

Examining Career Paths of Women in Educational Leadership: The Impact of Age, Gender, Maternity and Parental Leaves Surmonter les obstacles : les femmes dans le leadership éducatif

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Volume 20, numéro 2, 2024

URI : <https://id.erudit.org/iderudit/1115203ar>

DOI : <https://doi.org/10.22230/ijep.2024v20n2a1383>

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Éditeur(s)

Simon Fraser University, University of Delaware, Phi Delta Kappa International

ISSN

1555-5062 (numérique)

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Citer cet article

Essiomle, K., Nadler, L. & ElAtia, S. (2024). Examining Career Paths of Women in Educational Leadership: The Impact of Age, Gender, Maternity and Parental Leaves. *International Journal of Education Policy and Leadership*, 20(2), 1–31. <https://doi.org/10.22230/ijep.2024v20n2a1383>

Résumé de l'article

Cette étude se penche sur la dynamique complexe du leadership au sein du système éducatif de la maternelle à la 12e année en Alberta, en se concentrant sur la relation entre l'âge, le sexe, le congé de maternité et le congé parental, et la progression de la carrière des femmes. À l'aide d'une approche par méthodes mixtes explicatives comprenant une enquête auprès de 416 responsables éducatifs et deux groupes de discussion composés de 20 femmes occupant des postes de direction, cette recherche met en lumière les disparités d'âge et de sexe dans l'avancement professionnel au sein du système éducatif, en soulignant que les femmes accèdent souvent à certains postes de direction à un âge plus avancé que les hommes. Les recommandations issues de cette enquête comprennent une réévaluation des politiques de congés de maternité et de congés parentaux et familiaux dans les écoles afin de les aligner sur les principes d'une progression de carrière équitable, ainsi qu'un appel en faveur de politiques et de formations solides en matière d'équité, de diversité et d'inclusion (EDI) à tous les niveaux de direction et dans le cadre du processus de recrutement.



Examining Career Paths of Women in Educational Leadership: The Impact of Age, Gender, Maternity and Parental Leaves

Komla Essiomle, Leticia Nadler, & Samira ElAtia, *University of Alberta*

Abstract

This study delves into the complex dynamics of leadership within Alberta's K-12 education system, specifically focusing on the relationship between age, gender, maternity and parental leaves and women's career progression. Using an explanatory mixed-method approach, comprising a survey of 416 educational leaders and two focus groups of 20 women in leadership roles, this research uncovers age and gender disparities in career advancement in the education system, highlighting that women often enter some leadership roles at an older age than men. Recommendations from this inquiry include a reevaluation of maternity/parental/family leave policies in schools, aligning them with principles of equitable career progression and a call for robust equity, diversity, and inclusion (EDI) policies and training at all levels of leadership and in the recruitment process.

Résumé

Cette étude se penche sur la dynamique complexe du leadership au sein du système éducatif de la maternelle à la 12e année en Alberta, en se concentrant sur la relation entre l'âge, le sexe, le congé de maternité et le congé parental, et la progression de la carrière des femmes. À l'aide d'une approche par méthodes mixtes explicatives comprenant une enquête auprès de 416 responsables éducatifs et deux groupes de discussion composés de 20 femmes occupant des postes de direction, cette recherche met en lumière les disparités d'âge et de sexe dans l'avancement professionnel au

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sein du système éducatif, en soulignant que les femmes accèdent souvent à certains postes de direction à un âge plus avancé que les hommes. Les recommandations issues de cette enquête comprennent une réévaluation des politiques de congés de maternité et de congés parentaux et familiaux dans les écoles afin de les aligner sur les principes d'une progression de carrière équitable, ainsi qu'un appel en faveur de politiques et de formations solides en matière d'équité, de diversité et d'inclusion (EDI) à tous les niveaux de direction et dans le cadre du processus de recrutement.

Keywords / Mots clés : gender disparities, educational leadership, career progression, maternity leave, K-12 education / disparités entre les sexes, leadership éducationnel, développement de carrière, congé de maternité, enseignement primaire et secondaire

Introduction

The teaching profession is predominantly female, but men hold disproportionate leadership roles within the education system (Bush, 2021; Kelleher, Severin, Samson, De, Afamasaga-Wright, & Sedere, 2011). This disparity has been noted; thus, the issue of women's underrepresentation in leadership roles within the K-12 education system is well-documented, in Canada (Crabb, 1996; Logan, 2018; MacKinnon, 2021; Tucker & Fushell, 2014; van Jaarsveld, 2020) and particularly in the United States (US) (Hoff, Menard & Tuell, 2006; Hoff & Mitchell, 2008; Kellar, 2013; Sanchez & Thornton, 2010; Smith, 2011; Wallace, 2002; Wallace, 2004; Wallace & Wallin, 2015). Emerging from this research¹ is the consistent emphasis on the complex interactions between gender and other social factors that give rise to unique forms of discrimination and systemic biases within work environments (Macias & Stephens, 2019). The underrepresentation of women in high-ranking leadership roles in the K-12 education system raises two significant concerns. First, it perpetuates a perception that privileges men in positions of societal prestige, impacting the perspectives of students, educators, and parents alike (Moreau, Osgood, & Halsall, 2007). Second, it underscores how the education system plays a role in perpetuating gender-based divisions and bias, shaping broader public narratives (Moreau et al., 2007). Women's representation in leadership roles in the K-12 education system has yet to be extensively studied in Alberta. Hence, to understand this topic further, this study aimed to retrospectively explore leaders' career trajectories in the Alberta K-12 education system, shedding light on age and gender disparities while unravelling how maternity and parental leave are closely associated with women's career advancement.

Contextualizing terms

In the Alberta education landscape, the lack of a unified terminology for describing leadership roles and leaders poses a noteworthy challenge. The College of Alberta School Superintendents (CASS), for instance, distinguishes school-level leadership (comprising assistant principals and principals) from system-wide educational leadership (comprising assistant superintendents and superintendents) (CASS, 2023). The provincial government, as articulated in the School Leadership Quality Standard (SLQS) and Leadership Quality Standard (LQS), introduces a semantic demarcation

between “principal” and “school jurisdiction leader.” The latter pertains to a central office staff member within a school authority, excluding the superintendent or chief deputy superintendent, mandated by their leadership position to possess an Alberta teaching and leadership certificate. In the specific context of our investigation, this could encompass roles such as directors. Finally, the legislative landscape, as exemplified by *Bill 15*, delineates between “teachers” and “teacher leaders,” with the latter category encompassing superintendents (Government of Alberta, 2022).

To maintain clarity in our discourse, we opt for the umbrella term, “educational leadership” to characterize leadership within the framework of school authorities, regardless of whether individuals hold a valid leadership certificate (LQS or SLQS) when taking the survey or participating in the focus groups for this inquiry. Correspondingly, we employ the term “educational leaders” to denote individuals holding an Alberta teaching certificate and occupying various roles, such as coaches/consultants, assistants, associates, vice principals, principals, department heads, directors, associate superintendents, superintendents, and deputy superintendents. These roles are delineated explicitly in our survey and span across three distinct Alberta school authorities: The Francophone school boards, the Catholic school boards (referred to as separate school boards), and the public school boards, the largest group in the province. In essence, for the clarity of this study, the authors have chosen this overarching term to facilitate discussion and mitigate potential confusion.

Purpose of study and research questions

This study was undertaken with the overarching objective of examining the career trajectories of educational leaders within the Albertan K-12 education system, with a specific focus on the intersections of age and gender, as well as the relationship between maternity and parental leaves and the career progression of women in leadership positions. The aim of this research was to uncover disparities, variations, and patterns within career progression by exploring these intersections. This study addressed the following research questions:

- How does the career progression of educational leaders in Alberta differ when age and gender intersect?
- What is the impact of maternity and parental leaves on women’s career progression within the K-12 school system?

