

Women Leaders in Ohio Schools: A Statewide Analysis of the Typology of Female Superintendents

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Abstract

This study investigated the typology of female and male superintendents in Ohio to determine if a difference exists in the typology of female superintendents when compared to their male counterparts. Theories of gender differences and leadership styles, role congruity theory, and transformational leadership provided the framework for this study. The quantitative research design focused on a descriptive analysis of data. The sample was comprised of all school superintendents in the state of Ohio; a total of 614 participants. However, it is important to note that the study looked at males versus females, so while the sample size for males topped 518, the sample size for females was 96, a 15.64% confidence value. The findings demonstrate the underrepresentation of females in the superintendency, fewer women in each typology, clusters of female superintendents in particular regions of the state, and a higher percentage of females in the Big 8 districts. Implications of these findings are discussed and suggestions for future research given.

The latter half of the 20th century revealed a significant rise in women's involvement in the workforce (U.S. Bureau of Labor Statistics, 2017). By 1999, women constituted 60% of all workers in the United States, a statistic that has held steadily into the 21st century. Women continued to excel in other areas as well. Educational attainment for women ages 25 to 64 showed upward trends with 11% holding bachelor's degrees or higher in 1970 to 42% in 2016; in comparison, men's attainment of college degrees had doubled in that same time span. Men ages 25 to 64 showed upward trends with 15.7% holding bachelor's degrees or higher in 1970 to 36.2% in 2016.

Despite constituting over half the workforce, women continue to lag behind men in leadership positions. In the 21st century, women were trapped in lower-level management positions, where upward mobility was less likely to occur (Lang, 2010). Similar equity issues exist in the educational world as the progress of upward movement for aspiring women leaders continues to move at a slow pace. Women teachers represent 72% of the educational workforce and 54% of elementary principals, but only 24% hold the position of school superintendent (Domenech, 2012). The school superintendent plays one of the most influential roles in a school community; all qualified leaders should be considered, and no one individual should be excluded based on race or gender.

It is evident that discrimination exists in the position of superintendent. Eliminating discrimination in hiring practices may be one possible solution to the shortage of superintendents (Brunner & Kim, 2010; Glass & Kowalski, 2003). School districts need to strive for representative proportionality to females in the education field. Hunt et al. (2018) noted that companies with diverse executive teams outperform other by 21% and are more likely to be profitable (27%). Through a close analysis of the district location and typology that currently *Leadership and Research in Education: The Journal of the Ohio Council of Professors of Educational Administration (OCPEA)*, Volume 7, Issue 1, 2022

employ female superintendents, conclusions can be drawn to break down existing barriers and eliminate discrimination for females aspiring to the superintendency.

While it might be easy to argue that statistics support a figurative *glass ceiling*, data exist to support that there is a real glass ceiling with respect to women obtaining the role of superintendent. A review of current literature is void of any research specifically comparing the district typology between female and male superintendents. This study will address that gap in the literature. This study will investigate the typology of female and male superintendents in Ohio to determine if a difference exists in the typology of female superintendents when compared to their male counterparts.

This study was designed to identify the types of positions female superintendents secure related to region and district typology. This was done by examining the following research questions:

1. In which district typographies are male and female superintendents employed?
2. What regions in Ohio are female superintendents employed?
3. What counties are female superintendents employed?
4. Is there a statistically significant relationship between gender and district typographies for male and female superintendents in Ohio?

Examination of these questions provides insight for aspiring superintendents allowing them to better understand the current barriers in place for females in Ohio related to district region and typology.

Theoretical Framework

This theoretical framework is prompted by the under-representation of women in educational leadership positions; specifically, the superintendency. Theories of gender

differences and leadership styles, role congruity theory, and transformational leadership provided the framework for this study. The theory that may underlie this issue may be skewed perceptions of the role of women and women's leadership abilities.

Gender Differences and Leadership Style

Gender role identity defines a stereotypical individual self-perception as masculine or feminine that encompasses traits that are regarded the standard for each sex in society (Saint-Michel, 2018; Wood & Eagly, 2009). In this model, gender identity content is framed in terms of agency and communion. Men are expected to display agentic characteristics, such as assertiveness, striving for achievement and competitiveness. In contrast, women are expected to display communal characteristics, including a caring, compassionate, and thoughtful nature for others (Diekmann & Eagly, 2000; Saint-Michel, 2018). When female leaders demonstrate the agentic requirements of their leadership role and fail to show the collective behaviors more associated with women, female leaders can be negatively judged for exerting male-associated actions.

For decades, most leadership positions were held by men, creating an understanding of leadership based on stereotypical views (Ayman & Korabik, 2010). "Traits related to leadership are not culturally universal, and . . . because traits have an impact on the way that men and women are perceived as leaders, gender can affect access to leadership positions" (Ayman & Korabik, 2010, p. 162). For women such access can be hindered when decision-makers rely heavily on perceived leadership characteristics based on a stereotypic view of leadership.

