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A Contemporary Analysis of Impostor Phenomenon Among Female Education Leaders in the Province of Alberta

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A Contemporary Analysis of Impostor Phenomenon

Among Female Education Leaders in the Province of Alberta

By

Sharon Fischer

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Abstract

The purpose of this mixed-methods research study was to explore how prevalent impostor phenomenon (IP) is among education leaders in the province of Alberta, and to determine what can be done to support these leaders. This study explored the extent to which educational leaders experience impostor phenomenon, and how those experiences varied by gender, age, position, years of educational experience, and years of experience in their current role. There were 167 participants in this study, including superintendents, associate superintendents, principals, and assistant principals from 16 school divisions across the province of Alberta, Canada.

Data collection included a survey ($n = 167$) with follow-up semi-structured interviews ($n = 7$). The survey consisted of the Clance Impostor Phenomenon Scale (CIPS), a demographic questionnaire, and seven open-ended questions. The CIPS is the most common psychometric instrument used in research to identify experiences of impostor phenomenon. Purposeful, criterion sampling, based on demographic characteristics and CIPS scores, identified participants for the qualitative phase of the study.

Quantitative data analysis included independent sample t-tests, ANOVAs, and chi square analyses. Findings indicated that female educational leaders were significantly more likely ($p = .033$) to be affected by impostor phenomenon than their male counterparts. Additionally, leaders under the age of 45 were significantly more likely ($p = .024$) to experience impostor phenomenon than leaders aged 45 and above.

Qualitative data from interview transcripts and open-ended survey items were analyzed using a two-cycle coding process (Saldaña, 2016), resulting in the emergence of five themes for the second research question, For those educational leaders who experience impostor

phenomenon, what factors have contributed to these experiences? The themes identified included: cognitive distortions, impact of adverse relationships, overwhelming expectations, gender bias, and early life experiences. In response to the third research question, For those educational leaders who experience impostor phenomenon, what supports have helped to overcome those barriers? four themes emerged: relational influences, intentionality related to self-care, professional supports specific to education, and positive self-talk. This study can serve to provide support to school divisions regarding leadership development programs and the implementation of specific professional development suggestions for administrators. It is vital that school districts provide intentional support to educational leaders and that these supports include programming specific to the needs of the participants.

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Above all, thank you to my Lord and Saviour, Jesus Christ. "Keep on asking, and you

will receive what you ask for" (Matthew 7:7). I asked many times for clarity of thought, for the

right words, and for renewed energy and You were always faithful in answering.

Dedication

This dissertation is dedicated to my loving parents, Russ and Elaine Porisky. I lost my dad just months before starting this dissertation journey and lost my mom prior to completing my first two courses of this program. I miss them both every day, but I know they are in a much better place and that they are proud of me and of this accomplishment.

From the generation past to the next generation, I also dedicate this work to my children, Braden and Justin (Dacia) Fleischhacker. You are my greatest inspiration and motivators. I want more than anything to have demonstrated for you the value of hard work, the importance of perseverance, and to encourage you to follow your dreams. I'll love you forever, I'll like you for always, as long as I'm living my babies you'll be.

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Chapter 1: Introduction

The past half-decade has seen an extensive increase in the number of female administrators in Alberta schools. According to Cairns (1977), approximately 2% of principal positions were held by female leaders between the years of 1968 - 1971. By the 1990-91 school year, this number had risen to 18%, and by 1995, the statistics for women holding principal positions had risen to 26% (Young & Ansara, 1999). This number has continued to increase throughout the decades, and yet women are still vastly underrepresented in educational administrative positions. In fact, women make up nearly 75% of the teaching positions in Alberta and Canada but they hold only 40% of the administrative positions (ATA, 2020).

Public school education employs more women in administrative roles than ever before, which continues to illustrate the trajectory discussed above. In the province of Alberta, 41% of principals are female, 44% of vice principals are women, and only 11% of superintendents are females (ATA, 2020; Magnusson, 2017). Similarly, according to the U.S. Department of Education's National Center for Education Statistics (2013), during the 2009-10 school year, 76% of public-school teachers were female, yet less than 48% of the total number of teachers were school principals, and less than 24% of superintendents were women. According to the National Center for Education Statistics (2022), 54% of principals were female, up 6% from the 2012-2013 school year and up a full 10% from the 1999-2000 school year.

Despite the increase of women in educational leadership roles, women continue to be underrepresented in comparison to the number of women who are employed in the field of education (ATA, 2020). Women currently make up 74% of the teachers in the province of Alberta, yet they make up less than half of the overall administrators in Alberta (ATA, 2020). This overrepresentation of women in teaching positions is consistent throughout Canada.

According to Statistics Canada (2011), 84% of elementary school teachers are females and 59% of secondary teachers are female. In 2014 - 2015 women outnumbered men in elementary schools by four times and held well over half of the teaching positions at the secondary level as well (Hoffman, 2017). Perhaps more alarming is that these Canadian figures are not unique. In fact, according to the Organisation for Economic Co-operation and Development (2015), Canada had a higher percentage of male elementary teachers than all other Western countries, which illustrates that gender discrepancy in education is an international issue.

Aside from females being underrepresented in educational leadership, research shows that these leaders also experience challenges in their roles. Many women who hold leadership positions have little or no preparation for taking on these jobs, and they are often underprepared for what is expected of them in their administrative roles (Caselman et al., 2006; Mendez-Morse, 2004). As a result, these female leaders may experience high levels of competition in the workplace, workaholic behaviours, and eventual burnout (Caselman et al., 2006; Clance & Imes, 1978). Additionally, female administrators may experience burnout and stress due to their tendency to put the needs of others before themselves, and school systems have not addressed these challenges experienced by female principals (Wrushen & Sherman, 2008). Moreover, Wrushen and Sherman (2008) posit that the absence of mentors for women in leadership positions has had a negative impact on them as they move into higher positions. They also contend that these female leaders will experience more obstacles throughout their careers (Wrushen & Sherman 2008). Further challenges experienced by female leaders include the guilt they experience that they cannot be everything to everyone (Hicks, 1996). Additionally, women are often afforded less respect, experience more reluctance from female staff members, lack

professional female networks, and are left out of male networks. As a result, women feel that they work harder than male administrators in order to prove their worth (Caselman et al., 2006; Kennington-Edson, 1988). These impediments, combined with the lack of preparation and the underrepresentation of women in these roles, can lead to feelings of being fraudulent.

Impostor Phenomenon

Women have historically been underrepresented in and have faced many barriers pursuing their paths to educational administration; one reason for this underrepresentation may be impostor phenomenon (IP). In 1978, Pauline Clance and Suzanne Imes coined the term impostor phenomenon as it relates to high achieving women. Impostor phenomenon is used to describe the internal feeling of being an intellectual phony (Clance & Imes, 1978). IP is often experienced in high achieving individuals who do not believe their achievements are deserved (Clance & Imes, 1978; Wilke, 2018).

There is great variance in the use of both imposter and impostor throughout the literature. Impostor phenomenon is spelled both with an e and with an o, yet the meaning is the same despite the spelling. Additionally, IP is often referred to as imposter syndrome in the literature; however, Clance (1985) intentionally chose not refer to it as a syndrome because she wanted to avoid the negative stigma for women, and her study concluded that IP was often manifested in female clients. Furthermore, syndrome refers to an official medical diagnosis, of which IP is not.

For the purposes of this study, the author had chosen to use the term *imposter phenomenon*, believing that to be the Canadian spelling. However, a condition of receiving permission to use the Clance Impostor Phenomenon Scale in this study was dependent upon agreeing to use the spelling "impostor" as the office title of the scale include the words

"Impostor Phenomenon." Therefore, Clance suggests that researchers use that specific terminology.

Moreover, there has been a great deal of research done in the area of IP, and although Clance and Imes (1978) first coined the term in reference to high achieving women, this phenomenon has been reported in a variety of different people and groupings of people. For instance, IP has been researched in relation to first generation university students (Ayesiga, 2021; Chen & Carroll, 2005; Blackmon, 2018), faculty members, graduate students (Dahlvig, 2013; Fraenza, 2016; McLean, 2017), minorities in either university faculties or areas of employment (Moriel de Cedefio, 2020), those employed in both the fields of medicine (LaDonna et al., 2018; Mullangi & Jagsi, 2019) and business (Vaughn et al., 2019), and in the field of psychology (Chae et al., 1995; Sakulku & Alexander, 2011; Young, 2011). This study, however, will focus primarily on female administrators in the K-12 public school system.

Impostor Phenomenon Among K-12 Female Administrators

Numerous research studies have been conducted on the topic of impostor phenomenon as it relates to women (i.e., Clance & Imes, 1978; Fraenza, 2016; Wrushen & Sherman 2008) and as more and more females are working in educational leadership roles, it is important to study the scope of IP among female administrators. While female teachers continue to be overrepresented in the K-12 school system (ATA, 2020), they are still largely underrepresented in top leadership positions, such as principal and superintendent roles (Magnusson, 2017). This ongoing low representation may be the result of systematic sexism (Hideg & Ferris, 2016), a lack of opportunity (Brown, 2021; Moriel de Cedeño, 2020), or the feelings of being an impostor (Dahlvig, 2013). Studies at the university level show that women are more likely than men to experience impostor phenomenon (Clance & Imes, 1978; Dahlvig, 2013).

Although IP can be experienced by anyone, according to Clance and Imes' (1978) seminal work, it is often seen in high performing women with superior intellectual functioning. Yet, these women maintain a false sense of phoniness, which may affect advancement in their careers. Dahlvig (2013) found that university female faculty members experienced IP as a result of gender-role socialization, the pressures of balancing family-work life, and their inability to accept that they are worthy of their accomplishments.

Furthermore, there is a multitude of issues that result from experiencing IP over an extended period of time. These issues include the inability to delegate (Seritan & Mehta, 2016), along with self-doubt, lack of belongingness, workaholic behaviours, and burnout (Clance & Imes, 1978; Mullangi & Jagsi, 2019; Vaughn et al., 2019). Therefore, if women know that they are not alone in feeling this way and understand that research-based strategies for dealing with the feelings of being a fraud are readily available, then perhaps female administrators will be able to spend more time completing the important work that they are being recognized for and less time worrying that they are not good enough, smart enough, or talented enough to be educational leaders.

Education is an important profession, and it is essential that we have excellent leaders in the schools. Women have brought a multitude of strengths to their educational administrative roles. Women tend to be able to deal with details, they are sensitive to personality clashes, they work hard to maintain relationships within the school, and they are intuitive regarding possible problems or issues (Shantz, 1993). Moreover, they are often more empathetic, inclusive, and consensual than men (Morison & Zeimba, 1997). Additionally, female administrators emphasize personal relationships, are concerned with equity cooperation, fairness, and inclusivity, and demonstrate interdependence in their leadership (Smith & Hale, 2002). As a result, we need to

work with these strong leaders to keep them healthy and mentally capable of continuing and completing the essential work that is being done.

At present there is a paucity of research examining female leaders and impostor phenomenon in the K-12 school system. There is a great deal of research on IP in the area of psychology, at the university level, and among minority groups; however, there is very little research found specific to public education. So, while we know the extent to which impostor phenomenon is experienced among first generation university students - 75% of students experience IP at a frequent or intense level (Ayesiga, 2021) - no one has studied impostor phenomenon among female educational leaders in the province of Alberta or perhaps in Canada. Likewise, there have been very few studies in the United States. Furthermore, IP has been studied almost exclusively using qualitative approaches and there have been very few mixed methods studies completed to explore impostor phenomenon in a K-12 education system. The lack of quantitative data has resulted in a deficiency in breadth on the topic of IP. Consequently, findings from this study will add to the growing body of literature on impostor phenomenon and will possibly contribute to further leadership studies at the K-12 level.

Purpose Statement

The purpose of this mixed methods research study was to explore how prevalent impostor phenomenon is among female education leaders in the province of Alberta, and to determine what can be done to support these leaders. To further investigate impostor phenomenon among educational leaders in the province of Alberta, the following research questions were examined:

1. To what extent do educational leaders experience impostor syndrome, and how do these experiences vary by gender, age, position, years of educational experience, and years of experience in their current role?

2. For those female educational leaders who experience impostor syndrome, what factors contributed to these experiences?

3. For those female educational leaders who experience impostor syndrome, what supports help educational leaders overcome such barriers?

To investigate these questions, this study collected data from principals, vice or assistant principals, and superintendents and/or deputy or associate superintendents in the province of Alberta.

Significance

There have been very few studies conducted that address impostor phenomenon and how it affects school administrators, or educational leaders in general. Yet, there are multiple psychological studies that link IP to the manifestation of increased stress, anxiety, depression, and lowered self-esteem (Clance, 1985; Hayes & Davies, 1993; McClain et al., 2016). There are also studies that address whether or not IP exists; however, there is very little understanding of what triggers impostor phenomenon, the coping mechanisms that individuals use to assuage their feelings of being a fraud, and what can be done to help leaders who are experiencing these feelings of being an impostor. The paucity in the investigation of female educational leaders experiencing IP has resulted in an opportunity to study this phenomenon and its prevalence in K-12 school systems in Alberta.

Findings from this study can therefore potentially decrease the stigma of experiencing feelings of being an impostor, can highlight strategies for overcoming feelings of phoniness, can inform leadership preparation programs, and possibly encourage more women to take on leadership roles. Perhaps if female education leaders learn that they are not alone in their fraudulent feelings, they can share their own understandings of IP and thereby bring more of a

sense of normalcy to the issue. As a result, this change in mindset may encourage mentorship or mentorship programming. Having strong mentors in place may impact the leadership preparation programs allowing school districts, superintendents, and human resources personnel to support aspiring leaders by acknowledging IP experiences and sharing strategies to overcome their doubts (Brescoll, 2016). Supporting female leaders or aspiring female leaders may encourage more women to take on leadership roles and possibly begin to have them more equally represented in these all-important positions.