By diligently examining these research questions, the study contributed to a comprehensive understanding of the dynamics influencing the career pathways of educational leaders. It provided valuable insights into the roles played by age, gender, and the consequence of taking maternity and parental leave in shaping the professional trajectories of individuals in leadership roles within Alberta’s K-12 education system.

Factors influencing women’s career progression in the K-12 system

For this study, we reviewed existing literature to unravel the intricate dynamics of educational leadership in the K-12 system. The aim was to discern the bearing age, gender, maternity, and parental leaves had on career paths within the K-12 school system. The authors found very little relevant material in the Canadian context, and so broadened the search to the US. The review approach was rigorous and adhered

to inclusion criteria, such as studies conducted in Alberta, Canada, and the US, focusing on educational leaders, age/gender insights, and career progression data from the past 10 years. Consequently, any studies outside of these parameters, notably those unrelated to the K-12 school system, were omitted. The exception was made to explore maternity and parental leaves because narrowing the focus solely to the K-12 system proved overly restrictive and yielded a scarcity of pertinent articles.

Strategic keywords are outlined in Table 1, guiding searches across databases through the utilization of truncation and Boolean operators. Notable databases included ProQuest, ERIC (via EBSCOhost), and the University of Alberta Library Catalogue.

Table 1: Keywords used in databases searches

Age differences and educational leaders	Career barriers and women in education	Family leave and career progression
Age disparities and school leaders.	Career pathways and gender in education	Parental leave and promotion at work
Women in leadership and administration	Women and school leadership	Gender and family leave and career progression
Women career and work interruption	Gender and career progression	Women and family responsibilities
Leadership roles and gender in education	Gender and career trajectories	Family responsibilities and school leadership

Gender and career trajectories in education

Gender-based discrimination within Alberta school authorities exists (ATA, 2020), and action is required (Magnusson, 2017). Often, “bosses, regardless of gender, see women as having greater family-work conflict than men, even when their family situations are the same. Those perceptions in turn lead them to see women as less promotable” (Bolman & Deal, 2021, p. 365), which affects the hiring process of educational leaders. Furthermore, job advertisements often underscore traditional masculine leadership traits (Askehave & Zethsen, 2014; Newton, 2006), such as result-oriented, drive, and physical strength, inadvertently erecting a barrier that hinders women from envisioning themselves as educational leaders and, subsequently, dissuading them from applying to such positions. Both phenomena are compounded for women from visible minority groups who must contend with both gender and racial discrimination, thus influencing their prospects of attaining leadership positions (Chase & Martin, 2021; Fuller, Hollingworth, & An, 2019) within the realm of the school system.

Maternity/parental leaves and educators career paths

A significant research gap exists in North America regarding the interconnection of female teachers’ career trajectories and maternity, parental, or family leave (Chami, 2016). Limited studies on this matter indicate that acquiring and interpreting information on parental leave applications is challenging, with policy implementation posing difficulties for women (Martin, 2018). Upon returning to work after maternity leave, female teachers face various challenges, including managing overwhelming emotions, adapting to changes in eating habits, and navigating conflicting feelings,

particularly guilt (Chami, 2016). Furthermore, childcare demands and dealing with sleep deprivation from feeding or tending to sick children, for example, contribute to exhaustion (Chami, 2016).

Employers perceiving returning working mothers differently can restrict their career advancement opportunities and negatively impact their career progression (Hideg, Krstic, Trau, & Zarina, 2018; Zhang & Rodrigue, 2023). Effective planning and workplace support can alleviate some of these challenges, emphasizing the importance of both physical and emotional assistance (Coulson, Skouteris, & Dissanayake, 2012). Yet, to uncover the nuanced dynamics within the Canadian context, specifically Alberta's educational landscape, further investigation into the intricate interplay of gender, maternity/parental/family leave policies, and career progression is warranted.

Age and access to leadership positions in education

Unearthing studies that delve directly into the career progression of educational leaders, explicitly pertaining to how it varies with age and gender within the context of education, has proven to be a challenging endeavour, marked, at times, by contradictory findings. Sperandio and Devdas (2015) illuminated that if the demands entailed by superintendent positions fail to resonate with qualified women across different age brackets, these positions may equally lack appeal for men who harbour distinct expectations regarding domestic responsibilities and spousal support. This suggests a correlation between individual notions of family obligations and the attractiveness of the job, regardless of age or gender. In contrast, Jean-Marie's (2013) study, which delved into the experiences of two early-career female African American principals in a sizable urban district in the US, unveiled age-related barriers that influenced their trajectory to principalship, alongside persistent challenges stemming from sexism and racism. Meanwhile, Liang, Sottile, and Peters (2018) focused on the need to accommodate non-traditional leaders, who were "women, racial minorities, and the much younger/older" (p. 15), underscoring the complex interplay of race and age as discriminatory identity factors.

Conceptual framework

This study adopted a mixed-method research design to delve into the career progression of women in educational leadership within the context of Alberta. Rooted in the theoretical framework of intersectionality (Crenshaw, 2017), this inquiry sought to examine the intricate interplay of multiple social identities and factors that challenge women's career progression in the education system. Intersectionality, as articulated by scholars, such as Agosto and Roland (2018), Cho, Crenshaw, and McCall (2013), Collins and Bilge (2016), and Scanlan and Theoharis (2016), enables researchers to examine interwoven educational injustices and highlights the relationships between gender and society. In essence, intersectionality aids in foreseeing and addressing potential discrimination, fostering equality and equity among educational leaders (Macias & Stephens, 2019). Through the lens of intersectionality, this study sought to uncover the intricate interplay between gender, family status, social identity

factors, and women's career trajectories, thereby revealing the nuanced complexities of their professional journeys within Alberta's education system.

Methodology

Data collection tools

This study received ethics approval from the University of Alberta Research Administration Services. Data were collected through an online, self-administered questionnaire and two focus groups (Appendix A). The survey was sent to school and district leaders across the province of Alberta in both French and English. It was disseminated through 1) the College of Alberta School Superintendents (CASS) Connects, an email listserv that goes directly to their members; 2) various memos to all Alberta Teachers Association (ATA) local representatives; and 3) the ATA's general mailout to all schools across the province. Each school received a digital postcard with a QR code that led respondents to the online portal for the survey, which was structured in four parts, as follows:

Part 1: This section overviewed the participants' current positions. The authors gathered information, such as the type of school division working in, current leadership or administration role held, the nature of the leadership or administration role, and the part teaching activities played in the working week.

Part 2: Information was collected on the participants' working history, such as the number of years of classroom teaching experience in K-12 education in Canada and/or internationally, recognition of out-of-province teaching experience, years of teaching experience in Alberta, first leadership role held, all the leadership roles held during their career, and age of nomination at these roles.

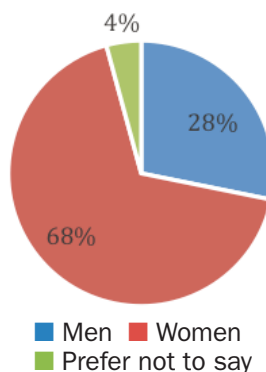
Part 3: Information was collected about leaves and family status, such as relationship status, having children, role of primary caregiver, access to maternity and parental leave, access to unpaid long-term leave, etc.

Part 4: This section provided an overview of the participant's demographics. Information was collected such as gender identity, equity, diversity, and inclusivity profiles, age group, level of education, place of work (rural vs. urban), etc.