Emphasizing the differences between males and females has served as a way to classify the roles of individuals based on gender; thus, boys and girls are expected to gain gender-specific skills or develop self-concepts based on the male and female characteristics defined by the

culture in which they live (Bem, 1981). Societies differ on the specific tasks they give to men and women; however, all societies assign adult roles based on gender and typically pass associated beliefs on to their children. “The process by which a society transmutes male and female into masculine and feminine is known as the process of sex typing, . . . and as children learn the contents of the society’s gender schema, they learn which attributes are linked with their own sex, hence, with themselves” (Bem, 1981, pp. 354–355). Sex-typed individuals are not seen for the degree of masculinity or femininity they possess, but whether or not their self-concepts and behaviors are based on gender. Despite changes in male and female roles and changes in the workforce, the desirability ratings have remained constant because “respondents still believed that traditional images of what traits are desirable ‘for a man’ and ‘for a woman’ . . . in contemporary American society” (Auster & Ohm, 2000, p. 526).

Stereotyping has become an influential and unseen threat to women in the workplace and a main cause of gender gaps in leadership given the perceived qualities of masculine and feminine leadership qualities (Kellerman & Rhode, 2017). Male leaders are commonly stereotyped with actions, ambitions, confidence, assertiveness, independence, rationality, decisiveness, domination, intimidation and risk assessment. On the contrary, female leaders are typically stereotyped with expressiveness, concern for others, acceptance, patience, sensitivity, warmth, compassion, helpfulness, nurturance, conformity and attention to detail. While assertiveness and ambition is seen as favorable for men, it is unfavorable for women; physical attractiveness is more beneficial to women’s success and showing emotions is equally harmful to both men and women.

Role Congruity Theory

Ben coined the term *androgynous* to refer to individuals who employed both masculine and feminine psychological characteristics (Bem, 1981). According to Bem, within each individual, there is a ratio of masculine and feminine traits, and an ideal picture is actualized when they are balanced and interchangeable. If we are talking about an androgynous female, she would embody the necessary masculine behavior at work: setting goals, defending her interests, achieving results while simultaneously focusing on people. All the while she is understanding, sensitive and affectionate with family and friends. An androgynous male's behavior would incorporate flexibility and implement both assertiveness and acceptance, domination and collaboration, risk behavior and cautiousness, giving and receiving.

Some individuals do not fit the traditional distinction of gender stereotyped leadership roles. According to role congruity theory (Eagly & Karau, 2002) there is a role incongruity between their role and gender archetype for example despite being female, they display stereotypical agentic or masculine traits or, conversely, despite being male, they display stereotypical communal or feminine characteristics (Kark, Waismel-Manor & Shamir, 2012; Larsen & Long, 1988; Saint-Machel, 2018). However, the stereotype of the successful leader is still defined in masculine terms (Koenig, Eagly, Mitchell & Ristikari, 2011; Saint-Michel, 2018) highlighted by the cliché *Think male – Think leader* (Schein, 1975).

Gender and Transformational Leadership

Transformational leadership involves inspiring followers to go beyond their own self-interests in order to serve the values and goals of the collective by raising their level of awareness (Bass & Avolio, 1994; Burns, 1978). Transformational leaders display communal orientations, because they are inclined to highlight the importance of cooperation and

interdependence between group members in order to attain team goals, are considerate and benevolent towards their followers, practice shared decision-making, and highlight the importance of interpersonal interactions, which are often stereotyped as female traits (Applebaum, Audet, & Miller, 2003. Eagly, 2003; Fletcher, 2004; Kark et al., 2012; Poddar & Kirshnan, 2004).

Agentic and communal attributes have been used to describe the differences in leadership styles between men and women (Eagly & Johannesen-Schmidt, 2001). Park (1996) investigated the relationship between leader gender identity and two leadership styles, described as task-oriented and relationship-oriented. The findings suggested a significant positive relationship between communal traits and the transformational leadership style, and between agentic traits and task-oriented leadership. Agentic attributes, associated more with men than women, include “assertive, ambitious, self-confident, and forceful. . . . In employment settings these behaviors might include speaking assertively, influencing others, and making problem-solving suggestions” (Eagly & Johannesen-Schmidt, 2001, p. 783). Communal attributes, associated more with women than men, involve the welfare of others and include “affectionate, helpful, interpersonally sensitive, and nurturing. . . . In employment settings these behaviors might include speaking tentatively, supporting others, and contributing to the solution of relational and interpersonal problems” (Eagly & Johannesen-Schmidt, 2001, p. 783). According to Eagly et al., transformational leadership is more associated with female leadership traits (2003).

Review of Literature

Women constitute over half the talent pool in education, so why are they missing in the school superintendency (Dana & Bourisaw, 2006)? The ongoing absence of women leading our nation’s public schools has prompted researchers to investigate the reasons that so few of them

have attained the top job (Brown, 2014; Davis & Bowers, 2019; Kim & Brunner, 2009; Wyland, 2016). Although the field of education is dominated by women in teaching positions, more men hold higher leadership positions (central office and higher administration) than women.

When women are able to break through these barriers to ascend to the superintendency, district typology can play an important factor. Nationally, women are more likely than males to work in rural districts (Dana & Bourisaw, 2006a). When considering district typology, 60% of females serve in rural districts (Lemasters & Roach, 2012; Rogers & McCord, 2020). These statistics can change depending on race and ethnicity. Robinson et al. (2017) found that statistics of female superintendents working in rural districts was only accurate for white women; women of color were more likely to serve in larger school districts than white women. This implies that women of color are more likely to serve in urban or suburban districts as they are generally larger in size. Women, no matter their race or ethnicity, are more likely than males to serve in communities with more diverse populations, populations that include more students with disabilities, and populations that include more homeless students (Robinson et al., 2017). Females serve as superintendent in districts perceived as higher need whether that district be urban or rural.

