does not improve. The glass cliff is not solely found in education but also business and politics (Darouei & Pluut, 2018).

The COVID-19 pandemic in 2020 seems to have exacerbated the discrepancy between males and females in educational leadership. Out of the 500 largest school systems in the United States, 186 changed leadership in the years following the pandemic. Of those districts with leadership changes, three-quarters of the positions held by female superintendents changed to men (Sawchuk, 2022). The force behind the turnover of female superintendents may have been the issues that many females faced during the pandemic. Those issues included an increased need for child and elder care, increased community anger over decisions made regarding online school and when and if students should return to the building in person (Sawchuk, 2022).

Why Gender Equality in School Leadership Matters

When researching the inequity in educational leadership across the United States, it is important to understand why equity matters. Leadership positions often have the highest pay, which means underrepresentation in these positions contributes to gender pay gaps (Miller, 2017). Additionally, because superintendents control the distribution of human resources, if male superintendents are more likely to hire leaders like themselves, they are more likely to create other inequities (Miller, 2017). The U.S. Department of Labor called the superintendency the executive position most gender-divided in the United States (Glass et al., 2000).

Tallerico and Blount (2004) listed four benefits derived from males and females holding leadership roles. The first is student knowledge that both male and female role models hold executive roles. The second is the increased pool quality of superintendents from which to choose. The third is the positive leadership styles women are more likely to bring to the superintendency: shared leadership style and a focus on curriculum, instruction, and learning. The fourth is that it is the ethical thing to do.

Women as educational leaders is not strictly a matter of being fair to female educators trying to advance their careers; there are benefits of having female superintendents for students, staff, and the community. Fuller et al. (2018) stated that women leaders have different leadership styles from their male counterparts, leading to leadership behaviors. Female principals are more likely to engage effectively in creating community and promoting collaboration. Female superintendents were more likely than males to seek citizen and teacher input. Female superintendents were also more likely to value the input they received from the community than male superintendents (Grogan, 2005). Female superintendents tend to have an instructional focus in addition to building relationships with community members who can create new learning opportunities for their students (Grogan, 2005). Fuller et al. (2018) purported that leadership behaviors of educational leaders differ between males and females and that females are more effective than males at increasing school achievement. Miller et al. (2017) described female leaders as having a "web-like model of leadership [that] can be seen as countering the weaknesses of hierarchical management" (p. 24). Through their communication skills and collaborative leadership behaviors, women are more likely to be viewed as leaders than bosses. Combined with instructional leadership skills that lead to higher academic

achievement and high motivation, women educational leaders can make powerful contributions to their districts (Fuller et al., 2018).

The restricted female representation in the superintendency limits their influence on educational policy and practice. Webb (2018) acknowledged that girls grow up in a society where boys are rewarded for leadership and girls are rewarded for compliance, including not being "bossy." Seeing women in positions of power while growing up supports both boys' and girls' understanding that women can and should be in leadership positions. "[A]ll children, particularly those from underrepresented populations such as young girls and children of color, need to see themselves reflected in their teachers, principals, and school superintendents so they can begin to visualize their opportunities in the future" (Webb, 2018, p. 121).

Additionally, in a Pew study, Parker et al. (2015) found that many Americans understand that there is a collective benefit in women having leadership positions, with 29% saying having more women in leadership would increase the quality of life for all women. Fuller et al. (2018) found evidence that having females in leadership positions serves as role models for other women in the organization. Gender equity in school leadership creates a culture for all stakeholders about the possibilities of who should aspire to a leadership position. Female leaders increase the likelihood that female leadership becomes the norm for female staff members and students, both male and female. "Becoming a leader involves much more than being put in a leadership role, acquiring new skills, and adapting one's style to the requirements of that role. It involves a fundamental identity shift" (Ibarra et al., 2013, para. 2). Seeing females in the highest possible leadership positions allows female staff and students to see themselves as

leaders. Acknowledging the possibility of becoming a leader is key to making that identity shift.

Internal and External Barriers

In 2020, 76% of all educators were women, but only 14.5% of superintendents were female (Perry, 2020). The percentage increase in women in the superintendency may deceive people into thinking that the balance in female representation is resolved (Olsen, 2005). However, biases and discriminatory practices against women in the superintendency still exist. Barriers to the superintendency have been studied to identify why there is such a vast difference between those working as educators and those leading the district in which they work. Shakeshaft (1989) determined two kinds of barriers limiting women in educational leadership, internal and external. Internal barriers, such as personality, values, and attitudes, were related to women themselves. Montz (2004) described such barriers as balancing family and work responsibilities, lack of aspiration, and lack of self-motivation. External values are those that involve society or institutions. Such barriers were reported to include stereotyping and discrimination (Montz, 2004). Miller et al. (2006) assert that the research focus on internal barriers diminishes stereotyping and discrimination and is an example of victim blaming. Miller (2009) reported that barriers for women to the superintendency include a lack of mentors, the glass ceiling, discrimination, the inability to relocate, exclusion from the old boys' network, and familial responsibilities. Unconscious bias can play a substantial role in hiring and promoting women in the workplace (Ray, 2022). Dana and Bourisaw (2006) found that the responsibility for decreasing the gender divide lies between males and

females. Both have contributed to “a culture where gender prejudice is tolerated, and gender structuring is the norm” (Dana & Bourisaw, 2006, p. 101).

To better understand factors that encourage or discourage women from pursuing the superintendency, Catlett (2017) interviewed nine participants who were administrators in the Commonwealth of Virginia. Participants were interviewed regarding their lived experiences and utilized a conceptual framework to “create a visual display of the phenomena of the study” (Catlett, 2017, p. 38). Specifically, Catlett investigated the experiences and characteristics of women who do and do not aspire to the superintendency and the factors influencing women’s decisions about whether to pursue the superintendency. Women reported that having male formal or informal mentors who encouraged becoming a superintendent was an important reason they sought the superintendency. Most participants felt superintendents should have strong interpersonal skills, while slightly fewer felt good communication skills and approachability was important. Catlett found that internal and external barriers affected women’s decisions about pursuing the superintendency. Catlett concluded that balancing family and the superintendency could be an internal barrier. External barriers included the negative perception of female leaders and the treatment by a particular board or community. All participants reported that they knew of or had experienced different treatment for male versus female superintendents. The following sections investigate the internal barriers of confidence and work/life balance and the external barriers of career paths, gatekeepers, and discriminatory practices.

Confidence

Self-imposed barriers and perceived competencies responsible for the disproportionality of women in the superintendency were the focus of Warden (2022). The mixed-methods study's purpose was to understand the effect of learning opportunities that addressed both self-imposed barriers and strengthen leadership competencies of potential women superintendents. A women-only leadership series, co-facilitated by the Boards of Cooperative Educational Services (BOCES), was developed to provide networking opportunities for women leaders with a purpose specific to each session. Sessions included inclusion activities and norms designed to create a safe space. Reflection, networking, and breakout rooms occurred at each session. Three sessions included panel discussions. Warden (2022) studied three research questions, including

> what happens when women educational leaders spend time participating in women-only professional development on leadership competencies, what happens when women educational leaders have time to network with other women educational leaders, and what happens when women educational leaders spend time hearing from current influential women educational leaders about barriers and limitations to career advancement. (p. 44)

The meetings were held via Zoom due to COVID-19. Participants were invited through BOCES emails or a professional development platform in the county. Participants across five counties in New York participated, with 30 participants enrolling in the series. Surveys were administered after sessions 1-5 with open-ended questions to investigate answers from closed-ended questions more deeply. Warden (2022) then interviewed participants to explore research questions and provide detailed responses.

Data showed an increase in confidence level to apply for promotional positions, with 16 participants showing confidence after the fifth session. Eight women were interviewed, and all responded that participation in the workshop series increased their confidence levels. Fourteen participants reported feeling more comfortable in women-only training. One woman of color reported that while the intersectionality of color and race made her initially quieter, feeling supported by fellow women encouraged her to be candid with her fellow participants. Intersectionality was also discussed during a panel discussion, possibly increasing comfort levels. Warden (2022) concluded that "leadership competencies may increase the leadership skill of confidence and increase confidence levels for promotional positions. Women-only professional development may also increase the willingness of women to participate in their learning" (p. 60). Responses fell under one of three themes regarding an increase in a professional network. Women reported feeling more connected and comfortable asking professional questions if needed, reaching out to fellow participants in a job search, and gaining multiple perspectives on what it means to be a female leader. Data was also collected regarding the outcomes of listening to current women's educational leaders and showed that this piece of the leadership series might be the most beneficial. Participants reported being validated, the benefit of understanding they are not alone, and feeling empowered by leaders who looked like them. Warden (2022) reported that all respondents agreed or strongly agreed that hearing from women educational leaders may increase confidence to advance their careers.

Although the belief that women self-select to not aspire to the superintendency has been reported, current research does not support that belief (Ray, 2022). Mohr (2014)

found that women's most common reason for not applying for a job was not a lack of confidence that they could do the job but the belief that they would not be hired. Women also focus more on qualifications and less on the ability to network. Women are more likely to be hired on record of accomplishment, while men are more likely to be hired on their potential. In a Hewlett Packard study, Ramaswamy (2020) reported that men apply for positions if they meet 60% of the qualifications, but women believe they must meet 100% before applying. Some have taken that information to mean that women are not confident in their abilities; however, Mohr (2014) revealed that confidence was not the key issue but a flawed view of the hiring process. Where men saw the qualification list but relied on networking relationships or the ability to sell one's qualifications, women saw the qualification list as finite and mandatory. "Unsurprisingly, given how much girls are socialized to follow the rules, a habit of 'following the guidelines' was a more significant barrier to applying for women than men" (Mohr, 2014, para. 12).

Work/Life Balance

The purpose of the study conducted by Reecks-Rodgers (2013) focused on the issue of work/family issues for women superintendents and analyzed the strategies women superintendents have used to find balance in their jobs and family lives. Reecks-Rogers sought to understand better what issues women superintendents face, what strategies support having both a superintendent position and a family, and what factors contribute to the issues and impact those support strategies through a phenomenological, qualitative study. Snowballing was used to gather participants, starting through word of mouth and then passed on through those invited (Reecks-Rodgers, 2013), and focus groups were conducted. Some groups were mixed-gender, and some were gender

specific. Women's issues in the superintendency were influenced by a family structure such as marital status and children status. Work demands was the most frequent issue reported, which the researcher separated into job-imposed and self-imposed demands. Job-imposed demands were those expected by contract and the school board, while self-imposed tended to be working additional hours and being at events for visibility. Although there were various family structure circumstances among participants, married women were more likely to report having responsibilities for caretaking at home. All respondents reported that they put family first when needed and that their boards seemed to respect that. Women superintendents reported feeling guilty about choosing between work and family events. While some women reported work being intrusive on family life, such as harassing phone calls or not feeling comfortable sharing a bottle of wine in a public place, participants did not report feeling like family intruded on work situations. Meditation, prayer, and developing support networks were strategies utilized by respondents. "The women superintendents who were successful at balancing their roles were aided by their family members, immediate or extended, and by actions that happened at work" (Reecks-Rodgers, 2013, p. 126). Participants also reported negotiating items such as gym memberships to support work-life balance, and that support from a workplace and school board during a family crisis was invaluable (Reecks-Rodgers, 2013).

The research findings regarding family demands keeping women from the superintendency are mixed. Female superintendents rarely have children in elementary or middle school, and most have no children or have adult children (Derrington & Sharratt, 2009). Some see this as a self-imposed barrier to either delaying or deciding not to apply

for a superintendent position (Derrington & Sharratt, 2009). According to Wickham (2007), the decision to delay can be a barrier. Women typically accept administrative positions when their children are older, meaning men become administrators between the ages of 25-30 and women between the ages of 31-40. Women then teach an average of 10 years longer than their male colleagues. They are older when they apply for their first superintendent positions, and school boards may be less likely to hire a superintendent near retirement (Wickham, 2007). The need to relocate for a superintendent position was a significant barrier for 88% of women superintendents (Grogan & Bruner, 2005). Even in relationships with an equal, two-income household, it is common for couples to make career choices, and the decision to move for a job is often a move for the man's career (Sperandio & Devdas, 2014). Being a wife and a mother makes moving a family for a career move difficult, and 20% of female superintendents have opted for a commuter marriage to take or continue in a position (Grogan & Bruner, 2005). Wickham (2007) noted that "the job of the superintendent has been described as migrant workers, and the lack of mobility continues to be a larger barrier for women than for men" (p. 29).

Motherhood and the superintendency can be a complicated combination. Many women wait to apply for the superintendency until their children are older. Fricano et al. (2021) argued that the "exclusion of women who are mothers, built into the norms and expectations of the job, limited many from moving into leadership when they were otherwise professionally ready" (p. 20). Fricano et al. found that experiences varied with study participants who had younger children during their superintendency. One found family support helpful, and her children benefited from seeing a woman in leadership. The other struggled with knowing her children did not feel supported growing up due to

the responsibilities of her job. Regardless of their choice, participants in Fricano et al.'s study felt the decision to have children during the superintendency or to wait until their children had grown cost them regardless of their choices.

Career Path

A male superintendent's typical career path differs from a woman's. While most elementary principals are women, only mid-size cities and large suburbs had more women middle school principals. There is no geographic location in which most high school principals are women (Fuller et al., 2018). Advancement opportunities for teachers often come from positions usually at the secondary level. These positions, such as department chair and assistant principal, are not often found at the elementary level. Seventy-five percent of elementary teachers are female, meaning many teachers do not have opportunities to start on an early path to the superintendency (Glass et al., 2000). For men, the move from a high school teacher, department chairperson, assistant principal, high school principal, and then superintendent is common. That path changes for women who begin teaching in elementary. Women will likely move from elementary teachers to principals, central office directors, and superintendents (Askren Edgehouse, 2008). With many superintendents from secondary schools, the department chair can be considered an administrative role, and schools sometimes list the position as management (Olsen, 2005). Since the typical male has a similar trajectory, male superintendents are more likely to connect to and appreciate the skills of those who have followed in similar footsteps. High school principals handle larger budgets and staff than elementary principals. Boards often see the high school principalship as training for the

superintendency. Men are also more likely to move into the business or facilities office rather than curriculum and instruction.

The differences between female superintendents' career paths and those of their male counterparts also impact women once they reach the superintendency. If women enter the superintendency later than men, age discrimination may greatly affect them (Tallerico, 2000). According to Connell et al. (2015), women are more likely to stay in the classroom longer than men and may take time off early in motherhood or stay in a principal role until their children are older or leave home. Because of this, they may enter the superintendency later and with less experience. The age at which women look for their first superintendency may negatively affect the selection process (Connell et al., 2015). Women are also financially affected because they cannot receive the higher compensation that comes with the superintendency for as long as well (Tallerico, 2000).

Manuel (2001) examined career pathways and perceived barriers in a descriptive study. Mostly White female superintendents (N = 1,946) from across the United States participated in the survey. The majority were married and three-fourths had children, 60% had doctoral degrees and had 11.5 years of experience in teaching, 11.4 years in administration, 8.1 years of experience in central offices, and 5.5 years as a superintendent. Most had a mentor who was a man. The most widespread career pathway was teacher, elementary principal, central office staff. Twelve barriers were examined, and all were indicated as "somewhat important," however the lack of mobility of family members was indicated as "important." More than half of respondents also indicated that the perception that women are weak leaders was a barrier (Manuel, 2001).

Kim and Brunner (2008) studied the differences and similarities in men's and women's pathways to the superintendency. Participants were male and female superintendents, female central office administrators aspiring to the superintendency, and female central office administrators who did not aspire to the superintendency. Kim and Brunner found that pathways to the superintendency differ for men and women. Men's pathways to the superintendency included secondary teacher, athletic coach, assistant secondary principal, secondary principal, to superintendent. Women superintendent's pathways included teacher, principal, central office, and superintendent. The "major entering port into school administration for women was the elementary principalship" (Kim & Brunner, 2008, p. 96). However, while their first role as an administrator was at the elementary level, participants in the study who were superintendents had their second administrative position as a secondary principal or director/coordinator position. Kim and Brunner found that movement to the superintendency was faster for men than women, despite those women taking positions that offered a path to future job opportunities.

Askren Edgehouse (2008) used a causal-comparative study to distinguish discrepancies in demographics, career paths, and barriers for women superintendents in Ohio and to examine differences in districts, demographics, and differences in knowledge, skills, abilities, and career paths of the same women. Participants in this study were mostly White, married women with children. Sixty-three percent were 55 or younger, and 33.3% held a doctorate. Most participants worked in a rural district, with 85% in districts with less than 3,000 students. Participants who taught longer were more likely to be hired by their district and encountered fewer barriers, with almost half being hired by a school board with two or more women on the board. Over half had boards

whose number one expectation of their superintendent was to be an instructional leader. Mentoring was important for participants; 62.3% had the support of a mentor attaining a superintendency, and half had male mentors (Askren Edgehouse, 2008). The study results indicate that the effect of a career on the family was the biggest internal barrier for participants. However, many participants had young children, and the "old boy" network was the strongest perceived external barrier. Askren Edgehouse also included open-ended portions of the survey in which "thick-skinned," "problem solver," "honesty," "visible, communicator, friendly," "stable," and "student-centered" (Askren Edgehouse, 2008, p. 155) were listed by participants as important skills and characteristics. The skills perceived as most important were human relations skills, and the least important was knowledge of budgeting and finance.

Johnson (2013) studied barriers and supports that helped or hindered African-American women superintendents in Louisiana. Using a phenomenological qualitative research method, Johnson explored the pathways African-American women accessed to achieve the superintendency, the barriers they encountered, and how their pathways differed from that of White men. This study was grounded in a conceptual framework based on barrier findings and pathway findings of female superintendents. The conceptual framework upon which it is based presented an "overview of typical pipeline barriers and attributes experienced by African-American women in the workplace and . . . helps establish a basis for potential routes accessed by women of color who have become superintendents despite barriers stacked against them" (Johnson, 2013, p. 35). The findings indicated that while men traditionally moved from a teacher, principal, and then superintendent, women were more likely to move horizontally. For example, one

participant moved from math specialist to curriculum coordinator and instructional specialist. Several participants named the secondary principalship the one most closely linked to the superintendency and prepared them the most. The top barrier faced by the women in the study was a lack of sponsorship and mentorship because of a lack of role models, and organizations to which participants belonged did not offer the opportunity. However, participants also acknowledged that relationships with school boards were essential to the superintendency (Johnson, 2013). Although many participants had doctorate degrees, all reported the minimal role their educational institution played in acquiring the superintendency. Learning about specific legal, leadership, and financial issues was beneficial, but there were no models for African American women. Participants' recommendations for future superintendents were mentorships, maintaining religion, family support, and superintendent/board relationships (Johnson, 2013).

Miller (2021) studied the correlation between career paths and the attainment of AASA professional standards in Illinois. The AASA's standards include "leadership and culture, policy and governance, communication and community relations, organizational management, curriculum planning and development, instructional management, human resource management, and values and ethics" (Hoyle & AASA Commission on Standards for the Superintendency, 1993, pp. 1-11). Questions guiding the mixed-methods study were as follows: seeking the pathways that are most common for Illinois superintendents, how those pathways differ between men and women, the position participants deemed the most important for the acquisition of skills used in the superintendency, and whether a difference exists between the position men and women chose as the most important. The study included 97 participants, with the number of women participants elevated to ensure

numbers adequate to reveal trends in the data (Miller, 2021). The study included school-level designation due to previous studies that revealed that a teacher-to-principal pathway might be different for men and women and that women are likelier to be elementary principals. Over 60% of respondents reported moving directly from principal to superintendent, with men more likely to be high school principals and women more like to be principals at the elementary level. Greater variability in pathways was found for female participants. Miller determined that there was no one most likely pathway to the Illinois superintendency and that principal and teacher positions lead to skill acquisition for both men and women.

Rehberg (2022) focused on experiences, perceived barriers, and strategies used to overcome barriers in a study of female superintendents in rural Georgia. She centered on two research questions. The first was what life and career experiences supported the career advancement of female superintendents. The second was what strategies women superintendents perceive will help increase the number of women superintendents in southern school districts. Using a mixed-methods study of six women superintendents in rural Georgia, four themes that developed "were surviving the male-dominated leadership jungle, safer at home, the paradox of female leadership, and balancing work-life demands" (Rehberg, 2022, pp. 102-103). All participants reported having positive school experiences and believed the extracurricular activities they participated in helped lead them to a career in education. Only one of the superintendents began their education career as an elementary teacher. Although all were building principals, only one was a building leader at a high school. Their roles at the district level were varied. All participants in the study reported facing gender inequality in the role of superintendent.

Respondents reported questions regarding facilities, operations, and athletics being asked of men in the room rather than them as the superintendent and whether they could discipline high school boys as principals. Rehberg (2022) also noted that the culture in rural Georgia, especially in Republican-led areas, is that leadership is male-dominated in many facets of "the Southern patriarchal society" (Rehberg, 2022, p. 111). Respondents also reported finding jobs close to home because they feel connected and respected. The third theme, the paradox of female leadership, encompassed "how the women have had to be demanding yet caring, authoritative yet participative, advocate for themselves yet serve others, and distant yet approachable" (Rehberg, 2022, p. 146). All respondents reported various acts of discrimination and had to work more hours than a male counterpart would have.

Gatekeepers

Superintendents recognized the lack of diversity in school boards, which influenced superintendents to hire leaders who reflected the board (Fricano et al., 2021). In addition to school boards, search consultants are also superintendency gatekeepers. Search consultants may see a key to recommending someone for a position as a 'fit.' Olsen (2005) stated that "'fit' is a 'weasel word' that allows a school board to disallow, for example, African-American candidates because they do not 'fit' in a predominantly Caucasian community, or a woman because the community has been limited to patriarchal leadership" (p. 256). Women can also be treated as though they are lucky to be hired by school boards and would not have additional opportunities for employment if they wanted to leave (Fricano et al., 2021).