Participants

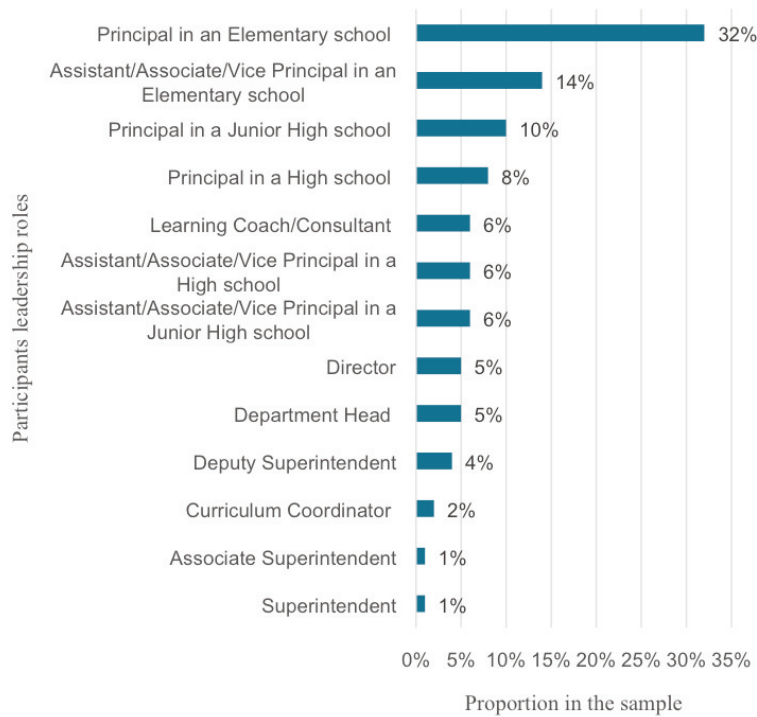
Alberta has approximately 4,400 school leaders working in publicly funded schools (ATA, 2019). All these professionals were invited to participate in the survey and the response rate was 9.45 percent. Four hundred and sixteen school leaders ($n = 416$) completed fully or partially the web-based survey. Women represented 68 percent and men 28 percent of participants (Figure 1), echoing, quite closely, the percentage of men and women working across school divisions in the province (Government of Alberta, 2012). After the preliminary analysis of the survey database, two focus groups were conducted with 20 women in leadership roles.

Figure 1: Gender representation



Seventy-six percent of people who took part in the survey were principals or assistant principals (Figure 2), and 70 percent were in continuous roles.

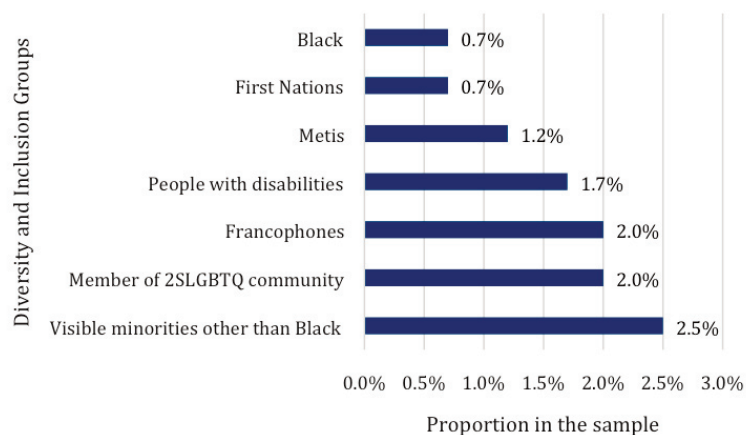
Figure 2: Participants' positions



Most participants (73%) were urban school leaders from Calgary and Edmonton. Of note, the survey was disseminated extensively across the province, equally in rural and urban parts of the province. Assistant/associate/vice principal appointments were the participants' most common (39%) first leadership roles. This was followed by leadership coach/consultants (25%) and department heads (20%). Most participants worked for a public school board and were in continuous roles. Almost 55 percent no longer taught regular classes. Among those who combined their leadership roles with teaching duties ($n = 190$), 43 percent spent less than 30 percent of their working week on teaching activities.

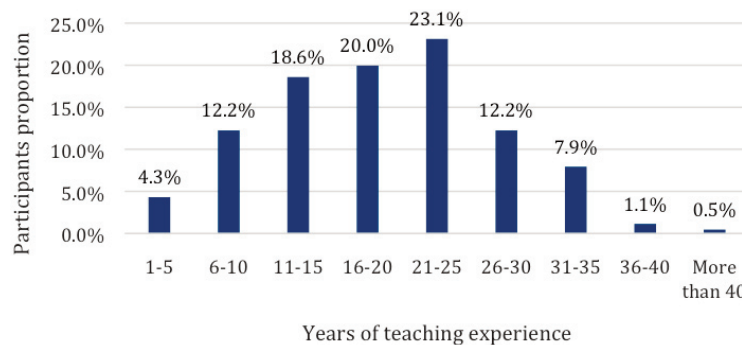
A deeper look at the demographic profile of participants revealed that First Nations (0.7%), Métis (1.2%), Inuit (0%), Black (0.7%) and other ethnocultural groups (2.5%) remained underrepresented in leadership positions (Figure 3). There was a substantial racial imbalance among Alberta school leaders, with Whites (Caucasians) accounting for 95 percent of those in leadership positions.

Figure 3: Diversity and inclusion among participants



Regarding levels of education, three-quarters of the participants reported holding master's degrees. It is worth noting that the participants had a wide range of professional experience. Most (80%) were between 41 and 60 years old and had between 11 and 35 years of teaching experience (Figure 4).

Figure 4: Years of teaching experience of participants in Alberta K-12



Among participants who had previously worked in an education system outside of Alberta ($n = 144$ persons), 53 percent had their experience recognized by the Teacher Qualifications Service (TQS).

Data analysis

Survey data analysis

The survey data were analyzed with the Statistical Package for the Social Sciences (SPSS), a powerful statistical software suite. Descriptive and inferential statistics were used to analyze the data (Creswell, 2012). A Kolmogorov-Smirnov test was used to check the normality of the main dependent variable. The test showed a significant deviation from normality for men ($D(29) = 0.392, p < 0.05$) and for women ($D(47) = 0.317, p < 0.5$) when they were appointed to a department head position, indicating that the age data were not normally distributed in the two groups. Similar results were found for the age distribution between these groups when they were appointed assistant/vice-principal and principal (see Table 2).

Table 2: Normality test results

	Gender Identity	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Age at which appointed department head	Man	0.392	29	<.001	0.596	29	<.001
	Woman	0.317	47	<.001	0.761	47	<.001
Age at which appointed assistant/vice principal	Man	0.2	29	0.004	0.892	29	0.006
	Woman	0.181	47	<.001	0.914	47	0.002
Age at which appointed principal	Man	0.22	29	<.001	0.88	29	0.003
	Woman	0.158	47	0.005	0.948	47	0.037

Note: ^a Lilliefors Significance Correction

Given that we are comparing two unrelated or independent samples, the Mann-Whitney U test is the most appropriate to determine whether there is a statistical difference between the ages scores of women and men. The percentage of missing

values in both groups ranged from 18.6 percent to 61.5 percent (see Table 3), which may be explained by the fact that some participants in the sample had never held the three aforementioned leadership positions during their careers. To perform the Mann-Whitney U test, the complete cases analysis was used, omitting cases with missing data and analyzing the remaining data.

Table 3: Missing data of each variable

Gender			Age_department _head	Age_assistant/ vice principal	Age_principal
Man	N	Valid	45	98	84
		Missing	68	15	29
Woman	N	Valid	103	214	144
		Missing	168	57	127

It should be noted that the Mann-Whitney U test is a non-parametric statistical test that examines the differences between two independent groups on ordinal data. Instead of comparing the means of the two groups, as with the *t*-test, the Mann-Whitney U test compares the mean ranks. It then assesses whether the ranks of the two groups differ significantly (Corder & Forman, 2014). The null hypothesis (H_0) of the test stated that there was no tendency for the age mean ranks of one group to be systematically higher or lower than those of the other group. The alternative hypothesis (H_a) stated that the ranks of one group were systematically higher or lower than those of the other group.