The high visibility of leaders within a rural community contributes to the lack of equality in hiring; typically, men are seen as being dominant, powerful, and visible members of the community (Edgehouse, 2008). Therefore, a woman entering a rural district as superintendent must already display several leadership characteristics to be gain recognition. In a study by Palladino et al. (2016), eleven female superintendents who were in their first appointment of less than five years were recruited for a qualitative case study. Each woman participated in a semi-structured interview, answering questions regarding: “How do rural female superintendents (1)

implement and sustain change, (2) describe their leadership style, (3) build relationships, and (4) seek out professional support and mentors? (Palladino et al., 2016, p. 43).” A significant finding was the theme of relationship building as a key leadership quality for rural female superintendents. Meaningful relationships help to build connections with community members, staff, school boards, and stakeholders. However, this can be a limitation to women moving into administrative positions due the close-knit relationships that are already formed within the school district.

In addition to visibility barriers, minority administrators must also deal with the needs of the students in the district. Gender also impacts student achievement of minorities. For example, when the majority of students enrolled in the school district are diverse and come from impoverished neighborhoods, superintendents who have congruent intersectionalities may better serve their students. Brown (2012) found that when African American boys who live in poverty learn from an African American male administrator, who can identify with being a minority and a male, student achievement rates increase. When intersectionalities and genders are incongruent, superintendents appear to be less influential role models (Brown, 2012). A female, African American administrator entering a rural district may not only be seen by her gender, but also her racial identity. In a multiple-case study using a phenomenological approach (Sweatt, 2018), African American teachers were interviewed about their perceptions of previously being a teacher in a predominately White rural school in Central Appalachia. A total of six teachers were interviewed in Eastern Kentucky. Similarly to Palladino et al.’s (2016) study of female superintendents, African American, female teachers also identified that relationships contributed to their success. Sweatt (2018) describes that, “Half of them identified instances of isolation, alienation, or marginalization at the school level, while the other half reported that they were

accustomed to the culture and thus did not identify their experiences as unusual” (p. 101). This suggests that African American, female teachers and administrators, are sometimes torn between feeling out of place instead of being used to being treated unequally in a rural district. Therefore, the African American teachers identified the need for adaptation, support systems, communication, self-motivation, and beneficial employment factors (Sweatt, 2018). When these needs are in place, female gendered, minority administrators are more apt to promote student achievement through making valuable, connective support systems; female administrators, who are also minority, may use one section of their identity (either racial or gendered) to become an appealing leader.

It is important to consider district typology because of the impacts that it has on the leader. Dowell (2012) found that females experienced lower salaries than males when considering rural, suburban, and urban typologies. These results were most significant in urban districts with a difference of male salaries between \$135,000-\$144,999 and female salaries between \$105,000 and \$114,999 (Dowell, 2012). This explains that there is a gender gap between the salaries of male and female superintendents, but it also explains that the range is further impacted by district typology.

Methods

The quantitative research design focused on a descriptive analysis of data. We examined the differences between male and female superintendents’ district typology. We used ex post facto data to identify the sample size for both males and females as well as to determine the typology of each participant. The independent variable was the gender of the superintendent; the dependent variable was the typology of each school district. This study does not introduce a

treatment, program, or intervention; the study simply observed existing patterns found within the data.

Participants

The population in this study was comprised of all school superintendents in the state of Ohio; a total of 614 participants. The main criterion for the sampling in this study was that the participant was currently serving as a superintendent in a public-school system during the 2018-2019 school year. According to Fowler (2009), to ensure a 95% confidence interval, the study needed to consist of 584 participants. Since all participants included on the EMIS report are, by default, in the study, the sample size can ensure the 95% confidence interval with an error of 3.96%. However, it is important to note that the study looked at males versus females, so while the sample size for males topped 518, the sample size for females was 96, a 15.64% confidence value. The high confidence value associated with the female population means that the study is not generalizable, since one cannot add female participants where they do not already exist. The large sample size, in this case over six hundred participants, is representative of the target population.

Validity

In this study, the sample size impacts external validity, specifically the fact that the sample comes from ex post facto data. The large representative sample size in this study, 614 school superintendents, means the external validity for this study was high. However, the sample size might be generalizable for persons in educational administration, the sample might not apply to all women and men in the workforce. According to Trochim and Donnelly (2008), threats to external validity in this study include, "...people, places, and time" (p. 36). This study took place in one state, with one year's worth of data, on a specific, not randomly selected, population.

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Data Collection

The Education Management Information System (EMIS) is the statewide data collection system used by the Ohio Department of Education to gather and store information relative to secondary and primary public-school districts. The school district IRN was used for the purpose of generating demographic data relative to school district typology and provided the following data variables: district name, county, typology, enrollment, median income, percent student poverty, and percent minority. In addition, the gender of superintendents for each district was collected from the Buckeye Association of School Administrators; however, no individual identifying information was used in the analysis. All data was combined into one data file for organizational purposes. The Statistical Package for the Social Sciences (SPSS) was used to gather and analyze data.

The purpose of this study was to answer the following research questions:

1. In which district typographies are male and female superintendents employed?
2. What regions in Ohio are female superintendents employed?
3. What counties are female superintendents employed?
4. Is there a statistically significant relationship between gender and district typographies for male and female superintendents in Ohio?

Definition of Variables

The following defined variables were used within the data collection process and analysis:

District Identifiers. Districts were identified by district name and county within the state of Ohio.