Theoretical Framework

This study is framed through several theories, which include social cognitive theory, leadership impostor phenomenon theory, and transformative leadership theory.

Social Cognitive Theory

Self-efficacy is an important theory in which to ground this study, as it will assist the researcher in understanding the extent to which female school administrators experience impostor phenomenon and how it affects them in the workplace. Self-efficacy is an integral part of Bandura's Social Cognitive Theory (1986). Self-efficacy is defined as the belief that one has in their own "capabilities to organize and execute the courses of action required to produce given attainment" (Bandura, 1997, p.3).

Bandura (1986) created a Triadic Reciprocal Causation Model to demonstrate factors that influence behaviour, internal personal characteristics, and external environmental and social factors. Personal characteristics include both cognitive and metacognitive skills, including one's beliefs and values of self-efficacy and physical characteristics (Bandura, 1986). Behavioural factors are comprised of the choices that individuals make and carry out, both verbally and physically. The environmental factors incorporate family and societal values, the influence of

power, external expectations, and social interactions (Bandura, 1986). These three parts of the triadic model work together in part to create this social cognitive theory and will help to frame this study on impostor phenomenon.

Leadership Impostor Phenomenon Theory

A second theory that will be used to frame this study is Jackson's (2018) Leadership Impostor Phenomenon Theory. This causal model provides a lens in which to explore how leadership impostor phenomenon constructs connect and progress from high achievement to impostor phenomenon and continues to the negative outcomes of risk aversion, indecisiveness, and procrastination (see Figure 1).

Figure 1

The Model of Constructs (adapted from Jackson, 2018)
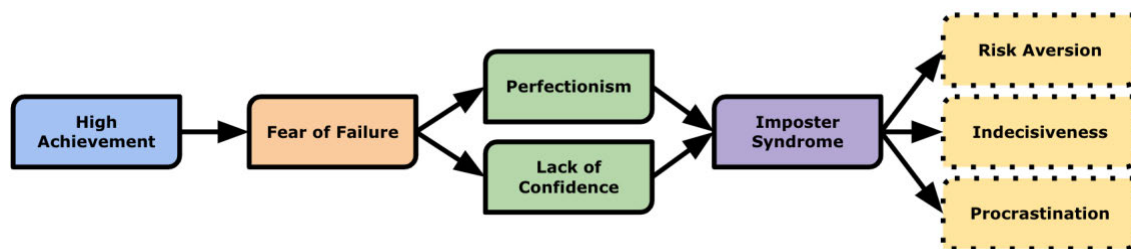
Jackson's (2018) Leadership Impostor Phenomenon theoretical causal model addresses how leaders may experience impostor phenomenon. This theory makes eight propositions regarding how leaders encounter IP, and these propositions have been used to develop the causal model, which demonstrates that high achievement may be accompanied by a fear of failure, resulting in both a lack of confidence and in procrastination (Jackson, 2018). This model also includes other outcomes that could be associated with leaders who experience IP, including indecisiveness and risk aversion (Jackson, 2018), and ultimately if impostor phenomenon is too

extreme, it carries with it a variety of negative consequences leading up to and including the failure to fulfil leadership responsibilities.

The leadership impostor phenomenon theoretical causal model (Jackson, 2018) is based on a plethora of research (i.e., de Souza & Tomei, 2016; Morgan & Sisak, 2016; Rohrmann et al., 2016) and from that research eight propositions emerged. These propositions are utilized by Jackson to suggest both the causal model of leadership impostor phenomenon and the potential outcomes of IP.

Proposition 1: "Highly Successful Leaders Will Experience the Fear of Failure" (Jackson, 2018, p. 77). The fear of failure, as associated with IP, has been found to result in both positive and negative outcomes for leaders. Some leaders use their fear of failure as motivation to work extra hard to ensure success in their work. These leaders pay careful attention to detail in an effort to eliminate all mistakes and in so doing they produce higher quality work. This in turn may result in enhanced growth and performance for both the leader and the organization. For other leaders and entrepreneurs, however, this fear of failure can have a debilitating effect. Leaders who have not experienced a certain level of success may become unmotivated or unwilling to take risks, resulting in self-sabotage and self-doubt (Jackson, 2018). Nonetheless, if utilized effectively, leaders who acknowledge their fear of failure are highly motivated to achieve success and therefore experience great benefit from this proposition.

Proposition 2: "Fear of Failure in Highly Successful Leaders Will Lead to a Lack of Confidence and Self-doubt in Leaders" (Jackson, 2018, p. 78). Self-confidence is defined as "judgement of our capabilities to successfully accomplish something" (Hollenback & Hall, 2004, p. 255). The level of performance experienced by leaders is affected by the leader's level of self-confidence. A leader who has developed a healthy degree of self-confidence will remain calm

when facing their fear of failure, and as a result perceive fewer situations as threatening and therefore move forward and experience growth (Jackson, 2018). Leaders with low levels of confidence will struggle and take more time to strategically plan – (Shipman & Mumford, 2011), resulting in a failure to effectively lead. This internal struggle is therefore detrimental in both their own careers and the success of their company.

Proposition 3: "Fear of Failure in Leaders Will Lead to Perfectionism" (Jackson, 2018, p. 78). Leaders who experience a tendency for perfectionism in their work expect flawlessness in themselves, which can lead to indecision, a lack of confidence, and procrastination. Leaders who struggle with perfectionism are not able to take calculated risks, do not deal well with ambiguity, and lack flexibility and decision-making skills. The ability to incorporate these skills into a leadership position is a fundamental aspect to successfully leading an organization. Therefore, lacking the above-mentioned tendencies, combined with the leader never truly being pleased with themselves or their work, can result in depression over time (Jackson, 2018). For a perfectionist to be an effective leader, they must find a way to make decisions, despite not having all of the answers.

Proposition 4: "Lack of Confidence Will Lead to Impostor Phenomenon in Leaders" (Jackson, 2018, p. 78). There are multiple theories as to what causes IP and if it is developed or innately found in high achieving individuals. However, according to Jackson (2018), experiencing a lack of confidence can certainly create or intensify the feeling of being an impostor. A leader who lacks confidence, experiences a fear of failure, and suffers from a need to be perfect and complete all tasks perfectly is likely to develop impostor phenomenon (Jackson, 2018). As a result, even in the face of success the individual is unable to internalize

their part in the achievement preferring to credit their success to good timing, luck, or extraordinary effort.

Proposition 5: "Perfectionism Will Lead to Impostor Phenomenon in Leaders" (Jackson, 2018, p. 78). As with a lack a confidence, perfectionism also promotes the feelings of being an impostor. When a leader is never truly satisfied with themselves or their performance, they question any success that they have achieved and again credit that success to luck or hard work on their part (Jackson, 2018).

"Proposition 6: Leaders who Feel Like Impostors Will be Less Likely to Take Risks, Even Calculated Risks, Because They Want to Continue to be Accepted by Others as Having a High Level of Knowledge and Skill in their Roles" (Jackson, 2018, p. 80). The inability or unwillingness of a leader to take risks can result in indecisiveness. The leader of any organization is typically responsible for making decisions, and they are responsible for the consequences of those decisions (Brunsson, 2007). Effective leadership requires that decisions be made clearly, confidently, and collaboratively. Therefore, if the leader lacks these qualities, and resorts to indecision instead, the result can be debilitating for both the leader and the organization. Moreover, these leaders are more likely to experience discomfort and anxiety and less likely to be able to perform their duties effectively (Jackson, 2018). Furthermore, these leaders are less prepared to handle the responsibilities of their position and the challenges of the job due to their inability to make decisions.

Proposition 7: "Leaders Who Feel Like Impostors Will be More Likely to Report Indecisiveness Because They Lack Confidence in Their Ability, and They Want to Make the Right Decision Due to Perfectionism" (Jackson, 2018, p. 80). The result of being indecisive can be devastating for a leader. A leader who is paralyzed by indecision will experience a

multitude of negativity in their role (Jackson, 2018). Both the leader and the organization will suffer in an atmosphere of perfectionism and indecision. The leader is looked to for direction and vision, and without those failure is imminent (Jackson, 2018). It is essential for the leader to work through or find ways to make decisions, in the face of their insecurities, if the organization is going to move forward.

Proposition 8: "Leaders Who Feel Like Impostors Will be More Likely to Report Procrastination Because of Low Self-esteem and High Rates of Perfectionism" (Jackson, 2018, p. 81). Procrastination is a phenomenon that occurs when a person postpones the completion of an activity even when they know that there could be negative consequences. This phenomenon can be described as putting off more complex or complicated tasks in favour of those that are less complicated and more enjoyable (Batool et al., 2017). Also discussed above, there is a great deal of unconstructiveness that can result from the tendency to procrastinate. In fact, procrastination can cost an organization both financially and in terms of productivity. As with the other seven propositions, there is potential for great destruction to one's leadership and organization if the leader's low self-esteem, tendency for perfectionism, and likelihood for procrastination are not kept in check (Jackson, 2018). The successes of an organization depend on the strength of its leader, so it is essential that impostor phenomenon not be an excuse and not cripple those who experience it.

Transformative Leadership Theory

While Bandura's (1986) social cognitive theory frames the self-efficacy of this study and Jackson's (2018) leadership impostor phenomenon theory provides a model in which to understand the advantages and potential pitfalls of IP, this third theory, Shields' (2011, 2018) Transformative Leadership Theory, will be used to examine the importance of leadership and the

change process. This theory will be used as an educational lens in which to view the importance of equity, leadership, and leader efficacy on the school. Shields (2018) opines that education has essentially been the same for two centuries, and it is not working. If significant, equitable, meaningful change is to occur, there must be changes in the way leaders think and act. What is needed is a more comprehensive approach to educational leadership, one that requires leaders to take a stand and focus on information sharing and relationships (Shields, 2018). Shields (2018) contends that meaningful change can only occur with transformative leadership. She describes this as normative, meaning that it is intended to benefit both the individual and the collective. Furthermore, it must be good for society as a whole, with special attention paid to those from non-dominant groups. Transformative leadership theory broadly identifies a desired state of where leaders should strive to be.

According to Shields, this leadership style calls for leaders to set directions through clear visioning, developing people to have an equity mind set, and by redesigning the organization. Transformative change calls for equity and the leader must be seen as authentic and ethical. Having authenticity means there is consistency in the leader's stated values, their expressed goals, and ultimately in the actions of the leader (Shields, 2018). Authentic leadership is one of collaboration because the leader works with their staff to make decisions (Banjarnahor et al., 2018). The authentic leader builds trust through honest relationships with colleagues, values their input, and provides a clear vision (Tschannen-Moran & Gareis, 2015).

Figure 2 below details the importance of balance for both the public and private good. It utilizes tenets such as moral courage, redistribution of power and interconnectedness, to create an equitable learning environment for all students.

Figure 2

The Transformative Leadership Model
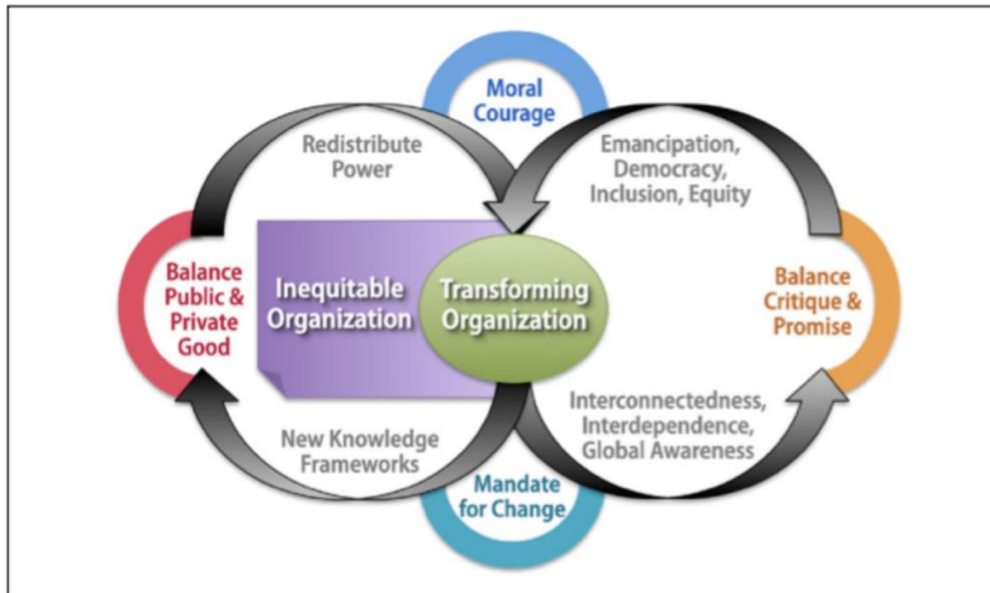
Shields' (2011, 2018) transformative leadership theory model identifies eight tenets that are supported by two theoretical systems. The tenets are essential to the successful implementation of the transformative model, but they are not prescriptive. Leaders must determine how to implement the tenets in a manner that considers the context and specific needs of their school (Shields, 2018). In essence, transformative leadership theory (Shields, 2011, 2018) is comprised of two basic and parallel propositions surrounded by eight tenets that support the model. According to Shields (2018), the first proposition is about inequitable organization, and it pertains to the individual, private good (Labaree, 1997). It also theorizes that the learning environment must focus on the needs of the individual and be respectful, equitable, and inclusive in order for students to be able to focus on academics. The second proposition represents the public good. This proposition addresses educational issues such as democracy, civic life, and citizenship. The rationale for protecting the good of the whole is that society in general will be strengthened through the participation of knowledgeable and caring citizens.