Finally, the nonparametric Spearman's rank correlation coefficient was used to check if there was any relationship between appointment to a leadership or administration position and variables, such as having children, having dependent children for whom participants were the primary caregiver, having dependent adults for whom participants were the primary caregiver, having accessed maternity leave, having accessed a parental leave, and having accessed a long-term unpaid personal leave due to caregiving responsibilities.

After the analysis of the survey data, two focus groups were held during the Women in Leadership ATA Summit in Edmonton. Of those who attended this event, 20 women ($n = 20$) volunteered to take part in the focus group. Thus, two focus groups comprising 10 people each were run to deepen our understanding of women's experiences in school leadership. The following questions were discussed by the participants:

1. What do you think about the impact of taking maternity/parental leave and the opportunities for promotion or career advancement to leadership and administrative positions? Can you share examples with us?
2. Do intersecting factors of social identities (e.g., gender, ethnic group) and family status (e.g., having dependent children, being single parent) affect career progression? How?
3. What are the structural and systemic barriers for women who take maternity or parental leaves with regard to progression through leadership roles?
4. What role(s) do decision makers play in ensuring equitable and inclusive career progression for all women?

Focus group data analysis

To interpret the survey result, the authors conducted two focus groups to discover and make sense of patterns and variations in the beliefs, attitudes, and opinions that women bring to their career advancement. The intersectionality framework that was used to design the focus group questionnaire served as an analytical tool to sort through, categorize, and determine themes based on words, phrases, and quotes from the participants (Anfara & Mertz, 2015).

Following the data collection, a coding process inspired by Saldaña's (2016) approach was employed to systematically organize and categorize the qualitative data (transcriptions from audio recordings). Codes were created to represent recurring themes, ideas, and concepts within the participants' narratives. Additionally, the intersectionality framework was applied during the interpretation process to analyze the data through the lens of intersecting factors, such as gender, race, family status, and culture. This allowed for a nuanced understanding of how multiple barriers and identities are related to career progression and experiences of bias and discrimination. Overall, the data collection, coding, and interpretation process provided a comprehensive view of the complex dynamics surrounding gender disparities and discrimination in career trajectories in the Alberta education system.

Four themes emerged from the analysis of the focus groups:

Theme 1: Hidden discrimination against mothers who aspired to leadership roles.

Theme 2: Family status affected women's career advancement.

Theme 3: Social and cultural cues as barriers to women's career in leadership.

Theme 4: The importance of male allies in promoting gender equality and addressing imbalances and biases in the workplace.

These themes were integrated in the interpretation and explanation of the survey findings.

Results

The intersectionality of various social identities and family status and leaves was evident throughout our findings. We found that individuals' experiences were associated with multiple factors, including gender, age, and family status. These intersecting identities can compound difficulties and shape educators' career paths differently.

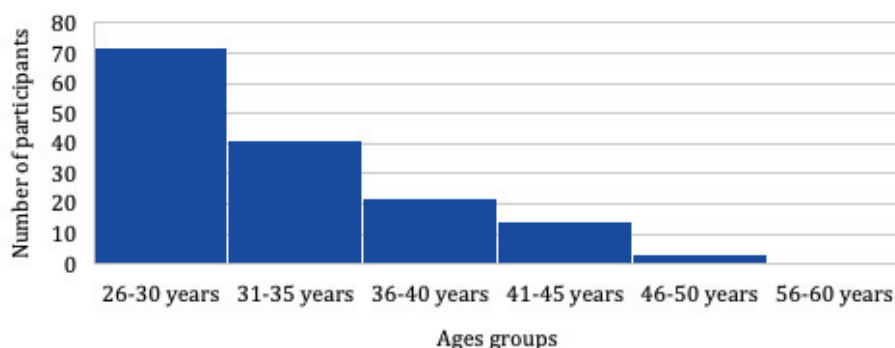
Career progression of school leaders varies according to the intersection of age and gender

Histograms of participants' ages when nominated to the different leadership roles held throughout their careers were examined. When considering the intersection of age and gender, the research team found significant differences between participants' appointments to department head, vice-principal, and principal roles.

Department head

Most participants were appointed department heads in their schools when they were between 26 and 30 years old (see Figure 5).

Figure 5: Distribution of participants ages when appointed department head

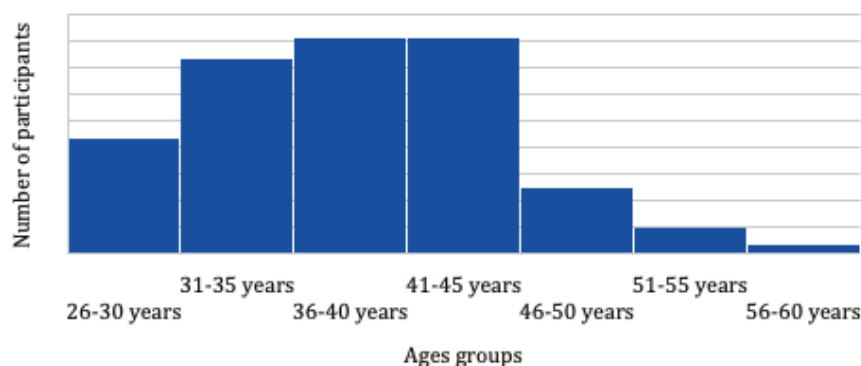


Group comparison with Mann-Whitney U test indicated a significant difference between the age scores of men and women ($U = 1730$, $z = -2.622$, $p < 0.05$, with a small effect size $r = .22$). Looking closely at the shape of the age score distributions by gender, the authors found that their boxplots were generally similar, and each distribution was positively skewed (see Appendix B). Consequently, the medians can be used to summarize the differences of age scores between the two groups. It was concluded that at the time of appointment to the position of head of department, the median age scores of the women ($Md = 2$, $n = 103$) were significantly higher than those of the men ($Md = 1$, $n = 45$).

Assistant/associate/vice-principal

Half of the participants who reported being appointed to assistant/associate/vice-principal positions were between 36 and 45 years old when assigned to these roles.

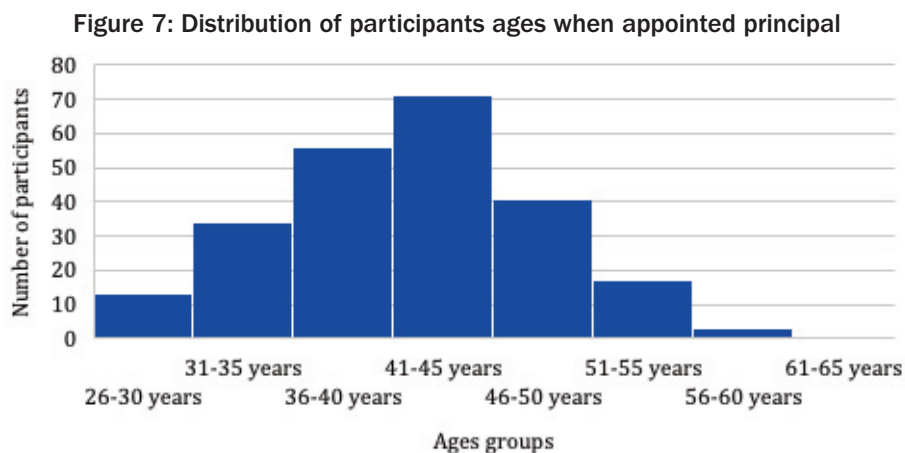
Figure 6: Distribution of participants ages when appointed assistant/vice principal



Conversely, group comparison showed that when promoted to assistant/associate/vice-principal roles, there is a statistical difference between men and women age scores ($U = 8359.500$; $z = -2.948$, $p < 0.05$, with a small effect size $r = .17$) (Figure 6). A thorough observation of the box plots revealed that the shape of the distributions of the dependent variable differed significantly between men and women (see Appendix B). Therefore, mean ranks rather than medians will be used to summarize the Mann-Whitney U results. We can state that women age score ($n_2 = 214$) has a larger mean rank (166.44) than men ($n_1 = 98$) with mean rank (134.80).