Typology. The Ohio Department of Education developed a classification system on district typology to “classify like districts together based on shared demographic and geographic

characteristics” (ODE, 2013, Typology of Ohio School Districts section, para. 2). Data in the current analysis was coded for congruency with corresponding classification numbers identified by the Ohio Department of Education (ODE, 2013).

Enrollment. The Ohio Department of Education states that *enrollment* “shows the number of public-school students in grades K-12 plus preschool handicapped students attending school buildings in the district at any point during the course of the school year on FTE basis” (ODE, 2013, A- Demographic Data section, para. 4).

Student Poverty. *Student poverty* is the “percentage of students flagged as economically disadvantaged” and “measures the poverty rate of students actually attending the school district” (ODE, 2013, p. 3).

Data Analysis and Results

A list of potential participants was identified from directory information provided by the Ohio Department of Education and crosschecked with directory information from the Buckeye Association of School Administrators. There were 614 superintendents with 518 male and 96 female within the sample, suggesting a lack of female superintendents in Ohio at only 15.6% of the total population. The data analysis section provides an overview of the typologies where female school superintendents are employed in the state of Ohio. In addition, a review of data collection and data analysis appears. SPSS was used to analysis the data.

Research Question 1

Descriptive statistics were used to determine in which district typographies male and female superintendents are employed. The databased was sorted by typology code and by female superintendent to cluster female superintendents by district type. Table 1 provides the typology codes along with the total number of school districts in each area. The second to last column

shows the number of female superintendents in each category. The last column shows the percentage of females within the typology.

The distribution of male and female superintendents in Ohio varies based on district typology, which is demonstrated using codes assigned by the Ohio Department of Education (2013). There is a significant disproportion of male superintendents versus female superintendents in Ohio districts. Male superintendents represent between 62.5- 86% percent of each district typology coding, leaving female superintendents to represent only 12.15-37.5% of each typology. In district typologies where there are fewer total amounts of superintendents (e.g. 5 total superintendents in typology code 0, and 8 total superintendents in typology code 8), females represent a greater percentage of superintendents (20% and 37.5% respectively). Data distribution also suggests that female superintendents have more representation in suburban and urban districts (district typology codes 6, 7, 8). Therefore, male superintendents dominate special, rural, and small-town districts (district typology codes 0, 1, 2, 3, 4).

Table 1

Ohio School District Typology and School Superintendents

District Typology Code	Major Grouping	Full Descriptor	Districts Within Typology	No. Female Superintendents	% Females within Typology
0		Special Districts	NA	NA	NA
1	Rural	Rural- High Student Poverty & Small Student Population	124	18	14.51

2	Rural	Rural- Average Student Poverty & Very Small Student Population	107	13	12.15
3	Small Town	Small Town- Low Student Poverty & Small Student Population	111	15	13.51
4	Small Town	Small Town- High Student Poverty & Average Student Population Size	89	14	15.73
5	Suburban	Suburban- Low Student Poverty & Average Student Population Size	77	14	18.18
6	Suburban	Suburban- Very Low Student Poverty & Large Student Population	46	8	17.39

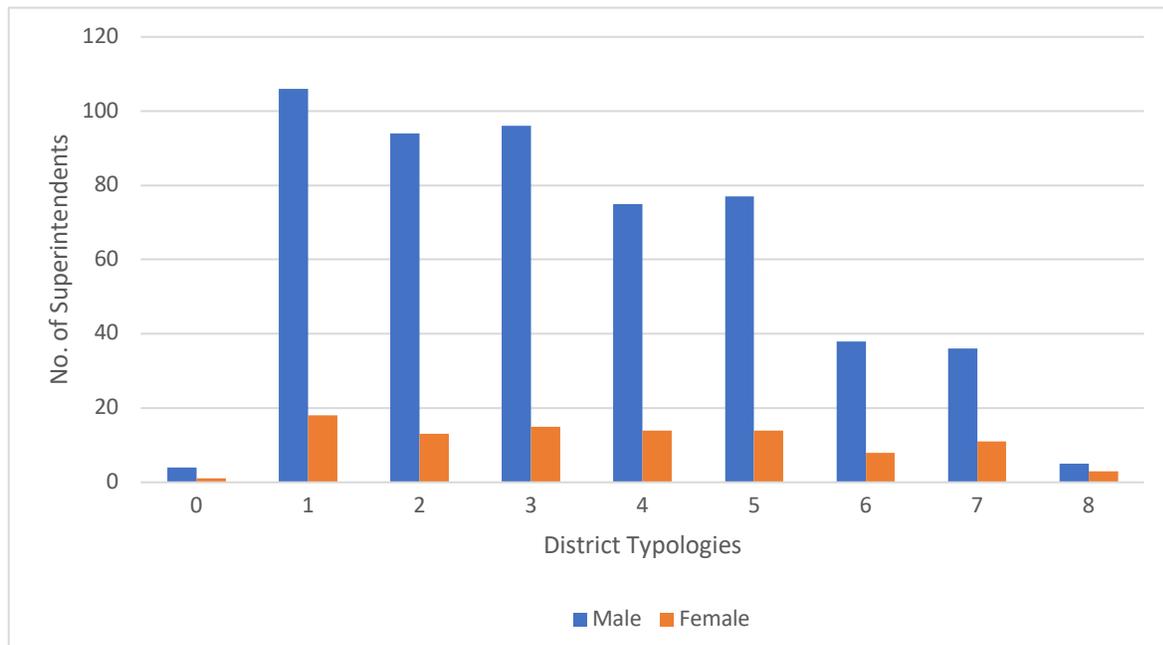
7	Urban	Urban- High Student Poverty & Average Student Population	47	11	23.40
8	Urban	Urban- Very High Student Poverty & Very Large Student Population	8	3	37.50

Note. This figure displays the coding classification system used within the present study based on the Ohio Department of Education (2013) District Typology Coding.