One external barrier for women in the superintendency may be the gatekeepers to the position. The selection process's gatekeeper combines hiring from search firms and the school boards. Notably, school board members are approximately 75% male and 25% female. Social and historical influences may prejudice both gatekeepers (Bernal, 2019). School board members have also been reported to experience the need to defend their choice to community members when female superintendents are hired (Bernal, 2019). Bernal (2019) used a mixed-methods study focused solely on the search firm portion of the gatekeeping process. The study included demographic information and information regarding each participant's role in superintendent searches, as well as two sections with statements about qualities a superintendent should have. The first section described a male or dominant female trait and a scale of agreeing to disagree with those traits. In the second section, respondents were asked to label attributes or qualities as male, female, or no difference to determine whether there was implicit or unconscious bias.

> Results showed that while search firm consultants perceive themselves to be gender unbiased, their attitudes and beliefs about the attributes, qualities or characteristics a candidate for the superintendency should have, be or ascribe to yield their implicit or unconscious biases that are parallel to that of the general population. (Bernal, 2019, p. 97)

Shuman (2020) conducted a qualitative study in Pennsylvania to understand the "female candidates' experience when moving through the hiring process to become a superintendent" (p. 10). Shuman used a feminist standpoint with results reported in a narrative that produced recommendations for females interested in becoming superintendents. In addition to interviewing women superintendents, Shuman (2020)

analyzed “recruitment materials and interviewed school board and search committee members” (p. 10). Shuman wanted to understand the candidate’s experiences to determine how a district’s bias affects hiring women superintendents, how that knowledge can close the gender gap in the superintendency, and what the influencing factors in hiring for the superintendency were. Shuman’s findings showed that extrinsic factors, including gender bias, and intrinsic factors, including the demands of family and the job of superintendent, continue to be barriers for women. The study’s results reinforced that support is vital to women’s pursuit and procurement of the superintendent’s position. This theme is underscored by participants’ reports of the need for networking and mentorship and the need for women to seek out opportunities to gain experience in areas where they have less. Supporting others to help overcome bias was also a theme in the study. Bias still exists for women in educational leadership; several participants reported being judged on their looks or dress. One participant mentioned that while men are judged for performance, women superintendents are judged for their performance and appearance and that “women have been her harshest critics and how she vowed to pick other women up instead of tearing them down” (Shuman, 2020, p. 156). All participants had faced bias or discrimination in their ascension to the superintendency and supported others by intentionally offering encouragement, working collaboratively, and mentoring others to build support systems to combat bias. Additionally, Shuman’s findings indicated that in a large pool of potential candidates, there was a need for women to research a potential district and create a presentation plan based on the district’s needs. With many candidates, districts look at individuals and their ability to connect to the district and the board. In cases with fewer candidates, districts looking to hire a

superintendent preferred a candidate with past administrative experience. Personal characteristics favored by districts included a well-rounded individual with familiarity and skills related to school management, such as finance, curriculum, and construction skills; a dedication to working collaboratively; and a highly ethical candidate with the ability to lead a vision for the district.

Ramaswamy (2020) reported that a nationwide superintendent search company recruiter admitted that school board members had questioned female candidates' ability to handle the superintendency. The search firms themselves are not the ultimate decision-makers in the superintendent process. School boards hire these search firms, and ultimately, school boards make the hiring decisions. While many female leaders enter the search for the superintendency with experience in curriculum and instruction, men with a background in coaching sports may have an advantage with school boards (Ramaswamy, 2020). Maranto et al. (2018) assert that many school board members never see classroom instruction. Board members are rarely in classrooms but can be found at sporting events and are often connected to booster clubs. While instruction may rarely be discussed at school board meetings, athletics is often discussed.

Discriminatory Practices

Glass et al. (2000) reported a significant difference in women's and men's perceptions about whether discriminatory practices in educational leadership exist, with more women reporting that they do. That perception is likely prohibitive; if male superintendents mentoring aspiring females are unaware, they will not be as effective in their mentorship. It is also prohibitive as male superintendents cannot make positive changes regarding hiring other leaders or supporting the board toward positive change. If

women are to break through the barriers they face in attaining the superintendency, they will need to understand the experiences of those who have reached the superintendency and what supports have been helpful along the way (Glass et al., 2000). Miller (2009) questioned whether the patriarchal nature of the superintendency is strengthened due to a lack of research focused on women who overcome societal and structural barriers. Both men and women must understand and challenge the barriers that have existed for so long in education. Research from the AASA showed that 82% of women superintendents indicated that board members did not think they were effective at management, and 75% felt boards did not think they were effective in finance (Glass, 2000). Boards often hold female superintendents to higher standards than male superintendents (Munoz et al., 2014). Female superintendents also reported feeling more supported if more women were on the school board (Robinson et al., 2017).

Banuelos (2008) studied the gender prejudice experiences of 35 women superintendents in California. The emphasis of this mixed-methods study was to what degree bias was a factor, to what extent did women experience specific types of gender bias, what perceived impact the bias had, how the participants lessened bias in their district, and how professional bias affected their personal lives. Women in the study reported being aware of gender on the job and being treated differently than men, which affected them emotionally. The women perceived six areas as a factor in the superintendency: “appearance, relationships with others, female communication style, leadership style, negative aspects, getting the job” (Banuelos, 2008, p. 292). They faced comments about their gender made by all stakeholders and peers. The majority perceived that gender affected their evaluation and experience with condescension. Nine reported

being touched inappropriately as a superintendent; 22 reported experiencing it as a building or district administrator. When determining the impact of gender bias, the majority of women said their communication style was different than men's, decision-making authority was affected, and gender-related stress negatively affected them; however, only 12 reported gender bias affecting their confidence. While 28 of 35 participants agreed that bias existed and was an issue in their districts, only two held gender bias trainings and only six felt their hiring practices spoke to gender bias. Participants found gender bias highly impactful, and to the women who reported experiences, had long-term effects on their emotions, sleeping, and eating patterns (Banuelos, 2008).

There are differences in what male and female superintendents identify as challenges in their positions. These differences may exist because of the variations in where they are likely to work (Robinson et al., 2017). While both genders note some challenges, females are more likely to find job stress challenging, while males find funding more stressful. Both males and White females are likely to find federal regulations a challenge. Women of color are more likely than White women to see role conflict as a challenge, perhaps because they represent their gender and race while appearing neutral to the community (Robinson et al., 2017). Forty-eight percent of female superintendents hold doctorate degrees compared to 41% of men (Thomas et al., 2022). Men are more likely than women to be hired from a district outside their work. That may indicate that districts are more likely to assume men are capable without prior proof of leadership in their district (Robinson et al., 2017). It may also indicate that prior leadership opportunities prove that women candidates are more qualified than male

competitors when tested through lower-level leadership positions (Robinson et al., 2017). Men are more likely to be hired in rural districts, and women are more likely to be in larger communities with people of color, homeless populations, and a higher population of students with disabilities. Women of color are most likely to lead a majority-minority district (Robinson et al., 2017). People tend to associate men with being a better fit for leadership positions, creating a cycle of hiring men regardless of whether they are more qualified than women (Robinson et al., 2017). Despite the likelihood of leading larger districts, female superintendents' pay is 96% of men's (Thomas et al., 2022). According to Olsen (2005), the financial structure of superintendent pay makes it more difficult to determine how comparable salaries may be. Salaries vary by district size, state, and specific job expectations. However, increasing the difficulty to compare salaries are benefits packages that can vary greatly and sometimes equal up to half the salary. Men are more likely to receive more benefits such as vehicles, conference fees, and other access to credit accounts than female superintendents (Olsen, 2005).

In a mixed-methods study, Parent (2004) addressed why school superintendencies were not drawing female applicants or why boards were not selecting females in Oregon. Parent considered perceived barriers from the viewpoint of male and female superintendents and school boards, whether there was a difference between tasks genders felt were important, and if the perception of important skills in the superintendency varied by gender for school board chairs. Parent also looked at success factors as perceived by female superintendents. The women participants in the study identified four top barriers: relocating, family/life balance, low pay, and lack of women role models. Those barriers contrast with what the board chair participants identified as barriers for

women: social and relationship aspects, lack of experience in finance and facilities, reluctance to non-renew ineffectual staff, and lack of experience outside of curriculum and instruction (Parent, 2004). All participants ranked budget as the highest-rated superintendent task, while women and school board chairs rated high academic standards as the second. School board chairs reported no difference in task ratings "when comparing the gender of the superintendents. Significant differences only existed between the ratings of men and women superintendents on the typical superintendent tasks" (Parent, 2004, p. 91). Women rated themselves higher than male superintendents in all categories except non-instructional tasks, which included facilities, budget, and legal concerns.

With the disproportionality in the number of female superintendents across the United States, it is important to study those who have successfully obtained superintendency (Pallaci, 2021). The study's purpose was to examine the lived experiences of female superintendents through a mixed-methods study. Research questions included the investigation of career paths, mentorship, career planning, and what steps are being taken by professional organizations and universities to increase women superintendents in New York State schools. The demographic questions concluded that participants spent 6-15 years in the classroom, became principals, and were most likely to move into a district office position before becoming a superintendent. Fifty-five respondents reported gender discrepancies, with one reporting, "All the time. It is converted and institutionalized. Sometimes it's in your face; other times, it is a nuance" (Pallaci, 2021, p. 125). Most respondents believed mentoring was important, while 82.22% reported that being encouraged or "tapped" for the job was a factor in becoming

a superintendent. Participants also reported the difficulty of the position with work and family life, not just the hours. “If you have a student suicide and it’s your child’s birthday, you need to deal with the suicide. Going into it with eyes wide open and accepting this isn’t a job; it’s a calling—a huge responsibility with a lot of people” (Pallaci, 2021, p. 133).

Focusing on perceptions of social interactions of female superintendent candidates who were not chosen for the job, Roberts (2022) used a mixed-methods study using grounded theory to research the gendered practices of the superintendent search. Recruitment letters were sent to state and national organizations, and 18 participants completed an interview and a survey. One focus of the study was on the experiences of women who were interviewed but were not chosen for the position. Roberts (2022) found that the common experience for the participants in the study was that the superintendent interview process was a gendered experience for White women and that for women of color, it was a racialized-gendered experience. Findings were reported as five dimensions: “*navigating gendered and racialized*-gendered *experiences, living my core, drifting from self, the big kaboom, and finding peace*” (Roberts, 2022, p. 101). Each dimension included four properties: conceptual categories, conditions, processes, and consequences.

Within the dimension *of navigating gendered and racialized-gendered experiences*, the first conceptual category was *boards behaving badly.* This conceptual category included participants being yelled at by board members, members receiving phone calls during interviews, and not appearing interested in interviews. Roberts (2022) reported a process labeled *shock and concern* to describe their feeling of moving from

being a top candidate to feeling disconnected from boards in the final rounds of interviews. Within the *navigating gendered and racialized gendered experiences* dimension, another conceptual category focused on *gendered and racialized-gendered communication*. One woman of color reported being told she did not appear happy and was not peppy enough during her interview. Another woman of color reported being questioned if she could lead White students.

Condition three under the first dimension focused on *overt gendered and racialized-gendered feedback.* When one White participant contacted the search committee chair to ask how she could have done better, she was told there was concern that "her family would not be embedded in the community" (Roberts, 2022, p. 111). Moreover, another was told she needed to "tone it down a bit" (Roberts, 2022, p. 112). Due to this type of communication and feedback, Roberts (2022) asserted that the women were moved to emotional states she called *paranoia* and *tokenism*. This included participants becoming paranoid about being a woman and feeling they were a token female candidate without a true possibility of attaining the position for which they interviewed. One participant reported having other female friends who reported easily making the short list of interviews for superintendencies but did not feel they were truly considered for the position by the final interview. The third conceptual category within the *navigating gendered and racialized-gendered experiences* dimension was labeled *something kind of fishy* (Roberts, 2022). One participant reported that the search firm told her that the board was re-writing their interview questions before interviewing her and that they had racialized-gendered experiences rooted in those questions when she interviewed. Multiple participants also reported feeling early in the final interview that

the board had already chosen a candidate and had no intention of offering them the position. One participant was the first interviewee in the final selection round, and her competition was allowed to watch her interview before his own, although the interview questions were the same.

The dimension of *living my core* included the conceptual categories *understanding identities* and *valuing and morals*. Roberts (2022) labeled *understanding identities* to reflect the participants' feelings of viewing themselves as capable leaders in education and within their families. In the dimension of *living my core*, the condition *ready to move up* described the collective feelings of their drive to become a superintendent and the belief that they held the qualifications and skills to do so. *Stating core values, understanding fit, and aligning values with the district* were conditions Roberts (2022) used to describe participants' need to find a district that would fit their values and strengths well. One participant reported not removing social media posts concerning the Black Lives Matter movement, knowing a district that would appreciate her support for police departments and the Black community would be the best fit for her. Another reported feeling the need to be in a community that would support the school superintendent.

A third dimension, *drifting from self,* was used to describe the feelings participants reported as they moved further into the superintendent process. One Latinx participant reported how consumed she became by focusing on facial expressions and not wanting to seem too serious to the point of being unable to focus on questions she was being asked. Participants reported concerns about wanting to change the way they look so they would look more like a superintendent. This condition, labeled by Roberts (2022) as

who do they want me to be, was also reported to be connected to navigating *gendered and racialized-gendered feedback*. After going through the process and not being chosen for the superintendency, the participants experienced embodied experiences, *shame and doubt*. Those experiences reportedly manifested through feelings of incompetence, that participants had disappointed their team. One reported an out-of-body experience when another candidate was announced at the board meeting as the new superintendent. *Negative impact on self* followed through humiliation, depression, and feelings of being defeated, and "for women of color, there is a double whammy as the intersections of identity converge within the experience" (Roberts, 2022, p. 137).

One participant's son coined the second to the last dimension, *the big kaboom,* to describe the impact felt when participants were told they were not chosen as superintendent. This dimension includes *navigating the* "*no,*" *rattling sense of self, the crisis of confidence, and wanting to quit the process. Navigating the "no"* refers to the conceptual condition encompassing the repercussions of the interview process and rejection. The result of *navigating the "no"* then led participants to the process *rattling sense of self,* describing the trauma of the interviews and the rejection that followed and the *consequence of wanting to quit,* describing the feeling that they cannot continue to put themselves through the process again.

However, despite the negative experiences during the superintendent interview process, the participants did report that they could come to terms with the implications of gender and race in the superintendents' search for the dimension *of finding peace.* While some participants reported finding peace through staying in their current roles, 11 of the

18 women were hired for the superintendency after an average of 5.8 interviews (Roberts, 2022).

Women Superintendents' Perceptions of Obstacles and Supports

Robinson et al. (2017) reported findings related to gender from the American Association of School Administrators 2015 Mid-Decade Survey, looking for trends for 15 years prior to the survey. The findings revealed that female superintendents are becoming more like their male colleagues, yet significant distinctions still exist. A man is still four times as likely to be a superintendent than a woman. People of color are underrepresented in the superintendency. The most significant barrier or challenge reported in the study is women superintendents and work/life balance. Men superintendents are more likely to have children than women superintendents. White females are less likely than females of color, but overall, all women are three to four times more likely not to have children than their male counterparts (Robinson et al., 2017). The findings also revealed that the glass cliff is evident in the superintendency. Women superintendents are more likely than men to lead districts where much of the community is most diverse, has a high population of homelessness, and where more students are disabled, indicating that more challenged districts are more likely to hire women. Men are more likely to be hired in districts with fewer challenges (Robinson et al., 2017).

In a mixed-methods study, Grewal (2002) investigated aspects that influence women superintendent career achievements in California public schools. There were 152 participants in the study and 10 were interviewed for further information. Grewal examined career paths that describe women superintendents, showing that all had taught for at least seven years but took varying paths to the superintendency. Half of interviewed

participants reported school board's gender bias is an obstacle. Two reported that the old boys' network is also an obstacle, and that women following a curriculum and instruction path can be a barrier compared to those who went into personnel or worked with school business (Grewal, 2002). The study also asked participants to offer advice, why disproportionality exists, and how that underrepresentation could be overcome. Personal barriers were few, with lack of mobility, confidence, and work/life balance mentioned. A majority of participants thought family obligations were a barrier; one participant mentioned that childcare heavily falling on women was a barrier. Four of 10 reported no barriers, and two reported barriers are perception but not necessarily reality (Grewal, 2002). Strategies for overcoming bias were to do the job well to overcome negative perceptions, being confident, growing professionally, perseverance, and earning a doctorate. Most participants indicated that their upbringing was one of their success factors, specifically supportive parents who encouraged and led them to believe they could achieve anything. Having a vast array of professional experiences was credited as a success factor. "Having strong goals, networking, being competent, utilizing their skills, persevering, having financial knowledge, attending to details, and being a risk taker" (Grewal, 2002, p. 85) were factors as well. Suggestions for overcoming barriers were improving spouse support, having more women in search firms, and having university training for female leadership in teaching programs.

MacTavish (2010) focused on perceptions of the quality of preparation for female superintendents for the superintendent job, how mentors or others assisted with their job acquisition, and how the superintendent knew they were ready for the role. For this study, the focus was on the research regarding mentorships. The mixed-methods study was

focused on Washington State, which had a higher-than-average population of female superintendents at the time of the study. Descriptive data and data from agreement Likert-scale questions and open-ended questions were collected. Qualitative data was then gathered in multiple follow-up interviews. Of the 68 women superintendents, 37 participated in the study. For the study, a mentor was defined as "[o]ne who helps teach an aspirant the job responsibilities and norm of the superintendency and who helps the aspirant grow personally and professionally in pursuit of that position" (MacTavish, 2010, p. 56). The majority of respondents reported having three mentors prior to the superintendency. MacTavish described a sponsor as someone who advocated for you with others to help you gain a position. The same number of women agreed and disagreed that they had one or more sponsors before the superintendency, but those who did felt strongly that they had benefited from the sponsorship. Those who did not have networks and sponsorships overcame the barrier by moving up in the same district (MacTavish, 2010).

Women superintendents in Texas participated in a quantitative study by Weatherly (2011), who examined perceptions regarding types of mentoring functions for aspiring superintendents. Out of 140 female superintendents who were sent the survey, 62.86% responded. Mentor functions perceived as most important were sponsorship, coaching, challenging assignments, exposure and visibility, friendship, role model, and acceptance. The most typical mentoring functions the superintendents had received were exposure and visibility, counsel, coaching, and sponsorship. "A significant relationship existed between the perception of the importance of the mentoring functions and what was received by the current women superintendents" (Weatherly, 2011, p. 70). The

function of parent-like traits was perceived as unimportant and not often received by the participants; however, the trait, along with role model and counsel, correlated with women more quickly achieving the superintendency.

When studying superintendents in Texas who qualified as exceptional and viewed themselves as transformational leaders, Howard (2016) researched the mentor experiences of women superintendents. Howard studied how mentoring affected "intellectual stimulation, individualized consideration, inspirational motivation, and idealized influence" (Howard, 2016, p. 32). Howard concluded that mentoring stimulates intellectual experiences, including increasing professional exposure and the ability to participate in district decision-making. This exposure enriches aspiring superintendent's district-wide view and participation in decision-making with the security of others with more experience from which to draw. Howard also indicated that female superintendents could learn how to recognize organizational needs, connect with their employees, and continue to grow as a leader. Through watching others lead, a mentorship allows potential superintendents to build relationships similar to the relationship building with stakeholders that is so important in the superintendency. Howard's findings provided evidence that, through mentorship, women superintendents learned to lead and inspire others, promote a vision, and gain confidence from staff members. Mentorship provides the potential superintendent with examples of how and how not to lead. Participants in Howard (2016) reported that "power in learning from mistakes, being able to learn from the mistakes of others is a privilege" (p. 66). Through idealized influence or charisma, learning through mentorship leads aspiring female superintendents to gain knowledge and experience with leading teams, business, and financial data and learn how to achieve

politically beneficial relationships. Part of idealized influence also involves being vulnerable and understanding strengths and weaknesses. Participants in the study reported learning that to be a transformational leader, one can count on your team to support areas that are not a strength. They also reported that being with mentors who lead by example allowed them the freedom to do the same.

Investigating how mentorship could improve the disparity in female superintendents, Bishop (2021) focused on women superintendents' perception of the role of mentorship in their ascendancy to the position. Twelve women participated in the qualitative phenomenological study, and three themes regarding mentorship appeared. The first theme was that women superintendents perceive mentorship as valuable, despite participants having varied levels of formal and informal mentorship themselves. The second theme was the shifts in mentoring: supervisory, progressive, and evolving. These stages evolved as women's careers evolved. Early supervisory mentoring was reported to be more informal and often from a supervisory principal; progressive mentoring occurred after the superintendents had accepted their first administrative position, and evolving mentoring occurred after they moved into the superintendency. The third theme evolved as mentor guidance differences based on gender. Participants reported seeing value in both male and female mentorship within this theme. One respondent reported the need to look at individual strengths regardless of gender. One reported feeling insecure at the beginning of her superintendency and felt more comfortable reaching out to female mentors. Participants of color reported that mentors helped them "recognize cultural perceptions and provided strategies to mitigate any of the negative ones" (Bishop, 2021, p. 90). Participants from a lower socio-economic background reported that mentorship

helped them “shift their paradigms and increase their social capital” (Bishop, 2021, p. 90) in middle and upper-class social norms to which they were not accustomed.