Principal

Most participants were awarded principal roles between 41 and 45 years old (see Figure 7).



The Mann-Whitney U test was applied to test if there were differences in age score between men and women. Since the shapes of distribution of age scores for the two groups were not similar (see Appendix B), we could argue that the age scores for women (mean rank = 124.60) were statistically significantly higher than those for men (mean rank = 97.19; $U = 4594$, $z = -3.106$, $p < 0.05$, with a small effect size $r = .21$).

Hidden discrimination against mothers who aspired to leadership roles

Data collected from the survey suggested that women tend to enter department head, assistant/associate/vice-principal, and principal roles at an older age than men. However, there are age-related barriers that educators may face when aspiring to leadership positions. It is crucial to access these positions before a certain age, and this can be seen as undisclosed ageism. According to the consensus of the focus groups, “when you hit a certain age, you are not considered for leadership roles because you might be retiring in a few years,” and “you need to get in before you’re 40.”

The focus groups also provided insight into why women enter these three leadership roles at an older age than men. It appeared that they often received promotions after their children had reached school age, raising questions about the reasons behind this timing, including reluctance to take on additional responsibilities, a potential lack of applications from women, or perceived bias in the selection process. To quote one participant, “I don’t know if it is necessarily women that do not want to take on those roles in that way because it’s too much all at once, because they are not applying, or they just know they won’t be.”

Perceived barriers that women with young children face when aspiring to leadership positions suggest a potential combination of societal bias, self-selection, and discouragement from applying for these roles due to a belief that they wouldn’t be seriously considered for the jobs. One participant said, “it’s not that you can’t go into leadership positions and put your name forward, but people think you are still very busy with young kids. I don’t remember any administrators in my early years that had school-age kids.” Another participant raised questions about the hiring process, reflecting, “I don’t know if it was a bias in the hiring or if women were not applying, or if maybe they were discouraged to apply because they were told ‘you’re not going to be considered.’” These quotes underscore the complex interplay of societal bias and personal choices, highlighting the need to address both systemic biases and the potential impact of self-doubt on women’s pursuit of leadership roles.

The variables of family status were important in this study as they aimed to capture differences in participants' career advancement. Of those surveyed, 82 percent reported having children, and 58 percent had a dependent child or adult for whom they were the primary caregiver. In addition, 50 percent of the participants had accessed a maternity leave, 17 percent a parental leave, and 8 percent a long-term unpaid personal leave due to caregiving responsibilities.

When the data was split according to the gender of the participants, the authors found significant differences in the relationship between family status, leaves, and career progression. Spearman's correlation revealed that parental leaves taken by men ($r_s = -0.277$; $p < 0.01$), as well as long-term unpaid personal leaves due to caring responsibilities ($r_s = -0.222$; $p < 0.05$) tended to decrease their promotion to principal roles. Meanwhile, women's access to maternity leaves limited their chances for promotion to director roles at the school division level ($r_s = -0.125$; $p < 0.05$), and having children reduced their promotion to superintendent position ($r_s = -0.142$; $p < 0.05$). Nevertheless, this result should be viewed with caution, given the sample's low representation of directors and superintendents.

During the qualitative phase of this research, we have deepened our understanding of these results. Women who participated in the focus groups reflected various family statuses and how they are related to their career progression. The majority, being parents, had taken maternity and/or parental leave one or more times in their careers. Pertaining to this, the participants pointed out several challenges women face in the workplace, including the fear of pregnancy jeopardizing career prospects, the need to hide pregnancies due to discrimination, and the isolation experienced during maternity leave. A participant discussing their early teaching years expressed reluctance to take leave before securing a permanent contract, fearing it might jeopardize her permanency in her (then) current role. Another participant in a leadership position recounted a discouraging response tied to her recent marriage and presumed future family planning. She was told, "We want someone who is going to be in this [leadership] role for the long-term, and you just got married, so you [are] probably gonna [sic] have babies ... that [comment] literally crushed my soul."

Similar experiences were shared in the focus group by a high school counsellor who, starting at 25 and pregnant in her first year of the position, feared losing her job during maternity leave. Another participant, taking a short stress leave to care for her disabled child highlighted her difficulty securing a desired position upon returning despite having superior qualifications. She said, "I took a stress leave for two weeks because my son was diagnosed with a disability. Therefore, I did not get the position I wanted." A single-parent participant emphasized the greater impact these challenges have on the career progression of single mothers in comparison to those with supportive spouses. Others confirmed this importance of having a spouse or family support when seeking career progression. One participant said, "When going back to work, I was struggling with making sure I was going to have support at home." Another said, "I am full [on] in my teaching career and it's taking everything. I would not survive without [my husband]." Participants also highlighted the intri-

cate difficulty of attaining a work-life balance and seeking career progression as these two endeavours were dependent on available childcare options and the challenges of obtaining part-time or full-time contracts upon returning. They also noted that there may be differences in perception or treatment when a man takes on the role of caregiver, highlighting potential gender-related stereotypes or biases. For example, “Women are usually promoted after they had kids, and they are [of] school age,” but “a dad who would come back from parental leave would come back and get right back in there,” highlighting that “when the male is the caregiver, it’s different.”

Social and cultural cues as barriers to women’s career in leadership

Societal expectations and gender roles can affect women in their careers, and participants expressed differing treatment and perceptions based on gender. Participants’ narratives highlighted the role of the school district’s religious and cultural orientation on women’s career progression compared with that on men’s, prompting an examination of the interplay between religious and cultural factors in shaping career progression. In the context of being a single parent within a religious school board, individuals experience a heightened need to work harder for job security, particularly when compared with the public system. A participant pointed out that, “Being a single parent because that relationship did not work out impacted my career progression in the Catholic education system.” Within the religious school districts, biases and disapproval toward single parents affect professional treatment, as evidenced by a participant who shared, “I know someone who had a child on her own, and they [the religious district] did not like that [her being a single parent].” The challenges of aligning personal life with religious values at work are, thus, emphasized, with recognition of a gender-based discrepancy in consequence for unintentional pregnancies or the breakdown of a relationship. This highlights the need for more equitable treatment, as expressed by one participant: “Living by religious values is archaic, and it’s hard to live by them. It adds stress to keep your personal life a secret from your employer. It’s the women who might accidentally get pregnant and get caught. I know of a woman who got caught for that but not the man (who was also working in the same school/district).”

Finally, another participant highlighted how gender identity and cultural norms intersect with career prospects in Catholic schools. Reflecting on her experience, she quoted that being a person of colour, part of the 2SLGBTQ+ community, and a single person can potentially impact career progression within a religious school board.

The need for male allies for gender equality and to address gender imbalances and biases in the workplace

The emergence of male allies as crucial agents in addressing workplace gender imbalances and biases signifies a key point. Exploring the significance of male allies in fostering an inclusive professional environment is integral to the broader discourse on gender equity. These unforeseen yet crucial themes offer valuable insights into the ongoing discussion on gender dynamics and career advancement in educational settings.

The importance of male allies in addressing gender imbalances within power structures was articulated through participants’ insights. The imperative to cultivate

male allies is expressed in the statement, “we need to build men as allies because without their voice[s], no men are going to listen.” This emphasizes the pivotal role of male voices in advocating for gender equality, recognizing that fostering understanding and support among men is essential for meaningful change. Acknowledging an unbalanced power structure further underscores the necessity for male engagement in dismantling existing disparities. This recognition of power imbalances also emphasizes the urgency of involving men as allies in discourse and action surrounding gender equity to contribute to a more inclusive and equitable work environment within the school system.