The bar chart shown in Figure 1 depicts the typology of districts between male and female superintendents.

Figure 1

District Typologies between Male and Female Superintendents



Note. This figure shows the number of male and female superintendents by district typology, based on the Ohio Department of Education (2013) District Typology Coding.

Research Question 2

To determine the regions in Ohio where female superintendents were employed, we plotted their location by county from the directory database (Figure 2) and retrieved some interesting findings. We found that female school superintendents clustered in the southwestern and northeastern parts of the state. Counties located in central, northwest, and southeastern regions of Ohio showed very few females employed as superintendents.

Figure 2 illustrates the locations of female school superintendents employed in Ohio during the 2019–2020 school year, specifically the number and percentage of female superintendents in each county. The number noted in each county represents the total number of female superintendents employed in that county, and the number in parentheses represents the percentage of female school superintendents in each county relative to the total number of school superintendents employed.

Figure 2

Female Superintendents by County



Results indicate that although some counties, such as Cuyahoga and Hamilton, employed seven and six female superintendents, respectively, overall, women still represent only 23% and 27% of all superintendents in those counties. Other counties like Jefferson and Clermont show a lower number of female superintendents; however, women represent 60% and 44% percent of all superintendents in those counties.

Research Question 3

Descriptive statistics were used to look at the employment of female superintendents in the *Big 8 School Districts* in Ohio. Ohio's eight urban districts include: Akron, Canton, Cincinnati, Cleveland, Columbus, Dayton, Toledo, and Youngstown. Out of the eight urban districts, 37.5% were led by female superintendents. This higher percentage indicates that women are proportionally more likely to serve in a large urban district in Ohio.

Next we investigated the relationship between big eight district and percentage of female superintendents in the county, shown in Table 2. This demonstrates that females are more likely to serve as superintendent in school districts located within counties that also have a large urban district. Counties with Cincinnati, Toledo, Cleveland, and Columbus, are the most likely to have districts with female superintendents.

Table 2

Big 8 Districts by County and Gender

Big 8 District	Superintendent Gender	County	% Female Superintendents
Akron	Male	Summit	12%
Canton	Male	Stark	12%
Cincinnati	Female	Hamilton	27%
Cleveland	Male	Cuyahoga	23%
Columbus	Female	Franklin	19%
Dayton	Female	Montgomery	13%
Toledo	Male	Lucas	25%
Youngstown	Male	Mahoning	7%

Research Question 4

Chi-Square was the best statistical method to determine what observed frequencies were significantly different than the expected frequencies (Salkind & Frey, 2019). Gender, a dichotomous variable, was given the values of 0 and 1 and district typology, a categorical variable, was given the values of 1-8.

The actual and expected frequencies for gender and district typology were calculated for 609 superintendents across 8 district typologies. Typology 0 was omitted from the analysis because superintendent gender was unknown. Table 3 shows the number of female and male superintendents employed in each typology. The largest number of male superintendents at 99 and female superintendents at 18 were employed in *Typology 1: Rural-High Student Poverty & Small Student Population* districts. The least number of males at 5 and females at 3 were employed in *Typology 8: Urban-Very High Student Poverty & Very Large Population* districts.

Table 3

Chi-Square Statistics Actual Frequencies for Gender and District Typology

Actual Frequencies									
	Rural-High Student Poverty & Small Student Population	Rural-Average Student Poverty & Very Small Student Population	Small Town-Low Poverty & Small Student Population	Small Town-High Poverty & Average Student Population Size	Suburban-Low Poverty & Average Student Population Size	Suburban-Very Low Student Poverty & Large Student Population	Urban-High Student Poverty & Average Student Population	Urban-Very High Student Poverty & Very Large Student Population	Total
Male	99	94	96	75	63	38	36	5	506
Female	18	13	15	14	14	8	11	3	96
Total	124	107	111	89	77	46	47	8	602

The expected frequencies are displayed in Table 4. For male superintendents, the largest discrepancies were in *Typology 1: Rural High Student Poverty & Small Student Population* with actual at 99 and expected at 104.23 with a difference of 5.23 with fewer males employed in those *Leadership and Research in Education: The Journal of the Ohio Council of Professors of Educational Administration (OCPEA)*, Volume 7, Issue 1, 2022

districts than expected. *Typology 2: Rural Average Student Poverty & Very Small Student Population* numbers were: actual at 94 and expected at 89.94 with a difference of 4.06 with more males employed in those districts than expected. For female superintendents, the largest discrepancies were in *Typology 2: Rural Average Student Poverty & Very Small Student Population* with actual at 13 and expected at 17.06 with a difference of 4.06 with fewer females employed in those districts. *Typology 7: Urban High Student Poverty & Average Student Population* numbers were: actual at 11 and expected at 7.50 with a difference of 3.5 with more females employed in those districts than expected.