Panasiuk (2021) studied mentorship in the form of developmental networks with a focus on participants’ experiences using networks, the perceived benefits, and what participants see as the potential role of the networks in conquering gender-related obstacles through a phenomenological, qualitative study. Seven participants were interviewed initially, followed by another interview to explore themes and validate data. All participants reported their developmental networks as, initially, colleagues and principals. All respondents stated that their supervising principals were mentors. However, as they grew in their career, retired or active superintendents and professional organizations provided not just mentorships for guidance or to grow in their careers but a network of trusted people whom they could reach out to when needed. Four of seven participants with a doctorate credited their programs with giving them added sources of support and a larger developmental network. One participant did describe issues with being a single woman and sometimes having to handle

> men who felt that benefits come with being your mentor or sponsor. . . people who you thought were being your mentor. Who you thought were trying to provide advice or opportunity, but then wanted to have sort of inappropriate, yeah, relationship with you because of it. (Panasiuk, 2021, p. 74)

Behan (2022) conducted a study of female superintendents in Canada to develop “comprehensive profiles of various social and professional dynamics of currently serving female jurisdictional leaders working as superintendents in British Columbia” (p. 11). The first research question for this study focused on female superintendents’ education

and professional background in their search for a superintendency and what barriers, challenges, and opportunities they faced in attaining the superintendency. The second question focused on what strategies helped them attain the superintendency despite those barriers and challenges. A third research question focused on barriers, challenges, and opportunities they faced in the superintendent job, and what strategies they used that helped them. The researcher used a basic interpretive interview methodology in the qualitative study that included 10 questions for each of the eight participants. Participants reported that they were not interested in the superintendency at the start of their teaching careers; mentoring throughout their career and being encouraged into administration was a motivational factor. Work-life balance was also a factor discussed by almost all respondents. The superintendency requires long hours, as does managing and caring for a home and family (Behan, 2022). While some participants in the study reported feeling supported by their board, others reported harassment and discrimination. Participants who had suffered harassment and discrimination also indicated being unable to leave the position, knowing it would be difficult to find a new job if the reason they left was known. Some participants also indicated having support from the board who hired them but suffering discrimination or harassment when those board members were replaced. Hiring a consultant was a strategy reported to be helpful in that situation.

Nix (2021) focused on the experiences of five women superintendents who were the first women superintendent in their district, specifically identifying strategies used successfully by these female superintendents to help future first-time female superintendents. Nix studied barriers female superintendents encounter, strategies used to overcome those barriers, challenges faced, and what strategies helped first-time female

superintendents overcome those challenges. In-depth interviews were conducted, and themes were identified. Results regarding barriers showed little agreement. However, there were "two barriers that all five participants agreed on: 1) personal anxieties about the effect their career would have on their families, and 2) there is an "old boy" network that promotes the selection of men over women" (Nix, 2021, p. 74). Participants also reported varied experiences with barriers to attaining their position or reported no barriers due to being asked to apply or working previously in the district. All participants noted that being proactive with all stakeholder groups is suggested. Participants reported challenges such as gender stereotyping during the interview and on the job, splintered school boards, feelings of isolation, and family struggles due to job demands. All participants gave different but similar advice for overcoming obstacles. These included being collaborative, admitting when you have made a mistake, calling board members instead of emailing, putting your strongest people on committees, and do not let them see you sweat were just a few of the strategies. Nix (2021) found themes of success to be "relationships, communication, mentoring, and confidence" (p. 87). Strategies to overcome challenges included "knowing the district in which you want to apply, building a solid educational leadership reputation before applying for a superintendent position, speaking confidently, knowing your strengths and weaknesses, and finally, networking" (Nix, 2021, p. 91).

Skills Perceived Important by Women in the Superintendency

Connor Schara (1992) studied skills perceived as necessary by women in the superintendency, the relationship between demographic variables and perceived skill needs, and how women can attain these skills. This study was a descriptive, ex post facto

study whose participants were women superintendents in California. Of the participants in the study, 73% reported personal/interpersonal skills as the most important. Other skills reported as most important were working with the board of education, communicating decision-making, managing financial resources, and setting goals and planning. The analysis of skills divided into human, technical, and conceptual skills categories determined common threads where skills overlapped the various categories. For example, "[d]ecision making (conceptual skill) is impacted by the ability to effectively resolve conflict (interpersonal skill), to integrate group interests (interpersonal skill), and to evaluate the financial and program needs of the district (technical skill)" (Connor Schara, 1992, p. 128). Motivating others and sharing a vision were often deemed necessary. In urban and suburban areas, setting a plan and implementing ideas was rated essential; rural superintendents reported financial skills as essential more frequently in larger districts. Women superintendents whose district includes strong ethnic diversity should be prepared with skills to make the change, integrate community and staff, lead instructional skills, and withstand criticism. Connor Schara indicated that participants reported maintaining desired skills by reading books and journals, attending conferences, and connecting with mentors and colleagues.

To determine how successful women superintendents achieved the superintendency, Lee (2000) focused a qualitative study on Georgia women superintendents. Women led 21 out of 163 districts in Georgia at the time of the study, and all women superintendents participated. Fourteen women reported gender barriers, the most common being the perception that women are not qualified to make budget or facilities decisions. All reported being very hardworking and having a reputation for

accomplishment, and 14 reported feeling they had to work extra-long hours to avoid the perception that women spend too much time with their families. Participants reported that "society has conditioned men and women to believe that women are not capable of holding a leadership position" (Lee, 2000, p. 62). Participants gave strategies to overcome that perception, including educational preparation, practicing interviewing skills, increasing professional exposure, networking, career planning, and building a support system with other superintendents were given as strategies that are helpful for women in the superintendency (Lee, 2000).

Montz and Wanat (2008) studied women superintendents in Iowa. Participants described personal, career, district, and school board demographics and the skills, characteristics, and barriers essential to their appointment as superintendent. All female superintendents in Iowa, aside from one who was an author in the study and one who left her position mid-year, participated. Thirty-five active woman superintendents were mailed a survey, and six were interviewed. Montz and Wanat compared their data to other research findings. With more rural than urban districts in Iowa, more women superintendents reported being in rural districts, and 17 were hired from within. Those who moved into new districts for the job reported that willingness to be part of the community was a determining factor. Participants reported working hard to gain the favor of boards and navigating boards that had members who did think a woman could do the job. Participants also reported difficulty working with new board members who were not part of the board that hired them. Thirty-two percent of the women held a Doctor of Education or Doctor of Philosophy degree, while 12.9% held an Education Specialist degree. Those with doctorate degrees reported doing so to gain an advantage in achieving

the superintendency. One reported a male mentor encouraging her to get a doctorate to increase the likelihood of being hired over a man. Their career paths were varied, with 14 moving from teacher to principal to central office and nine moving from teacher to principal to superintendent (Montz & Wanat, 2008). Having mentors was reported as important, especially being encouraged and challenged by leaders with whom they worked. Three participants reported negative role models being a reason they aspired to be positive leaders. Interviewees reported seeking mentors through professional networks, although three participants did not know other female superintendents. One veteran superintendent responded that she felt men "looked through her" (Montz & Wanat, 2008, p. 37), and another reported feeling more accepted by younger male superintendents. Given a list of characteristics that could potentially be seen as important to a school board while making hiring decisions, respondents chose "competent, confident, cooperative, decisive, firm/fair/consistent, intelligent, proactive, problem solver, and resilient" as those they perceived as most important (Montz & Wanat, 2008, p. 39). Given 20 skills that could be important to a school board while making hiring decisions, respondents rated "involvement of others in decision making, knowledge of curriculum and instruction, and maintaining a positive public image" as those they perceived as most important (Montz & Wanat, 2008, p. 41). Barriers were also studied. Family concerns were reported to be the greatest barrier. The old boys' network and sex-role stereotyping, including men who publicly refused to listen to their female leader and the male conception of the superintendent, were also perceived as significant barriers.

Guajardo (2015) studied career trajectories, challenges faced, and internal and external factors of the success of women superintendents. The study also investigated

what successful women superintendents need to bring to the role of superintendent. Nine women participated in the qualitative study. All participants reported making career decisions while considering their family in some way. While some took time before moving into educational leadership for their children to get older, all achieved their goals. All married participants reported that a supportive spouse has been vital to their success. Two reported failed marriages because their husbands did not support ambitious wives. Participants also credited a stable board and strong communication with their board for their longer-than-average tenures in their position. There was no typical career path among participants, although six were heavily focused on curriculum, and all nine had secondary school experience. Two reported not getting jobs due to gender, and three others said they knew of situations when it had happened to other women. Seven of the nine reported incidents where bias was evident against their gender. Four participants experienced bias in matters of facilities and operations. Participants reported success factors, including working harder than their male counterparts, learning as much as possible before taking on the role, and "concepts such as collaboration, communication, compassion, being prepared, relationship building, passion, and balance" (Guajardo, 2015, p. 84).

Using a phenomenological, quantitative design, Soignier (2021) studied the perceived skills and characteristics of importance to women superintendents and compared them to those of school board presidents in Louisiana. Participants rated 22 professional skills from unimportant to extremely important using a 5-point Likert-type scale. Professional skill items rated of most importance by women superintendents in the study were "visibility (M = 5.00), mediating conflict effectively (M = 4.89), formulating

student-focused district policies (*M* = 4.89), and developing, articulating, and implementing a vision (*M* = 4.89)" (Soignier, 2021, p. 42). Skills rated highest by school board presidents were as follows: "recruits, selects, and retains productive staff (*M* = 4.62), establishes clear academic goals (*M* = 4.54), formulates student-focused district policies (*M* = 4.42), develops positive relations with the board (*M* = .42), operates a safe and effective environment (*M* = 4.42), and develops, articulates, and implements a vision (*M* = 4.42)" (Soignier, 2021, p. 43). However, Soignier (2021) studied differences and similarities in professional skills perceived to be important to women superintendents and school board presidents.

Both women superintendents and school board presidents see the skills of working with a school board, having strong communication skills, and sharing a vision as important skills for women superintendents. Clark-Saboda (2022) studied how the Boards of Cooperative Educational Services (BOCES) superintendency was gendered and what supports helped women navigate and mitigate challenges. BOCES is an organization in New York State that provides educational services to member districts. During the study, there were 109 positions with a superintendent in the title or similar titles, such as chief operating officer. Thirty-seven of those positions were held by women. The researcher utilized Acker's definition of a gendered organization: "advantage and disadvantage, exploitation and control, action and emotion, meaning and identity of men and women" (as cited in Clark-Saboda, 2022, p. 146). The researcher utilized a gendering organizational theoretical framework to complete the qualitative study. The researcher used five processes to analyze BOCES, including division of labor, cultural symbolism, workplace interactions, individual identities, and organizational logic. Clark-Saboda

stated that the process of division of labor included reviewing gendered divisions within the organization and whether men and women are equal in behaviors, physical space, opportunities for salary, benefits, and other items related to employment.

While the participants in Clark-Saboda's (2022) study reported feeling as though they were treated the same as their male counterparts, there were specific areas in which they did not. The results indicated that women felt judged on appearance. One participant reported being told after an interview by a board member that they were concerned she would not be detail oriented because her nails were not painted. The second process, cultural symbolism, reviewed cultural symbolism and images within the BOCES organization. Workplace interactions were the third process, which reviewed interactions for dominance or submission between genders. Sixty-nine percent of participants reported feeling their ideas were not taken seriously and that they had been dismissed because they were women. The review of individual identities investigates how one's appearance and behaviors align with societal expectations of their gender. One superintendent reported being excluded from professional events because she felt that a woman did not fit the expectation of a superintendent. Organizational logic assumes that people are strictly workers on the job, void of outside or gender influences (Clark-Saboda, 2022). Supports that participants reported as essential included the value of informal mentorships, including having a trusted support system, being approached regarding promotion opportunities, and being developed as a superintendent. The power of networking includes social networking and networking through professional organizations. Participants also reported specific BOCES supports that were beneficial to them. These supports included a helpful board of education, district superintendent,

colleagues, and a cohesive team. Flexibility and understanding of work-life balance were also noted as important to participants. Clark-Saboda also reported commitment to self-care systems as important in women navigating the superintendency. These systems include being connected to and appreciative of the staff, participating in exercise activities or yoga, and focusing on nutrition and water intake. The study also determined that family value was important to maintaining the superintendency. That value included a helpful spouse, childcare assistance, an extended family support system, and spending time traveling with family. The sixth support that helped women maintain the superintendency was superintendents making time for themselves. These included hobbies such as exercise, cooking, reading, spirituality, and sleeping (Clark-Saboda, 2022).

Summary

The literature review included the history of gender inequality in school leadership, the status of female leadership, the differences between men and women as leaders, barriers to the superintendency, including career paths, bias, and discriminatory practices, and women superintendents' perceptions of obstacles and supports. The literature review provided an overview of conditions and perceptions that contribute to the lack of representation of women in the superintendency. Chapter 3 includes the methods utilized in this study.

Chapter 3

Methods

The purpose of this study was to determine the perceptions of current female superintendents. Specifically, the purpose was to determine perceptions related to the perceived career paths that have supported their entry into the superintendency, what extent the superintendents agree they were selected because the board of education believed specific characteristics apply to them, the extent female superintendents agree they were selected by the board of education because they demonstrated and possessed specific knowledge, skills, and abilities, and to what extent female superintendents perceive they have experienced barriers during their careers as school leaders. Included in this chapter are the research design, selection of participants, measurement, data collection procedures, data analysis and hypothesis testing, limitations, and summary.

Research Design

According to Creswell and Creswell (2018), quantitative research is a method to test theories by studying the relationships among variables. These variables can be measured so that data can be investigated through statistical analysis. This cross-sectional study followed a quantitative descriptive research design using survey research methods. Lunenburg and Irby (2008) described descriptive research as the study of "phenomena in our world" (p. 30). The variables of interest in this study are the perceptions of U.S. female superintendents related to the career paths that have supported their entry into the superintendency; the specific characteristics that the board believed applied to them which led to their selection; the specific knowledge, skills, and abilities that the board

believed they demonstrated and possessed; and the barriers they have experienced during their careers as school leaders.

Selection of Participants

The population for this study was females who were superintendents during the 2022-2023 school year from across the United States. The purposive sample for this study was the female superintendents found through a search of state board of education and state departments of education websites. The participants in the study were those female superintendents who chose to complete the survey.

Measurement

Askren Edgehouse (2008) modified the *Superintendent Survey* (Montz, 2004) for the study of female superintendents in Ohio (see Appendix A). Permission to use and modify the survey was obtained from Montz and Askren Edgehouse (see Appendix B). The survey items used for current research were created using a modified version of the *Ohio Women Superintendent Survey*, which was used to gather information from participants in the areas of district and board demographics (part 1); career paths (part 2); personal demographics (part 3); characteristics (part 4); knowledge; skills; and abilities (part 5); and barriers (part 6) (Askren Edgehouse, 2008). The survey used in the current study focused on Askren Edgehouse's items in the areas of career paths (part 2); characteristics (part 4); knowledge, skills, and abilities (part 5); and barriers (part 6).

Part 1: District and Board Demographics

Part one of the Ohio Women Superintendent Survey included district and board demographics. This part was focused on items from the section regarding the classification of district and positions and size of district and school board. It also

included questions related to the job search, such as board member involvement, whether superintendents were hired from outside or from within the district, and their impression of the job search. This part was not used in this study because it was not relevant to the data gathered for the purpose of this study.

Part 2: Career Paths

Part two of the Ohio Women Superintendents Survey included 25 items in which participants indicated their degrees, years as a classroom teacher and administrator other than superintendent, and current educational enrollment. Askren Edgehouse asked participants to rank the reasons why they believe the school board hired them to be the superintendent. Superintendents were asked to choose which educational positions best describes their rise to the superintendency, content and level taught as a classroom teacher, and extracurricular activities sponsored. Participants were asked questions about former supervisory roles: how long it took to become an administrator, the nature of their first supervisory role, length of their superintendent career, how many superintendencies had been held, and how long it took to obtain the superintendency. Also, in the survey, participants were asked to respond whether they had mentors in their administrative and superintendent roles and whether they were male or female. Thirty-three items were changed for the U.S. Women Superintendents' Survey. Questions regarding degrees earned, years in education, content and level taught as a classroom teacher, and extracurricular activities sponsored were removed. One question regarding educational positions that describe career paths was also removed due to redundancy. Items 61-65 were used for descriptive statistics. Item 66 measures H1-H4, the number of female

superintendents who previously were high school building leaders, middle school/junior high building leaders, elementary building leaders, and other district-level positions.

Part 3: Personal Demographics

Part 3 items were not used for variable measurement in this study because it was not relevant to the data gathered for the purpose of this study. Nine demographic questions were included in the original survey. None were used in the survey for the current research (see Appendix A).

Part 4: Characteristics

Part 4 of Askren Edgehouse's Ohio Women Superintendents Survey lists 20 possible characteristics of superintendents, including assertive, career oriented, competent, competitive, concerned about personal relationships, confident, cooperative, decisive, fair, firm, and consistent, family-oriented, flexible, goal/task-oriented, intelligent, motivated by power, nurturing/supportive/approachable, politically aware, proactive, problem solver, resilient, and risk-taker. Participants in the Ohio Women Superintendents Survey responded to a four-point Likert scale of *disagree, mildly disagree, mildly agree, and agree*. All items from this section of the Ohio Women's Survey were used in the current survey. See Table 2 below for items that measure female superintendents' agreement about the characteristics that led to their selection as the superintendents of the districts and the alignment of the items with this study's hypothesis.

Table 2

Survey Items Used to Measure Agreement About Female Superintendents' Agreement About Characteristics That Led to Their Selection

Item Number	Characteristics	Hypotheses
1	Assertive	H5
2	Career-oriented	H6
3	Competent	H7
4	Competitive	H8
5	Concerned about personal relationships	H9
6	Confident	H10
7	Cooperative	H11
8	Decisive	H12
9	Fair, firm, and consistent	H13
10	Family-oriented	H14
11	Flexible	H15
12	Goal/task-oriented	H16
13	Intelligent	H17
14	Motivated by power	H18
15	Nurturing/supportive/approachable	H19
16	Politically aware	H20
17	Proactive	H21
18	Problem-solver	H22
19	Resilient	H23
20	Risk Taker	H24

Part 5: Knowledge, Skills, and Abilities

Part 5 of the Ohio Women Superintendents Survey lists 20 possible knowledge, skills, and abilities. Participants rated themselves on the same four-part Likert scale: *disagree, mildly disagree, mildly agree, and agree*. This section includes the following: create a vision for the district, strategic/long-range planning, model core values of the organization, data-driven decision-making to improve student achievement, ability to bring about change, human relation skills/interactions, knowledgeable in budgeting and finance, positive public image, ability to motivate others, ability to be in control of emotions, involve others in decision-making, knowledgeable of facilities, maintenance and operation, knowledgeable about curriculum and instruction, collective bargaining, knowledgeable in legal-personnel issues, knowledgeable of innovative education practices, effective school board relations, knowledgeable of assessment/testing practices, effective in promoting parental involvement, and knowledgeable of state and federal programs. All items from this section of the original survey were used in the current survey. See Table 3 below for items that measure female superintendents' beliefs about the knowledge, skills, and abilities that led to their selection as superintendents and their alignment with the hypotheses.

Table 3

Survey Items Used to Measure Agreement About Female Superintendents' Beliefs About the Knowledge, Skills, and Abilities That Led to Their Selection

Item	Knowledge, Skills, and Abilities	Hypotheses
21	Create a vision for the district	H25
22	Strategic/long range plans	H26
23	Model core values of the organization	H27
24	Use data driven decision-making to improve student achievement	H28
25	Bring about change	H29
26	Human relation skills/interactions	H30
27	Budgeting and finance	H31
28	Positive public image	H32
29	Motivate others	H33
30	Be in control of emotions	H34
31	Involve others in decision-making	H35
32	Facilities, maintenance, and operation	H36
33	Curriculum and instruction	H37
34	Collective bargaining	H38
35	Legal/personnel issues	H39
36	Innovative education practices	H40
37	Effective school board relations	H41
38	Assessment/testing practices	H42
39	Promoting parent involvement	H43
40	State and federal programs	H44

Part 6: Barriers

Part 6 lists 20 possible barriers. Participants rated themselves on the same four-part Likert scale: *disagree, mildly disagree, mildly agree, and agree*. This section begins with the question "To what extent have you experienced the following barriers during your career as a school leader?" The list of 20 potential barriers includes personal anxieties about effect of career on family, women are perceived to have inadequate skills in budgeting and finance, hiring and promotional practices of board members and search consultants, inability to relocate, there is an "old boy" network that promotes the selection of men over women, and men are viewed by the community and staff as more qualified for a leadership position. All survey items from the original survey were used in the current survey. See Table 4 below for items that measure the extent to which female superintendents perceived they faced barriers in their careers as a school leader.

Table 4

Survey Items Used to Measure Agreement About Female Superintendents' Perceptions About the Barriers They Faced During Their Careers

Item	Barriers	Hypotheses
41	Personal anxieties about effect of career on family	H45
42	Women are perceived to have inadequate skills in budgeting and finance	H46
43	Personal level of assertiveness during your career as a school leader	H47
44	Women are not considered politically astute	H48
45	Women fail to plan for appropriate education and key experiences prior to seeking the superintendency.	H49
46	Personal level of motivation	H50
47	Discrimination based on personal appearance	H51
48	Lack of professional network and/or mentoring	H52
49	Lack of family support	H53
50	Hiring and promotional practices of board members and search consultants	H54
51	Women are perceived as allowing their emotions to influence decisions	H55
52	Inability to relocate	H56
53	An "old boy" network	H57
54	Women are perceived to lack skills in managing facilities, grounds, and building projects	H58
55	Women are perceived as not able to achieve organizational goals	H59
56	Conflict or confusion regarding career goals	H60
57	Women are perceived as not able to manage staff	H61
58	Men are perceived to be more knowledgeable about administration; women are perceived to be more knowledgeable about teaching	H62
59	Personal level of self-confidence	H63
60	Men are viewed by the community and staff as more qualified for a leadership position	H64

The last four items on the survey were modified from items found in multiple sections of Askren Edgehouse's (2008) survey. These items measured whether participants had support from a practicing or former superintendent as a mentor, whether they were male or female, whether mentorship from a practicing or former superintendent helped them attain a position as a superintendent, and whether that mentor was male or female.

Validity was established for the original Superintendent's Survey by Montz (as cited in Askren Edgehouse, 2008), but Askren Edgehouse (2008) sought to ensure accuracy of her findings. Confirming accuracy was accomplished through guidance from retired female superintendents, a retired female assistant superintendent, a female administrator, and four female faculty from higher education from other states with experience in dissertations and research work related to female school leaders. From their suggestions, a few questions were added, and a few were rewritten. Content validity was established through the review with those individuals. A reliability analysis was not required because a scale was not constructed from the survey items. The researcher used single-item measurement.