Male allyship also refers to having a supportive partner when balancing a demanding job with a leadership role that requires frequent evenings and weekends away from home. One participant said, “When going back to work, I was struggling with making sure I was going to have support at home. As local president, I have lots of evenings and weekends away from home. I could not do what I do without my husband.” However, that support also depends on several factors, including the partner’s work and societal expectations about gender roles. This situation was summarized by another participant:

It [the support] depends on what your spouse does. My husband is in trade, and we have kids. The expectation on him is you are here; this is your man’s role. What’s wrong with your wife? Why can’t she stay at home when your kid is sick? Why can’t your wife do this? That’s her job. He told his employer we are both parents, so we have to take turns. As an apprentice, he was under pressure, he could not afford to lose his job, just because of the gender roles in his field, which then landed it on me. As a teacher, it was okay to take that time off and be with my kids. We split the parent leave of our last child, and he got fired, and we ended up going to a huge human rights thing, because he was fired. I went on parental leave, and nobody cared. His name was mud because he took a parental leave. There is pressure on the men’s side as well.

Challenges faced by spouses of some individuals in the education profession who often work long shifts away from home, thus, essentially making one parent responsible for childcare and household duties (with the exception of financial support) may affect women’s work life balance and their aspiration for leadership positions.

Discussion

The findings from this study show that in Alberta, there is still a glass ceiling for most women to attain their career aspirations within the public and religious school authorities. This glass ceiling is due to “invisible barriers that many women face as they advance through the ranks of their chosen profession but are able to progress only so far before being stymied in their efforts to reach upper echelons” (Chisholm-Burns, Spivey, Hagemann, & Josephson, 2017, p. 312).

According to Bolman and Deal (2021), there is “no consensus about what sustains the glass ceiling, but evidence points to several contributing factors” (p. 364),

including discrimination, normative expectations, and family-work conflict. Mayrhofer, Meyer, Schiffinger, and Schmidt (2008) added that this conflict is higher among those who have children at home, are concerned or troubled about childcare, have greater time demands from family, have disagreements with their family or partner, and have less family support. The results of this research are consistent with these previous studies and reveal that family responsibilities are one of the biggest barriers to women's career progression.

The survey showed that women who prioritize having children and taking maternity/parental leave inadvertently delay their own entry into various leadership positions, resulting in an age-gap of when they are appointed to the roles compared with men. In addition, because they are "out of the system" during their leaves, they may not apply for leadership roles as they are unaware of the opportunities that may be available in their school or school board. Moreover, returning to work and aspiring to a leadership career can be a tough process. Although there is a negative correlation between maternity/parental leaves and career progression for all gender identities, women experience the consequences of these leaves to a greater extent than men, as they reduce their likelihood of being promoted to director roles at the school division level or to superintendent positions. Focus groups revealed that some employers and colleagues stereotype women with family responsibilities, assuming that they would devote less time and energy to the time-consuming work of leadership roles than their male counterparts or women without children. Similar to the findings of Morris (2002), this study underscores the importance of support mechanisms (such as partner involvement and men's voices for equity and inclusivity) to navigate these invisible barriers.

The survey showed that regardless of marital status, women tend to be older than men when appointed to head of department positions. This trend is also observed for women promoted to assistant, associate, vice-principal, and principal roles. The literature on the intersection of age and gender in educational leadership supports the survey's findings that younger men tend to get promoted more quickly (Wilson, Powney, Hall, & Davidson, 2006), while women generally attain leadership positions at older ages compared with their male counterparts. Specifically, Ellerson (2015) highlights that "female superintendents continue to be older, on average, than their male counterparts" (p. 32), and that men are four times more likely than women to achieve the superintendent position before the age of 36. Additionally, less than one-third of female educational leaders assume the role of superintendent before reaching the age of 45 (Ellerson, 2015).

Despite these trends, an emerging group of younger women are prepared for educational leadership roles (Oram-Sterling, 2015). Still, research remains limited on this demographic (Sperandio, 2015). Additionally, the literature shows that beyond age, appearance plays a significant role in educational leadership (Newcomb & Grogan, 2015). For example, an older appearance can confer credibility and authority, helping leaders establish respect and influence, while a younger appearance may have the opposite effect. In sum, the intersection of age and gender is intertwined with subtle factors such as perceived age based on appearance, highlighting a complex layer of societal assumptions and discrimination that neither the survey nor the focus group

captured. Additionally, Wilson et al. (2006) found that female headteachers are more likely to be White, reflecting the predominantly White demographic of both the survey respondents and focus group participants. Their findings indicate that women are less likely to have children compared with their male counterparts, suggesting that female teachers' personal lives are more significantly impacted by their career choices. In other words, female educational leaders make greater personal sacrifices for their careers but still experience slower promotions than men.

One of the practical consequences of this research is that it identifies the need to reevaluate maternity/parental/family leave policies in force in school boards to align them with principles of equitable career progression and work-life balance. It also sheds light on unequal career progression at the intersection of age and gender, providing insights to develop more inclusive and fair workplace practices. Our recommendations include ensuring that mothers, availing themselves of maternity leave extended with parental leave, remain integrated in the education system. While on leave, as active employees within the school district, they should retain access to job offers and professional development opportunities, enabling them to decide on their engagement during their absence. Initiatives to raise awareness among spouses and family members about supporting mothers who aspire to balance motherhood and career advancement are essential. Decision-makers and policymakers must cultivate realistic expectations for those in leadership roles to foster a healthy work-life balance. Additionally, Powney, Wilson, Hall, Davidson, Kirk, Edward, and Mirza (2003) suggest providing training for school trustees, and holding them accountable for developing, updating, monitoring, and evaluating policies as well as carrying out audits to ensure compliance with other legislation. Finally, school divisions must deploy structural efforts to comprehend the impact of biases at the intersection of age and gender, ensuring that career progression is based on qualifications rather than age-related perceptions and assumptions.

Concrete actions are imperative to shift the attitudes among decision-makers to reduce gender stereotypes that hinder women from choosing both motherhood and their career; at this point, it seems that these options are mostly mutually exclusive. Efforts to raise awareness among decision-makers involved in recruiting educational leaders are crucial, necessitating reflection and alteration of explicit and implicit discriminatory discourse. The presence of women at decision-making tables, alongside male allies, is indispensable for both descriptive and substantive representation, and to foster positive transformative change.

Limitations

While this research offers valuable insights into the career progression of school leaders, it is important to acknowledge the limitations of this study. Indeed, web surveys can be employed to efficiently and effectively collect data about a large group of people. However, the low response rate to the survey (9.4%) is problematic, as it raises the possibility that the results may be misleading and only representative of those who take the survey. The findings do not reflect elements of the target population with the breadth and depth that would be expected. Consequently, the results cannot be generalized to all Alberta school leaders. Furthermore, the self-adminis-

tration of the survey does not allow for verification of the participants' understanding of the constructs used in the questionnaire. This could potentially impact the reliability of the results. To mitigate this drawback, a qualitative approach was used to get a deeper understanding of participants' experiences and beliefs about career progression. However, the choice of focus groups rather than semi-structured interviews did not provide a more contextualized perspective.

Conclusion

To sum up, this research explored the underrepresentation of women in top educational leadership roles in Alberta's K-12 system. The inquiry uncovered the relationship between age, gender, maternity and parental leaves, and women's career progression using a mixed-method approach grounded in intersectionality theory. The study revealed gender-based discrimination, age-related barriers, and unexpected themes, such as the interplay between social and cultural cues as barriers to women's careers in leadership, as well as the crucial role of male allies. Findings emphasized a glass ceiling, hindering women's progression in public and religious school authorities.

In consequence to our findings, our team of researchers advocates for a rethink of maternity/parental/family leave policies in school boards, urging policymakers to prioritize procedures that address equitable career progression and work-life balance. Recommendations included integrating mothers on leave into the education system, raising awareness among families, and cultivating realistic expectations for leadership roles. Policymakers are urged to take concrete action to shift from a discriminatory mindset to focus on the active inclusion of women in education leadership roles, which, with the additional support of male allies, is crucial for positive change.