There are eight tenets surrounding the two propositions; they are interconnected and interdependent and they work together to create the transformative leadership model framework (Shields, 2011, 2018). The eight tenets are deep equitable change, deconstructing and reconstructing frameworks, addressing inequitable power distribution, emphasizing both private and public goods, striving for equity and justice, ensuring global interconnectedness, balancing critique with promise, and exhibiting moral courage.

Shields (2018) contends that transformative leadership moves beyond other leadership theories in that its goal is continuous improvement in schools through deep and equitable social change (Shields, 2018). To create the level of change needed for schools to become places where all students can achieve their potential, Shields explains the importance of deconstructing and reconstructing knowledge frameworks (Shields, 2018). Schools that adopt principles of equity, interdependence, interconnectedness, and global awareness are on a pathway towards equal opportunities for success for all. For this reason, Shields' model for transformative leadership articulates a vision beyond whole school improvement, to one of whole societal change.

Transformative leadership requires a shift in thinking that includes commitment to mission, vision, and goals through the lens of critical self-awareness. It recognizes the need to prepare students to be caring and academically successful individuals, as well as collectively being involved and engaged citizens of the global community (Shields, 2018). Values, public goals, and clear purpose, along with the process required for creating successful, thoughtful, and globally engaged students must be considered under this model (Shields, 2018).

The assemblage of social cognitive theory, leadership impostor phenomenon theory, and transformative leadership theory allows for critical examination of the experiences for women in educational leadership roles and the extent to which they experience IP.

Definitions

- **Impostor phenomenon.** The term impostor phenomenon, as coined by Clance and Imes (1978), describes the feeling of fraudulence experienced by highly accomplished individuals, most often women. Clance (1985) posits, that even though these "impostors" are often very successful, they somehow feel that their success is simply due to luck or hard work. They fail to see their success as genuine or due to their own ability.

- **Impostor syndrome.** Although often identified in the literature as interchangeable with impostor phenomenon, Clance (1985) intentionally does not refer to it as a syndrome because she wanted to avoid the negative stigma for women, and she found that IP seemed to manifest more often in female clients. Furthermore, syndrome refers to an official medical diagnosis, of which IP is not.

- **CIPS.** The Clance Impostor Scale or CIPS was used in this study to capture experiences of impostor phenomenon and the term CIPS is used throughout this dissertation.

- **Self-efficacy.** It is based on one's belief in their own abilities to organize and execute the actions required to be productive or effective. In short, it is one's belief in their own abilities (Bandura, 1997).

- **Educational Leaders.** For the purpose of this study, educational leaders refers to principals, vice or assistant principals, superintendents, deputy and/or associate superintendents.

- **Administrators.** Principals, vice or associate principals, superintendents, deputy and/or associate superintendents.

- **Vice or assistant principals.** School based administrators who support or assist the principal in the day to day operation of the school. These titles are used intechangably in

this study as some Alberta schools and school districts use the term vice and some use the designation assistant.

- **Superintendent.** Division or central office based administrator. The leader of the school division.

- **Deputy or associate superintendents.** Division or central office based administrators who assist or support the superintendent in the operation of the school division. These terms are used intechangably in this study as some Alberta school districts use the term deputy and some use the designation associate.

Summary

This chapter outlined the issue of women making up almost 75% of the teaching positions yet holding only 40% of the administrative positions. It also addressed the strengths that women bring to leadership and identified some of the potential factors, including impostor phenomenon, that have females underrepresented in these administrative positions. Furthermore, the paucity of work completed in the area of public education on the topic of impostor phenomenon was examined. Therefore, the purpose of this study was identified, and it is to explore how prevalent impostor phenomenon is among female education leaders in the province of Alberta, and to determine what can be done to support these leaders. Aspects of the study discussed in this chapter included the significance of the study, the research questions, and the theoretical frameworks that this study was grounded in.

Chapter 2 will present a review of the relevant literature that addresses the historical and changing role of the principal, the most effective leadership styles, as well as the impact and qualities of an effective leader. Also examined in Chapter 2 is a thorough review of impostor phenomenon, as well as the factors contributing to IP and the affect that it has on those

experiencing it in their leadership positions. Chapter 3 will then outline the methodology, data collection, and data analysis for this mixed methods research study. Chapter 4 will provide a detailed analysis of the data and will offer findings for each of the research questions based on the examination of survey responses. Finally, implications and recommendations for female educational leaders will be discussed in Chapter 5, followed by future research, limitations, and a conclusion of the study.

Chapter 2: Literature Review

The literature on impostor phenomenon proposes that there is a relationship between some demographic factors and impostor phenomenon. There are numerous studies (Chae et al., 1995; Sakulku & Alexander, 2011; Young, 2011), that identify a variety of factors that influence the presence of impostor phenomenon. The most frequently examined variables include gender, ethnicity, and student status (Ayesiga, 2021; Dahlvig, 2013; Seritan & Mehta, 2016). There have been very few studies conducted regarding leadership at the K-12 level. Therefore, this current study aimed to examine IP among educational leaders in the province of Alberta and identified the factors contributing to feelings of impostorism as well as the factors that have supported leaders in overcoming these feelings.

Current research indicates that impostor phenomenon is prevalent in women (Dahlvig, 2013) and since the demographics of educational leadership has changed to include an increasing number of women in these roles (ATA, 2020, Magnusson, 2017), it is important to study the full impact of the changing role of principals and effective leadership. Thus, the purpose of this literature review is to consider the changing role of the principal, explore how leadership styles have changed through the years, discuss the impact that principals have on schools, identify the qualities of an effective leader, and finally to look at impostor phenomenon and its effects on principals, specifically female educational leaders.

This chapter is therefore presented in six sections and in its examination of changing leadership styles, the progression from autocratic leadership to directive then authentic and transformative leadership styles are examined. Next, the impact of principals which includes the effect that they have on school culture, student achievement, and the overall quality of the school is discussed. Additionally, the qualities of effective principals are examined and include building

effective relationships, being trustworthy, exhibiting clear communication skills, demonstrating empathy and integrity, and displaying fairness and consistency in their work. Next female leadership is considered and includes the investigation of female identity development and barriers for women in education. Finally, understanding impostor phenomenon and how it relates to female leadership is examined in this literature review.

The Changing Role of the Principal

According to research conducted by The Alberta Teachers' Association (ATA) and The Canadian Association of Principals (ATA, 2014) the role of the principal is shifting and becoming much more complex, demanding, and diverse. There are a number of major areas in which today's principals are struggling. The Alberta Teachers' Association and Canadian Association of Principals (CAP) conducted 22 empirical studies across Canada, which consisted of surveys, interviews, case studies, and focus groups. The sample size for the various qualitative and quantitative studies ranged in size from 4 - 2144 participants (ATA, 2014). This national research study was designed to explore the changing roles of the principal. The Alberta Teachers' Association report (2014) espoused that although diversity in our schools has many positive implications, principals are required to address the myriad needs of increasing diversity in schools without having sufficient resources and professional development to do so. Secondly, the heightened accountability systems distract principals from their important tasks of improving teaching and learning (ATA, 2014). Also identified in this report is the increased workload due to technological advancements. Principals "find themselves trying to get to the bottom of just who posted which bullying or sexting message on Facebook first and how a simple message with perhaps benign intent spiralled into a crisis that hurt vulnerable youth" (ATA, 2014. p. 81).

The increased demands resulted in 78% of principals, at the K-12 level, expressing their

dissatisfaction with the "amount of time the job requires" and on average principals reported to work 50-55 hours per week. Additionally, one third of principals stated that their workweek extended beyond 60 hours per week (ATA, 2020). Finally, parental expectations of principals have increased in recent years and have left principals scrambling to maintain and improve school relationships. Professional parents frequently demand individual attention and heightened support for their children, while parents from lower socio-economic groups often feel threatened and defeated by the school system, and therefore choose to disengage from the school community (ATA, 2014). This study illustrates that the role of the principal is becoming much more complex and school leaders are distracted by the varying demands on them and their time.

Additional research supports the claim that principals are challenged now more than ever, which according to Jackson's (2018) propositions could affect one's struggle with impostor phenomenon. Heffernan (2018) contends that the current policies and expectations of principals require them to cope with rapid and ongoing changes, and principals are faced with numerous complexities in these rapidly changing environments. Leadership, and our understanding of leadership, are ever evolving (Hunt & Fedynich, 2018), and through the on-going and extensive changes to the role of principal, many school leaders are left to their own devices.

History of Changing Leadership Styles

Leadership styles have changed substantially over the past several decades. Autocratic leadership was a typical style up to and including the 1970's, and as times and leaders evolved, there was a movement towards the more task oriented, yet still controlling directive leadership style. In more recent times, leaders have become increasingly more collaborative thus the progression towards more authentic and transformative leaders. This transformation of

leadership styles has resulted in a much more effective, caring, and collaborative trend in administrative practice.

Autocratic Leadership

Autocratic leadership is also referred to as authoritarian leadership and is characterized by individual control. As such, these leaders ensure they have control over all decisions that are made (Cherry, 2020). Decisions are typically made based on the ideas and judgement of the leader, and rarely do they ask or accept advice from followers (Cherry, 2020). A leader who uses an authoritarian leadership style tends to dictate policies and procedures, controls all activity, decides what goals are to be achieved, and does not consider participation or opinions from subordinates (Bell et al., 2014). With this type of leadership, there is low autonomy with the group, as the leader has full control of all situations (Bell et al., 2014).

Hussain et al. (2017) further describe autocratic leaders as those who have all of the power and make all decisions themselves. The leader takes full responsibility as well as authority and does not include others in decision-making (Hussain et al., 2017). The autocratic leader does not like the distributed work concept and does not use collaboration. They are essentially the "power", and they give the orders (Hunt & Fedynich, 2018; Hussain et al., 2017).

Much of the research indicates that autocratic leadership style has lost its popularity, and there are now more effective methods of leading. For example, one study (Hussain et al., 2017) involving a survey and questionnaire of 200 teachers indicated that autocratic leadership is no longer valid and concluded that there is negative job satisfaction for teachers, and staff are unhappy with this type of leader. Staff members also describe feeling undervalued and unable to work effectively under the direction of the autocratic leader (Hussain et al., 2017). Stein (2013) reinforces these findings by stating, "Much of the recent literature on the subject of school

leadership argues that the classical models of leadership, which emerged from classical theories of management, no longer serve the best interests of school, if they ever did" (Stein, 2013, p. 23). Leadership needs to move away from top-down management to responsive, emergent, more connected leadership (Sanford et al., 2019). It is clear from the research that an autocratic leading style does not benefit schools, and it is not considered to be an effective leadership style.

Directive Leadership

A second major leadership style is that of directive leadership. The directive leadership style is characterized by setting clear objectives and rules for subordinates and ensuring that the expectations and directions are clearly defined and understood (Banjarnahor et al., 2018). This type of leadership is one of the most common styles of leadership, and these leaders define tasks, set deadlines, and in general have firm rules and boundaries (Banjarnahor et al., 2018). Bell et al. (2014) concurred defining directive leadership as a process of providing guidance to subordinates to forward leadership goals. They contend that the directive leader tends to control discussions, dominate interaction, set the direction of the vision and the mission, and is task-oriented (Bell et al., 2014). Directive leadership also provides the team members with a framework for decision-making; however, those actions are in line with the leader's vision (Somech & Wenderow, 2006). Mahdi et al. (2014) also asserted that this leadership style directs work processes such as what to do, how to do, where, when, and who should do, ensuring that roles are clearly defined.

Directive leadership, however, shows little concern for the welfare of subordinates and their personal needs (Banjarnahor et al 2018). Murdoch (2013) concurs stating that directive-style leaders tend to act aggressively, are controlling, and are inclined to dictate to subordinates what they should do and how to do it. An empirical study of 174 junior high school principals

comparing directive and participatory leadership (Banjarnahor et al., 2018) found that directive style leadership positively correlated with subordinate satisfaction in ambiguous tasks. Conversely, when it came to structured work or less menial tasks, there was found to be a negatively correlated *(r = 0.47)* relationship with organizational commitment (Banjarnahor et al., 2018). Therefore, greater buy-in and job satisfaction are not evidenced in directive leadership organization.

Although directive leadership is more desirable than the autocratic leadership style, it is often stressed in leadership literature that there is a clear distinction between participative and directive leadership styles (Somech &Wenderow, 2006). There is a shared belief that participative, or authentic, leadership has many advantages over the contrasting style of directive leadership when it comes to organizational effectiveness (Banjarnahor et al., 2018; Somech & Wenderow, 2006). Therefore, the research indicates that directive leadership is preferable to autocratic leadership, but less advantageous than the authentic leading style.

Authentic Leadership

The third major leadership style is that of authentic leadership. Authentic leadership is one of collaboration and is also referred to as participatory leadership because the leaders work with their staff to make decisions (Banjarnahor et al., 2018). The authentic leader builds trust through honest relationships with colleagues and values their input (Tschannen-Moran & Gareis, 2015). Generally, authentic leaders are positive people who promote openness and treat their colleagues with dignity and respect. Their actions are consistent with their thoughts and words (Duignan, 2014). Principals who lead this way are able to build trust with their colleagues and are supported by their employees (Tschannen-Moran & Gareis, 2015). Tschannen-Moran and Gareis (2015) collected data from 64 elementary, middle, and high schools in two school districts

to formulate their study. This study consisted of surveying 3,215 teachers and found that team performance and improved quality of work in individuals is a common side effect of authentic leaders (Tschannen-Moran & Gareis, 2015). Principals who use an authentic or participatory leadership style tend to foster increased job satisfaction with their teachers, because teachers are encouraged to participate in the formulation of school goals and are valued participants in decision-making (Banjarnahor et al., 2018).