> Most commonly used single-item measures can be divided into two categories: (a) those measuring self-reported facts . . . and (b) those measuring psychological constructs, e.g., aspects of personality . . . measuring the former with single-items is common practice. However, using single-item measure for the latter is considered to be a "fatal error" in research. If the construct being measured is sufficiently narrow or is unambiguous to the respondent, a single item may suffice. (Sackett & Larson, 1990, p. 631)

Data Collection Procedures

Prior to data collection, a proposal to conduct research was submitted to the Baker University Institutional Review Board (IRB) on December 8, 2022. The IRB formally granted permission to conduct the research study on December 13, 2022 (see Appendix D). The US Women's Superintendents Survey was emailed to explore the paths and perceptions of current female superintendents across the United States. The email addresses for current female superintendents were obtained through a search of each state's department of education superintendent lists. An email was sent to the superintendents on January 3, 2023 (see Appendix E) that included a summary of the study, an explanation that survey completion indicated consent for participation in the study, a link to the survey via Google Forms, and the researcher's and major advisor's contact information. The same email was sent as a reminder on January 9, 2023, and January 16, 2023. After the survey was closed on January 20, 2023, the data were downloaded into an Excel spreadsheet and uploaded to IBM SPSS Statistics for PC.

Data Analysis and Hypothesis Testing

According to Creswell and Creswell (2020), data analysis means moving to a deeper understanding of data, representing data, and interpreting the larger meaning of the data. Likewise, Turabian (2013) asserted that research must do more than provide a rational answer to a research question but must also show why the question allows understanding an issue in a new way. Each research question is listed and is followed by the corresponding hypotheses and the analysis method.

RQ1

What are the perceived career paths that have supported the current female superintendents' entry into the superintendency in the United States?

H1. The number of female superintendents who previously were high school building leaders is different than expected by chance.

H2. The number of female superintendents who previously were middle school/junior high building leaders is different than expected by chance.

H3. The number of female superintendents who previously were elementary building leaders is different than expected by chance.

H4. The number of female superintendents who previously had other district-level positions is different than expected by chance.

Four chi-square tests for goodness of fit were conducted to test H1-H4 because the frequency distribution for one categorical variable was analyzed for each hypothesis. A frequency table containing the observed and expected frequencies was constructed for the categorical variable: career path (high school building leaders, middle school/junior high building leaders, elementary building leaders, and other district-level positions). The observed frequencies were compared to those expected by chance. The level of significance was set at .05. An effect size, as indexed by Cramer's V, is reported, when appropriate.

RQ2

To what extent do female superintendents agree they were selected because the board of education believed specific characteristics apply to them?

H5. Female superintendents in the United States agree they were selected because the board of education believed they were assertive.

H6. Female superintendents in the United States agree they were selected because the board of education believed they were career-oriented.

H7. Female superintendents in the United States agree they were selected because the board of education believed they were competent.

H8. Female superintendents in the United States agree they were selected because the board of education believed they were competitive.

H9. Female superintendents in the United States agree they were selected because the board of education believed they were concerned about personal relationships.

H10. Female superintendents in the United States agree they were selected because the board of education believed they were confident.

H11. Female superintendents in the United States agree they were selected because the board of education believed they were cooperative.

H12. Female superintendents in the United States agree they were selected because the board of education believed they were decisive.

H13. Female superintendents in the United States agree they were selected because the board of education believed they were fair, firm, and consistent.

H14. Female superintendents in the United States agree they were selected because the board of education believed they were family-oriented.

H15. Female superintendents in the United States agree they were selected because the board of education believed they were flexible.

H16. Female superintendents in the United States agree they were selected because the board of education believed they were goal/task-oriented.

H17. Female superintendents in the United States agree they were selected because the board of education believed they were intelligent.

H18. Female superintendents in the United States agree they were selected because the board of education believed they were motivated by power.

H19. Female superintendents in the United States agree they were selected because the board of education believed they were nurturing/supportive/approachable.

H20. Female superintendents in the United States agree they were selected because the board of education believed they were politically aware.

H21. Female superintendents in the United States agree they were selected because the board of education believed they were proactive.

H22. Female superintendents in the United States agree they were selected because the board of education believed they were a problem-solver.

H23. Female superintendents in the United States agree they were selected because the board of education believed they were resilient.

H24. Female superintendents in the United States agree they were selected because the board of education believed they were a risk-taker.

Twenty chi-square tests for goodness of fit were conducted to test H5-H24 because the frequency distribution for one categorical variable was analyzed for each hypothesis. Twenty frequency tables containing the observed and expected frequencies were constructed for the categorical variable: characteristics (assertive, carrier oriented, competent, competitive, concerned about personal relationships, confident, cooperative,

decisive, fair/firm/and consistent, family-oriented, flexible, goal/task-oriented, intelligent, motivated by power, nurturing/supportive/approachable, politically aware, proactive, problem solver, resilient, and risk-taker). The observed frequencies were compared to those expected by chance. The level of significance was set at a .05 effect size, as indexed by Cramer's V, is reported, when appropriate.

RQ3

To what extent do female superintendents in the United States agree they were selected because the board of education perceived they demonstrated and possessed specific knowledge, skills, and abilities?

H25. Female superintendents in the United States agree the board of education selected them because they demonstrated the ability to create a vision for the district.

H26. Female superintendents in the United States agree the board of education selected them because they demonstrated the ability to execute strategic/long-range planning.

H27. Female superintendents in the United States agree the board of education selected them because they demonstrated the ability to model core values of the organization.

H28. Female superintendents in the United States agree the board of education selected them because they demonstrated the ability to use data-driven decision-making to improve student achievement.

H29. Female superintendents in the United States agree the board of education selected them because they demonstrated the ability to bring about change.

H30. Female superintendents in the United States agree the board of education selected them because they demonstrated human relation skills/interactions.

H31. Female superintendents in the United States agree the board of education selected them because they demonstrated knowledge in budgeting and finance.

H32. Female superintendents in the United States agree the board of education selected them because they demonstrate a positive public.

H33. Female superintendents in the United States agree the board of education selected them because they demonstrated the ability to motivate others.

H34. Female superintendents in the United States agree the board of education selected them because they demonstrated the ability to be in control of emotions.

H35. Female superintendents in the United States agree the board of education selected them because they demonstrated the ability to involve others in decision-making.

H36. Female superintendents in the United States agree the board of education selected them because they demonstrated knowledge of facilities, maintenance, and operation.

H37. Female superintendents in the United States agree the board of education selected them because they demonstrated knowledge of curriculum and instruction.

H38. Female superintendents in the United States agree the board of education selected them because they demonstrated knowledge of collective bargaining.

H39. Female superintendents in the United States agree the board of education selected them because they demonstrate knowledge of legal/personnel issues.

H40. Female superintendents in the United States agree the board of education selected them because they demonstrated knowledge of innovative education practices

H41. Female superintendents in the United States agree the board of education selected them because they demonstrated the ability to create effective school board relations.

H42. Female superintendents in the United States agree the board of education selected them because they demonstrated knowledge of assessment/testing practices.

H43. Female superintendents in the United States agree the board of education selected them because they demonstrated the ability to be effective in promoting parent involvement.

H44. Female superintendents in the United States agree the board of education selected them because they demonstrated knowledge of state and federal programs.

Twenty chi-square tests for goodness of fit were conducted to test H25-H44 because the frequency distribution for one categorical variable was analyzed for each hypothesis. Twenty frequency tables containing the observed and expected frequencies were constructed for the categorical variable: knowledge, skills, and abilities (create a vision or the district, strategic/long-range planning, model core values of the organization, data-driven decision making to improve student achievement, ability to bring about change, human relation skills/interactions, knowledgeable in budgeting finance, positive public image, ability to motivate others, ability to be in control of emotions, involve others in decision-making, knowledgeable of facilities, maintenance, and operations, knowledgeable about curriculum and instruction, collective bargaining, knowledgeable in legal/personnel issues, knowledgeable of innovative education practices, effective school board relations, knowledge of assessment/testing practices, effective in promoting parent involvement, and knowledge of state and federal

programs). The observed frequencies were compared to those expected by chance. The level of significance was set at .05. An effect size, as indexed by Cramer's V, is reported, when appropriate.

RQ4

To what extent do female superintendents in the United States perceive they have experienced barriers during their careers as school leaders?

H45. Female superintendents in the United States perceive they have experienced the barrier of personal anxieties about the effect of career on family during their careers as school leaders.

H46. Female superintendents in the United States perceive they have experienced the barrier of having inadequate skills in budgeting and finance during their careers as school leaders.

H47. Female superintendents in the United States perceive they have experienced the barrier of personal level of assertiveness during their careers as school leaders.

H48. Female superintendents in the United States perceive they have experienced the barrier of discrimination based on women are not considered politically astute.

H49. Female superintendents in the United States perceive they have experienced the barrier of women fail to plan for appropriate education and key experiences prior to seeking the superintendency.

H50. Female superintendents in the United States perceive they have experienced the barrier of personal level of motivation.

H51. Female superintendents in the United States perceive they have experienced the barrier of discrimination based on personal appearance as school leaders.

H52. Female superintendents in the United States perceive they have experienced the barrier of lack of professional network and/or mentoring as school leaders.

H53. Female superintendents in the United States perceive they have experienced the barrier of lack of family support as school leaders.

H54. Female superintendents in the United States perceive they have experienced the barrier of hiring and promotional practices of board members and search consultants as school leaders.

H55. Female superintendents in the United States perceive they have experienced the barrier of perceived as allowing their emotions to influence decisions as school leaders.

H56. Female superintendents in the United States perceive they have experienced the barrier of the inability to relocate as school leaders.

H57. Female superintendents in the United States perceive they have experienced the barrier of an "old boy" network that promotes the selection of men over women as school leaders.

H58. Female superintendents in the United States perceive they have experienced the barrier of the lack of skills in managing facilities, grounds, and building projects as school leaders.

H59. Female superintendents in the United States perceive they have experienced the barrier of not able to achieve organizational goals as school leaders.

H60. Female superintendents in the United States perceive they have experienced the barrier of conflict or confusion regarding career goals as school leaders.

H61. Female superintendents in the United States perceive they have experienced the barrier of not able to manage staff as school leaders.

H62. Female superintendents in the United States perceive they have experienced the barrier of men being perceived to be more knowledgeable about administration; women being perceived to be more knowledgeable about teaching as school leaders.

H63. Female superintendents in the United States perceive they have experienced the barrier of personal level of self-confidence as school leaders.

H64. Female superintendents in the United States perceive they have experienced the barrier of men being viewed by the community and staff as more qualified for a leadership position.

Twenty chi-square tests for goodness of fit were conducted to test H45-H64 because the frequency distribution for one categorical variable was analyzed for each hypothesis. Twenty frequency tables containing the observed and expected frequencies were constructed for the categorical variable: barriers (personal anxieties about the effect of career on family, women are perceived to have inadequate skills in budgeting and finance, personal level of assertiveness, women are not considered politically astute, women fail to plan for appropriate education and key experiences prior to seeking the superintendency, personal level of motivation, description based on personal appearance, lack of professional network and/or mentoring, lack of family support, hiring and promotional practices of board members and search consultants, women are perceived as allowing their emotions to influence decisions, inability to relocate, there is an "old boy" network that promotes the selection of men over women, women are perceived to lack skills in managing facilities, grounds, and building projects, women are perceived as not

able to manage staff, men are perceived to be more knowledgeable about administration; women are perceived to be more knowledgeable about teaching, personal level of self-confidence, men are viewed by the community and staff are more qualified for a leadership position). The observed frequencies were compared to those expected by chance. The level of significance was set at .05. An effect size, as indexed by Cramer's V, is reported, when appropriate.

Limitations

The researcher may not have control over the limitations associated with a survey, according to Lunenburg and Irby (2008). Those limitations "may have an effect on the interpretation of the findings or on the generalizability of the results" (Lunenburg & Irby, 2008, p. 133). The results of the study were limited because not all female superintendents completed the survey. Due to email addresses being found on department of education websites, a second limitation is that not all female superintendent emails may have been listed or found by the researcher. Another limitation is that not all participants may have faced the barriers studied in the survey in the same way. For instance, children may not have been a barrier for one participant because she was not a parent, while children may not have been a barrier for another because the role of superintendent did not interfere with parenting responsibilities.

Summary

This chapter presented the methods used to study female superintendents and their perceptions of what characteristics, skills, abilities, and knowledge aided in achieving the superintendency, what career paths they followed prior to being superintendents, and what barriers they faced in or during their ascension to the superintendency. The rationale

for using the survey research method and the information regarding the instrument used were also presented. Included in this chapter were the research design, selection of participants, measurement, data collection procedures, data analysis and hypothesis testing, and the limitations. The results of the study are included in Chapter 4.

Chapter 4

Results

Examined in this study were perceived career paths that have supported the current female superintendents' entry into the superintendency, the extent female superintendents agree they were selected because the board of education believed specific characteristics apply to them, and the extent female superintendents agree they were selected because the board of education perceived they demonstrated and possessed specific knowledge, skills, and abilities, and barriers they faced. To address the purpose of the study, four research questions were posed and 64 hypotheses were tested. The findings of the hypothesis testing are included in this chapter.

Descriptive Statistics

For this study, 561 female superintendents from across the United States participated in a survey. The survey was sent to 1,648 email addresses gathered from state department of education websites, the AASA member list, and district websites. Of the original 1,648 emails, 38 female superintendents were replaced by a man, six women superintendents had left with no replacement, and an interim superintendent had replaced eight. Additionally, 22 superintendents who received the email were men, 10 were not part of a traditional school district, six were elected superintendents, one was on an extended leave, and four superintendent's districts required an approval process before participating in the survey.

This section contains the frequency tables for the number of years participants had been a school superintendent, the number of superintendencies participants had held, how many times superintendents applied before obtaining their first superintendency, and in

which positions the participants had one or more full years of experience. These tables were constructed from numerical data. Table 5 contains the data regarding the participants' years of experience in the superintendency. The ranges for years of experience were 1-5, 6-10, 11-15, and 16+. Before the researcher built the table, numerical data was recoded because some participants responded with decimals or words, and whole numbers were needed to build the frequency tables. For example, one participant responded that she had experienced "8 as Superintendent and ten as Executive Director." Decimals, such as "3.5," were rounded to the next whole number.

Table 5 contains the data regarding the participants' years of experience in the superintendency. The ranges for years of experience were 1-5, 6-10, 11-15, and 16+. Three participants did not answer this question. Of the superintendents who participated in the study, 57.4% had one to five years of experience, and only 5.9% had 16 or more years in the superintendency.

Table 5

Frequency Table for Participants' Years of Experience in the Superintendency

Years of experience	*N*	%
1-5	322	57.4
6-10	151	26.9
11-15	52	9.3
16+	33	5.9
Missing	3	0.5

Table 6 contains data regarding the participants' number of superintendencies. The ranges for participants' number of superintendents were 1, 2, 3, 4, 5+, and Missing. Three participants did not answer this question. Of the superintendents who completed the survey, 79.1% have only held one superintendency.

Table 6

Frequency Table for Participants' Number of Superintendencies

Number of superintendencies	*N*	%
1	444	79.1
2	83	14.8
3	26	4.6
4	4	0.7
5+	1	0.2
Missing	3	0.5

Table 7 contains data regarding the participants' number of applications needed to obtain their first superintendency. The ranges for participants' number of superintendents were 0, 3-8, and 9+. Sixteen participants did not answer this question. Of note in this table is that 20.1% of participants did not apply for their superintendent position. Reasons for this could be that women who worked in the district were asked to take the position or were interim superintendents and were hired for the job without an application.

Table 7

Frequency Table for Participants' Number of Applications to Obtain Their First Superintendency

Number of applications	*N*	%
0	113	20.1
3-8	347	61.9
9+	80	14.3
Missing	16	2.9

Hypothesis Testing

To address the purposes of the study, four research questions were posed and 64 hypotheses were tested. Results are reported in this section. Research questions are followed by the data analysis paragraph, the hypothesis statement, and the results of the hypothesis testing.

RQ1

What are the perceived career paths that have supported the current female superintendents' entry into the superintendency in the United States?

Four chi-square tests for goodness of fit were conducted to test H1-H4 because the frequency distribution for one categorical variable was analyzed for each hypothesis. A frequency table containing the observed and expected frequencies was constructed for the categorical variable: career path (elementary building administrator, middle school/junior high building administrator, high school building administrator, other district-level position, none of the above). The observed frequencies were compared to

those expected by chance. The level of significance was set at .05. An effect size, as indexed by Cramer's V, is reported, when appropriate.

H1. The number of female superintendents who previously were high school building leaders is different than expected by chance.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(1) = 87.061$, $p = .000$, Cramer's V = .394. See Table 8 for the observed and expected frequencies. The observed frequency for no experience as a high school building leader ($n = 391$) was higher than the expected frequency ($n = 280.5$). H1 was supported. The number of female superintendents who previously were not high school building leaders is different than expected by chance. The effect size, as indexed by Cramer's V, indicated a medium effect.

Table 8

Observed and Expected Frequencies for H1

High school building leader	$f_{observed}$	$f_{expected}$
Experience	170	280.5
No experience	391	280.5

Note: In addition to high school building leaders, middle school building leaders, elementary school building leaders, and other district office positions, a fifth option on the survey was none of the above. Although 3 superintendents checked that option, the selection was not included in the calculations for the hypothesis test.

H2. The number of female superintendents who previously were middle school/junior high building leaders is different than expected by chance.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(1) = 5.791$, $p = .016$, Cramer's V = .102. See Table 9 for the observed and expected frequencies. The observed frequency for no experience as a middle school/junior high building leader (n = 309) was higher than the expected frequency (n = 280.5). H2 was supported. The number of female superintendents who previously were not middle school/junior high building leaders is different than expected by chance. The effect size, as indexed by Cramer's V, indicated a small effect.

Table 9

Observed and Expected Frequencies for H2

Middle/junior high school building leader	$f_{observed}$	$f_{expected}$
Experience	252	280.5
No experience	309	280.5

Note: In addition to high school building leaders, middle school building leaders, elementary school building leaders, and other district office positions, a fifth option on the survey was none of the above. Although three superintendents checked that option, the selection was not included in the calculations for the hypothesis test.

H3. The number of female superintendents who previously were elementary building leaders is different than expected by chance.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(1) = 14.761$, $p = .000$, Cramer's V = .162. See Table 10 for the observed and expected frequencies. The observed frequency for experience being an elementary building leader ($n = 326$) was higher than the expected frequency ($n = 280.5$). H3 was supported. The number of female superintendents who previously were elementary building leaders is different than expected by chance. The effect size, as indexed by Cramer's V, indicated a small effect.

Table 10

Observed and Expected Frequencies for H3

Elementary building leader	$f_{observed}$	$f_{expected}$
Experience	326	280.5
No experience	235	280.5

Note: In addition to high school building leaders, middle school building leaders, elementary school building leaders, and other district office positions, a fifth option on the survey was none of the above. Although 3 superintendents checked that option, the selection was not included in the calculations for the hypothesis test.

H4. The number of female superintendents who previously had other district-level positions is different than expected by chance.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(1) = 146.825$, $p = .000$, Cramer's V = .512. See Table 11 for the observed and expected frequencies. The observed frequency for

experience in other district-level positions (n = 424) was higher than the expected frequency (n = 280.5). H4 was supported. The number of female superintendents who previously had other district-level positions is different than expected by chance. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 11

Observed and Expected Frequencies for H4

Other district-level positions	$f_{observed}$	$f_{expected}$
Experience	424	280.5
No experience	137	280.5

Note. In addition to high school building leaders, middle school building leaders, elementary school building leaders, and other district office positions, a fifth option on the survey was none of the above. Although 3 superintendents checked that option, the selection was not included in the calculations for the hypothesis test.

Four hypothesis tests were conducted to address RQ1. The results for all tests were statistically significant. Female superintendents reported they had experience as an elementary building leader and in a district-level position. Female superintendents reported they did not have experience as a high school or middle/junior high school building leader.

RQ2

To what extent do female superintendents agree they were selected because the board of education believed specific characteristics apply to them?

Twenty chi-square tests for goodness of fit were conducted to test H5-H24 because the frequency distribution for one categorical variable was analyzed for each hypothesis. Nineteen frequency tables containing the observed and expected frequencies were constructed for the categorical variable: characteristics (assertive, carrier oriented, competent, competitive, concerned about personal relationships, confident, cooperative, decisive, fair/firm/and consistent, family-oriented, flexible, goal/task-oriented, intelligent, motivated by power, nurturing/supportive/approachable, politically aware, proactive, problem solver, resilient, and risk-taker). The observed frequencies were compared to those expected by chance. The level of significance was set at a .05 effect size, as indexed by Cramer's V, is reported, when appropriate.

H5. Female superintendents in the United States agree they were selected because the board of education believed they were assertive.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 219.184$, $p = .000$, Cramer's V = .363. See Table 12 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 227$) was higher than the expected frequency ($n = 138.5$). The observed frequency for *agree* ($n = 222$) was higher than the expected frequency ($n = 138.5$). Female superintendents in the United States mildly agreed or agreed they were selected because the board of education believed they were assertive. Based on the researcher's decision that for the distribution of responses to support H5, mildly agree or agree must have been the high-frequency responses, H5 was supported. The effect size, as indexed by Cramer's V, indicated a medium effect.

Table 12

Observed and Expected Frequencies for H5

Response	$f_{observed}$	$f_{expected}$
Disagree	33	138.5
Mildly disagree	72	138.5
Mildly agree	227	138.5
Agree	222	138.5

H6. Female superintendents in the United States agree they were selected because the board of education believed they were career-oriented.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 242.060$, $p = .000$, Cramer's V = .383. See Table 13 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 190$) was higher than the expected frequency ($n = 137.25$). The observed frequency for *agree* ($n = 259$) was higher than the expected frequency ($n = 137.25$). H6 was supported. Female superintendents in the United States mildly agreed or agreed they were selected because the board of education believed they were career-oriented. Based on the researcher's decision that for the distribution of responses to support H6, mildly agree or agree must have been the high-frequency responses, H6 was supported. The effect size, as indexed by Cramer's V, indicated a medium effect.