Moving forward, future research should delve into the effectiveness of EDI policies across all levels of leadership within school authorities. A comprehensive examination of how these policies impact the career trajectories of individuals, particularly focusing on gender, age, and family status, is essential. Additionally, investigating the implementation of EDI training for individuals involved in the recruitment process of educational leaders would significantly contribute to creating a more inclusive and equitable environment. Understanding how EDI training influences decision-makers in addressing biases, promoting diversity, and fostering an inclusive culture is paramount. This research could increase awareness of gaps in EDI policies and training and provide actionable insights to enhance the recruitment and advancement processes for female education leaders in the K-12 system.

Note

1. This study was conducted in partnership with the Alberta Teachers Association, the College of Alberta School Superintendents (CASS), and La Fédération des Conseils Scolaires Francophones de l'Alberta. The research was funded by the Social Sciences and Humanities Council of Canada (SSHRC).

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Appendix A

Survey questions

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Essiomle, Nadler,
& ElAtia

*Career Paths of
Women in
Educational
Leadership*

SECTION 1 CURRENT POSITION	
Questions	Answers
What type of division do you currently work for?	Charter Francophone Private school Public separate Prefer not to say
What is your current leadership role?	Assistant/associate/vice principal in an elementary school Assistant/associate/vice principal in a junior high school Assistant/associate/vice principal in a high school Principal in an elementary school Principal in a junior high school Principal in a high school Learning coach/consultant Curriculum coordinator Department head Director associate Superintendent Deputy superintendent
What is the nature of your leadership designation?	Continuous Term Acting Temporary Probationary
Is teaching part of your current role?	Yes If you selected yes, please indicate the percentage of your teaching load: 90–70% 75–50% 50–30% 30% or less No

SECTION 2 PREVIOUS TEACHING AND LEADERSHIP EXPERIENCES	
Questions	Answers
How many years of classroom teaching experience do you have in K-12 education in Canada (but outside of Alberta) and/or internationally?	1–5 years 6–10 years 11–15 years 16–20 years 21–25 years 26–30 years 31–35 years 36–40 years 40+ years
Was your previous teaching experience outside Alberta recognized?	Yes No
How many years of classroom teaching experience do you have in K-12 education in Alberta?	1–5 years 6–10 years 11–15 years 16–20 years 21–25 years 26–30 years 31–35 years 36–40 years 40+ years
What was your first leadership role?	Assistant/associate/vice principal Principal Learning coach/consultant Curriculum coordinator Department head Director Associate superintendent Superintendent Deputy superintendent
Have you held a department head role during your career?	Yes At what age did you first enter this role? 26–30 years 31–35 years 36–40 years 41–45 years 46–50 years 51–55 years 56–60 years 61–65 years No
Have you held a learning coach/consultant role during your career?	Yes At what age did you first enter this role? 26–30 years 31–35 years 36–40 years 41–45 years 46–50 years 51–55 years 56–60 years 61–65 years No

SECTION 2 (continued)

Questions	Answers
Have you held a principal position during your career?	<p>Yes</p> <p>At what age did you first enter this role?</p> <p>26–30 years</p> <p>31–35 years</p> <p>36–40 years</p> <p>41–45 years</p> <p>46–50 years</p> <p>51–55 years</p> <p>56–60 years</p> <p>61–65 years</p> <p>No</p>
Have you held a director role during your career?	<p>Yes</p> <p>At what age did you first enter this role?</p> <p>26–30 years</p> <p>31–35 years</p> <p>36–40 years</p> <p>41–45 years</p> <p>46–50 years</p> <p>51–55 years</p> <p>56–60 years</p> <p>61–65 years</p> <p>No</p>
Have you held an associate superintendent role during your career?	<p>Yes</p> <p>At what age did you first enter this role?</p> <p>26–30 years</p> <p>31–35 years</p> <p>36–40 years</p> <p>41–45 years</p> <p>46–50 years</p> <p>51–55 years</p> <p>56–60 years</p> <p>61–65 years</p> <p>No</p>
Have you held a deputy superintendent role during your career?	<p>Yes</p> <p>At what age did you first enter this role?</p> <p>26–30 years</p> <p>31–35 years</p> <p>36–40 years</p> <p>41–45 years</p> <p>46–50 years</p> <p>51–55 years</p> <p>56–60 years</p> <p>61–65 years</p> <p>No</p>
Have you held a superintendent role during your career?	<p>Yes</p> <p>At what age did you first enter this role?</p> <p>26–30 years</p> <p>31–35 years</p> <p>36–40 years</p> <p>41–45 years</p> <p>46–50 years</p> <p>51–55 years</p> <p>56–60 years</p> <p>61–65 years</p> <p>No</p>

SECTION 3 FAMILY STATUS

A maternity leave, at minimum, provides 16 weeks of leave for pregnant women. It can only be accessed by birth parents. Most teacher collective agreements have maternity leave that ranges from the minimum time to 18 weeks. Maternity leave may have paid and unpaid portions.

A parental leave is the time parents and caregivers take off work to care for children or a new baby. It can be accessed for up to 62 weeks by birth parents or non-birth parents, including adoptive parents.

A personal leave is defined for this study as being a long-term leave without pay or benefits. Personal leave can be accessed for a variety of reasons, including child-rearing, educational attainment, personal travel, compassionate care, and so on.

Questions	Answers
Which of the following best describes your current relationship status?	Common-law Divorced Legally married Separated Single Widowed Decline to answer
Do you have children?	Yes No I prefer not to answer
Do you have dependent children for whom you are the primary caregiver?	Yes No I prefer not to answer
Do you have dependent adults for whom you are the primary caregiver?	Yes No I prefer not to answer
How many dependents do you have?	1 2 3 4 More than 5
Have you accessed a maternity leave?	Yes How many maternity leaves have you taken? 1 2 3 +4 No
Have you accessed a parental leave?	Yes How many parental leaves have you taken? 1 2 3 +4 No