Principals who lead with an authentic leadership style have a higher level of respect and trust in their schools. In a study conducted by Bird et al. (2012), 28 principals were interviewed, and 633 teachers were surveyed using a five-point Likert scale to measure the benefits of using an authentic leadership style. The researchers discovered that among other noted improvements, enhanced trust was a key benefit of participatory leadership (Bird et al., 2012). Tschannen-Moran and Gareis (2015) reported similar findings stating that their research found that principals who operated from a collegial (or authentic) leadership style enjoyed a greater level of trust within the organization. Teachers also reported that they felt empowered in their work environments, reported significant autonomy and influence in their work, and were found to have higher trust in their principals (Tschannen-Moran & Gareis, 2015).

The authenticity of the school principal not only builds a higher degree of trust, but also leads to improved teacher engagement levels. Bird et al. (2012) reported the principal-teacher rater agreement regarding leader authenticity is also associated with teachers' trust and engagement levels. The study also determined that principals who demonstrated authentic leadership behaviours, had staff members who reported greater levels of job satisfaction. These behaviours included self-awareness, relational transparency, balanced processing, and

moral integrity (Bird et al., 2012). Effective school leadership depends on principals understanding human nature and what motivates people. Principals need to understand the meaning of collaborative working relationships and the difference between authentic, directive, and autocratic leadership styles (Stein, 2013).

Transformative Leadership

A fourth leadership style worth exploring is that of transformative leadership. The transformative leader shares many qualities with that of an authentic leader, however the two differ in that Shields' transformative leadership model is about transforming an organization. Shields (2018) opines that a more comprehensive approach to educational leadership is needed. Shields (2018) contends that leaders need to take a stand and focus on information sharing and relationships and meaningful change can only occur with this type of leadership.

Transformative leadership calls for leaders to set directions through clear visioning, developing people to have an equity mind set, and by redesigning the organization (Shields, 2018). Transformative change calls for equity and therefore the leader must be seen as authentic and ethical. As with the previous leadership style, having authenticity means there is consistency in the leader's stated values, their expressed goals, and ultimately in the actions of the leader (Shields, 2018). It also means that the leader builds trust by creating honest relationships with colleagues, valuing their input, and by providing a clear vision (Tschannen-Moran & Gareis, 2015).

Having a clear vision is being aware of our beliefs and values. Values become a part of the individual as a leader. Brene Brown (2018) concurs as she espouses that, "living into our values means that we do more than profess our values, we practice them" (p.186). She posits that integrity is about choosing courage over comfort and right over fast, fun, or easy (Brown, 2018).

Essentially, it is doing the right thing. "Values should be so crystallized in our minds, so infallible, so precise and clear and unassailable, that they don't even feel like a choice - they are simply a definition of who we are in our lives" (Brown, 2018, p.189).

Shields contends that historically there has not been a level playing field for all students, and therefore transformative leadership is about offering inclusive and equitable education to all students. Beyond the student, however, transformative leadership is about addressing issues for the public good. This leadership style is one that addresses democracy, civic life, and citizenship. It is all encompassing, and the needs of the collective public are considered to be of primary importance. By addressing the issues pertaining to the public good, the democratic society is strengthened through the participation of caring and knowledgeable citizens. The focus is on how education will enrich society as a whole through the development of informed and caring citizens.

Shields (2018) asserts that transformative leadership moves beyond other leadership theories in that its goal is continuous improvement in schools through deep and equitable social change. To create the level of change needed for schools to become places where all students can be successful, Shields explains the importance of deconstructing and reconstructing knowledge frameworks (Shields, 2018). Schools that adopt principles of equity, interdependence, interconnectedness, and global awareness are on a pathway towards equal opportunities for success for all (Shields, 2018).

In summation, increased knowledge about effective principals and school success has resulted in an important change in leadership styles over the years. Leaders of today need to practice a distributive style leadership, demonstrate collegiality and democratic processes, and determine needs and priorities collaboratively (Brown, 2018; Sanford et al., 2019; Wheatley,

2017). To ensure equity for all students and to create significant, meaningful change transformative leadership is required. Where directive and autocratic leadership styles were once the norm, it has now been determined that many schools throughout North America have adopted a much more participatory and authentic leadership style (Stein, 2013). To enhance learning and to prepare students for a world that is equitable and interconnected, a transformative leadership style is required. In this, the most human of all professions, there is little room for autocratic or directive leadership styles.

Impact of Principals

School leadership is crucial to the success of schools. Leithwood et al. (2004) opine that outside of the quality of classroom instruction, effective leadership is the most important factor in determining student success. "In the world of public-school education everything depends on good leadership" (Stein, 2013, p. 21). The principal plays a vital role and is responsible for all of the aspects of the school (Hussain et al., 2017). The principal is directly responsible for the management and other activities in the school, and their attitude establishes a positive attitude with others and creates a positive environment in the school (Hussain et al., 2017). An abundance of research has been conducted to support the fact that the principal affects the culture, student achievement, and the overall quality of the school (i.e., Cray & Weiler 2011; Stein, 2013; Tschannen-Moran & Gareis 2015). Tschannen-Moran and Gareis (2015) contend that school climates are impacted directly by the quality of interpersonal relationships, and they go on to assert that a major contributor to school climate is the principal. Cray and Weiler (2011) surveyed 178 Colorado superintendents and asked them to identify the characteristics that they believe were needed in new principal candidates. Findings from their survey led Cray and Weiler (2011) to espouse that principals not only need to be able to bring school vision, goals, and

strategies to full articulation, but their abilities also affected change, school culture, collaboration within the school, and student learning. Research repeatedly demonstrates that an effective school-based administrator is critical to the success of schools. Principals play a key role in determining the overall quality of education in the schools (Banjarnahor, 2018). Bickmore and Dowell (2019) concur stating that the role of the principal is multifaceted and shapes all aspects of the school up to and including the working conditions for teachers. Principals impact the organizational structures, school cultures, collaboration within the school, and professional and personal interactions (Bickmore & Dowell, 2019). Hussain et al. (2017) contend that the principal is vital to the school and is responsible for every aspect of the school. Thus, the importance of strong and effective leadership at the school level is well affirmed.

The results from multiple studies clearly demonstrate that the impact of the principal is far-reaching, measurable, and observably vast. The principal has a clear and marked effect school climate, culture, and staff interactions (Banjarnahor et al., 2018). Beyond that, their role impacts student achievement, organizational structures, and the overall quality of the school. Ensuring satisfaction of the employees is one of the most important tasks of the principal. The person who can generate creative solutions within the organization, determine the policies of the institution, and make necessary improvements in the regulations is the leader (Aydin et. al, 2013). Reid (2017) asserts that school leaders have long been tasked with ensuring that academic, social, emotional, and the overall needs of students are looked after. At the same time principals need to manage the ever-fluctuating pressures from both internal and external environments, and in so doing create an environment that cultivates professionalism and promotes success for all stakeholders (Reid, 2017). Fullan (2014) opines that the role of the principal is crucial for school-wide development, however it is being diverted by all of the

managerial requirements. The result of this report calls for the distractors to be removed. The primary role of the principal is to lead the learning culture and be a system player connected to the other schools and the district (Fullan, 2014). Clearly the role of the principal is crucial to the success of schools, and therefore it is vital that effective people are at the helm of the schools.

Qualities of an Effective Principal

To ensure excellence in schools, there must be effective leadership in place, and we therefore need to know what constitutes an effective principal. Hussain et al. (2017) posit that effective leaders inspire and influence others through motivation. Principals who involve teachers in decision-making have a positive effect on their staff. These leaders motivate their staff and are considered to be successful and efficient in what they do (Banjarnahor et al., 2018). The success of schools lies in the effectiveness with which the school leader participates and engages in the schools' social networks (Banjarnahor et al., 2018). There are multiple studies that indicate the qualities of effective leadership. In a mixed methods study involving 212 respondents, Curry (2019) identifies five qualities of particular note. There are multiple qualities that have been identified, however; building effective relationships, demonstrating trust, having clear communication, demonstrating integrity and empathy, and being fair and consistent are the qualities that are reported on most frequently in the literature.

Building Effective Relationships

The ability to build and maintain relationships is an integral part of school administration. Couros (2015) identifies the three most important words in education to be relationships, relationships, relationships. As leaders in education, our job is not to control people and situations, instead it is to serve and unleash the talent of staff members. In so doing, we build trust and develop relationships (Couros, 2015). Supportive relationships allow principals to fulfil

all of their roles and responsibilities both effectively and professionally (Wilson, 2019). Wilson (2019) also affirms that one of the most significant ways that principals can demonstrate support is through the development and maintenance of supportive relationships with all staff. Carrington (2019) identifies relationships, and the building of genuine connections, to an integral part of education. Relationships are key for all educators, not the least of which are the principals who lead the schools (Carrington, 2019). Leaders must be able to connect with all of the people they encounter on a daily basis and need to be able to find common ground (Meador, 2019). These school leaders effectively deal with situations by connecting with people and demonstrating that they care about each unique situation (Meador, 2019). Successful school leaders build effective relationships in the school and gain trust with their staff. They also make every effort to know the students and their parents. In so doing, they develop personal relationships and positively affect others (Stein, 2013). The research clearly demonstrates the need for relationship development and identifies the myriad benefits of establishing positive relationships within the school building.

Trust

Trust in an integral part of all human interactions and education is about people and relationships, therefore trust is the cornerstone upon which everything else is based. Tschannen-Moran and Gareis (2015) posit that perceived administrative support is related to the level of trust that the teachers have in their principal. It is also instrumental in the overall trust of the organization. Once principals become dependable as trustworthy and are seen as partners, they create a culture that is interactive and there is greater coherence in the work (Fullan, 2019). The development of trust and respect is the educational system benefits morale; however, it is also key to resolving issues, particularly in stressful situations (Wilson, 2019). Stephen Covey (2015)

contends that trust, or a lack of trust, has a significant impact on performance. Leaders or organizations that have built up a high level of trust are able to enjoy a "dividend" that can act as a performance multiplier (Covey, 2015). People work harder in a school, or organization, where there is a high level of trust. There is a positive relationship between teachers' levels of trust in their principal and in their commitment to growth in both themselves and the organization (Bird et al., 2012). Having trust in the competence, honesty, and openness of a leader can easily translate into acceptance and support for their decisions. It is clear from the research that the importance of trust, within any organization, cannot be overstated. The importance of trust in a school or school system is of even greater importance because education is about people and relationships.

Clear Communication

Communication is an important factor in developing both trust and supportive relationships. It is no surprise then, that having clear communication is often cited as one of the most important qualities of an effective leader. One important aspect of communication is being an excellent listener. Principals are able to disarm difficult situations simply by listening carefully to the people who enter their office (Meador, 2019). Much of a principal's time is spent listening to others, and therefore they need to be present in every conversation and truly learn the art of active listening (Kelly, 2019). Other important aspects of communication include using ideas from teachers, providing feedback to staff members, and being available to provide advice, support, or crisis intervention (Wilson, 2019). Tyler (2016) conducted a qualitative study which consisted of interviewing 19 principals at high-performing schools to identify communication strategies consistently used. There were a number of implications from this study, but one such factor determined that any breakdown, or absence of, communication between leaders and

followers results in lost collegiality and teamwork. Communication in leadership affects

transparency, faculty trust, and decision-making (Tyler, 2016). Teacher motivation is also

determined, at least in part, by principal communication behaviours (Tyler, 2016). Additionally,

Mikkelson et al. (2015) conducted a study that surveyed 276 participants endeavouring to

measure the correlation between communication competence of the leaders along with measures

of the participants' job satisfaction, motivation, and organizational commitment. The result

demonstrated that there was indeed a strong positive correlation (Mikkelson et al., 2015).

Overall, it was also determined that effective communication and relationship-based leadership

styles were the best indicators of motivation, commitment, and job satisfaction (Mikkelson et al.,

2015). These and a multitude of other studies demonstrate the importance of clear

communication in educational leadership.

Empathy and Integrity

Empathy and integrity are essential qualities in an effective leader. Leaders who are able

to recognize individual needs in relation to system needs seek ways to engage in conversations

and this leads to recognizing and understanding alternative perspectives (Sanford et al., 2019).

Demonstrating empathy strengthens both the relationship and the level of trust in the workplace

(Sanford et al., 2019). When leaders are able to view the world through an empathetic lens, it

raises awareness in the differences that teachers make, and it improves the educational

experience of the students (Gallagher & Thordarson, 2018). Lumpkin and Achen (2018) assert

that ethical leaders and leadership emphasize serving and caring for other. This includes making

morally reasoned decisions through the lens of integrity. These leaders are self-aware and stress

empathy and social skills (Lumpkin & Achen, 2018). Lumpkin and Achen (2018) further opine

that leading from the ground up, meaning with empathy, integrity, and respect nurture

environments that allow people to feel supported, secure, and ultimately more motivated.

Integrity and empathy are essential qualities in the world of education; however, its importance is also extending into the world of business. There is an increasing awareness of the importance of integrity and empathy in contemporary leadership (Holt et al., 2017). Holt et al. conducted a longitudinal research study with a total of 191 business administration students, ranging in age from 18-62, at a Los Angeles-based university. These students were asked to complete a survey identifying qualities they viewed as leading, interdependent tendencies in the corporate world (Holt et al., 2017). Empathy and integrity were viewed as leading, interdependent tendencies (Holt et al., 2017). Empathy is depicted as a much-needed awareness of, and care for, others' feelings to establish a mutually rewarding relationship. Integrity is defined as not simply being truthful, but also having the courage and ability to make bold decisions (Holt et al., 2017). Thus, being an effective leader means demonstrating moral and ethical behaviours. These include integrity and empathy, and the importance of those in education, and the world, cannot be overstated.