Table 4

Chi-Square Statistics Expected Frequencies for Gender and District Typology

Expected Frequencies									
	Rural-High Student Poverty & Small Student Population	Rural-Average Student Poverty & Very Small Student Population	Small Town-Low Student Poverty & Small Student Population	Small Town-High Student Poverty & Average Student Population Size	Suburban-Low Student Poverty & Average Student Population Size	Suburban-Very Low Student Poverty & Large Student Population	Urban-High Student Poverty & Average Student Population	Urban-Very High Student Poverty & Very Large Student Population	Total
Male	104.23	89.94	93.30	74.81	64.72	38.66	39.50	6.72	506
Female	19.77	17.06	17.71	14.20	12.28	7.34	7.50	1.28	96
Total	124	107	111	89	77	46	47	8	602

A Chi-Square Test was used to determine if there was a statistically significant relationship between gender and district typographies for male and female superintendents in Ohio. A chi-square test of independence was performed to examine the relation between gender and district typology. With an alpha level of .05, the relation between these variables was not statistically significant, $\chi^2 (1, N = 602) = 8.9, p = 0.41$. There was no significant association

between district typology and the gender of Ohio Superintendents. These results must be viewed with caution, due to the small sample of female superintendents which may have a false negative finding or a Type II error.

Findings

Lack of Female Superintendents

At the time of this research, there were 614 superintendents in the state of Ohio with 518 male and 96 females within the sample. This data demonstrates a lack of female superintendents in Ohio at only 15.6%. This discrepancy coincides with research that suggests that women are underrepresented in the position of superintendent, however, the Ohio percentage is significantly below the national average of approximately 27% female superintendents (Finnan et al., 2015). The national average has increased from 13% in 2000 (Glass et al., 2000). Considering this, Ohio is more than 15 years behind the national average and is not making significant gains to close the gender gap.

Fewer Women in Each Typology

There is a significant disproportion of male superintendents compared with female superintendents when examining the district typology of Ohio districts. Male superintendents represent between 62.5- 86% percent of each district typology coding, while female superintendents represent a mere 12.15-37.5% of each typology. Data distribution suggests that female superintendents have more representation in suburban and urban districts (district typology codes 6, 7, 8). This supports research by Sampson et al. (2015) who found that the largest percentages of female superintendents in Texas were found in major urban districts and central suburban districts.

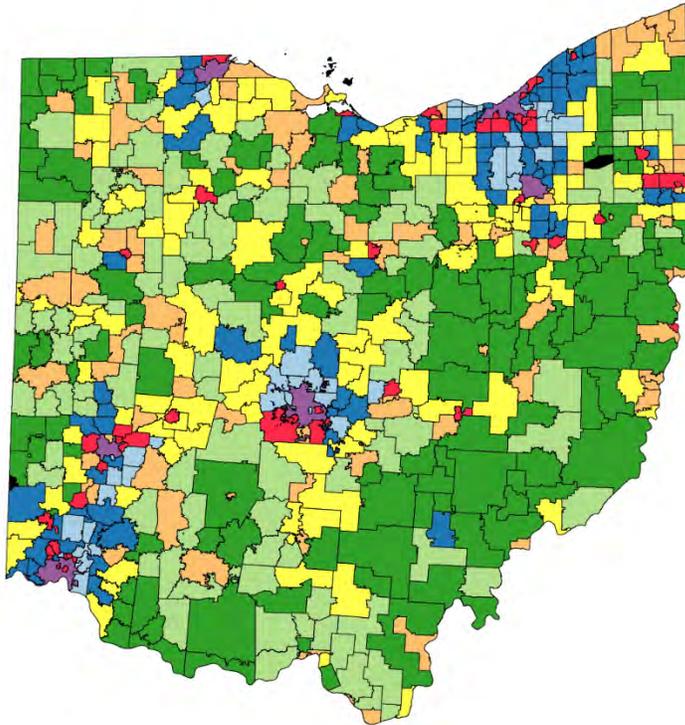
Data from this study shows that more males are superintendents in rural, and small-town districts (district typology codes 0, 1, 2, 3, 4). Although there are fewer numbers of females in these typologies, females do represent a greater percentage of superintendents in this area when proportion is considered. For example, of 5 total superintendents in typology code 0 females represented 20%, and of 8 total superintendents in typology code 9, females represented 37.5%. It may be these proportions that explain research by Dana and Bourisaw (2006) who found that nationally, females are more likely to serve in rural districts. When considering district typology, 60% of female superintendents serve in rural districts (Lemasters & Roach, 2012; Rogers & McCord, 2020).

Clusters of Female Superintendents

This research demonstrates that females in Ohio are more likely to serve as superintendent in the southwestern and northeastern parts of the state. Examination of these clusters of female superintendents demonstrate that females are more likely to serve in specific typologies. These cluster areas are heavily represented by typologies 5, 6, 7, and 8 which indicate suburban and urban districts, as evidenced by Figure 3.

Figure 3

2013 School District Typology



Legend

- | | |
|--|--|
| [1] Rural - High Student Poverty | [5] Suburban - Low Student Poverty |
| [2] Rural - Average Student Poverty | [6] Suburban - Very Low Student Poverty |
| [3] Small Town - Low Student Poverty | [7] Urban - High Student Poverty |
| [4] Small Town - High Student Poverty | [8] Urban - Very High Student Poverty |

Note. This figure demonstrates district typology across the state of Ohio in 2013. It does not include the transition of Canton City and Youngstown City from type 7 to 8. From *Typology of Ohio School Districts*, by Ohio Department of Education, 2021 (<http://education.ohio.gov/Topics/Data/Frequently-Requested-Data/Typology-of-Ohio-School-Districts>).