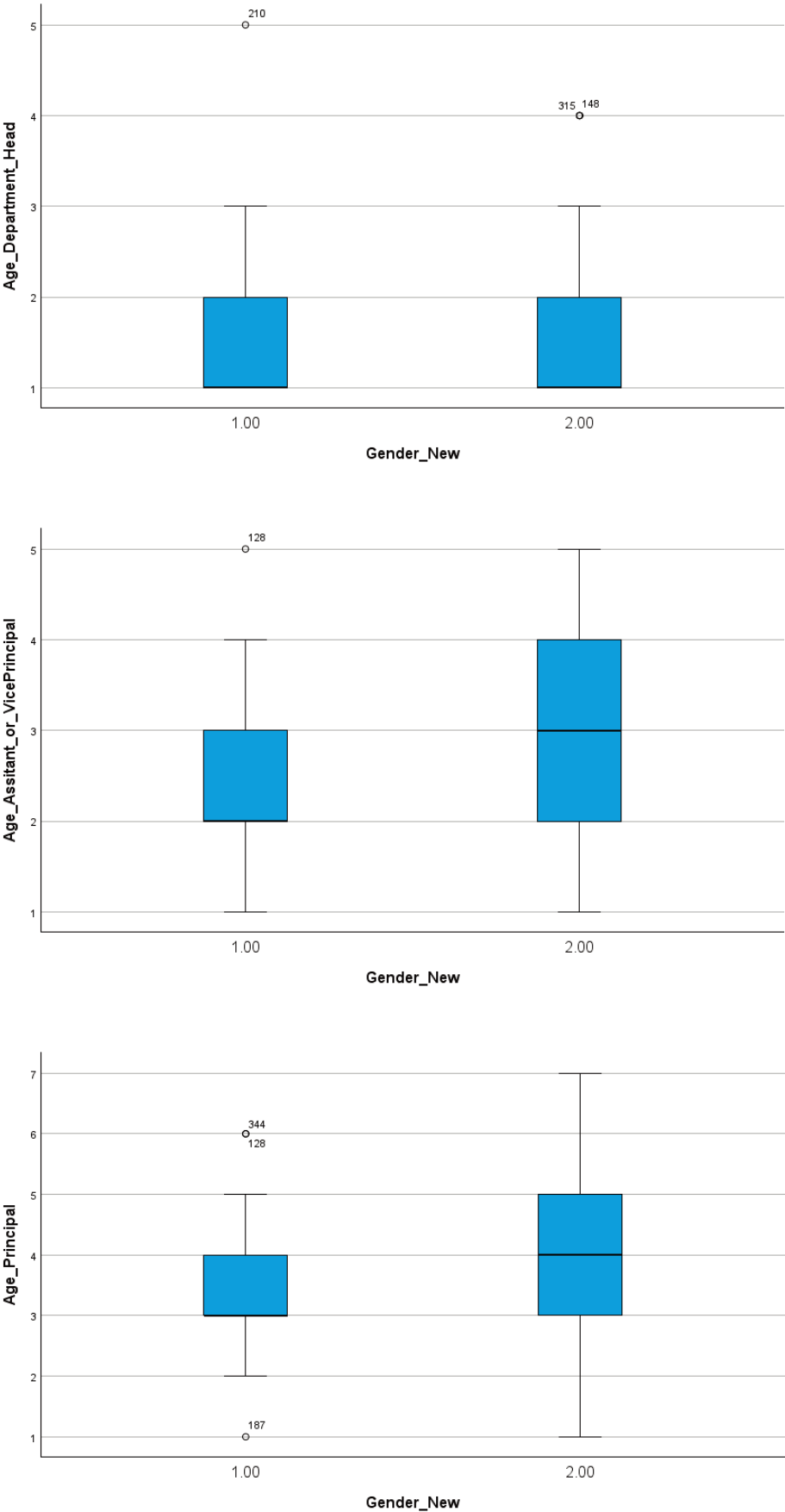
SECTION 3 (continued)	
Questions	Answers
Have you accessed a long-term unpaid personal leave due to caregiving responsibilities?	<p>Yes</p> <p>If yes, for which of the following reasons?</p> <p>Continue a parental leave</p> <p>Caregiving responsibilities of children</p> <p>Elderly care</p> <p>Other</p> <p>How many personal leaves due to caregiving responsibilities have you taken?</p> <p>1</p> <p>2</p> <p>3</p> <p>+4</p> <p>No</p>

SECTION 4 DEMOGRAPHIC	
Questions	Answers
How do you self-identify? Please check all that apply.	<p>Woman</p> <p>Man</p> <p>Black</p> <p>Person of colour</p> <p>2SLGBTQ+</p> <p>First Nations</p> <p>Métis</p> <p>Inuit</p> <p>Person with a disability</p> <p>Francophone</p> <p>Decline to answer</p>
From the list below, please select your age group.	<p>25–30 years</p> <p>31–35 years</p> <p>36–40 years</p> <p>41–45 years</p> <p>46–50 years</p> <p>51–55 years</p> <p>56–60 years</p> <p>61–65 years</p> <p>65+ years</p>
What is your highest level of education attained?	<p>Bachelor's degree</p> <p>Combined degree</p> <p>After degree</p> <p>Master's degree</p> <p>Professional certificate</p> <p>Post doctorate degree</p> <p>Decline to answer</p>

SECTION 4 (continued)	
Questions	Answers
Do you primarily work in a rural or urban setting?	Rural: geographic area outside of a town or city Urban: geographic area within a town or city
Which of the below cities is closest to your area of employment?	Calgary Edmonton Red Deer Lethbridge Medicine Hat Grande Prairie Cold Lake Fort McMurray High Level Jasper Lloydminster None Listed

Appendix B

Age distributions box plots by gender



Descriptives

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	Gender Identity		Statistic	Std. Error
Age_ Department_ Head		Mean	1.33	.333
		95% Confidence Interval for Mean	Lower Bound	-.10
			Upper Bound	2.77
		5% Trimmed Mean	.	
		Median	1.00	
		Variance	.333	
		Std. Deviation	.577	
		Minimum	1	
		Maximum	2	
		Range	1	
		Interquartile Range	.	
		Skewness	1.732	1.225
		Kurtosis	.	.
	Man	Mean	1.48	.169
		95% Confidence Interval for Mean	Lower Bound	1.14
			Upper Bound	1.83
		5% Trimmed Mean	1.35	
		Median	1.00	
		Variance	.830	
		Std. Deviation	.911	
		Minimum	1	
		Maximum	5	
		Range	4	
		Interquartile Range	1	
		Skewness	2.489	.434
		Kurtosis	7.259	.845
	Woman	Mean	1.74	.138
		95% Confidence Interval for Mean	Lower Bound	1.47
			Upper Bound	2.02
		5% Trimmed Mean	1.66	
		Median	1.00	
		Variance	.890	
		Std. Deviation	.943	
		Minimum	1	
		Maximum	4	
		Range	3	
		Interquartile Range	1	
		Skewness	1.031	.347
		Kurtosis	.007	.681

Descriptives (continued)

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	Gender Identity		Statistic	Std. Error
Age_ Assitant_ or_Vice Principal		Mean	2.67	.667
		95% Confidence Interval for Mean	Lower Bound	-.20
			Upper Bound	5.54
		5% Trimmed Mean	.	
		Median	2.00	
		Variance	1.333	
		Std. Deviation	1.155	
		Minimum	2	
		Maximum	4	
		Range	2	
		Interquartile Range	.	
		Skewness	1.732	1.225
		Kurtosis	.	.
	Man	Mean	2.41	.189
		95% Confidence Interval for Mean	2.03	
			2.80	
		5% Trimmed Mean	2.37	
		Median	2.00	
		Variance	1.037	
		Std. Deviation	1.018	
		Minimum	1	
		Maximum	5	
		Range	4	
		Interquartile Range	1	
		Skewness	.360	.434
		Kurtosis	.063	.845
	Woman	Mean	2.83	.153
		95% Confidence Interval for Mean	Lower Bound	2.52
			Upper Bound	3.14
		5% Trimmed Mean	2.82	
		Median	3.00	
		Variance	1.101	
		Std. Deviation	1.049	
		Minimum	1	
		Maximum	5	
		Range	4	
		Interquartile Range	2	
		Skewness	.002	.347
		Kurtosis	-.606	.681

Descriptives (continued)

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	Gender Identity		Statistic	Std. Error
Age_Principal		Mean	4.00	.577
		95% Confidence Interval for Mean	Lower Bound	1.52
			Upper Bound	6.48
		5% Trimmed Mean	.	
		Median	4.00	
		Variance	1.000	
		Std. Deviation	1.000	
		Minimum	3	
		Maximum	5	
		Range	2	
		Interquartile Range	.	
		Skewness	.000	1.225
		Kurtosis	.	.
	Man	Mean	3.52	.196
		95% Confidence Interval for Mean	Lower Bound	3.12
			Upper Bound	3.92
		5% Trimmed Mean	3.50	
		Median	3.00	
		Variance	1.116	
		Std. Deviation	1.056	
		Minimum	1	
		Maximum	6	
		Range	5	
		Interquartile Range	1	
		Skewness	.342	.434
		Kurtosis	1.379	.845
	Woman	Mean	3.79	.197
		95% Confidence Interval for Mean	Lower Bound	3.39
			Upper Bound	4.18
		5% Trimmed Mean	3.80	
		Median	4.00	
		Variance	1.823	
		Std. Deviation	1.350	
		Minimum	1	
		Maximum	7	
		Range	6	
		Interquartile Range	2	
		Skewness	-.092	.347
		Kurtosis	-.028	.681