Fair and Consistent

Credibility is an important and necessary part of being a principal. Being judged to be inconsistent or unfair will quickly tear away at the credibility of a site-based administrator (Kelly, 2019). As is the case with effective teachers, principals must be fair and consistent. They need to have the same set of rules or procedures for all staff and students, and cannot show favouritism (Kelly, 2019). An essential aspect of being an effective leader is trust, and trust is dependent on the consistency with which the principal displays qualities such as honesty, benevolence, and competence (Tschannen-Moran & Gareis, 2015). Obiekwe and Ezeugbor (2019) conducted a study using a survey of 672 teachers. Data were collected using two

instruments: The ethical leadership scale (ELS) and the teachers' commitment scale. The study indicated that there was a significant positive correlation *(r=0.84)* between perceptions of principal fairness in decision-making and job commitment and satisfaction (Obiekwe & Ezeugbor, 2019). Findings indicated that principals should demonstrate ethical behaviours such as being humble, patient, and fair (Obiekwe & Ezeugbor, 2019). The research indicates that fair and consistent behaviour, on behalf of the principal, is very important for all staff members.

Fair and consistent behaviour on behalf of the school administrator can also reduce bullying in an educational system. Gerlinger and Wo (2016) conducted a study using a nationally representative sample of 12- to 18-year-old students. They determined that the consistent and fair enforcement of school rules, helped to foster a positive school culture (Gerlinger & Wo, 2016). Fair and consistent handling of physical, verbal, and relational bullying, combined with care and attention provided by adults, resulted in far less student victimization (Gerlinger & Wo, 2016). Having school leaders consistently enforcing the rules and dealing with inappropriate behaviours is an important step in the reduction of bullying (Gerlinger & Wo, 2016). Thus, it is essential that principals are fair and consistent, along with demonstrating skills in relationship building. Effective principals also build trust, lead with empathy and integrity, and communicate clearly with staff, students, and parents.

The qualities identified above are often characteristics that are held by female leaders within the school systems. Shantz (1993) espouses that women work hard to maintain relationships within the school, and they are sensitive to the needs and emotions of their teachers. Morison and Zeimba (1997) concur asserting that female leaders are often more empathetic and inclusive than their male counterparts. Moreover, female administrators emphasize personal relationships, fairness, cooperation, and inclusivity in their leadership (Smith and Hale, 2002).

As women clearly possess the skills that are oft recognized in literature surrounding effective leadership, it makes sense that we should encourage more females to pursue leadership positions in the education profession.

Female Leaders

There is substantial research that explores the experiences of women in leadership positions (Murakami & Tornsen, 2017; Vroman & Danko, 2020), yet there is no universal model that can be used as a standard for women's leadership. Instead, leadership is tied to professional identity and is contextualized in economic, political, and social terms (Moriel de Cedeno, 2020). Vroman and Danko (2020) contend that women leaders attempt to be what they perceive others want them to be, and as a result they expend a great deal of emotional energy. Additionally, their professional identity is developed through gender socialization, family upbringing, and challenges within the profession (Murakami & Tornsen, 2017). As females often receive conflicting messages regarding personal identity, feelings of impostorism are common in the development of their professional identity (Hutchins & Rainbolt, 2017). Furthermore, role and career transitions are key events that are likely to instigate impostor feelings as the individual questions their ability to effectively perform all necessary responsibilities (Hutchins & Rainbolt, 2017). Consequently, in order to thoroughly understand women in leadership roles, it is important to address the identity development and barriers that have historically been at play for women as they move into administrative positions.

Female Leader Identity Development

In many cases an individual's identity is influenced by their role and social position. Roles are defined as expectations and behaviours that have been impressed upon individuals by those who are a part of the social positions. However, it is up to the individual to accept or reject

the roles or labels that have been placed on them (Stryker & Burke, 2000). Self-concept plays a part in whether we accept or reject that label. Moreover, it influences how individuals behave, what motivates them, and what they believe about themselves and their environment (DeRue et al., 2009). Leadership identity, however, is defined as the extent to which an individual incorporates their role as leader into their self-concept (DeRue et al., 2009). Researchers assert that it is essential to have a strong self-concept in order to effectively perform their duties as a leader (Karelaia & Gullén, 2014). Epitropaki et al. (2017) concur espousing that leaders with a solid leadership identity are much more likely to have a positive impact on the self-efficacy, commitment, and self-esteem of their employees. The importance of having a strong sense of leader identity cannot be underrated, yet aspiring female leaders may struggle in developing a positive leader identity due to a lack of alignment between their identity as a woman and their goal of being a leader (Karelaia & Gullén, 2014). Many women find that their role as a leader conflicts with how they feel they should behave as a woman. This identity conflict can cause increased stress, but if a female leader has a positive gender identity, it often results in increased motivation (Karelaia & Gullén, 2014).

The development of leader identity begins early in life and if the modeling that females are taught when they are young conflicts with what they later learn are important qualities in a leader, then identity conflict is likely to occurs. Criswell and Betz (1995) found that girls were socialized to believe that they were inherently deficient in their ability to lead and the gender-role stereotyping that they were taught is that they should be subservient to men in their aspiration to lead. As a result, an internal conflict arises when women decide that they want to take on leadership positions. This can result in a lack of confidence, and in some cases keeps

women from pursuing leadership roles. Therefore, it is important to address the factors that may be keeping women from ascending the educational ladder.

Barriers for Women in Educational Leadership

There is substantial research to demonstrate that women are extremely capable of leading in the K-12 school system (Barsh & Yee, 2012; Grogan & Shakeshaft, 2011; Pounder & Coleman, 2002), however women continue to be underrepresented in these roles. Despite an awareness that women are talented, capable, and qualified to lead, there continues to be a systemic issue in mobility. There are both internal and external factors that impact women moving into leadership positions, and the journey has been fraught with institutional and sociological barriers. These factors are partially due to the traditional belief, held by some, that a directive leadership style is effective leadership. Rowe (2017) asserts that it does not matter if internal barriers are real or perceived. If the individual views, accepts, and believes these to be true, then they are in fact real. Grogan and Shakeshaft (2011) posit that there are eight barriers that hinder females from career advancement. These include lack of self-confidence, family commitments, lack of gender-specific preparation programs, gender stereotyping, the glass ceiling effect, lack of opportunities, attitudes of colleagues and superiors, and the limitation of work-related experiences essential to advancement (Grogan and Shaftshake, 2011).

Research indicates that women are perceived to be moderately more effective in leadership roles in the area of education, social services, and government (Ramaswamy, 2020). Furthermore, school authorities often identify females as being better collaborative decision makers, and they generate change through understanding and listening (Grogan and Shaftshake, 2011). Hoyt (2007) agrees stating that women are more collaborative and that they more commonly use a democratic and participatory leadership style that is evident in their work.

Moreover, the number of women earning doctoral degrees considerably outweighs that of men (Shaftshake et al., 2007). In fact, females earned 59% of all degrees in 2008 (Ely & Rhode, 2010). Yet despite these qualities and characteristics women continue to be underrepresented in leadership positions. Additionally, females do not serve in educational leadership positions in a proportion that even comes close to representing their presence in the field of education or in their training and certification in school administration (Shaftshake et al., 2007).

Research has identified a number of reasons for this continued underrepresentation of women in leadership roles. The "Good Ole Boy" network consists of men who prefer and promote their male colleagues to leadership positions, and it excludes women from climbing the corporate ladder (Goethals et al., 2011; Grogan and Shaftshake, 2011; Hannum et al., 2015). Despite the similarities of men and women in terms of educational attainments, ambitions, and commitments to career, men typically progress faster and reach higher-status positions much more quickly than women (Goethals et al., 2011). Furthermore, research indicates that women are effective leaders, however, stereotypes and gender discrimination hinder advancement and impede female leaders' success (Goulart et al., 2021). Prejudice against women leaders is often based on inconsistencies between the perception of what a leader is and typical characteristics of females (Eagly & Karau, 2002). Men are typically considered masculine role models and are believed to be more organized. Women, conversely, are seen as compassionate, meek, and relationship-based (Kray et al., 2017).

Moreover, in 2005 Heilman and Haynes conducted a study that focused on the relationship between gender and perceived attributes of success. The results revealed that women were thought to be less competent and less influential than their male counterparts (Heilman & Haynes, 2005). The adoption of such stereotypes has made the attainment of leadership positions

much more challenging for females (Kray et al., 2017; Goethals et al., 2011; Lyness & Grotto, 2018). This barrier of prejudice and discrimination is referred to as the glass ceiling effect and it impedes women from progressing up the career ladder (Dyczkowska & Dyczkowski, 2018; Eagly & Carli, 2007). Furthermore, because of gender stereotypes, women are frequently held to a higher standard than men in the workplace (Goethals et al., 2011; Lyness & Grotto, 2018). Eagly and Karau (2002) also cited that women emerge less frequently as leaders because they have a higher standard to meet than men. Men are innately considered to be highly competent (Eagly and Karau, 2002). Horowitz et al. (2018) cited unequal and higher expectations for women as a primary reason that women less frequently hold top leadership positions.

Another imbalanced, cultural expectation is that of family responsibilities. Society deems it more appropriate for women to interrupt their careers for such duties as caring for children or aging parents than it is for men (Bishop, 2022). Shakeshaft et al. (2007) opine that family responsibilities continue to be a barrier for women who aspire to educational administration. Additionally, women experience more emotional stress in the workplace as a result of trying to balance family and the supervision of employees (Iwasaki et al., 2004). Women who are consciously working hard to climb the corporate ladder, dealing with gender stereotyping, and trying to raise a family may therefore become susceptible to developing impostor phenomenon. Kets de Vries (2005) asserts that "women who reach successful positions that conflict with their family origin's way of thinking about gender roles are especially prone to feeling fraudulent" (p. 111). Women in leadership positions are especially susceptible to feelings of fraudulence due to gender socialization and the high levels of stress associated with leadership roles (Iwasaki et el., 2004). Gender socialization is not only a barrier to women's mobility, but it leaves women vulnerable to impostor phenomenon and leads them to struggle with feelings of self-doubt and

the tendency to trivialize their own achievements (Kets de Vries, 2005). As such, it is important to understand IP, who is affected by it, and the factors that contribute to impostor phenomenon.

Understanding Impostor Phenomenon

One considerable obstacle that female leaders face during their careers is impostor phenomenon (IP). Some women take on leadership roles as a compensation mechanism for their belief that they are not good enough (Shantz, 1993). Women experiencing IP often feel they need to prove themselves and pursuing higher positions in an organization is one way of doing so (Shantz, 1993). Added to the feelings of unworthiness, women often feel unprepared for their leadership roles and therefore tend to work extra hard fearing that they will be discovered as a fraud. This in turn often pushes the individual to intensely focus on further preparation in order to succeed at a task (Caselman et al., 2006; Clance & Imes, 1978).

As mentioned earlier, Clance and Imes (1978) coined the term Impostor Phenomenon after conducting a five-year study working in "individual psychotherapy (groups), theme centered interaction groups, and in college classes" (Clance & Imes, 1978, p. 241) that involved 172 women. Their study involved 110 undergraduate students, 30 graduate and Ph.D. students, 10 faculty members, and 22 professional women including lawyers, nurses, and social workers. The purpose of their study was to understand the personal and experiential effects of feeling like an impostor. Participants in their study consistently reported the need to find explanations for their success and accomplishments other than their own intelligence and talents (Clance & Imes, 1978). These women were found to attribute their successes primarily to luck, charm, or hard work (Clance & Imes, 1978; Cowman & Ferrari, 2002; Mullangi & Jagsi, 2019). As a result of this study, impostor phenomenon is now used to describe the internal feeling of being an intellectual phony (Clance & Imes, 1978; Hawley, 2019) and occurs when a person doubts their

ability to complete a task at a standard that will meet the expectations of others (Clance, 1985;

Sakulku & Alexander, 2011).

During the 40-year period since this seminal study was conducted, there have been

multiple empirical studies that have explored IP. However, the majority of these studies have

been in the area of psychology, and as a result, there is a gap in the research regarding if and how

impostor phenomenon manifests itself in educational leaders. Current research indicates that IP

is prevalent in women and since the demographics of educational leadership have changed to

include an increasing number of women in these roles, it is important to study this phenomenon.

The responsibilities of the school principal have also changed considerably during the period of

time that women have become more highly represented in these positions, and as past research

would indicate, women are more often afflicted with IP (Clance & Imes, 1978; Seritan & Mehta,

2016). Therefore, exploring impostor phenomenon and the impact that it has on female

educational leaders is important to investigate.

Impostor Phenomenon

"The term impostor phenomenon is used to designate an internal experience of

intellectual phoniness which appears to be particularly prevalent and intense among high

achieving women" (Clance & Imes, 1978, p. 241). According to Mullangi and Jagsi (2019),

impostor phenomenon is a psychological term that refers to a pattern of behaviour wherein

people, even those with adequate external evidence of success, doubt their abilities and have a

persistent fear of being exposed as a fraud. In Clance and Imes' (1978) seminal work, the authors

spent five years working with and observing over 170 highly educated, well respected, and

successful women who each, in one way or another, viewed themselves as frauds. In this study,

"these women (found) innumerable means of negating any external evidence that contradicts

their belief that they are, in reality, unintelligent" (Clance & Imes, 1978, p. 241). All indicators pointed to the fact that these women were gifted and talented, yet they failed to see that in themselves (Clance & Imes, 1978; Mullangi & Jagsi, 2019). These "self-declared impostors fear that eventually some significant person will discover that they are indeed intellectual impostors" (Clance & Imes, 1978, p. 243). Despite the fact that the women Clance and Imes (1978) worked with experienced academic excellence, were respected professionals, and received professional recognition from colleagues and esteemed authorities, they were unable to see themselves deserving of the accolades. As a result of this multi-year study, the term impostor phenomenon was devised.