The southwest and northeast areas of the state are also highly populated and have a large number of school districts. Some counties have a relatively large number of females, such as Cuyahoga (7) and Hamilton (6). Despite these relatively high numbers, the proportion of women in these counties is still low at 23% and 27%. Other counties like Jefferson and Clermont experience the inverse of this relationship with low numbers of female superintendents but a higher proportion for the county at 60% and 44%. Cuyahoga and Hamilton counties are identified as typology 5 for suburban with low student poverty, while Jefferson and Clermont are

identified as typology 1 for rural districts with high student poverty (Ohio Department of Education, 2021). This indicates that women are more likely to serve in suburban districts in Ohio, but because there are more schools in these areas, they are still underrepresented proportionally.

Female Superintendents in the Big 8

There is a high percentage (37%) of female superintendents in the Big 8 districts. The Big 8 districts in Ohio are comprised of the eight urban school districts – Akron, Canton, Cincinnati, Cleveland, Columbus, Dayton, Toledo and Youngstown. The high percentage of women serving in these large urban districts speaks to the leadership style of female superintendents and their ability to make changes. Women are more likely than their male counterparts to work in districts with a higher percentage of people of color or districts with a large population of students who are experiencing homelessness or students with disabilities (Finnan et al., 2015; Robinson et al., 2017). This suggests that high-need districts are more likely to hire females over males than districts that have lower needs. This phenomenon is referred to as the glass cliff that suggests that women are more likely to be promoted in high need organizations with the expectation that they are able to fix it (Ryan & Haslam, 2004). Zenger and Folkman (2020) expanded on the understanding of the glass ceiling to the glass cliff to explain that women may be put in difficult situations because of their ability to succeed despite obstacles. This research supports that women in Ohio are brought in to higher need districts in urban areas possibly with the intent to fix the issues that persist.

Further, females may be more likely to be hired by districts with less financial stability. AASA survey data demonstrated that female superintendents are “less optimistic about the economic stability of their district” than male superintendents (Rogers & McCord, 2020, p. 15).

Female superintendents in the field also recall scenarios in which women serve in higher-needs districts. Superintendent Bruckner explained that her school board hired her to turn the community around and school board members noted that she “meant business” (Superville, 2016a). Conclusions drawn from these data suggest that the leadership style of women lend themselves to be more effective in high-need districts than males. When correlated with the transformational leadership theory, this demonstrates that females seek to attain goals beyond their own self-interests (Bass & Avolio, 1994; Burns, 1978). Although this may help to explain why females are more likely to be hired as superintendent in high need districts, this continued gender inequity further demonstrates the gap between male and female superintendent positions.

No Significant Association Between Typology and Gender.

The results of the Chi Square Test indicate that there was no significant association between district typology and the gender of Ohio Superintendents. This may be due to the relatively small sample size of female superintendents, resulting in a false negative or Type II error. This also does not mean that superintendent gender and district typology do not have a correlation. Instead, this suggests that further investigation is necessary to determine if there is an underlying factor causing female superintendents to be more highly represented in one typology over another.

Discussion

This study provides insight into the district typologies where female superintendents serve in Ohio. It also continues to highlight the lack of female superintendents in the position and across all typology types. Cooper, Fusarelli, & Carella, (2000) describes the shortage of superintendents by reinforcing that, “Nearly 90% of superintendents nationally thought that the number of administrators willing to pursue this position is inadequate— a condition they blamed

on diminishing average tenure in office” (as cited in Kowalski, 2003, p. 288). Advocacy for seeking qualified superintendents, therefore, falls in the hands of superintendents themselves.

Female leadership style varies significantly when compared with males. Females are more apt to adopt a collaborative or shared leadership style that lends itself to problem-solving (Grogan and Shakeshaft, 2013). Through committees and advisory boards, females are more likely to hear opinions of many to make informed and collaborative decisions (Grogan & Shakeshaft, 2013). This collaborative effort helps females to better understand and resolve issues. By focusing on these gender-specific skills (Bem, 1981), females become the logical choice for a district that is struggling. As noted by Zenger and Folkman (2020), this may explain why females are more likely to be superintendents in difficult districts.

School boards often seek designated leaders with specific attributes and characteristics, which qualify them for the superintendency. Hiring decisions should be based on professional qualifications, however, biases within the hiring process produce discrimination and stereotyping; the intersectionality of minority applicants is a key variable in hiring. For the superintendents who fall into the minority of administrators, such as Black and female superintendents, finding support from others is often difficult and discouraging. Research by Scott (1990) establishes that Black superintendents are sometimes appointed to school systems that are unwanted and under-supported. These school systems are defined by a lack of student achievement and financial disparities, consisting of students who are considered minority and come from low socioeconomic backgrounds (Scott, 1990). Minority superintendents are similar to rural superintendents in that they must establish professional leadership qualities and relationships with the community to gain acceptance.

Limitations of the Study

A limitation is that this research was conducted in Ohio and limited to one geographic area of the country that may not be representative of female superintendents from other states or representative of all superintendents, including males. The information involves one state, Ohio, and the persons employed as high school principals during one school year, 2015-2016. The sample included unique participants, however; since each state does not report the same information in the same manner, a limitation of the study might be the generalizability of the study to other states. Additionally, the scope of the research speaks to only one of fifty states within the United States. Finally, the lack of pre-existing research on this specific topic is a limitation.