Table 13

Observed and Expected Frequencies for H6

Response	$f_{observed}$	$f_{expected}$
Disagree	36	137.25
Mildly disagree	64	137.25
Mildly agree	190	137.25
Agree	259	137.25

H7. Female superintendents in the United States agree they were selected because the board of education believed they were competent.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 1450.289$, $p = .000$, Cramer's V = .932. See Table 14 for the observed and expected frequencies. The observed frequency for *agree* ($n = 528$) was higher than the expected frequency ($n = 139.25$). Female superintendents in the United States agreed they were selected because the board of education believed they were competent. Based on the researcher's decision that for the distribution of responses to support H7, mildly agree or agree must have been the high-frequency responses, H7 was supported. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 14

Observed and Expected Frequencies for H7

Response	$f_{observed}$	$f_{expected}$
Disagree	1	139.25
Mildly disagree	1	139.25
Mildly agree	27	139.25
Agree	528	139.25

H8. Female superintendents in the United States agree they were selected because the board of education believed they were competitive.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 147.486$, $p = .000$, Cramer's V = .300. See Table 15 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 232$) was higher than the expected frequency ($n = 136.75$). The observed frequency for *agree* ($n = 159$) was higher than the expected frequency ($n = 136.75$). Female superintendents in the United States mildly agreed or agreed they were selected because the board of education believed they were competitive. Based on the researcher's decision that for the distribution of responses to support H8, mildly agree or agree must have been the high-frequency responses; therefore, H8 was supported. The effect size, as indexed by Cramer's V, indicated a medium effect.

Table 15

Observed and Expected Frequencies for H8

Response	$f_{observed}$	$f_{expected}$
Disagree	35	136.75
Mildly disagree	121	136.75
Mildly agree	232	136.75
Agree	159	136.75

H9. Female superintendents in the United States agree they were selected because the board of education believed they were concerned about personal relationships.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 516.084$, $p = .000$, Cramer's V = .556. See Table 16 for the observed and expected frequencies. The observed frequency for *agree* ($n = 359$) was higher than the expected frequency ($n = 139.25$). Female superintendents in the United States agreed they were selected because the board of education believed they were concerned about personal relationships. Based on the researcher's decision that for the distribution of responses to support H9, mildly agree or agree must have been the high-frequency responses, H9 was supported. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 16

Observed and Expected Frequencies for H9

Response	$f_{observed}$	$f_{expected}$
Disagree	23	139.25
Mildly disagree	39	139.25
Mildly agree	136	139.25
Agree	359	139.25

H10. Female superintendents in the United States agree they were selected because the board of education believed they were confident.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 884.774$, $p = .000$, Cramer's V = .728. See Table 17 for the observed and expected frequencies. The observed frequency for *agree* ($n = 434$) was higher than the expected frequency ($n = 139.25$). Female superintendents in the United States agreed they were selected because the board of education believed they were confident. Based on the researcher's decision that for the distribution of responses to support H10, mildly agree or agree must have been the high-frequency responses, H10 was supported. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 17

Observed and Expected Frequencies for H10

Response	$f_{observed}$	$f_{expected}$
Disagree	3	139.25
Mildly disagree	9	139.25
Mildly agree	111	139.25
Agree	434	139.25

H11. Female superintendents in the United States agree they were selected because the board of education believed they were cooperative.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 927.899$, $p = .000$, Cramer's V = .746. See Table 18 for the observed and expected frequencies. The observed frequency for *agree* ($n = 442$) was higher than the expected frequency ($n = 139.00$). Female superintendents in the United States agreed they were selected because the board of education believed they were cooperative. Based on the researcher's decision that for the distribution of responses to support H11, mildly agree or agree must have been the high-frequency responses, H11 was supported. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 18

Observed and Expected Frequencies for H11

Response	$f_{observed}$	$f_{expected}$
Disagree	1	139.00
Mildly disagree	9	139.00
Mildly agree	104	139.00
Agree	442	139.00

H12. Female superintendents in the United States agree they were selected because the board of education believed they were decisive.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 660.187$, $p = .000$, Cramer's V = .632. See Table 19 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 154$) was higher than the expected frequency ($n = 137.75$). The observed frequency for *agree* ($n = 378$) was higher than the expected frequency ($n = 137.75$). Female superintendents in the United States mildly agreed or agreed they were selected because the board of education believed they were decisive. Based on the researcher's decision that for the distribution of responses to support H12, mildly agree or agree must have been the high-frequency responses, H12 was supported. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 19

Observed and Expected Frequencies for H12

Response	$f_{observed}$	$f_{expected}$
Disagree	4	137.75
Mildly disagree	15	137.75
Mildly agree	154	137.75
Agree	378	137.75

H13. Female superintendents in the United States agree they were selected because the board of education believed they were fair, firm, and consistent.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 1007.369$, $p = .000$, Cramer's V = .779. See Table 20 for the observed and expected frequencies. The observed frequency for *agree* ($n = 457$) was higher than the expected frequency ($n = 138.25$). Female superintendents in the United States agreed they were selected because the board of education believed they were fair, firm, and consistent. Based on the researcher's decision that for the distribution of responses to support H13, mildly agree or agree must have been the high-frequency responses, H13 was supported. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 20

Observed and Expected Frequencies for H13

Response	$f_{observed}$	$f_{expected}$
Disagree	2	138.25
Mildly disagree	12	138.25
Mildly agree	82	138.25
Agree	457	138.25

H14. Female superintendents in the United States agree they were selected because the board of education believed they were family-oriented.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 237.985$, $p = .000$, Cramer's V = .380. See Table 21 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 173$) was higher than the expected frequency ($n = 137.50$). The observed frequency for *agree* ($n = 265$) was higher than the expected frequency ($n = 137.50$). Female superintendents in the United States mildly agreed or agreed they were selected because the board of education believed they were family-oriented. Based on the researcher's decision that for the distribution of responses to support H14, mildly agree or agree must have been the high-frequency responses, H14 was supported. The effect size, as indexed by Cramer's V, indicated a medium effect.

Table 21

Observed and Expected Frequencies for H14

Response	$f_{observed}$	$f_{expected}$
Disagree	25	137.50
Mildly disagree	87	137.50
Mildly agree	173	137.50
Agree	265	137.50

H15. Female superintendents in the United States agree they were selected because the board of education believed they were flexible.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 356.652$, $p = .000$, Cramer's V = .464. See Table 22 for the observed and expected frequencies. The observed frequency for mildly agree ($n = 208$) was higher than the expected frequency ($n = 137.75$). The observed frequency for *agree* ($n = 281$) was higher than the expected frequency ($n = 137.75$). Female superintendents in the United States mildly agreed or agreed they were selected because the board of education believed they were flexible. Based on the researcher's decision that for the distribution of responses to support H15, mildly agree or agree must have been the high-frequency responses, H15 was supported. The effect size, as indexed by Cramer's V, indicated a medium effect.

Table 22

Observed and Expected Frequencies for H15

Response	$f_{observed}$	$f_{expected}$
Disagree	10	137.75
Mildly disagree	52	137.75
Mildly agree	208	137.75
Agree	281	137.75

H16. Female superintendents in the United States agree they were selected because the board of education believed they were goal/task-oriented.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 876.733$, $p = .000$, Cramer's V = .726. See Table 23 for the observed and expected frequencies. The observed frequency for *agree* ($n = 432$) was higher than the expected frequency ($n = 138.75$). Female superintendents in the United States agreed they were selected because the board of education believed they were goal/task-oriented. Based on the researcher's decision that for the distribution of responses to support H16, mildly agree or agree must have been the high-frequency responses, H16 was supported. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 23

Observed and Expected Frequencies for H16

Response	$f_{observed}$	$f_{expected}$
Disagree	2	138.75
Mildly disagree	12	138.75
Mildly agree	109	138.75
Agree	432	138.75

H17. Female superintendents in the United States agree they were selected because the board of education believed they were intelligent.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 961.511$, $p = .000$, Cramer's V = .759. See Table 24 for the observed and expected frequencies. The observed frequency for *agree* ($n = 448$) was higher than the expected frequency ($n = 139.00$). Female superintendents in the United States agreed they were selected because the board of education believed they were intelligent. Based on the researcher's decision that for the distribution of responses to support H17, mildly agree or agree must have been the high-frequency responses, H17 was supported. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 24

Observed and Expected Frequencies for H17

Response	$f_{observed}$	$f_{expected}$
Disagree	2	139.00
Mildly disagree	5	139.00
Mildly agree	101	139.00
Agree	448	139.00

H18. Female superintendents in the United States agree they were selected because the board of education believed they were motivated by power.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 506.949$, $p = .000$. See Table 25 for the observed and expected frequencies. The observed frequency for *mildly disagree* ($n = 168$) was higher than the expected frequency ($n = 137.25$). The observed frequency for *disagree* ($n = 340$) was higher than the expected frequency ($n = 137.25$). Female superintendents in the United States disagreed or mildly disagreed that they were selected because the board of education believed they were motivated by power. Based on the researcher's decision that for the distribution of responses to support H18, mildly agree or agree must have been the high-frequency responses, H18 was not supported.

Table 25

Observed and Expected Frequencies for H18

Response	$f_{observed}$	$f_{expected}$
Disagree	340	138.25
Mildly disagree	168	138.25
Mildly agree	32	138.25
Agree	9	138.25

H19. Female superintendents in the United States agree they were selected because the board of education believed they were nurturing/supportive/approachable.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 405.424$, $p = .000$, Cramer's V = .493. See Table 26 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 207$) was higher than the expected frequency ($n = 139.00$). The observed frequency for *agree* ($n = 298$) was higher than the expected frequency ($n = 139.00$). Female superintendents in the United States mildly agreed or agreed they were selected because the board of education believed they were nurturing/supportive/approachable. Based on the researcher's decision that for the distribution of responses to support H19, mildly agree or agree must have been the high frequency responses, H19 was supported. The effect size, as indexed by Cramer's V, indicated a medium effect.

Table 26

Observed and Expected Frequencies for H19

Response	$f_{observed}$	$f_{expected}$
Disagree	7	139.00
Mildly disagree	44	139.00
Mildly agree	207	139.00
Agree	298	139.00

H20. Female superintendents in the United States agree they were selected because the board of education believed they were politically aware.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 213.537$, $p = .000$, Cramer's V = .359. See Table 27 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 271$) was higher than the expected frequency ($n = 137.75$). Female superintendents in the United States mildly agreed they were selected because the board of education believed they were politically aware. Based on the researcher's decision that for the distribution of responses to support H20, mildly agree or agree must have been the high-frequency responses, H20 was supported. The effect size, as indexed by Cramer's V, indicated a medium effect.

Table 27

Observed and Expected Frequencies for H20

Response	$f_{observed}$	$f_{expected}$
Disagree	32	137.75
Mildly disagree	117	137.75
Mildly agree	271	137.75
Agree	131	137.75

H21. Female superintendents in the United States agree they were selected because the board of education believed they were proactive.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 603.252$, $p = .000$, Cramer's V = .601. See Table 28 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 168$) was higher than the expected frequency ($n = 139.00$). The observed frequency for *agree* ($n = 364$) was higher than the expected frequency ($n = 139.00$). Female superintendents in the United States mildly agreed or agreed they were selected because the board of education believed they were proactive. Based on the researcher's decision that for the distribution of responses to support H21, mildly agree or agree must have been the high-frequency responses, H21 was supported. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 28

Observed and Expected Frequencies for H21

Response	$f_{observed}$	$f_{expected}$
Disagree	4	139.00
Mildly disagree	20	139.00
Mildly agree	168	139.00
Agree	364	139.00

H22. Female superintendents in the United States agree they were selected because the board of education believed they were a problem-solver.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 1019.213$, $p = .000$, Cramer's V = .783. See Table 29 for the observed and expected frequencies. The observed frequency for *agree* ($n = 458$) was higher than the expected frequency ($n = 138.5$). Female superintendents in the United States agreed they were selected because the board of education believed they were a problem-solver. Based on the researcher's decision that for the distribution of responses to support H22, mildly agree or agree must have been the high-frequency responses, H22 was supported. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 29

Observed and Expected Frequencies for H22

Response	$f_{observed}$	$f_{expected}$
Disagree	1	138.5
Mildly disagree	5	138.5
Mildly agree	90	138.5
Agree	458	138.5

H23. Female superintendents in the United States agree they were selected because the board of education believed they were resilient.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 548.360$, $p = .000$, Cramer's V = .575. See Table 30 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 153$) was higher than the expected frequency ($n = 138.25$). The observed frequency for *agree* ($n = 357$) was higher than the expected frequency ($n = 138.25$). Female superintendents in the United States mildly agreed or agreed they were selected because the board of education believed they were Based on the researcher's decision that for the distribution of responses to support H23, mildly agree or agree must have been the high-frequency responses, H23 was supported. The effect size, as indexed by Cramer's V, indicated a medium effect.

Table 30

Observed and Expected Frequencies for H23

Response	$f_{observed}$	$f_{expected}$
Disagree	6	138.25
Mildly disagree	37	138.25
Mildly agree	153	138.25
Agree	357	138.25

H24. Female superintendents in the United States agree they were selected because the board of education believed they were a risk-taker.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 181.864$, $p = .000$, Cramer's V = .331. See Table 31 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 255$) was higher than the expected frequency ($n = 138.25$). Female superintendents in the United States mildly agreed or agreed they were selected because the board of education believed they were politically aware Based on the researcher's decision that for the distribution of responses to support H24, mildly agree or agree must have been the high-frequency responses, H24 was supported. The effect size, as indexed by Cramer's V, indicated a medium effect.

Table 31

Observed and Expected Frequencies for H24

Response	$f_{observed}$	$f_{expected}$
Disagree	35	138.25
Mildly disagree	112	138.25
Mildly agree	255	138.25
Agree	151	138.25

RQ3

To what extent do female superintendents in the United States agree they were selected because the board of education perceived they demonstrated and possessed specific knowledge, skills, and abilities?

Twenty chi-square tests for goodness of fit were conducted to test H25-H44 because the frequency distribution for one categorical variable was analyzed for each hypothesis. Twenty frequency tables containing the observed and expected frequencies was constructed for the categorical variable: knowledge, skills, and abilities (create a vision or the district, strategic/long-range planning, model core values of the organization, data-driven decision making to improve student achievement, ability to bring about change, human relation skills/interactions, knowledgeable in budgeting finance, positive public image, ability to motivate others, ability to be in control of emotions, involve others in decision-making, knowledgeable of facilities, maintenance, and operations, knowledgeable about curriculum and instruction, collective bargaining, knowledgeable in legal/personnel issues, knowledgeable of innovative education

practices, effective school board relations, knowledge of assessment/testing practices, effective in promoting parent involvement, and knowledge of state and federal programs). The observed frequencies were compared to those expected by chance. The level of significance was set at .05. An effect size, as indexed by Cramer's V, is reported, when appropriate.

H25. Female superintendents in the United States agree the board of education selected them because they demonstrated the ability to create a vision for the district.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 800.564$, $p = .000$, Cramer's V = .691. See Table 32 for the observed and expected frequencies. The observed frequency for *agree* ($n = 415$) was higher than the expected frequency ($n = 139.75$). Female superintendents in the United States agree that the board of education selected them because they demonstrated the ability to create a vision for the district. Based on the researcher's decision that for the distribution of responses to support H25, mildly agree or agree must have been the high-frequency responses, H25 was supported. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 32

Observed and Expected Frequencies for H25

Response	$f_{observed}$	$f_{expected}$
Disagree	2	139.75
Mildly disagree	9	139.75
Mildly agree	133	139.75
Agree	415	139.75

H26. Female superintendents in the United States agree the board of education selected them because they demonstrated the ability to execute strategic/long-range planning.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 598.387$, $p = .000$, Cramer's V = .598. See Table 33 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 175$) was higher than the expected frequency ($n = 139.5$). The observed frequency for *agree* ($n = 361$) was higher than the expected frequency ($n = 139.5$). Female superintendents in the United States mildly agreed or agreed the board of education selected them because they demonstrated the ability to execute strategic/long-range planning. Based on the researcher's decision that for the distribution of responses to support H26, mildly agree or agree must have been the high-frequency responses, H26 was supported. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 33

Observed and Expected Frequencies for H26

Response	$f_{observed}$	$f_{expected}$
Disagree	3	139.5
Mildly disagree	19	139.5
Mildly agree	175	139.5
Agree	361	139.5

H27. Female superintendents in the United States agree the board of education selected them because they demonstrated the ability to model core values of the organization.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 1061.627$, $p = .000$, Cramer's V = .796. See Table 34 for the observed and expected frequencies. The observed frequency for *agree* ($n = 468$) was higher than the expected frequency ($n = 139.5$). Female superintendents in the United States agreed the board of education selected them because they demonstrated the ability to model core values of the organization. Based on the researcher's decision that for the distribution of responses to support H27, mildly agree or agree must have been the high-frequency responses, H27 was supported. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 34

Observed and Expected Frequencies for H27

Response	$f_{observed}$	$f_{expected}$
Disagree	4	139.5
Mildly disagree	3	139.5
Mildly agree	83	139.5
Agree	468	139.5

H28. Female superintendents in the United States agree the board of education selected them because they demonstrated the ability to use data-driven decision-making to improve student achievement.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 498.896$, $p = .000$, Cramer's V = .545. See Table 35 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 195$) was higher than the expected frequency ($n = 139.75$). The observed frequency for *agree* ($n = 330$) was higher than the expected frequency ($n = 139.75$). Female superintendents in the United States mildly agreed or agreed that the board of education selected them because they demonstrated the ability to use data-driven decision-making to improve student achievement. Based on the researcher's decision that for the distribution of responses to support H28, mildly agree or agree must have been the high-frequency responses, H28 was supported. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 35

Observed and Expected Frequencies for H28

Response	$f_{observed}$	$f_{expected}$
Disagree	4	139.75
Mildly disagree	30	139.75
Mildly agree	195	139.75
Agree	330	139.75

H29. Female superintendents in the United States agree the board of education selected them because they demonstrated the ability to bring about change.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 586.686$, $p = .000$, Cramer's V = .591. See Table 36 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 156$) was higher than the expected frequency ($n = 140.0$). The observed frequency for *agree* ($n = 368$) was higher than the expected frequency ($n = 140.0$). Female superintendents in the United States mildly agreed or agreed that the board of education selected them because they demonstrated the ability to bring about change. Based on the researcher's decision that for the distribution of responses to support H29, mildly agree or agree must have been the high-frequency responses, H29 was supported. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 36

Observed and Expected Frequencies for H29

Response	$f_{observed}$	$f_{expected}$
Disagree	10	140.0
Mildly disagree	26	140.0
Mildly agree	156	140.0
Agree	368	140.0

H30. Female superintendents in the United States agree the board of education selected them because they demonstrated human relation skills/interactions.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 964.557$, $p = .000$, Cramer's V = .758. See Table 37 for the observed and expected frequencies. The observed frequency for *agree* ($n = 452$) was higher than the expected frequency ($n = 140.0$). Female superintendents in the United States agreed that the board of education selected them because they demonstrated human relation skills/interactions. Based on the researcher's decision that for the distribution of responses to support H30, mildly agree or agree must have been the high-frequency responses, H30 was supported. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 37

Observed and Expected Frequencies for H30

Response	$f_{observed}$	$f_{expected}$
Disagree	3	140.0
Mildly disagree	10	140.0
Mildly agree	95	140.0
Agree	452	140.0

H31. Female superintendents in the United States agree the board of education selected them because they demonstrated knowledge in budgeting and finance.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 261.283$, $p = .000$, Cramer's V = .395. See Table 38 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 270$) was higher than the expected frequency ($n = 139.5$). The observed frequency for *agree* ($n = 185$) was higher than the expected frequency ($n = 139.5$). Female superintendents in the United States mildly agreed or agreed that the board of education selected them because they demonstrated knowledge in budget and finance. Based on the researcher's decision that for the distribution of responses to support H31, mildly agree or agree must have been the high-frequency responses, H31 was supported. The effect size, as indexed by Cramer's V, indicated a medium effect.

Table 38

Observed and Expected Frequencies for H31

Response	$f_{observed}$	$f_{expected}$
Disagree	21	139.5
Mildly disagree	82	139.5
Mildly agree	270	139.5
Agree	185	139.5

H32. Female superintendents in the United States agree the board of education selected them because they demonstrate a positive public image.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 739.386$, $p = .000$, Cramer's V = .663. See Table 39 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 142$) was higher than the expected frequency ($n = 140.0$). The observed frequency for *agree* ($n = 402$) was higher than the expected frequency ($n = 140.0$). Female superintendents in the United States mildly agreed or agreed that the board of education selected them because they demonstrated a positive public image. Based on the researcher's decision that for the distribution of responses to support H32, mildly agree or agree must have been the high-frequency responses, H32 was supported. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 39

Observed and Expected Frequencies for H32

Response	$f_{observed}$	$f_{expected}$
Disagree	5	140.0
Mildly disagree	11	140.0
Mildly agree	142	140.0
Agree	402	140.0

H33. Female superintendents in the United States agree the board of education selected them because they demonstrated the ability to motivate others.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 665.298$, $p = .000$, Cramer's V = .631. See Table 49 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 160$) was higher than the expected frequency ($n = 139.25$). The observed frequency for *agree* ($n = 380$) was higher than the expected frequency ($n = 139.25$). Female superintendents in the United States mildly agreed or agreed that the board of education selected them because they demonstrated the ability to motivate others. Based on the researcher's decision that for the distribution of responses to support H33, mildly agree or agree must have been the high-frequency responses, H33 was supported. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 40

Observed and Expected Frequencies for H33

Response	$f_{observed}$	$f_{expected}$
Disagree	3	139.25
Mildly disagree	14	139.25
Mildly agree	160	139.25
Agree	380	139.25

H34. Female superintendents in the United States agree the board of education selected them because they demonstrated the ability to be in control of emotions.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 255.215$, $p = .000$, Cramer's V = .391. See Table 41 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 202$) was higher than the expected frequency ($n = 139.25$). The observed frequency for *agree* ($n = 256$) was higher than the expected frequency ($n = 139.25$). Female superintendents in the United States mildly agreed or agreed that the board of education selected them because they demonstrated the ability to be in control of emotions. Based on the researcher's decision that for the distribution of responses to support H34, mildly agree or agree must have been the high-frequency responses, H34 was supported. The effect size, as indexed by Cramer's V, indicated a medium effect.