People who experience impostor phenomenon believe that they are not worthy of the professional positions that they have earned, and they are afraid that they are going to be exposed as the frauds that they believe they are (Mullangi & Jagsi, 2019; Sakulku & Alexander, 2011; Seritan & Mehta, 2016). Each new promotion or recognition is accompanied by further fear that they will be found out. Caselman et al. (2006) concur finding that women with impostor phenomenon are characterized by possessing a fear of failure, which frequently leads to perfectionism. These women then tend to work extra hard, fearing they will be discovered as a fraud, which often pushes the individual to intensely focus on further preparation in order to succeed at a task (Caselman et al., 2006). Their dedication to working hard and the extra effort exerted often results in further success. This then reinforces the belief that their success was not legitimate because it is due to hard work and a large investment of time (Caselman et al., 2006; Sakulku & Alexander, 2011). If they were truly smart or talented, success would come easily and would not require the hard work that they have invested. Impostors make extraordinary efforts to maintain the facade of competence. They believe their professional survival is dependent upon

upholding the appearance of success and impressing others with their achievements (Clance et al., 1995; Ferrari & Thompson, 2006). As a result, the impostor is persuaded that their successful outcome is the result of considerable effort as opposed to a reflection of their actual ability (Gibson-Beverly & Schwartz, 2008).

In a series of three studies, Leary et al. (2000) examined the theoretical assumptions of impostor phenomenon. The aim of these studies was to compare the differences between the way impostors perceived themselves as compared to perceptions of others. Additionally, the interpersonal strategies used by impostors and the nuances in type of impostors was also examined. The first study was comprised of 238 undergraduate students who completed three survey instruments including the Clance Impostor Phenomenon Scale (CIPS). Researchers concluded that impostors not only saw themselves as inadequate, but they also believed others to perceive them in the manner (Leary et al., 2000). This finding was inconsistent with earlier studies that concluded impostors believed that others viewed them favourably.

A second study examined intellectual inauthenticity more carefully utilizing the specific behaviours of impostor phenomenon as outlined in Clance and Imes' (1978) seminal study, and again using CIPS as a survey instrument. One interesting finding from the second study was that individuals with IP responded differently about their expected performance in private and public settings (Leary et al., 2000). This finding was in part due to the assumption that impostors felt they needed to act differently when they thought others held low expectations for them (Leary et al., 2000). These findings are consistent with Clance and Imes' (1978) contention that social expectations are an important aspect of the development and maintenance of impostor phenomenon.

Who is Affected by Impostor Phenomenon?

Impostor phenomenon can be experienced by anyone and has been studied in a variety of ethnic groups (Chae et al., 1995), in people of varying occupational groupings (Want & Kleitman, 2006), and in multiple studies involving university students (Ayesiga, 2021; Blackmon, 2018; Fraenza, 2016). Nonetheless, women are far more often plagued with feelings of being an intellectual phony (Clance & Imes, 1978; Dahlvig, 2013; Seritan & Mehta, 2016) and therefore it warrants further study in this area. Multiple studies, dating back to 1978, have addressed IP and those affected by it, and although it has been studied for decades, there is much work left to do. In this earliest study, Clance and Imes (1978) reported that the majority of the women that they worked with were white, middle to upper class women between the ages of 20 and 45. All of the women in the study presented as both intelligent and successful yet could not accept that they were worthy of the accolades they received. One of Clance and Imes' findings included, "these women tend to attribute their successes to temporary causes, such as luck or effort" (1978, p. 242). They also found that, "women are more likely (than men) either to project the cause of success outward to an external cause (luck) or to a temporary internal quality (effort) that they do not equate with inherent ability" (Clance & Imes, 1978, p. 242).

Fraenza (2016) conducted an empirical study to explore the impact of impostor phenomenon on anxiety levels in *(n = 220)* female university graduate students. The participants consisted of *(n = 115)* online graduate students and *(n = 105)* enrolled in traditional graduate programs, and all participated on a voluntary basis. This study utilized a cross-sectional survey design, and it incorporated the Clance Impostor Phenomenon Scale, the Zung Self-Rating Anxiety Scale, and the Perfectionistic Self-Presentation Scale. Although the study was designed to explore IP among graduate students and to determine if there was variance dependent upon on

program type, the implications for IP remained consistent with the findings above. While traditional graduate student participants had a mean score that demonstrated frequent feelings of being an impostor, online graduate student participants (although lower) still measured at a moderate level for IP. The purpose of the study was outside the scope of this literature review, however Fraenza (2016) concurred with earlier studies asserting, "Regardless of success, these individuals believe they have somehow fooled everyone into believing they are more competent than they really are" (p. 3).

Periodically entertaining feelings of doubt is not uncommon but experiencing impostor phenomenon goes beyond occasional self-doubt. Young (2011) espouses that people who experience IP tend to set extremely high expectations for themselves, may be hesitant to apply for positions they are amply qualified for, and tend to work harder than those who do not experience IP in order to fulfill the need to be successful in all aspects of life. Although impostor phenomenon can be experienced by anyone, Young (2011) opines that women are particularly at risk for feeling fraudulent in their workplace environments.

Factors Contributing to Impostor Phenomenon

The experience of impostor phenomenon (IP) is extremely complex and differs with each individual. Therefore, it is difficult to narrow down specific factors that contribute to this phenomenon. Clance and Imes (1978) reported that they were, "amazed at the self-perpetuating nature of the impostor phenomenon — with the pervasiveness and longevity of the impostor feelings of our high achieving women, with their continual discounting of their own abilities, and persistent fears of failure" (p. 242). They were also perplexed as to why so many bright women, despite consistent and impressive evidence to the contrary, continued to see themselves as impostors (Clance & Imes, 1978).

Stereotypes. One finding from the above study was that the self-image of women, believing themselves to be a phony, was consistent with the societal view that women are not defined as being competent and as a result if a woman does do well, it could not possibly be because of her ability. Therefore, it must be because of some fluke (Clance & Imes, 1978). Additionally, gender stereotypes contribute to these societal views and to experiences with fraudulent feelings (Peus et al., 2015). Gender stereotypes are understood to be the one of the most predominant challenges affecting the professional advancement of women (Heilman, 2012; Peus et al., 2015). Among those stereotypes is the assumption that men have greater legitimacy as leaders, and they are naturally more influential (Carli, 2018; Kray et al., 2017; Sartore & Cunningham, 2007). Conversely, women are considered compliant and are viewed as nurturers not leaders (McDonagh & Paris, 2012; Sartore & Cunningham, 2007). DiTomaso (2015) posits that attitudes that arise from these sorts of stereotypes are difficult to observe given they are often concealed in the policies and structures of the organization.

Also hidden in the structures of organizations is the invisible barrier that prevents women from reaching the highest leadership positions. This glass ceiling encompasses obstacles designed to inhibit upward mobility for female leaders (Grogan & Shaftshake, 2011; Johnson, 2016). The glass barrier goes beyond the individual as it applies to all women or women as a group (Grogan & Shaftshake, 2011). Nevertheless, it is opined that women are able to break the glass ceiling if they exceed performance expectations by working harder and longer than their male colleagues (Carli, 2018; Grogan & Shaftshake, 2011). This culture extends beyond the practice of promoting men, to persuading women to conform to the system in order to protect the dominant and traditional norms (Sartore & Cunningham, 2007).

Leadership Development. Women who pursue leadership positions do so without proper training or clear expectations of their role. Professional development programs rarely consider the unique needs of women and often reflect the values and beliefs of white, male leaders (Amey, 2006; White, 2003). Additionally, mixed-gendered leadership programming identifies effective leadership and leadership traits in masculine terms (Madsen & Andrade, 2018). These characteristics include being competitive, assertive, and controlling and programs therefore unintentionally teach women to impersonate traits attributed with male leadership (Madsen & Andrade, 2018). Ultimately, this impersonation may cause inauthentic practices for women and results in less effective leadership; creating a dichotomy between leadership identity and a desire for authenticity (Gallant, 2014; Madsen & Andrade, 2018; Moorosi, 2014). When a female leader utilizes a leadership style that misaligns with the expected gender biases of the organization, the woman is viewed negatively (Agarwal, 2018; Eagly & Karau, 2002; Kellerman & Rhode, 2017).

Leadership Traits. Female leaders who are assertive and make difficult decisions are frequently perceived as insensitive, demanding, overbearing, abrupt, and nasty (Agarwal, 2018; Kellerman & Rhode, 2017). When male leaders possess the same attributes, they are considered to be positive qualities; and these traits reinforce the impression that the man is a competent and effective leader (Agarwal, 2018). Female leadership styles are often characterized as facilitative, collaborative, conciliatory, and people oriented (Walker & Aritz, 2015). Therefore, a woman is expected to be helpful in all situations and if she is not, she is regarded as mean and inconsiderate (Agarwal, 2018). Whereas if a male leader is unaccommodating, it is viewed as the norm. Additionally, when he is helpful, he receives acknowledgement and appreciation (Agarwal, 2018). Furthermore, male leaders are afforded more latitude regarding decisions that

they make. Kellerman and Rhode (2017) contend that there is less tolerance for mistakes made by a woman. Moreover, female leaders are oftentimes treated with dismissive attitudes and a lack of respect from colleagues (Kellerman & Rhode, 2017).

Although the Clance and Imes study was conducted over 40 years ago, Mullangi and Jagsi (2019) have found that the societal view has not changed as much as one might expect. Their research states "that women tend to minimize their ambitions and salary expectations in mixed-gender environments to boost relationship prospects" (Mullangi & Jagsi, 2019, p. 403). Perpetuating these learned behaviours contribute to the cycle. When women soften their edges, they run the risk of not being recognized for their competence and then may not be promoted (Mullangi & Jagsi, 2019). This "oversight then leads to women doubting their capabilities and deepening the sense of impostor syndrome" (Mullangi & Jagsi, 2019, p. 404).

Early Life Experiences. Clance and Imes (1978) observed that the "impostors" typically fell into two groups with respect to early family history. Either these women had a sibling that was designated as the "intelligent child" in the family or they themselves were often told how perfect they were (Clance & Imes, 1978). In the first case, women with impostor phenomenon, "go out to prove they are capable or intelligent. (They) get high marks, successful careers, myriad accolades, but are unable to win family respect nonetheless" (Clance & Imes, 1978, p. 243). Women from the second group demonstrated precocity as very young children and as such were viewed as "perfect" in the eyes of family members. These girls were told early in life that they were superior in all ways (Clance & Imes, 1978). These early experiences leave girls vulnerable to IP as a result of the positive affirmations that they receive for being good students and quick learners. These assertions led girls to internalize the message that academic success should come easily, and that a lack of perfectionism indicated a lack of intelligence or ability

(Clance et al., 1995). Therefore, these women grew up feeling obligated to keep up the charade and when they experienced difficulties, they became filled with self-doubt that they needed to keep to themselves (Clance & Imes, 1978). Whether the girls were "the intelligent child" or the sibling of "the intelligent child" these circumstances demonstrate that people are deeply affected by their upbringing and that it is difficult to move beyond what we are taught in even in our earliest experiences. The fact that women have been caught in this cycle for over 40 years suggests that we have not successfully moved forward in this area and consequently there is still much work to be done.

  IP Behaviours. Experiencing feelings of being an impostor affects women in a multitude of ways and therefore manifests differently in each distinct group of people. Clance and Imes (1978) observed that there were various types of behaviours that make it very difficult to navigate once the impostor assumed the posture of being an intellectual phony. The first behaviour involves being diligent and hard working. These impostors fear that their "stupidity" will be discovered if they cease their hard work and "consequently, the woman studies or works very hard to prevent the discovery" (Clance & Imes, 1978, p. 244). The second type of behaviour is that of intellectual flattery. These phonies tend to tell professors, supervisors, or colleagues what they want to hear instead of sharing what they really believe. That way her superior will view her as having insight and intellect beyond what she actually possesses.

  A third type of impostor uses her charm to win the approval of supervisors. She uses the strategy so that others will think she is intellectually superior. Although this impostor doubts her actual intelligence, at some level she sees herself as brilliant enough to win people over with her charm, friendliness, or sense of humour. Each of these types of "impostors" is recognized as having skills, yet they believe that if they really were bright, they would not need outside

approval. "Thus, efforts to gain approval give proof that (they are) intellectual phonies. After all, people who are geniuses or innovators in their fields manage to be productive and creative despite lack of support from others" (Clance & Imes, 1978, p. 244). In all cases, these are successful women who are not giving themselves credit for the successes that they have achieved.

There are several factors that lead to the feeling of being an impostor, but one consistent belief is that these feelings of inadequacy are unique to them and if they revealed feelings of phoniness, they would face criticism and a lack of understanding from others (Clance & Imes, 1978). This refusal to discuss thoughts of failure is one of the reasons that many women, who experience IP, continue the never-ending cycle of negative self-talk, anxiety, fear of being discovered, and even depression (Clance & Imes, 1978; Mullangi & Jagsi, 2019). Bringing awareness to this phenomenon is an important first step in helping successful women acknowledge their own self-worth.