Significance of Study

It is important to consider district typology because it determines the level of funding provided to each district and it provides an economic snapshot of the community relative to all other communities within the state of Ohio. It is further important for aspiring females to be aware of the district typology that is most likely to employ a female superintendent when considering job applications. Females place high importance on their proximity between work and home and are less likely to make a longer commute (Sperandio & Devdas, 2015). If females reside in a typology code that is less likely to promote female superintendents, this may serve as a barrier.

School administrators in rural communities in Ohio may experience unique barriers to success in comparison to urban communities. One barrier is maintaining the longevity of school administrators, such as the superintendency, which is the leading administrative position in a school district. Many rural communities are experiencing high turnover rates of superintendents;

Kamrath (2015) affirms that managerial inability, strong expectations for educational leadership and academic achievement, political agendas, and fiscal management are a few of the reasons for the high turnover rate. This provides an opportunity for female administrators to break the ‘glass ceiling’, seek new open positions, and move into the superintendency from outside districts.

In comparing rural school districts to urban school districts, the school district’s size is a significant influence to the superintendent’s role as a leader. By relating that members of small sized rural communities display strong community ties, Kamrath & Brunner (2014) suggest that school leaders can gain high visibility and high influence within the school system more easily. This is both a blessing and a curse to superintendents who feel the added pressure to support student achievement, to be strong leaders within their districts, and to promote moral values of school teachers and staff. Notably, superintendents who don’t meet the expectations of the community may be seen as inadequate leaders; lack strong leadership within their rural districts which may cause the district to appear as unmanageable. This, consequently, decreases the likelihood of outsiders moving into administrative positions within rural districts. On the other hand, leaders may relish the opportunity of there not being a large pool of administrators seeking higher positions, reflecting on the shortage of superintendents. The shortage opens several opportunities for minority applicants seeking positions in the school district.

This article contributes to the field of education by highlighting the inequities that exist for female superintendents across the state. The number of female superintendents in Ohio (15.6%) significantly behind the national average of approximately 27% (Finnan et al., 2015). Further, this article suggests that females are more likely to serve in regions of the state clustered with large urban districts or in the Big 8 districts themselves.

Recommendations for Future Research

There are many additional topics that can be explored to further current research related to the gender disparity of the superintendent. One suggestion for future research is to investigate the impact of district typology on salary. Going one step beyond would involve the components of intersectionality: race/ethnicity, class, gender, and district typology, on annual income. This would be an important step in understanding the implications for the glass ceiling in respect to female superintendents.

To further extend this research, a more in-depth correlational study could be conducted to determine commonalities of districts with female superintendents. Since females are more concentrated near the large urban areas of the state, is there also a correlation that may explain why this occurs? One possible consideration could include political affiliations of individuals in districts or counties with female superintendents. Research explains that women are promoted to superintendent in districts with challenges due to their ability to succeed despite obstacles (Zenger & Folkman, 2020). To explore this, it would be important to examine factors including district report card grades, financial stability, student demographics, and districts in accountability status with the state. This would help to determine causality.

With educators being majority female and administrator majority male, it is imperative to determine where the pathway breaks down and what the barriers are for females. A narrative study to examine the lived experiences of female superintendents to determine how they were able to overcome challenges and successfully secure a superintendency in a male-dominated field would support the entrance of women in the field. Finally, it would be beneficial to conduct an exploration of the gendered differences of superintendents in their pathways to superintendency.

Another potential area for future research would be to expand on the necessary leadership competencies needed for superintendents related to gender differences. Maranto et al. (2018) suggested that females may be better suited to the role of superintendent because of their strong background in curriculum and instruction. A qualitative study of female superintendents would provide insight into the competencies needed while giving a voice to female superintendents. It is necessary for the field to continue to explore the inequities that exist for female leaders.

Conclusion

Although women have made their way into educational leadership roles, the reality of the superintendency is that most studies have shown few women hold the position. Researchers have explored the career paths of female superintendents (Davis & Bowers, 2019; Wallace, 2014), the barriers they encountered (Derrington & Sharratt, 2009; Lane-Washington & Wilson-Jones, 2010), and reasons they left the position (Robinson & Shakeshaft, 2015). This study was designed to identify where female superintendents secure positions in the superintendency.

A quantitative, descriptive research design was implemented to investigate state data regarding the demographics and typology of female superintendents in Ohio. This study provides information that may be useful to the parents of females, K–12 educators, single-gender K–12 schools, supervisors of women, institutions with leadership development programs, single-sex leadership programs, and most importantly, women who want to pursue leadership roles in education, particularly the superintendency.

The typology of female superintendents in Ohio uncovers systemic inequities and hidden factors behind the lack of female representation in the role of superintendent.

In conclusion, gender is a factor in district typology in the population examined in this study. Although the results of the Chi Square Test indicate that there was no significant

association between district typology and the gender of Ohio Superintendents, it is important to note that the descriptive statistics demonstrate that there is a correlation between gender and district typology. Females are more likely to serve as superintendent in school districts located within counties that also have a large urban district clustered in the southwestern and northeastern parts of the state and a higher percentage of females in the Big 8 districts. Females are also more likely to serve as superintendents in districts with suburban and urban typologies. The findings of this study also demonstrate the continued under-representation of females in the superintendency. Through this research, conclusions can be drawn to help aspiring female superintendents as they advance to the role of superintendent.

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