Table 41

Observed and Expected Frequencies for H34

Response	$f_{observed}$	$f_{expected}$
Disagree	19	139.25
Mildly disagree	80	139.25
Mildly agree	202	139.25
Agree	256	139.25

H35. Female superintendents in the United States agree the board of education selected them because they demonstrated the ability to involve others in decision-making.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 561.346$, $p = .000$, Cramer's V = .581. See Table 42 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 194$) was higher than the expected frequency ($n = 138.75$). The observed frequency for agree ($n = 342$) was higher than the expected frequency ($n = 138.75$). Female superintendents in the United States mildly or agree that the board of education selected them because they demonstrated the ability to involve others in decision-making. Based on the researcher's decision that for the distribution of responses to support H35, mildly agree or agree must have been the high-frequency responses, H35 was supported. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 42

Observed and Expected Frequencies for H35

Response	$f_{observed}$	$f_{expected}$
Disagree	2	139.25
Mildly disagree	17	139.25
Mildly agree	194	139.25
Agree	342	139.25

H36. Female superintendents in the United States agree the board of education selected them because they demonstrated knowledge of facilities, maintenance, and operation.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 182.086$, $p = .000$, Cramer's V = .330. See Table 43 for the observed and expected frequencies. The observed frequency for mildly agree (n = 251) was higher than the expected frequency (n = 139.5). The observed frequency for *agree* (n = 147) was higher than the expected frequency (n = 139.5). Female superintendents in the United States mildly agreed or agreed that the board of education selected them because they demonstrated knowledge of facilities, maintenance, and operation. Based on the researcher's decision that for the distribution of responses to support H36, mildly agree or agree must have been the high-frequency responses, H36 was supported. The effect size, as indexed by Cramer's V, indicated a medium effect.

Table 43

Observed and Expected Frequencies for H36

Response	$f_{observed}$	$f_{expected}$
Disagree	26	139.5
Mildly disagree	134	139.5
Mildly agree	251	139.5
Agree	147	139.5

H37. Female superintendents in the United States agree the board of education selected them because they demonstrated knowledge of curriculum and instruction.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 769.322$, $p = .000$, Cramer's V = .677. See Table 44 for the observed and expected frequencies. The observed frequency for *agree* ($n = 408$) was higher than the expected frequency ($n = 139.75$). Female superintendents in the United States agree that the board of education selected them because they demonstrated knowledge of curriculum and instruction. Based on the researcher's decision that for the distribution of responses to support H37, mildly agree or agree must have been the high-frequency responses, H37 was supported. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 44

Observed and Expected Frequencies for H37

Response	$f_{observed}$	$f_{expected}$
Disagree	2	139.75
Mildly disagree	11	139.75
Mildly agree	138	139.75
Agree	408	139.75

H38. Female superintendents in the United States agree the board of education selected them because they demonstrated knowledge of collective bargaining.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 69.425$, $p = .000$. See Table 45 for the observed and expected frequencies. The observed frequency for *mildly disagree* ($n = 141$) was higher than the expected frequency ($n = 138.75$). The observed frequency for *mildly agree* ($n = 217$) was higher than the expected frequency ($n = 138.75$). Female superintendents in the United States mildly disagreed or mildly agreed that the board of education selected them because they demonstrated knowledge of collective bargaining. Based on the researcher's decision that for the distribution of responses to support H38, mildly agree or agree must have been the high-frequency responses, H38 was not supported.

Table 45

Observed and Expected Frequencies for H38

Response	$f_{observed}$	$f_{expected}$
Disagree	110	138.75
Mildly disagree	141	138.75
Mildly agree	217	138.75
Agree	87	138.75

H39. Female superintendents in the United States agree the board of education selected them because they demonstrate knowledge of legal/personnel issues.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 254.892$, $p = .000$, Cramer's V = .391. See Table 46 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 265$) was higher than the expected frequency ($n = 139$). The observed frequency for *agree* ($n = 186$) was higher than the expected frequency ($n = 139$). Female superintendents in the United States mildly agreed or agreed that the board of education selected them because they demonstrated knowledge of legal/personnel issues Based on the researcher's decision that for the distribution of responses to support H39, mildly agree or agree must have been the high-frequency responses, H39 was supported. The effect size, as indexed by Cramer's V, indicated a medium effect.

Table 46

Observed and Expected Frequencies for H39

Response	$f_{observed}$	$f_{expected}$
Disagree	18	139
Mildly disagree	87	139
Mildly agree	265	139
Agree	186	139

H40. Female superintendents in the United States agree the board of education selected them because they demonstrated knowledge of innovative education practices.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 542.719$, $p = .000$, Cramer's V = .570. See Table 47 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 186$) was higher than the expected frequency ($n = 139$). The observed frequency for *agree* ($n = 343$) was higher than the expected frequency ($n = 139$). Female superintendents in the United States mildly agreed or agreed that the board of education selected them because they demonstrated knowledge of innovative education practices. Based on the researcher's decision that for the distribution of responses to support H40, mildly agree or agree must have been the high-frequency responses, H40 was supported. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 47

Observed and Expected Frequencies for H40

Response	$f_{observed}$	$f_{expected}$
Disagree	6	139
Mildly disagree	21	139
Mildly agree	186	139
Agree	343	139

H41. Female superintendents in the United States agree the board of education selected them because they demonstrated the ability to create effective school board relations.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 542.719$, $p = .000$, Cramer's V = .570. See Table 48 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 186$) was higher than the expected frequency ($n = 139$). The observed frequency for *agree* ($n = 343$) was higher than the expected frequency ($n = 139$). Female superintendents in the United States mildly agreed or agreed that the board of education selected them because they demonstrated the ability to create effective school board relations. Based on the researcher's decision that for the distribution of responses to support H41, mildly agree or agree must have been the high-frequency responses, H41 was supported. The effect size, as indexed by Cramer's V, indicated a large effect.

Table 48

Observed and Expected Frequencies for H41

Response	$f_{observed}$	$f_{expected}$
Disagree	6	139
Mildly disagree	21	139
Mildly agree	186	139
Agree	343	139

H42. Female superintendents in the United States agree the board of education selected them because they demonstrated knowledge of assessment/testing practices.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 311.072$, $p = .000$, Cramer's V = .431. See Table 49 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 221$) was higher than the expected frequency ($n = 139.25$). The observed frequency for *agree* ($n = 261$) was higher than the expected frequency ($n = 139.25$). Female superintendents in the United States mildly agreed or agreed the board of education selected them because they demonstrated knowledge of assessment/testing practices. Based on the researcher's decision that for the distribution of responses to support H42, mildly agree or agree must have been the high-frequency responses, H42 was supported. The effect size, as indexed by Cramer's V, indicated a medium effect.

Table 49

Observed and Expected Frequencies for H42

Response	$f_{observed}$	$f_{expected}$
Disagree	14	139.25
Mildly disagree	61	139.25
Mildly agree	221	139.25
Agree	261	139.25

H43. Female superintendents in the United States agree the board of education selected them because they demonstrated the ability to be effective in promoting parent involvement.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 359.353$, $p = .000$, Cramer's V = .464. See Table 50 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 248$) was higher than the expected frequency ($n = 139.0$). The observed frequency for *agree* ($n = 251$) was higher than the expected frequency ($n = 139.0$). Female superintendents in the United States mildly agreed or agreed that the board of education selected them because they demonstrated the ability to be effective in promoting parent involvement. Based on the researcher's decision that for the distribution of responses to support H43, mildly agree or agree must have been the high-frequency responses, H43 was supported. The effect size, as indexed by Cramer's V, indicated a medium effect.

Table 50

Observed and Expected Frequencies for H43

Response	$f_{observed}$	$f_{expected}$
Disagree	5	139.0
Mildly disagree	52	139.0
Mildly agree	248	139.0
Agree	251	139.0

H44. Female superintendents in the United States agree the board of education selected them because they demonstrated knowledge of state and federal programs.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 328.436$, $p = .000$, Cramer's V = .443. See Table 51 for the observed and expected frequencies. The observed frequency for *mildly agree* ($n = 236$) was higher than the expected frequency ($n = 139.25$). The observed frequency for *agree* ($n = 254$) was higher than the expected frequency ($n = 139.25$). Female superintendents in the United States mildly agreed or agreed that the board of education selected them because they demonstrated knowledge of state and federal programs. Based on the researcher's decision that for the distribution of responses to support H44, mildly agree or agree must have been the high-frequency responses, H44 was supported. The effect size, as indexed by Cramer's V, indicated a medium effect.

Table 51

Observed and Expected Frequencies for H44

Response	$f_{observed}$	$f_{expected}$
Disagree	13	139.25
Mildly disagree	54	139.25
Mildly agree	236	139.25
Agree	254	139.25

RQ4

To what extent do female superintendents in the United States perceive they have experienced barriers during their careers as school leaders?

Twenty chi-square tests for goodness of fit were conducted to test H45-H64 because the frequency distribution for one categorical variable was analyzed for each hypothesis. Twenty frequency tables containing the observed and expected frequencies were constructed for the categorical variable: barriers (personal anxieties about the effect of career on family, women are perceived to have inadequate skills in budgeting and finance, personal level of assertiveness, women are not considered politically astute, women fail to plan for appropriate education and key experiences prior to seeking the superintendency, personal level of motivation, description based on personal appearance, lack of professional network and/or mentoring, lack of family support, hiring and promotional practices of board members and search consultants, women are perceived as allowing their emotions to influence decisions, inability to relocate, there is an “old boy” network that promotes the selection of men over women, women are perceived to lack

skills in managing facilities, grounds, and building projects, women are perceived as not able to manage staff, men are perceived to be more knowledgeable about administration; women are perceived to be more knowledgeable about teaching, personal level of self-confidence, men are viewed by the community and staff are more qualified for a leadership position). The observed frequencies were compared to those expected by chance. The level of significance was set at .05. An effect size, as indexed by Cramer's V, is reported, when appropriate.

H45. Female superintendents in the United States perceive they have experienced the barrier of personal anxieties about the effect of career on family during their careers as school leaders.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 228.929$, $p = .000$, Cramer's V = .369. See Table 52 for the observed and expected frequencies. The observed frequency for *sometimes* ($n = 285$) was higher than the expected frequency ($n = 140.0$). Female superintendents in the United States perceive they sometimes have experienced the barrier of personal anxieties about the effect of career on family during their careers as school leaders. Based on the researcher's decision that for the distribution of responses to support H45, sometimes or frequently must have been the high-frequency responses, H45 was supported. The effect size, as indexed by Cramer's V, indicated a medium effect.

Table 52

Observed and Expected Frequencies for H45

Response	$f_{observed}$	$f_{expected}$
Never	40	140.0
Hardly ever	120	140.0
Sometimes	285	140.0
Frequently	115	140.0

H46. Female superintendents in the United States perceive they have experienced the barrier of having inadequate skills in budgeting and finance during their careers as school leaders.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 90.786$, $p = .000$. See Table 53 for the observed and expected frequencies. The observed frequency for *hardly ever* ($n = 175$) was higher than the expected frequency ($n = 140.25$). The observed frequency for *sometimes* ($n = 208$) was higher than the expected frequency ($n = 140.25$). Female superintendents in the United States perceive they sometimes hardly ever or sometimes have experienced the barrier of having inadequate skills in budgeting and finance during their careers as school leaders. Based on the researcher's decision that for the distribution of responses to support H46, sometimes or frequently must have been the high-frequency responses, H46 was not supported.

Table 53

Observed and Expected Frequencies for H46

Response	$f_{observed}$	$f_{expected}$
Never	118	140.25
Hardly ever	175	140.25
Sometimes	208	140.25
Frequently	60	140.25

H47. Female superintendents in the United States perceive they have experienced the barrier of personal level of assertiveness during their careers as school leaders.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 109.973$, $p = .000$. See Table 54 for the observed and expected frequencies. The observed frequency for *hardly ever* ($n = 168$) was higher than the expected frequency ($n = 139.75$). The observed frequency for *sometimes* ($n = 227$) was higher than the expected frequency ($n = 139.75$). Female superintendents in the United States perceive they hardly ever or sometimes have experienced the barrier of personal level of assertiveness during their careers as school leaders. Based on the researcher's decision that for the distribution of responses to support H47, sometimes or frequently must have been the high-frequency responses, H47 was not supported.

Table 54

Observed and Expected Frequencies for H47

Response	$f_{observed}$	$f_{expected}$
Never	94	139.75
Hardly ever	168	139.75
Sometimes	227	139.75
Frequently	70	139.75

H48. Female superintendents in the United States perceive they have experienced the barrier of discrimination based on women are not considered politically astute.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 89.293$, $p = .000$. See Table 55 for the observed and expected frequencies. The observed frequency for *hardly ever* ($n = 182$) was higher than the expected frequency ($n = 139.75$). The observed frequency for *sometimes* ($n = 195$) was higher than the expected frequency ($n = 139.75$). Female superintendents in the United States perceive they hardly ever or sometimes have experienced the barrier of discrimination based on women are not considered politically astute. Based on the researcher's decision that for the distribution of responses to support H48, sometimes or frequently must have been the high-frequency responses, H48 was not supported.

Table 55

Observed and Expected Frequencies for H48

Response	$f_{observed}$	$f_{expected}$
Never	129	139.75
Hardly ever	182	139.75
Sometimes	195	139.75
Frequently	53	139.75

H49. Female superintendents in the United States perceive they have experienced the barrier of women fail to plan for appropriate education and key experiences prior to seeking the superintendency.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 364.843$, $p = .000$. See Table 56 for the observed and expected frequencies. The observed frequency for *never* ($n = 301$) was higher than the expected frequency ($n = 140.0$). The observed frequency for *hardly ever* ($n = 188$) was higher than the expected frequency ($n = 140.0$). Female superintendents in the United States do not perceive they have experienced the barrier of women fail to plan for appropriate education and key experiences prior to seeking the superintendency. Based on the researcher's decision that for the distribution of responses to support H49, sometimes or frequently must have been the high-frequency responses, H49 was not supported.

Table 56

Observed and Expected Frequencies for H49

Response	$f_{observed}$	$f_{expected}$
Never	301	140.0
Hardly ever	188	140.0
Sometimes	58	140.0
Frequently	13	140,0

H50. Female superintendents in the United States perceive they have experienced the barrier of personal level of motivation.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 360.234$, $p = .000$. See Table 57 for the observed and expected frequencies. The observed frequency for *never* ($n = 315$) was higher than the expected frequency ($n = 139.75$). The observed frequency for *hardly ever* ($n = 151$) was higher than the expected frequency ($n = 139.75$). Female superintendents in the United States do not perceive they sometimes have experienced the barrier of personal level of motivation. Based on the researcher's decision that for the distribution of responses to support H50, sometimes or frequently must have been the high-frequency responses, H50 was not supported.

Table 57

Observed and Expected Frequencies for H50

Response	$f_{observed}$	$f_{expected}$
Never	315	139.75
Hardly ever	151	139.75
Sometimes	79	139.75
Frequently	14	139.75

H51. Female superintendents in the United States perceive they have experienced the barrier of discrimination based on personal appearance as school leaders.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 94.251$, $p = .000$. See Table 58 for the observed and expected frequencies. The observed frequency for *never* ($n = 189$) was higher than the expected frequency ($n = 140.25$). The observed frequency for *hardly ever* ($n = 179$) was higher than the expected frequency ($n = 140.25$). The observed frequency for *sometimes* ($n = 149$) was higher than the expected frequency ($n = 140.25$). Female superintendents in the United States perceive they never, hardly ever, or sometimes have experienced the barrier of discrimination based on personal appearance as school leaders. Based on the researcher's decision that for the distribution of responses to support H51, sometimes or frequently must have been the high-frequency responses, H51 was not supported.

Table 58

Observed and Expected Frequencies for H51

Response	$f_{observed}$	$f_{expected}$
Never	189	140.25
Hardly ever	179	140.25
Sometimes	149	140.25
Frequently	44	140.25

H52. Female superintendents in the United States perceive they have experienced the barrier of lack of professional network and/or mentoring as school leaders.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 142.889$, $p = .000$. See Table 59 for the observed and expected frequencies. The observed frequency for *never* ($n = 206$) was higher than the expected frequency ($n = 139.75$). The observed frequency for *hardly ever* ($n = 191$) was higher than the expected frequency ($n = 139.75$). Female superintendents in the United States do not perceive they sometimes have experienced the barrier of lack of professional network and/or mentoring as school leaders. Based on the researcher's decision that for the distribution of responses to support H52, sometimes or frequently must have been the high-frequency responses, H52 was not supported.

Table 59

Observed and Expected Frequencies for H52

Response	$f_{observed}$	$f_{expected}$
Never	206	139.75
Hardly ever	191	139.75
Sometimes	136	139.75
Frequently	26	139.75

H53. Female superintendents in the United States perceive they have experienced the barrier of lack of family support as school leaders.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 569.842$, $p = .000$. See Table 60 for the observed and expected frequencies. The observed frequency for *never* ($n = 372$) was higher than the expected frequency ($n = 139.5$). The observed frequency for *hardly ever* ($n = 129$) was higher than the expected frequency ($n = 139.5$). Female superintendents in the United States do not perceive they sometimes have experienced the barrier of lack of family support as school leaders. Based on the researcher's decision that for the distribution of responses to support H53, sometimes or frequently must have been the high-frequency responses, H53 was not supported.

Table 60

Observed and Expected Frequencies for H53

Response	$f_{observed}$	$f_{expected}$
Never	372	139.5
Hardly ever	129	139.5
Sometimes	47	139.5
Frequently	10	139.5

H54. Female superintendents in the United States perceive they have experienced the barrier of hiring and promotional practices of board members and search consultants as school leaders.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 58.748$, $p = .000$. See Table 61 for the observed and expected frequencies. The observed frequency for *never* ($n = 162$) was higher than the expected frequency ($n = 139.0$). The observed frequency for *hardly ever* ($n = 187$) was higher than the expected frequency ($n = 139.0$). The observed frequency for *sometimes* ($n = 141$) was higher than the expected frequency ($n = 139.0$). Female superintendents in the United States perceive they never, hardly ever, or sometimes have experienced the barrier of hiring and promotional practices of board members and search consultants as school leaders. Based on the researcher's decision that for the distribution of responses to support H54, sometimes or frequently must have been the high-frequency responses, H54 was not supported.

Table 61

Observed and Expected Frequencies for H54

Response	$f_{observed}$	$f_{expected}$
Never	162	139.0
Hardly ever	187	139.0
Sometimes	141	139.0
Frequently	66	139.0

H55. Female superintendents in the United States perceive they have experienced the barrier of perceived as allowing their emotions to influence decisions as school leaders.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 67.329$, $p = .000$. See Table 62 for the observed and expected frequencies. The observed frequency for *never* ($n = 137$) was higher than the expected frequency ($n = 140.0$). The observed frequency for *hardly ever* ($n = 192$) was higher than the expected frequency ($n = 140.0$). The observed frequency for *sometimes* ($n = 168$) was higher than the expected frequency ($n = 140.0$). Female superintendents in the United States perceive they never, hardly ever, or sometimes have experienced the barrier of perceived as allowing their emotions to influence decisions as school leaders. Based on the researcher's decision that for the distribution of responses to support H55, sometimes or frequently must have been the high-frequency responses, H55 was not supported.

Table 62

Observed and Expected Frequencies for H55

Response	$f_{observed}$	$f_{expected}$
Never	137	140.0
Hardly ever	192	140.0
Sometimes	168	140.0
Frequently	63	140.0

H56. Female superintendents in the United States perceive they have experienced the barrier of the inability to relocate as school leaders.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 324.803$, $p = .000$. See Table 63 for the observed and expected frequencies. The observed frequency for *never* ($n = 321$) was higher than the expected frequency ($n = 139.25$). Female superintendents in the United States perceive they never have experienced the barrier of the inability to relocate as school leaders. Based on the researcher's decision that for the distribution of responses to support H56, sometimes or frequently must have been the high-frequency responses, H56 was not supported.

Table 63

Observed and Expected Frequencies for H56

Response	$f_{observed}$	$f_{expected}$
Never	321	139.25
Hardly ever	105	139.25
Sometimes	74	139.25
Frequently	57	139.25

H57. Female superintendents in the United States perceive they have experienced the barrier of an "old boy" network that promotes the selection of men over women as school leaders.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 94.757$, $p = .000$, Cramer's V = .237. See Table 64 for the observed and expected frequencies. The observed frequency for *sometimes* ($n = 211$) was higher than the expected frequency ($n = 140.0$). The observed frequency for *frequently* ($n = 178$) was higher than the expected frequency ($n = 140.0$). Female superintendents in the United States perceive they have experienced the barrier of an "old boy" network that promotes the selection of men over women as school leaders. Based on the researcher's decision that for the distribution of responses to support H57, sometimes or frequently must have been the high-frequency responses, H57 was supported. The effect size, as indexed by Cramer's V, indicated a small effect.

Table 64

Observed and Expected Frequencies for H57

Response	$f_{observed}$	$f_{expected}$
Never	65	140.0
Hardly ever	106	140.0
Sometimes	211	140.0
Frequently	178	140.0

H58. Female superintendents in the United States perceive they have experienced the barrier of the lack of skills in managing facilities, grounds, and building projects as school leaders.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 70.043$, $p = .000$. See Table 65 for the observed and expected frequencies. The observed frequency for *hardly ever* ($n = 158$) was higher than the expected frequency ($n = 140.0$). The observed frequency for *sometimes* ($n = 213$) was higher than the expected frequency ($n = 140.0$). Female superintendents in the United States perceive they hardly ever or sometimes have experienced the barrier of the lack of skills in managing facilities, grounds, and building projects as school leaders. Based on the researcher's decision that for the distribution of responses to support H58, sometimes or frequently must have been the high-frequency responses, H58 was not supported.