Effects of Impostor Phenomenon

As discussed earlier, impostor phenomenon (IP) has been studied extensively in the world of psychology (Chae et al., 1995; Sakulku & Alexander, 2011; Young, 2011), and research indicates that this problem has negatively affected women in a variety of ways. Impostor phenomenon often leads to workaholic behaviours and eventual burnout. In an article written by Seritan and Mehta (2016), they reflect on the impostor's inability to balance work and life over the long haul to be pervasive and noted those with IP are at especially high risk of the balance tipping toward persistent workaholism. Those who suffer are also at risk for burnout, anxiety, depression, and self-sabotage (Seritan & Mehta, 2016). "The impostor phenomenon may be associated with a number of behaviors that are mostly unconscious attempts to compensate for

the deeply held beliefs of inadequacy" (Seritan & Mehta, 2016, p. 419). In its most severe

manifestations, impostor phenomenon, in combination with isolation and fear of failure, can

contribute to suicide or suicidal ideation (Seritan and Mehta, 2016). These are but some of the

destructive effects of IP and as a result, it is worthy of devoting time and attention to the issue.

As discussed earlier, findings in Fraenza's (2016) empirical study of 220 university

graduate students also indicated a significant, positive relationship between anxiety scores and IP

scores. Additionally, research conducted by Hutchins (2015) also revealed that emotional

exhaustion was positively related to IP, and those reporting moderate to intense levels of IP also

reported greater use of adaptive coping skills. Hutchins recruited a sample *(n = 61)* from the

academy of Human Resources Development membership to participate in a survey that consisted

of 78 items. The majority of the respondents were women faculty at four-year institutions who

affiliated with social sciences disciplines, and 46 percent identified as associate professors, while

32 percent identified as full professors (Hutchins, 2015). The result of this descriptive study

suggested that "impostor tendencies are alive and well among higher faculty and associate with

reports of work stress, their use of coping skills, and the perceived impact of mentors" (Hutchins,

2015, p. 10). Additionally, although there has been substantial research done in the area of

psychology, healthcare, and with university faculty and students (both graduate and

undergraduate), there has been little in the area of education relevant to how female leaders in

school districts have been affected.

Due to the lack of empirical and theoretical research in the area of K-12 education, there

is considerable benefit for such a study to determine how prevalent this issue is among female

leaders in the Alberta education system. Determining the prominence, cause, and a potential

resolution to impostor phenomenon in Alberta schools may benefit leaders not only for today,

but also for future generations. It is important that a mixed-method study be conducted to determine the serious effects of impostor phenomenon and what can be done to remedy this issue.

Conclusion

While chapter 2 reviewed the literature relevant to impostor phenomenon and various studies that have previously been undertaken on the topic, Chapter 3 will examine the methodology of the study completed by this researcher. Chapter 3 is designed to investigate IP among female educational leaders in the province of Alberta, and it provides the research design and rationale for the methodology. Moreover, the chapter will discuss the participants, instruments, and interview protocol that was utilized in this study. The design and procedures and ethical considerations are also examined in the forthcoming chapter.

Chapter 3: Methodology

This chapter presents the methodology that was used to conduct this mixed methods study, and it investigates impostor phenomenon among educational leaders in the province of Alberta. The purpose of the study, research questions, instrumentation, data collection, and analysis are presented to justify the quantitative and qualitative methods that were utilized in this study.

Purpose and Research Questions

The purpose of this mixed methods research study was to use an explanatory sequential design (Creswell, 2014) to explore how prevalent impostor phenomenon is among female education leaders in the province of Alberta, and to determine what can be done to support these leaders. The ultimate goal of this study was to establish the presence of impostor phenomenon among educational administrators and to determine the perceived factors contributing to success and perseverance. To further investigate impostor phenomenon among female educational leaders in the province of Alberta, the following research questions were examined:

1. To what extent do educational leaders experience impostor phenomenon, and how do these experiences vary by gender, age, position, years of experience in education, and years of experience in their current role?

2. For female educational leaders who experience impostor phenomenon, what factors contributed to these experiences?

3. For female educational leaders who experience impostor syndrome, what supports have helped to overcome those barriers?

To investigate these questions, this study collected data from principals, assistant (or vice) principals, superintendents, and deputy (or associate) superintendents of K-12 schools in the province of Alberta.

Research Design and Rationale for Methodology

The research questions in this study benefitted from using both qualitative and quantitative approaches, as the researcher was looking for both depth and breadth in this study. "The advantage of large samples is breadth, whereas their problem is one of depth. For the case study, the situation is the reverse. Both approaches are necessary for a sound development of social science" (Flyvberg, 2006, p. 241). Tashakkori and Teddlie (2009) posit that mixed methods research is grounded in a combination of qualitative and quantitative paradigms and because of that its approach puts emphasis on combining the most effective characteristics of each. "At its foundation, a mixed methods design involves the inclusion of both qualitative and quantitative methods into a single study to generate a more comprehensive understanding of the phenomenon under study" (Watkins & Gioia, 2015, p. 3). Watkins and Gioia (2015) also assert that one of the advantages of using mixed methods research is that it helps to maximize the strengths that each design brings to a study. It can also offset any of the weaknesses that using only one research methodology might bring.

McMillan and Schumacher (2014) concur, arguing that the mixed approach combines elements of both qualitative and quantitative research in both the data collection and analysis phases, allowing for a more thorough study. Using both quantitative and qualitative data provides different but complimentary insights into a phenomenological study (Patten & Newhart, 2018). The researcher found extensive research to support the use of mixed methods research, therefore this mixed methods study allowed for a comprehensive understanding of the number,

severity, and impact that impostor phenomenon had on successful women in educational leadership positions within Alberta.

More specifically, this study utilized an explanatory sequential design (Creswell, 2014), in which the researcher used the qualitative data results to explain the results of the quantitative phase. Therefore, the quantitative data was collected and analyzed first and the results of that phase helped to plan the second, qualitative phase. This explanatory sequential design was dependent upon the idea that the qualitative data would build directly on the quantitative results (Creswell, 2014).

It was important that the quantitative results not only inform the sampling procedure, but that they actually helped to form the questions that the participants were asked in the second phase of the study. Furthermore, the interpretation of the qualitative data was designed to help explain the quantitative data. Consequently, the merging of the two databases was not the way this design model was intended to be used. It was essential that the two sets of data be viewed separately and that the qualitative results help to expand and explain the quantitative results (Creswell, 2014). Directly comparing the two sets of data results would have resulted in an inadequate comparison of the concepts and it would not have done justice to this study.

Figure 3

Flowchart Illustrating Phases of Explanatory Sequential Design Adapted and modified from

Creswell (2013).
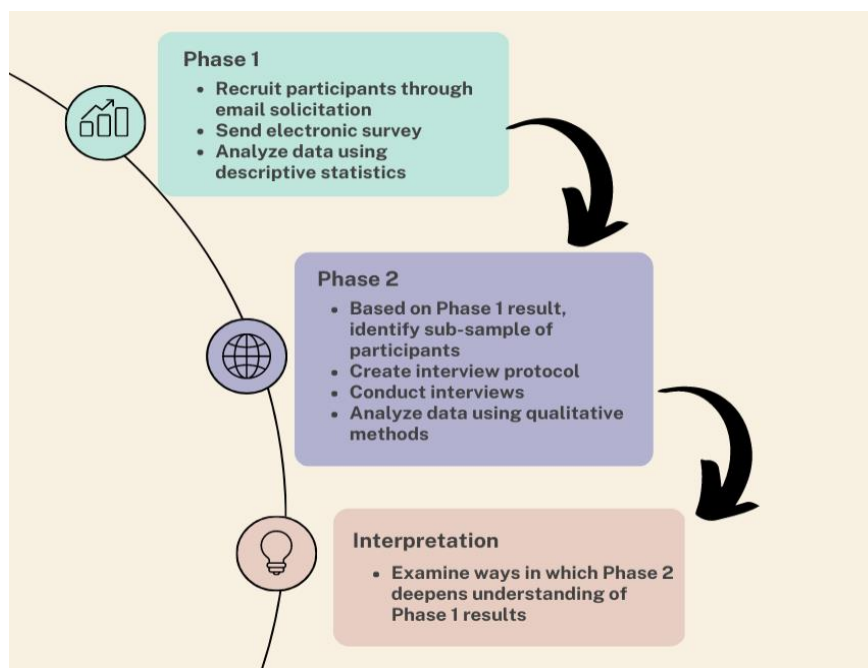
The first phase of this study used the Likert-type Clance Impostor Phenomenon Scale

survey as well as the researcher generated questionnaire that included demographic and open-

ended questions. Descriptive statistics were utilized for the initial analysis of data, followed by

researcher generated provisional coding (Saldaña, 2021) based on relevant research. Results

from the generated list of codes was then used to inform some of the interview questions in

phase 2.

The second phase of this study was conducted through semi-structured interviews which

were used to generate a deeper understanding of the participants' experiences with impostor

phenomenon. This explanatory sequential approach was applicable for this study as qualitative

interviews could be used to expand upon results from the survey. Furthermore, the sequential

design was an appropriate method for data collection, as participants were recalling and reflecting on previous experiences (Merriam & Tisdell, 2016). Additionally, in qualitative research, it is essential that data collection and analysis be comprehensive to address issues of reliability and trustworthiness (Guba & Lincoln, 2005).

Participants

To investigate impostor phenomenon, this study needed to understand the perceptions of educational leaders both at the school and at the division level. Therefore, the researcher had intended to contact the College of Alberta School Superintendents Association (CASS) to request permission to distribute a survey and questionnaire to all superintendents and deputy or assistant superintendents in Alberta. The researcher had then planned to ask the members of CASS to share the instrument(s) with principals and assistant or vice principals within their divisions. However, the researcher was unable to connect with the chair of CASS and emails were not responded to. The researcher then attempted to connect with all principals and assistant principals who are members of the Alberta Teacher Association's Council of School Administration (CSA) and have the surveys shared out through the CSA. The purpose of using these two approaches was to allow all principals, vice (or assistant) principals, superintendents, and deputy (or associate) superintendents in the province of Alberta the opportunity to participate in this survey. Unfortunately, the Council of School Administration was not willing to send the survey to their members as it was believed that COVID had added a number of stressors to the principals and associate principals, and they did not want to add to their workload.

Having no other way to get the surveys out to educational leaders, the researcher went to the Alberta School Boards Association (ASBA) website, found names and email addresses, and sent individual emails to each of the Superintendents in the province. The purpose of those

emails was to request that superintendents complete the survey and that they share the survey with all associate superintendents, principals, and assistant principals within their divisions. There are 61 public and private school divisions that the researcher sent emails to and of those three completed and sent on the surveys immediately and five superintendents replied that they would not be participating in the study. Seven school divisions requested research proposals, applications for research, and IRB documentation to support the study, and then they agreed to participate in the study and to pass the survey onto administrators within their districts. The researcher did not get any response from the other 46 school divisions (even with a follow-up email sent) and received a total of 167 completed surveys from 16 different school divisions in the province of Alberta. Therefore, of the 61 superintendents, approximately 110 associate superintendents, and nearly 3650 school principals and vice principals, the survey got to a maximum of 291 schools and approximately 489 educational leaders. Of these roughly 489 leaders, 167 surveys were completed and returned to the researcher, making it a response rate of 34%.

The researcher had hoped that 40% of superintendents would complete the survey and forward it to the administrators within their school divisions, however only 26.2% of superintendents chose to participate and, in many cases, it was the smallest divisions in the province who took part. Participation was completely voluntary and those who chose to participate were assured as much anonymity as possible.

The survey consisted of 20 questions taken directly from Clance's Impostor Phenomenon Scale (CIPS) (1985) as well as demographic questions that included the participants' gender, age bracket, current administrative position, years of experience (both in teaching and in administration), and the size of their school or school division. Collecting demographic

information allowed the researcher to look for and report similarities and differences between these factors and experiences with impostor phenomenon (IP).

Female leaders were then asked to complete open-ended questions which included: 1. Do you have siblings and if so, how did you compare socially and academically to them growing up? 2. Have you experienced impostor phenomenon and if so, how has it manifested in your work and what are some factors that have contributed to it? 3. What supports have you received that have helped you to overcome some of the feelings of being an impostor? 4. Have you had a mentor and/or do you feel that a mentor would be beneficial in helping to overcome some of the feelings on IP? Finally, female participants were asked if they would be willing to participate in a 45-minute one-on-one interview. Of the 93 female survey participants, 52 (56%) agreed to a potential interview discussing their experiences with impostor phenomenon. The researcher conducted a total of 7 interviews, consisting of 1 superintendent, 1 deputy superintendent, 3 principals, and 2 vice principals. Criterion sampling was applied in the selection process for these interviewees in order to examine the lived experiences of female leaders impacted by impostor phenomenon. Criterion sampling was used as participants were "chosen because they meet a certain set of criteria as predetermined by the researcher" (Bloomberg & Volpe, 2019, p. 385). To be considered for the interview process, the participants needed to be female, be currently employed in 1 of the 4 leadership positions identified, and the researcher was looking for the highest scores on Clance's Impostor Phenomenon Scale (CIPS). The researcher aspired to have a representative number of leaders from each of the four administrative positions, therefore CIPS scores were not the only factors considered when selecting candidates for the interview. Nonetheless, the sampling was purposeful. Purposeful sampling is widely used in qualitative

research in order to identify and select information-rich cases related to the phenomenon of interest (Bloomberg & Volpe, 2019).

In preparation for the interview stage of the study, the researcher conducted a pilot study. According to Hassan et al. (2006), a pilot study is an essential stage of a research project, and it is conducted to identify potential problems and deficiencies in the research instruments prior to the implementation of the full study. The researcher could not find a valid instrument that solicited the questions required for this study, therefore the questionnaire used was self-generated. To address the use of the self-generated questionnaire, the researcher performed two pilot studies of the instrument. The first pilot study consisted of the participants from the doctoral cohort, and the second pilot study group included two recently retired principals and one retired superintendent. The pilot studies concentrated on ensuring that ambiguity was eliminated from both the open-ended questions on the questionnaire and semi-structured interview questions. The intent was to ensure that the phrasing of the questions was clearly formulated and were not leading in any way. However, the interview questions were written as a guideline in order to keep the interview stage semi-structured and to allow the interviewees to go where they felt the discussion was most authentic and true to their experiences.