Table 65

Observed and Expected Frequencies for H58

Response	$f_{observed}$	$f_{expected}$
Never	97	140.0
Hardly ever	158	140.0
Sometimes	213	140.0
Frequently	92	140.0

H59. Female superintendents in the United States perceive they have experienced the barrier of not able to achieve organizational goals as school leaders.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 196.071$, $p = .000$. See Table 66 for the observed and expected frequencies. The observed frequency for *never* ($n = 226$) was higher than the expected frequency ($n = 140.0$). The observed frequency for *hardly ever* ($n = 209$) was higher than the expected frequency ($n = 140.0$). Female superintendents in the United States perceive they never or hardly ever have experienced the barrier of not able to achieve organizational goals as school leaders Based on the researcher's decision that for the distribution of responses to support H59, sometimes or frequently must have been the high-frequency responses, H59 was not supported.

Table 66

Observed and Expected Frequencies for H59

Response	$f_{observed}$	$f_{expected}$
Never	226	140.0
Hardly ever	209	140.0
Sometimes	103	140.0
Frequently	22	140.0

H60. Female superintendents in the United States perceive they have experienced the barrier of conflict or confusion regarding career goals as school leaders.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 276.327$, $p = .000$. See Table 67 for the observed and expected frequencies. The observed frequency for *never* ($n = 266$) was higher than the expected frequency ($n = 139.75$). The observed frequency for *hardly ever* ($n = 194$) was higher than the expected frequency ($n = 139.75$). Female superintendents in the United States perceive they never or hardly ever have experienced the barrier of conflict or confusion regarding career goals as school leaders. Based on the researcher's decision that for the distribution of responses to support H60, sometimes or frequently must have been the high-frequency responses, H60 was not supported.

Table 67

Observed and Expected Frequencies for H60

Response	$f_{observed}$	$f_{expected}$
Never	266	139.75
Hardly ever	194	139.75
Sometimes	91	139.75
Frequently	8	139.75

H61. Female superintendents in the United States perceive they have experienced the barrier of not able to manage staff as school leaders.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 191.848$, $p = .000$. See Table 68 for the observed and expected frequencies. The observed frequency for *never* ($n = 225$) was higher than the expected frequency ($n = 139.75$). The observed frequency for *hardly ever* ($n = 209$) was higher than the expected frequency ($n = 139.75$). Female superintendents in the United States perceive they never or hardly ever have experienced the barrier of not able to manage staff as school leaders. H61 was not supported.

Table 68

Observed and Expected Frequencies for H61

Response	$f_{observed}$	$f_{expected}$
Never	225	139.75
Hardly ever	209	139.75
Sometimes	100	139.75
Frequently	25	139.75

H62. Female superintendents in the United States perceive they have experienced the barrier of men being perceived to be more knowledgeable about administration; women being perceived to be more knowledgeable about teaching as school leaders.

The results of the chi-square test indicated there was not a statistically significant difference between the observed and expected values, $\chi^2(3) = 6.786$, $p = .079$. See Table 69 for the observed and expected frequencies. H62 was not supported.

Table 69

Observed and Expected Frequencies for H62

Response	$f_{observed}$	$f_{expected}$
Never	140	140.0
Hardly ever	150	140.0
Sometimes	155	140.0
Frequently	115	140.0

H63. Female superintendents in the United States perceive they have experienced the barrier of personal level of self-confidence as school leaders.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 112.136$, $p = .000$. See Table 70 for the observed and expected frequencies. The observed frequency for *never* ($n = 194$) was higher than the expected frequency ($n = 139.5$). The observed frequency for *hardly ever* ($n = 176$) was higher than the expected frequency ($n = 139.5$). The observed frequency for *sometimes* ($n = 154$) was higher than the expected frequency ($n = 139.5$). Female superintendents in the United States perceive they never, hardly ever, or sometimes have experienced the barrier of personal level of self-confidence as school leaders Based on the researcher's decision that for the distribution of responses to support H63, sometimes or frequently must have been the high-frequency responses, H63 was not supported.

Table 70

Observed and Expected Frequencies for H63

Response	$f_{observed}$	$f_{expected}$
Never	194	139.5
Hardly ever	176	139.5
Sometimes	154	139.5
Frequently	34	139.5

H64. Female superintendents in the United States perceive they have experienced the barrier of men being viewed by the community and staff as more qualified for a leadership position.

The results of the chi-square test indicated a statistically significant difference between the observed and expected values, $\chi^2(3) = 28.355$, $p = .000$. See Table 71 for the observed and expected frequencies. The observed frequency for *hardly ever* ($n = 152$) was higher than the expected frequency ($n = 140.25$). The observed frequency for *sometimes* ($n = 181$) was higher than the expected frequency ($n = 140.25$). Female superintendents in the United States perceive they hardly ever or sometimes have experienced the barrier of men being viewed by the community and staff as more qualified for a leadership position. Based on the researcher's decision that for the distribution of responses to support H64, sometimes or frequently must have been the high-frequency responses, H64 was not supported.

Table 71

Observed and Expected Frequencies for H64

Response	$f_{observed}$	$f_{expected}$
Never	94	140.25
Hardly ever	152	140.25
Sometimes	181	140.25
Frequently	134	140.25

Summary

In this chapter, the results of the study were presented. Included in this chapter were descriptive statistics and the results of the hypothesis testing. A study summary, findings related to the literature, and the conclusions are included in Chapter 5.

Chapter 5

Interpretation and Recommendations

The purpose of the study was to explore U.S. female superintendents' perceived career paths that have supported female superintendents' entry into the superintendency; perceived characteristics female superintendents agree the board of education believed specifically apply to them; perceived knowledge, skills, and abilities female superintendents agree the board of education perceived they demonstrated and possessed; and perceived barriers they faced. Provided in Chapter 5 is a study summary of the main points in Chapters 1-4. It also includes the findings related to the literature and the conclusions.

Study Summary

In this quantitative study, the researcher examined the perceptions of U.S. female superintendents. Participants included women superintendents from the United States. This section contains an overview of the problem, the purpose statement and research questions, a review of the methodology, and the major findings of the study.

Overview of the Problem

Although there is research on the topic, there has not been significant growth in how to create an environment in which the percentage of female superintendents is similar to the percentage of females in education. Current female superintendents' perceptions can provide insight into the career paths that led women to the superintendency; skills, knowledge, and abilities that they perceive as critical to their success; and the barriers that female superintendents may face on their way to the

superintendency. “In a field that is well populated by women, the glass ceiling effect is still present” (Sanchez & Thornton, 2010, p. 1).

Purpose Statement and Research Questions

The first purpose was to ascertain what perceived career paths supported U.S. female superintendents’ entry to the position. The second purpose was to examine perceptions regarding the characteristics U.S. female superintendents felt their board of education believed applied to them. The third purpose was to study the knowledge, skills, and abilities female superintendents in the United States perceive their board of education believed applied to them so that women aspiring to the superintendency can learn from and attain them. Finally, the fourth purpose was to examine the perceived barriers faced by female superintendents in the United States that could restrict opportunities for female superintendents or women aspiring to the superintendency. Four research questions were posed and 64 hypotheses were tested to address the purposes of this study.

Review of the Methodology

A quantitative research design was used to determine the perceptions of female superintendents as they related to career paths they felt pathed the way to the superintendency; what knowledge, skills, abilities, and characteristics school board members believed they had; and what perceived barriers they faced on their way to the superintendency. The population for this study was current female superintendents from the United States. The Ohio Women Superintendent Survey was modified with permission from Askren Edgehouse (2008). Modifications included removing district, board, and personal demographics, certain career path questions, and opportunities to comment. The researcher found lists of superintendents from each state’s state board of

education and state departments of education websites. For those with emails listed as well, female superintendent emails were utilized. For those without emails listed, female superintendents' district websites were searched for their email addresses. Chi-square tests for goodness of fit were conducted for all hypotheses testing.

Major Findings

The researcher for this study examined perceptions of female superintendents in the United States. The first finding is the perceived career paths that have supported the current female superintendents' entry into the superintendency. The second finding is the extent female superintendents agree they were selected because the board of education believed specific characteristics apply to them. The third is the extent female superintendents agree they were selected because the board of education perceived they demonstrated and possessed specific knowledge, skills, and abilities. The last finding is related to the barriers they faced on their way to the superintendency.

The first RQ dealt with the reported previous positions held by female superintendents. More female superintendents than expected reported having been an elementary building leader and having held a district-level position before the superintendency. However, fewer female superintendents than expected reported they were previously middle school/junior or high school building leaders.

After analyzing the results of the female superintendents' perceptions regarding characteristics their board of education believed applied to them, this researcher found that superintendents mildly agreed or agreed that the board of education believed they held all but two characteristics listed in the survey. Results indicate that female superintendents disagreed or mildly disagreed that they were selected because the board

of education believed they were motivated by power. They mildly agreed they were selected because the board believed they were politically aware. However, female superintendents mildly agreed or agreed that they were selected for the superintendency because the board of education believed the following characteristics applied to them: assertive, confident, competitive, decisive, family-oriented, nurturing, proactive, resilient, and risk-taker. Female superintendents agreed they were selected for the superintendency because the board of education believed the following characteristics applied to them: competent, concerned about personnel, confident, cooperative, fair & firm, goal-oriented, intelligent, and problem-solver.

Findings demonstrate that female superintendents in the United States perceived they were selected because the board of education perceived they demonstrated and possessed all specific knowledge, skills, and abilities but one listed in the survey. Results indicate that female superintendents in the United States mildly disagreed or mildly agreed that they were selected because the board of education perceived they demonstrated and possessed knowledge of collective bargaining. However, they mildly agreed or agreed that they were selected because the board perceived they demonstrated and possessed the following knowledge, skills, or abilities: strategic/long range planning; data-driven decision making; ability to bring about change; knowledge of budgeting; positive public image; ability to motivate others; ability to be in control of emotions; involving others in decision-making; knowledge of facilities, maintenance, and operation; knowledgeable of legal/personnel issues; knowledgeable of innovative education practices; effective school board relations; knowledgeable of assessment/testing practices; effective in promoting parent involvement; and knowledgeable of state and

federal programs. Female superintendents in the United States agreed they were selected because the board of education perceived they demonstrated and possessed the following knowledge, skills, or abilities: create a vision for the district; model core values of the organization; human relation skills/interactions, and knowledgeable about curriculum and instruction.

Results regarding female superintendents' perceptions of barriers they have experienced during their careers as school leaders are mixed. Female superintendents in the United States were undecided whether they had experienced the barrier of men are perceived to be more knowledgeable about administration; women are perceived to be more knowledgeable about teaching. Participants reported they had never experienced the barriers of lack of family support and the inability to relocate during their careers as school leaders. Female superintendents in the United States perceived they had never or hardly ever experienced the following barriers: women fail to plan for appropriate education and key experiences prior to seeking the superintendency; personal level of motivation; lack of professional network and/or mentoring; women are perceived as not able to achieve organizational goals; conflict or confusion regarding career goals; and women are perceived as not able to manage staff. Female superintendents in the United States perceived they had never, hardly ever, or sometimes experienced the following barriers: discrimination based on personal appearance; hiring and promotional practices of board members and search consultants; women are perceived as not able to achieve organizational goals; and personal level of self-confidence. Participants perceived they have hardly ever or sometimes experienced the following barriers: women are perceived to have inadequate skills in budgeting and finance; women are not considered politically

astute; women are perceived to lack skills in managing facilities, grounds, and building projects, and men are viewed by the community and staff as more qualified for a leadership position. Two barriers were reported to be sometimes or frequently experienced. Female superintendents in the United States perceived they had sometimes experienced the barrier of personal anxieties about the effect on family. They reported that they have sometimes or frequently experienced the "old boys' network."

Findings Related to the Literature

This section examines the current study's findings on how career paths, knowledge, skills, abilities, and barriers affect females in the superintendency. Similar studies have been conducted in individual regions or states, but few have conducted a similar quantitative study in all states. This section explains whether the current study supports or contrasts previous research.

Manuel (2001), Askren Edgehouse (2008), Kim and Brunner (2008), and Montz and Wanat (2008) also studied career paths for female superintendents' entry into the superintendency. Manuel (2001), Askren Edgehouse (2008), and Kim and Brunner (2008) reported that the most prevalent career pathway was teacher, elementary principal, and district-office staff prior to the superintendency. Montz and Wanat (2008) also reported that female superintendents take the pathway of teacher, elementary principal, and central office staff. The results of the current study, which provided evidence that the elementary principalship and a central office position is the path most women superintendents take prior to the superintendency, support the findings of Manuel (2001), Askren Edgehouse (2008), Kim and Brunner (2008), and Montz and Wanat (2008).

The current study participants agreed they were selected because the board of education believed the characteristics of competent, confident, cooperative, firm/fair/consistent, intelligent, and problem solver applied to them. The finding supports similar findings from Montz (2004), in which participants ranked the same characteristics the highest. The current study participants agreed that being goal-oriented was a characteristic for which they were selected. Askren Edgehouse (2008) had similar results, with competent, confident, cooperative, firm/fair/consistent, intelligent, problem solver, and goal-oriented. Askren Edgehouse (2008) also found decisive to be a characteristic of importance. Female superintendents in the current study agree they were selected because the board of education believed they were assertive. The current study also supported Askren Edgehouse's (2008) and Montz's (2004) findings that women superintendents disagreed that they were selected because their board believed they were motivated by power.

Montz (2004), Montz and Wanat (2008), Askren Edgehouse (2008), and Shuman (2020) found that human relations or communication skills were important in the superintendency. Nix (2021) found relationships and communication keys to superintendent success. Although Parent (2004) found that school board chair participants identified social and relationship and lack of experience outside of curriculum and instruction as barriers, the current study results show that women superintendents agree that their board believes they possess human relation skills and their knowledge of curriculum and instruction. Supported by the current study's findings, Roberts (2022) noted the importance of finding a district with which a female superintendent shares core values; participants in the current study also agreed they were

hired because boards believed they could model the core values of the district. In contrast to Askren Edgehouse (2008), whose participants ranked knowledge of budget and finance as least important, and Montz (2004), whose participants ranked it as one of the least important, the current study's participants mildly agreed or agreed they were hired because the board believed it was knowledge they possessed. This point is important because Askren Edgehouse noted that the finding does not indicate that women superintendents cannot manage budgets or school finance. After all, the question on the survey asked participants not to consider their skill but whether the board believed they possessed the skill. However, women in this study may hold similar opinions to women in other research that indicated that school board members do not find women qualified to manage a school budget. The increase in women superintendents indicated they were hired because their board saw them as having budgeting and finance skills may indicate a shift in belief that school board members find women qualified to manage a budget. Montz (2004) found decision-making, knowledge of curriculum and instruction, and positive public image to be the perceived skills that led to their selection as superintendent, which is supported by the findings of the current study,

Montz (2004) and Askren Edgehouse (2008) found personal anxieties about the effect of career on family to be the highest-ranked internal barrier. The findings of the current study supported Montz (2004) and Askren Edgehouse (2008) that female superintendents in the United States sometimes experience the barrier of personal anxieties about the effect of career on family during their careers as school leaders. Glass et al., (2000), Montz (2004), and Askren Edgehouse (2008) also found that the largest external barrier was the "old boys'" network that promotes the section of men over

women. These findings are supported by the current study's findings. Both experiencing the barrier of personal anxieties about the effect of career on family during their careers as school leaders and the "old boys' network" were the only two barriers experienced frequently or somewhat frequently in the current study.

The findings of the current study suggest that female superintendents in the United States perceive they sometimes have, to some extent, experienced the barrier of inadequate skills in budgeting and finance during their careers as school leaders. This finding supports Parent (2004), who found that board chairpersons identified lack of skill in budgeting and finance as a barrier to women superintendent candidates and contrasts with Askren Edgehouse (2008), who found that women superintendents in Ohio perceived skills in budgeting and finance during their careers as school leaders as the least important skill for which they were hired. Female superintendents in the United States hardly ever or sometimes experience the barrier of personal level of assertiveness during their careers as school leaders. The results of the current study also support Montz and Wanat's (2008) findings, in which participants had differing opinions on their personal level of assertiveness as a barrier. While 93% of participants found assertiveness to be an important superintendent characteristic, only 33% felt they were assertive. Sixty-six percent of participants in the study perceived themselves as less assertive in their personal lives but could be assertive to achieve district goals. The current study supports the findings of Montz and Wanat (2008) and Askren Edgehouse (2008) that female superintendents in the United States perceive they hardly ever or sometimes have experienced the barrier of discrimination based on women are not considered politically astute. "Women's lack of political savvy" (Montz & Wanat, 2008, p. 2) was reported as a

reason that women were discouraged from the superintendency. In the U.S. Women's Superintendent Survey, 76.3% of women reported political astuteness as an important characteristic in participants' selection as the superintendent.

The current study's findings support Glass (2000), Robinson et al. (2017), and Perry (2020), that failing to plan for appropriate education and key experiences prior to seeking the superintendency is not a perceived barrier for women superintendents. Glass (2000) reported that more than 50% of education graduate programs are women. Although the number of women in education programs is comparable to men, only 10% of those earn their superintendency credentials and that degree. Robinson et al. (2017) found that 60.5% of female superintendents held a doctorate or other professional degree, while 49.7 percent of male superintendents held one. Perry (2020) also reported that women earned 68.4 % of EdDs. Robinson et al. (2017) and Shakeshaft (1987) reported motivation as showing one of the internal barriers women face in the superintendency. The finding of the current study that women never or hardly ever perceive motivation as a barrier contrasts with Robinson et al. (2017) and Shakeshaft (1987). Female superintendents in the United States perceive they have never, hardly ever, or sometimes have experienced the barrier of discrimination based on personal appearance as school leaders. Clark-Saboda (2022) reported that women felt treated the same as men in some areas but felt judged on appearance. Shuman (2020) reported that a participant reported that men are based only on performance in the superintendency, but women are based on performance and appearance. She reported that "women have been her harshest critics, and how she vowed to pick other women up instead of tearing them down" (Shuman, 2020, p. 156). In 2008, Askren Edgehouse found that discrimination based on personal

appearance was the least frequently experienced barrier in the Ohio Women Superintendents Survey. The findings of the current study contrast with Askren Edgehouse (2008), in which 26.5% of respondents indicated that they have sometimes experienced appearance discrimination and Montz (2004), who found 41.9% of respondents slightly agreed or agreed that they had experienced discrimination based on personal experience.

Conclusions

The results of this study provide insight for potential female superintendents, boards of education, university preparation programs, state departments of education, and professional organizations. This study provides insight into the career paths, characteristics, knowledge skills and abilities, and barriers current female superintendents face. The following section includes implications for action, recommendations for future research, and concluding remarks.

Implications for Action

The results of this study can help provide feedback to female educators with the goal of becoming a superintendent. These aspiring superintendents can utilize the information in this study to make career decisions that may make them better prepared for and better perceived as being prepared for the superintendency. Volunteering to be on committees related to an area of perceived importance, such as a budget committee, or intentionally gaining skills in human relations could increase the likelihood of being hired by a school board. Additionally, being aware of barriers one may face can also benefit potential superintendents. A woman may think, for instance, that the personal anxiety over family responsibilities may indicate she should not set the superintendency as her

goal. Understanding that even sitting superintendents have had the same anxiety may make the barrier seem like one that can be overcome.

On the same note, current female superintendents have the power to affect positively the future of females in the superintendency. The impact could be through mentoring but also from acting on the results of the study. Discussing their experiences of their career path, characteristics, skills, abilities, and knowledge, as well as the barriers they face, could help support other current superintendents and potential female superintendent candidates. Normalizing females in the superintendency would be beneficial to all.

The results of this study could also help university preparation programs, state departments of education, and professional organizations. These entities could have a positive impact on females in the superintendency. Departments of education and professional organizations could offer leadership academies for women that include current female superintendents as speakers, mentoring, and networking opportunities, like that studied by Warden (2022). University preparation programs could review curriculum and practices. Recognizing that the "old boys' network" is the greatest barrier for female superintendents across the country, university preparation programs, state departments of education, and professional organizations need to move away from promoting that network to being more inclusive institutions. Increasing inclusivity occurs by being intentional about diversity, including current or past female superintendents as speakers and authors. Representation matters and university preparation programs, state departments of education, and professional organizations can use the information in this study to increase current professionals' interaction with female superintendents. That

could increase knowledge of potential career paths, characteristics, knowledge, skills, and abilities and show others that regardless of barriers, it is possible to be a female superintendent.

Recommendations for Future Research

This study adds to the research related to the females in the superintendency. This addition includes research on female superintendent career paths, characteristics, knowledge, skills, and abilities, and the barriers faced by female superintendents. Three suggestions for future research are as follows:

1. One recommendation for future research includes a researcher working with current female superintendents to update the U.S. Superintendents Survey. Updating this survey may better reflect the most current knowledge, skills, abilities, characteristics, and barriers. As attitudes, behaviors, and practices may have changed over time, an updated national study may reflect knowledge, skills, abilities, characteristics, and barriers not accessible on the U.S. Superintendents Survey. One specific update could be focusing on the "old boys' network" in the barriers section of the survey to gain more specific information on what women superintendents perceive they have encountered.
2. A second recommendation for future research includes using a mixed methods approach in a national study. This research would allow the researcher to view perceptions from different viewpoints. The quantitative data could be collected to assess perceptions, and the qualitative data could gain insight into the experiences behind those perceptions.

3. Chiefs for Change (2019) asserted that although women account for 76% of the teacher workforce, only 11% are women of color. The U.S. Women Superintendent Survey could be modified to include variables related specifically to the underrepresentation of women superintendents of color. As a study of women across the United States, this future research recommendation could better indicate all women's knowledge, skills, abilities, characteristics, and barriers by differentiating those of White women and women of color. This recommendation for research was suggested by a participant in the U.S. Women Superintendent Survey, as the barriers faced by a woman of color may be significantly different from those of White women.

Concluding Remarks

There is a history of gender inequality in education, leading to the underrepresentation of women in educational leadership positions (Bernal et al., 2017). Gender equality in school leadership leads to increased collaboration and more stakeholder input and creates role models for staff and students of women in leadership. Although the number of female superintendents is increasing, more needs to be done to ensure equal representation in the superintendency for the benefit of the qualified women who desire the positions, students, and society. Preparation for women seeking the superintendency could support this needed societal change.

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Appendices

Appendix A: Ohio Women Superintendents Survey

BGSU
Bowling Green State University

Ohio Women Superintendents Survey

Directions: Please consider each question and select the response which most closely matches your experiences, attitudes, and/or beliefs. The survey will take approximately 15-20 minutes to complete. Your help with this research is greatly appreciated. Thank you for your participation.

Part 1: District and Board Demographics
The questions listed here will provide data about the district in which female superintendents work. Please select the response that most closely resembles your district.

1. **How is your position classified?**
   - ○ City School District Superintendent
   - ○ Local School District Superintendent
   - ○ Exempted Village School District Superintendent
   - ○ Career Technical School District/JVSD Superintendent Go to item 4.
   - ○ Educational Service Center (ESC) Superintendent Go to item 5.

2. **How is your district classified?**
   - ○ Rural
   - ○ Suburban
   - ○ Urban

3. **What was your district's Local Report Card rating for the 2006- 2007 school year?**
   - ○ Excellent
   - ○ Effective
   - ○ Continuous
   - ○ Academic Watch
   - ○ Academic Emergency

4. **How many students were enrolled in your district as of September 2007?**

   _____

5. **How many of these Board members are women?**

   _____

6. **What group/individuals managed the search process for your current superintendency?**
   - ○ Professional search team
   - ○ State school board association
   - ○ Local school board members
   - ○ County office/ESC

   Other (please specify)

   _____

   _____

7. **During the search and selection process, the board was actively involved with... (Please check all that apply)**

- ☐ Identifying criteria for selection
- ☐ Contacting/checking for references
- ☐ Selecting participants of staff/community groups
- ☐ Screening applications and credentials
- ☐ Interviewing
- ☐ Uncertain

Other (please specify)

_____

_____

8. **Which of the following best describes how you obtained your current superintendency position?**

- ○ Hired from within
- ○ New to district
- ○ Hired from a district within my service area

9. **Please describe your impressions of your experiences with hiring practices of school districts.**

_____

_____

_____

_____

_____

Part 2: Career Paths

The questions listed in Part 2 will provide data about the education and experiences of female superintendents. Please select the response that most closely resembles your experiences and education.

10. **What is the highest earned degree you hold?**

- ○ Master's Degree
- ○ Education Specialist
- ○ Doctorate

Other (please specify)

_____

11. **Which of the following was your major field of study in your highest graduate degree?**

- ○ Educational administration
- ○ Curriculum and instruction
- ○ Elementary education
- ○ Middle childhood education
- ○ Secondary education
- ○ Humanities or fine arts
- ○ Science or engineering
- ○ Mathematics
- ○ Business

Other (please specify)

_____

_____

12. **Are you currently working toward an academic degree?**
    - ○ Yes
    - ○ No Go to item 14.

13. **Please indicate the academic degree you are working toward.**
    - ○ Master's
    - ○ Education Specialist
    - ○ Doctorate

    Other (please specify)

    _____

14. **How many years were you a classroom teacher? (Do *not* count your years as an administrator.)**

    _____

15. **Other than as a superintendent, how many years were you in administrative/supervisory positions? (Do *not* count years as a superintendent.)**

    _____

16. **What do you believe is the most important reason you were employed by your present board of education? Please *rank* your responses on a scale where *1 = Least important* and *6 = Most important*. Select each rank only one time. You may also respond *Does not apply to me*.**

	1 = Least important	*2*	*3*	*4*	*5*	*6 = Most important*	*Does not apply to me*
Personal characteristics (honesty, tact, etc.)	○	○	○	○	○	○	○
Potential to be a change agent	○	○	○	○	○	○	○
Ability to maintain the status quo	○	○	○	○	○	○	○
Ability to be an instructional leader	○	○	○	○	○	○	○
Racial/ethnic group(s) I represent	○	○	○	○	○	○	○

Other (please specify)

_____

_____

17. **Which of the following educational experiences best describe your career path to the superintendency?**
    - ○ Teacher > principal > central office/ESC > assistant/associate superintendent
    - ○ Teacher > principal > central office/ESC
    - ○ Teacher > principal > assistant/associate superintendent
    - ○ Teacher > central office/ESC > assistant/associate superintendent
    - ○ Teacher > principal
    - ○ Teacher > central office/ESC
    - ○ Principal only
    - ○ Central office/ESC only
    - ○ Assistant/associate superintendent only

    Other (please specify)

    _____

    _____

18. **What did you teach in your first full- time teaching position? Please select all that apply.**

- ☐ Art
- ☐ Business Education
- ☐ Computer Education/ Technology
- ☐ Consumer Science
- ☐ Counseling
- ☐ Driver Education
- ☐ Elementary Education
- ☐ English
- ☐ Foreign Languages
- ☐ Mathematics
- ☐ Physical Education/ Health
- ☐ Science
- ☐ Social Studies
- ☐ Special Education
- ☐ Vocational/Career Technology

Other (please specify)

_____

_____

19. **In which of the following positions have you had ONE full year or more experience? Please select all that apply.**

- ☐ Elementary teacher
- ☐ Middle school/junior high teacher
- ☐ High school teacher
- ☐ Counselor
- ☐ Elementary associate/assistant principal
- ☐ Elementary principal
- ☐ Middle school/junior high associate/assistant principal
- ☐ Middle school/junior high principal
- ☐ High school associate/assistant principal
- ☐ High school principal
- ☐ Curriculum coordinator
- ☐ Supervisor or consultant
- ☐ College or university professor
- ☐ Associate/Assistant superintendent

20. **What extracurricular activities did you have a contract for while teaching? Please select all that apply.**

- ☐ Coaching athletics
- ☐ Newspaper/yearbook
- ☐ Class/club advisor
- ☐ Music director
- ☐ None

Other (please specify)

_____

_____

21. **How long did it take you to obtain your first administrative/supervisory position once you were certified/licensed and actively sought such a role?**

- ○ Less than 1 year
- ○ 1 year
- ○ 2 years
- ○ 3 years
- ○ 4 years
- ○ 5+ years
- ○ I did not seek the position and was appointed.

22. **What was the nature of your *first* administrative/supervisory position?**

- ○ Elementary Principal
- ○ Elementary Associate/Assistant Principal
- ○ Middle School/Jr. High Principal
- ○ Middle School/Jr. High Assistant/Associate Principal
- ○ High School Principal
- ○ High School Assistant/Associate Principal
- ○ District Office (other than Associate/Assistant Superintendent)
- ○ Associate/Assistant Superintendent
- ○ ESC/Consultant/Supervisor

Other (please specify)

_____

_____

23. **Counting this year, how many years have you been a school superintendent?**

_____

24. **How many school superintendencies have you held?**

_____

25. **In how many states have you served as a school superintendent?**

_____

26. **Have you spent your entire career in one school district?**

- ○ Yes
- ○ No

27. **How long did it take you to obtain your first superintendency once you were certified/licensed and actively sought such a position?**

- ○ Less than 1 year
- ○ 1 year
- ○ 2 years
- ○ 3 years
- ○ 4 years
- ○ 5+ years
- ○ I did not seek the position and was appointed.

28. **Please provide comments regarding the time it took for you to obtain your first superintendency.**

_____

_____

_____

_____

_____

_____

_____

29. **Did a practicing or retired administrator serve as a mentor in helping you earn your *first* administrative position?**

- ○ Yes
- ○ No Go to item 31.

30. **Was this mentor male or female?**

- ○ Male
- ○ Female

31. **Did a practicing or retired administrator serve as a mentor in helping you earn your *first* superintendency?**

- ○ Yes
- ○ No Go to item 33.

32. **Was this mentor male or female?**

- ○ Male
- ○ Female

33. Please provide comments regarding your experiences with mentors.

_____
_____
_____
_____
_____
_____
_____

34. In your opinion, which of the following is your Board's primary expectation of you as a superintendent?

- ○ Educational leader
- ○ Community leader
- ○ Leader of school reform initiative
- ○ Managerial leader
- ○ Political leader

Other (please specify)

_____
_____

Part 3: Personal Demographics

The following questions pertain to personal demographics. Please select the response that most closely describes you.

35. What is your ethnic background?

- ○ American Indian/Alaskan Native
- ○ Asian/Pacific Islander
- ○ Latino
- ○ Black/Non-Latino
- ○ White/Non-Latino

Other (please specify)

_____

36. What is your marital status?

- ○ Married
- ○ Single
- ○ Divorced
- ○ Widowed

37. What is your age?

_____

38. How many children are you raising or have you raised?

_____

If you do not have children, go to item 41.

39. How many years have you had children in your household while you have been a superintendent?

_____

40. Please list all of the ages of the children in your household when you first became a superintendent.

_____
_____

Part 4: Characteristics
Shown below is a list of characteristics that are common in effective superintendents.

41. How strongly do you agree that you were selected by the board of education to be the superintendent of your district because the *board of education believed* the following characteristics applied to you?

	Disagree	*Mildly Disagree*	*Mildly Agree*	*Agree*
a. Assertive	○	○	○	○
b. Career oriented	○	○	○	○
c. Competent	○	○	○	○
d. Competitive	○	○	○	○
e. Concerned about personal relationships	○	○	○	○
f. Confident	○	○	○	○
g. Cooperative	○	○	○	○
h. Decisive	○	○	○	○
i. Fair, firm, and consistent	○	○	○	○
j. Family oriented	○	○	○	○
k. Flexible	○	○	○	○
l. Goal/task oriented	○	○	○	○
m. Intelligent	○	○	○	○
n. Motivated by power	○	○	○	○
o. Nurturing/supportive/approachable	○	○	○	○
p. Politically aware	○	○	○	○
q. Proactive	○	○	○	○
r. Problem solver	○	○	○	○
s. Resilient	○	○	○	○
t. Risk taker	○	○	○	○

42. Please provide comments regarding characteristics of superintendents.

_____

_____

_____

_____

_____

_____

_____

Part 5: Knowledge, Skills, and Abilities
Shown below is a list of knowledge, skills, and abilities that effective superintendents demonstrate and possess.

43. How strongly do you agree that you were selected by the board of education to be superintendent of your district because the *board of education perceived that you demonstrated and possessed* the following knowledge, skills, and abilities?

	Disagree	*Mildly Disagree*	*Mildly Agree*	*Agree*
a. Create a vision for the district	○	○	○	○
b. Strategic/long range planning	○	○	○	○
c. Model core values of the organization	○	○	○	○
d. Data driven decision-making to improve student achievement	○	○	○	○
e. Ability to bring about change	○	○	○	○
f. Human relation skills/interactions	○	○	○	○
g. Knowledgeable in budgeting and finance	○	○	○	○
h. Positive public image	○	○	○	○
i. Ability to motivate others	○	○	○	○
j. Ability to be in control of emotions	○	○	○	○
k. Involve others in decision-making	○	○	○	○
l. Knowledgeable of facilities, maintenance and operation	○	○	○	○
m. Knowledgeable about curriculum and instruction	○	○	○	○
n. Collective bargaining	○	○	○	○
o. Knowledgeable in legal/personnel issues	○	○	○	○
p. Knowledgeable of innovative education practices	○	○	○	○
q. Effective school board relations	○	○	○	○
r. Knowledgeable of assessment/testing practices	○	○	○	○
s. Effective in promoting parent involvement	○	○	○	○
t. Knowledgeable of state and federal programs	○	○	○	○

44. Please provide comments regarding knowledge, skills, and abilities of superintendents.

_____

_____

_____

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_____

_____

Part 6: Barriers
Shown below is a list of barriers that may limit career opportunities for women in educational administration.

45. To what extent have you experienced the following barriers during your career as a school leader?

	Never	*Hardly Ever*	*Sometimes*	*Frequently*
a. Personal anxieties about effect of career on family	○	○	○	○
b. Women are perceived to have inadequate skills in budgeting and finance	○	○	○	○
c. Personal level of assertiveness	○	○	○	○
d. Women are not considered politically astute	○	○	○	○
e. Women fail to plan for appropriate education and key experiences prior to seeking the superintendency	○	○	○	○
f. Personal level of motivation	○	○	○	○
g. Discrimination based on personal appearance	○	○	○	○
h. Lack of professional network and/or mentoring	○	○	○	○
i. Lack of family support	○	○	○	○
j. Hiring and promotional practices of board members and search consultants	○	○	○	○
k. Women are perceived as allowing their emotions to influence decisions	○	○	○	○
l. Inability to relocate	○	○	○	○
m. There is an "old boy" network that promotes the selection of men over women	○	○	○	○
n. Women are perceived to lack skills in managing facilities, grounds, and building projects	○	○	○	○
o. Women are perceived as not able to achieve organizational goals	○	○	○	○
p. Conflict or confusion regarding career goals	○	○	○	○
q. Women are perceived as not able to manage staff	○	○	○	○
r. Men are perceived to be more knowledgeable about administration; women are perceived to be more knowledgeable about teaching	○	○	○	○
s. Personal level of self-confidence	○	○	○	○
t. Men are viewed by the community and staff as more qualified for a leadership position	○	○	○	○

46. Please provide comments regarding barriers you have experienced.

_____

_____

_____

_____

_____

_____

_____

Thank you for completing this survey.
Your input is greatly appreciated.

Please remember to clear your browser's cache and page history after you submit the survey in order to protect your privacy.

To send your responses, please click SUBMIT.

Appendix B. Permission for Survey Use

Heather,

Please feel free to use and/or modify the Superintendent's Survey created for my dissertation. I would be very interested in hearing more about your dissertation.
Thanks,
Carol Montz

Hi Heather,

Absolutely! Please feel free to use the survey. If you need anything else, just ask. Good luck finalizing your dissertation!

Hope you had a wonderful Thanksgiving,
Melissa

Appendix C. U.S. Women's Superintendent Survey

US Women's Superintendent Survey

How strongly do you agree that you were selected by the board of education to be the superintendent of your district because *the board of education believed* the following characteristics applied to you?

	Disagree	Mildly Disagree	Mildly Agree	Agree
1. Assertive	◯	◯	◯	◯
2. Career-oriented	◯	◯	◯	◯
3. Competent	◯	◯	◯	◯
4. Competitive	◯	◯	◯	◯
5. Concerned about personal relationships	◯	◯	◯	◯
6. Confident	◯	◯	◯	◯
7. Cooperative	◯	◯	◯	◯
8. Decisive	◯	◯	◯	◯
9. Fair, firm, and consistent	◯	◯	◯	◯
10. Family-oriented	◯	◯	◯	◯
11. Flexible	◯	◯	◯	◯
12. Goal/Task-oriented	◯	◯	◯	◯
13. Intelligent	◯	◯	◯	◯
14. Motivated by power	◯	◯	◯	◯
15. Nurturing/supportive/approachable	◯	◯	◯	◯
16. Politically aware	◯	◯	◯	◯
17. Proactive	◯	◯	◯	◯
18. Problem-solver	◯	◯	◯	◯
19. Resilient	◯	◯	◯	◯
20. Risk-taker	◯	◯	◯	◯

How strongly do you agree that you were selected by the board of education to be superintendent of your district because the *board of education perceived* that you demonstrated and possessed the following knowledge, skills, and abilities?

	Disagree	Mildly Disagree	Mildly Agree	Agree
21. Create a vision for the district	○	○	○	○
22. Strategic/long range planning	○	○	○	○
23. Model core values of the organization	○	○	○	○
24. Data driven decision-making to improve student achievement	○	○	○	○
25. Ability to bring about change	○	○	○	○
26. Human relation skills/interactions	○	○	○	○
27. Knowledgeable in budgeting and finance	○	○	○	○
28. Positive public image	○	○	○	○
29. Ability to motivate others	○	○	○	○
30. Ability to be in control of emotions	○	○	○	○
31. Involve others in decision-making	○	○	○	○
32. Knowledgeable of facilities, maintenance and operation	○	○	○	○
33. Knowledgeable about curriculum and instruction	○	○	○	○
34. Collective bargaining	○	○	○	○
35. Knowledgeable in legal/personnel issues	○	○	○	○
36. Knowledgeable of innovative education practices	○	○	○	○
37. Effective school board relations	○	○	○	○
38. Knowledgeable of assessment/testing practices	○	○	○	○
39. Effective in promoting parent involvement	○	○	○	○
40. Knowledgeable of state and federal programs	○	○	○	○

To what extent have you experienced the following barriers during your career as a school leader?

	Never	Hardly Ever	Sometimes	Frequently
41. Personal anxieties about effect of career on family	○	○	○	○
42. Women are perceived to have inadequate skills in budgeting and finance.	○	○	○	○
43. Personal level of assertiveness	○	○	○	○
44. Women are not considered politically astute	○	○	○	○
45. Women fail to plan for appropriate education and key experiences prior to seeking the superintendency	○	○	○	○
46. Personal level of motivation	○	○	○	○
47. Discrimination based on personal appearance	○	○	○	○
48. Lack of professional network and/or mentoring	○	○	○	○
49. Lack of family support	○	○	○	○
50. Hiring and promotional practices of board members and search consultants	○	○	○	○

51. Women are perceived as allowing their emotions to influence decisions	○	○	○	○
52. Inability to relocate	○	○	○	○
53. There is an "old boy" network that promotes the selection of men over women	○	○	○	○
54. Women are perceived to lack skills in managing facilities, grounds, and building projects	○	○	○	○
55. Women are perceived as not able to achieve organizational goals	○	○	○	○
56. Conflict or confusion regarding career goals	○	○	○	○
57. Women are perceived as not able to manage staff	○	○	○	○
58. Men are perceived to be more knowledgeable about administration; women are perceived to be more knowledgeable about teaching	○	○	○	○
59. Personal level of self-confidence	○	○	○	○
60. Men are viewed by the community and staff as more qualified for a leadership position	○	○	○	○

61. In your opinion, which of the following is your board's primary expectation of you as a superintendent?

- ◯ Educational leader
- ◯ Community leader
- ◯ Leader of school reform initiative
- ◯ Political leader
- ◯ Managerial leader

62. Counting this year, how many years have you been a school superintendent?

Your answer

63. How many school superintendencies have you held?

Your answer

64. Have you spent your entire career in one school district?

- ◯ Yes
- ◯ No

65. How long did it take you to obtain your first superintendency once you were certified/licensed and actively sought such a position?

- ◯ Less than 1 year
- ◯ 1 year
- ◯ 2 years
- ◯ 3 years
- ◯ 4 years
- ◯ 5 + years
- ◯ I did not seek the position and was appointed.

66. In which of the following positions have you had ONE full year or more experience? Please select all that apply.

- ◯ Elementary Building Administrator
- ◯ Middle School/Junior High Building Administrator
- ◯ High School Principal
- ◯ Other district-level position
- ◯ None of the above

67. Did a practicing or retired administrator serve as a mentor in helping you earn your first administrative position?

- ◯ Yes
- ◯ No

68. Was this mentor male or female?

- ◯ Male
- ◯ Female
- ◯ Non-Binary
- ◯ Not Applicable

69. Did a practicing or retired administrator serve as a mentor in helping you earn your first superintendency?

- ◯ Yes
- ◯ No

70. Was this mentor male or female?

- ◯ Yes
- ◯ No
- ◯ Non-Binary
- ◯ Not Applicable

Appendix D: IRB Letter of Approval

BAKER UNIVERSITY
Own Confidence

Baker University Institutional Review Board

December 13th, 2022

Dear Heather Renk and Susan Rogers,

The Baker University IRB has reviewed your project application and approved this project under Expedited Status Review. As described, the project complies with all the requirements and policies established by the University for protection of human subjects in research. Unless renewed, approval lapses one year after approval date.

Please be aware of the following:

1. Any significant change in the research protocol as described should be reviewed by this Committee prior to altering the project.
2. Notify the IRB about any new investigators not named in original application.
3. When signed consent documents are required, the primary investigator must retain the signed consent documents of the research activity.
4. If this is a funded project, keep a copy of this approval letter with your proposal/grant file.
5. If the results of the research are used to prepare papers for publication or oral presentation at professional conferences, manuscripts or abstracts are requested for IRB as part of the project record.
6. If this project is not completed within a year, you must renew IRB approval.

If you have any questions, please contact me at npoell@bakeru.edu or 785.594.4582.

Sincerely,

Nathan D. Poell

Nathan Poell, MLS
Chair, Baker University IRB

Baker University IRB Committee
Tim Buzzell, PhD
Nick Harris, MS
Scott Kimball, PhD
Susan Rogers, PhD

Appendix E: Survey Solicitation Letter

January 3, 2023

Dear Superintendent,

My name is Heather Renk, and I am a principal in St. Joseph, Missouri, and a doctoral candidate at Baker University. The title of my study is The Glass Ceiling in K-12 Education: How Career Paths, Knowledge, Skills, Abilities, and Barriers Affect Females in the Superintendency. The purpose of my study is to investigate the underrepresentation of women in the role of superintendent, despite educators being primarily female. Participation in this study is voluntary. There are no risks associated with your participation, and should you decide not to submit the survey, there will be no repercussions.

Completion of the survey will indicate your consent to participate in the study. The survey is entirely confidential. Your name and email address will not be collected, and all responses will be reported in summary form. Responses will remain anonymous, and data will not be associated with any individual respondent.

The survey consists of 70 items. Please use the link below to access and complete the survey by January 20, 2023.

Survey Link: https://forms.gle/Due2aHWAzA1ndYuP7

Thank you in advance for your time and participation in this study. If you have questions about this survey, the study, or your rights as a participant, please contact me by email at HeatherLRenk@stu.bakeru.edu, 785-217-5596 or my major advisor, Dr. Susan Rogers, at srogers@bakeru.edu.

Sincerely,