Table 1

Participant Demographics

Category	n	%
Gender		
Female	93	56%
Male	74	44%
Total	167	100%
Current Position		
Superintendent	15	9%
Deputy Superintendent	16	10%
Principal	90	54%
Vice Principal	46	27%
Total	167	100%
Age Range		
25-34	6	4%
35-44	49	29%
45-54	81	48%
55+	29	18%
Prefer Not to Say	2	1%
Total	167	100%
Years in Education		
1-5	1	1%
6-15	33	20%
16-25	63	38%
25+	70	42%
Total	167	101%
Years in Current Position		
1-3	92	55%
4-6	38	23%
7-9	22	14%
10+	15	9%
Total	167	101%

Note: Due to rounding, not all columns add to exactly 100%

Instruments

In order to investigate impostor phenomenon, three data collection tools were utilized. First, the study included a psychometric assessment, the Clance Impostor Phenomenon Scale (CIPS) as a validated instrument for assessing impostor phenomenon characteristics (Clance,

1985). The CIPS consists of 20 questions rated on a 5-point Likert-type scale from 1 (not at all true) to 5 (very true) where each statement contains an indicator of each of the nine behavioural characteristics of impostor phenomenon (Clance, 1985). Higher scores on the CIPS indicate more frequent experiences of impostor phenomenon, and those with intense experiences likely notice that IP affects their day to day living (Clance, 1985). The CIPS instrument has been used as a validated assessment in many studies pertaining to IP (Ayesiga, 2021; Fraenza, 2016; Seritan & Mehta, 2016). Participants who score below 40 on the Clance Impostor Phenomenon Scale are considered to possess few IP qualities. Those who score between 41-60 points are characterized as experiencing moderate levels of IP, those with scores between 61 and 80 points are described as frequent, and those scoring above 80 points are identified as intense on the IP scale (Clance, 1985). Questions that are asked on the CIPS include items such as: (1) *I have often succeeded on a test or task even though I was afraid that I would not do well before I undertook the task*, (2) *I can give the impression that I'm more competent than I really am*, and (3) *I avoid evaluations if possible and have a dread of others evaluating me*.

A second part of the questionnaire was distributed to female leaders only and it consisted of open-ended questions used to gauge if the participant felt that IP impacted them in any way and to identify factors that have contributed to these experiences with fraudulent feelings (if applicable). Other questions were designed to determine what supports participants felt were in place to assist them in overcoming the feelings and allowing them to successfully complete their work as an educational leader. Third, participants were asked to provide demographic information including categorical variables such as gender, age range, current leadership position, years of educational experience, and years in current role. According to Bloomberg and Volpe (2019), multiple data-gathering strategies are often used in qualitative research as a

purposeful strategy to generate more sophisticated knowledge of the phenomenon being investigated.

Prior to distributing the Clance Impostor Phenomenon Scale to participants, the researcher contacted Dr. Pauline Clance's team to obtain permission to use her instrument. The CIPS was an integral part of the study as it was needed to ensure reliability and validity. Reliability refers to the repeatability of the measure. Quantitative data are considered reliable when measurement results are found to be consistent by two or more researchers (Patten & Newhart, 2018). It is crucial that instrument reliability be established to ensure the reader understands that any variation in results was due to the independent variable as opposed to chance. The CIPS survey has been used extensively in studies on impostor phenomenon and thus it is considered reputable. Moreover, using a pre-existing survey, such as this one, increases instrument fidelity and it provides consistency. It also ensures that the researcher's data can be integrated into a larger body of work on impostor phenomenon (Creswell & Plano Clark, 2011).

Validity of an instrument is one that captures the information that was intended to be measured and accurately performs the function it is supposed to perform (Patten & Newhart, 2018). McMillan and Schumacher (2014) describe validity as the degree to which the scientific explanations are balanced with reality. Therefore, using the CIPS as a screening tool for the qualitative phase of the study helped to ensure that the data obtained through the interview process would more likely be directly related to IP as opposed to occurring due to other confounding variables.

Interview Protocol

Following the survey and the questionnaire, seven participants were selected to participate in an interview, allowing the researcher to delve deeper into this study. In order to

find participants for the interview stage, the survey included one final open-ended question that asked, "Are you willing to participate in an interview as a follow-up to this survey?" The respondents with the highest IP scores in each of the four roles, and who had indicated a willingness to participate in the interviews, were selected to take part in the one-on-one interviews. These interviews were semi-structured (Patten & Newhart, 2018) to ensure consistency in the qualitative process, while still allowing the conversation to flow and the researcher to ask clarifying or follow-up questions as needed. The interviews were scheduled to be 45 minutes in length, but most lasted close to an hour. The interviews each began with a script to introduce the topic, explain the purpose of the research, and it included a standard set of questions to be used as a guide for all participants (Patten & Newhart, 2018). Interviewees were given the opportunity to choose the time and place for the interview to occur, however Zoom meetings were chosen by all respondents. The interview protocol for this study included the following questions, beginning with a first question designed to build rapport with the participants and provide a level of comfort to these leaders:

1. Tell me a little but about your educational journey, your teaching experience, and your road to administration.

2. On the survey, you identified that you have experienced IP. Can you tell me a little bit more about that?

3. Please tell me a little bit about the factors contributed to these experiences.

4. How do these feelings manifest in your day-to-day work? How about in the other aspects of your life?

5. Clearly, in spite of having some feelings of IP, you have experienced success. After all

you are now a superintendent (or principal, etc.). What supports have helped you obtain

this role? What, if anything helped you overcome feelings of being an impostor?

Merriam (2014) posits that the depth of the insight from the interview feedback is far

more important than the quantity of information. Hence the rationale for doing a mixed method

research approach for this study. The list of questions changed for each participant as

spontaneous questions arose based on the discussions in the interview. This semi-structured

format allowed for that flexibility (Merriam, 2014). Furthermore, the researcher avoided "why"

questions, focusing more so on the respondents' thoughts and reactions (Patton, 2002).

Design and Procedures

This mixed methods study explored how widespread impostor phenomenon (IP) is

among female educational leaders in the province of Alberta. There is "no rule of thumb (that)

exists to tell a researcher precisely how to focus a study. The extent to which a research or

evaluation study is broad or narrow depends on the purpose" (Patton, 2002, p. 228). However, as

this study was designed to examine both the depth and breadth of IP among educational leaders

in Alberta, a mixed methods research model was required. Furthermore, an explanatory

sequential design (Creswell, 2014) was utilized as the intent was to first collect and analyze the

quantitative data and then use those findings to inform the qualitative data collection and analysis

(Creswell et al., 2013). "Some strengths of the explanatory sequential design include its appeal to

pure quantitative researchers and its straightforward and self-contained framework that includes

the completion of one phase first, then completion of the next phase" (Watson & Gioia, 2015, p.

17). The quantitative phase of the study provided breadth for this research, and it was intended to

ensure that biases did not interfere with the collection of research or with the data analysis.

Phase 1

Phase 1 of this mixed methods research was done through the use of a widespread survey designed to explore the perceptions of educational leaders and to gather information regarding impostor phenomenon: if, how, and to what extent IP is present in the leader's work. The survey and questionnaire were the chosen instruments in this study as they were an efficient way to gather the same information from each of the participants quickly and objectively. The data were analyzed to determine which themes surfaced most frequently. This information was then used to finalize the interview questions. The survey used for this phase of the study included both the Clance Impostor Phenomenon Scale (CIPS) and questions relating to feelings of being an impostor, coping mechanisms, factors that have led to IP, and the respondents' views of strategies they have used to be successful in their work. The final part of the questionnaire asked for basic demographic information, and one last question asked of female participants only was if they were willing to participate in an interview at a later date.

This distributive study was circulated to the population of interest; all principals, vice principals, superintendents, and deputy superintendents in the province of Alberta could have had access to participation in the survey. However, only 16 school divisions allowed for the survey to be distributed, therefore the maximum number of leaders who saw the survey was 489. Voluntary response sampling was utilized, and the survey was sent directly to each superintendent, in the province of Alberta, using the Qualtrics program. The use of Qualtrics enabled the researcher to keep track of how many participants had responded, and how many surveys were in the process of being completed. Furthermore, this online survey allowed the researcher to use a secure survey/evaluation tool and assigned each participant a generic ID number. Moreover, the body of the email included an introduction of the researcher and it

informed potential participants of the purpose of the survey. Educational leaders, who received

this email, were informed that participation in the survey was optional, that they could withdraw

their survey results from the study at any time, and that the analysis results would be promoted

through the use of member checking (Merriam, 2014).

Once all responses were collected and the survey was closed, the data was cleaned using

the Microsoft Excel program. Excel was also used to quantify the Mean, Standard Deviation,

Range, and significance for each of the categorical data. SPSS was later utilized to perform *t-*

tests, F scores, and Chi square functions. Additionally, SPSS was used to validate the descriptive

statistics performed using the Microsoft Excel program.

Upon the successful defence of the dissertation proposal on July 21, 2022, the researcher

submitted an application to the University of Portland for Institutional Research Board (IRB)

approval. Upon obtaining IRB approval, on August 26, 2022, the researcher sent an email to the

College of Alberta School Superintendents (CASS) requesting an opportunity to attend a CASS

meeting, share the research topic, and ask Superintendents and Associate Superintendents to

complete the survey during the meeting. Dillman (2014) posits that survey response rates are

increased through personal connection and by giving people time to complete the surveys.

Unfortunately, the president of CASS did not respond to the email, so the researcher had to try

another approach. A request was then made to the Alberta Teachers' Association's Council for

School Leadership (CSL) to distribute the survey to any members of the CSL. This would have

allowed the majority of school-based administrators the opportunity to complete the survey. That

avenue was not successful either, therefore on October 2, 2022, the researcher sent individual

emails to each of the 61 Superintendents in the province, along with a link to the surveys. The

survey was originally intended to remain open for 12 days, but due to an initially low response

rate, the researcher sent a follow-up email to superintendents who had not responded to the request and the survey remained open for an additional seven days. The researcher also incentivized potential respondents by offering three $100 Amazon gift cards that were drawn by one of the cohort members using Randomizer. The draw was open to all participates who completed the entire survey and who indicated that they wanted to be included in the draw.

Phase 2

Phase 2 of this study was the interview process, and it was used to delve deeper into the topic of impostor phenomenon. The final question on the Phase 1 questionnaire asked participants if they were willing to participate in an interview. Those who volunteered for the interview phase of the study were asked to share their email address. The email address was cross referenced with the generic ID code and the participants were then chosen using a purposive sampling technique. Individuals were intentionally selected so the researcher could better understand their experience with the phenomenon (Creswell & Guetterman, 2019; Patton, 2015). Potential interview participants were narrowed through a few different mechanisms of purposive sampling. First, participants were selected using criterion sampling; interview participants needed to have self-identified as female. Secondly, participants were chosen to represent the four different groups pertinent to this study: principals, vice-principals, superintendents, and deputy superintendents. Finally, in these four categories, participants were intensity sampled; those that reported the highest impostor phenomenon scores were selected. The researcher was looking for scores above 80, which is considered in the 'intense' category on the CIPS survey, however in order to have a representative number of participants from each "position" category, it was not possible to interview only those above 80.

Role of the Researcher

Qualitative studies require close attention to the human instrument, the researcher, and their role in the study. Therefore, it is important to understand my experiences in order to understand my potential biases. I began my teaching career in the fall of 1991, and 32 years later I can honestly say that I have enjoyed almost every day of my career. However, I can't say that I always knew that I wanted to be a teacher or even that I always loved learning. In fact, I hated school and seriously contemplated dropping out at the end of Grade 11. I reluctantly did return to school for my senior year and have been in school virtually ever since that time.

It was during my first year of college that I discovered that learning "wasn't that bad" and I actually attended classes, participated, and completed assignments for the first time. Once I actually contributed to classes, I discovered that I wasn't as "dumb" as I had always believed myself to be. In fact, I stayed at the college longer than I had planned so that I could complete my Bachelor of Arts degree before moving on to the University of Alberta to complete my Bachelor of Education degree. In both of these university settings, I enjoyed a very active social life. I participated in sports, was actively involved in a number of clubs, and served on various committees. I have always felt an overwhelming need to stay extremely busy.

My first five years of teaching took place in a small, rural school district located in northern Alberta. During that time, I taught full-time, got married, had two children, coached basketball, and served on a number of organizations and chaired two committees. We then moved to central Alberta where I procured my first principal position of a kindergarten through grade 9 rural school. This administrative position involved a full-time teaching load with only two 30-minute administration periods per week. The learning curve was steep and the workload was heavy, and the following four years were no easier.

During those four years I got divorced, became a single parent, and started and completed my master's degree. My boys were very young and just beginning to become involved in hockey, baseball, and soccer. I worked hard to be everything to everyone and found myself racing home from administration meetings and parental functions at 140 km/hour just to get home in time to tuck my children into bed. To the outside world I looked like I had everything under control and apparently was seen as successful and having it altogether. To me, I knew I was starting to spiral out of control, and something had to change, but I did not know how to get off of the rollercoaster I was riding.

One of the highs of riding the rollercoaster included having the opportunity to meet many highly respected, extremely successful women who were holding leadership positions. As I moved into a principal position myself, I was fortunate enough to receive accolades, awards, and positive recognition. In the privacy of my own home however, I felt like a fraud. I believed that my successes were due to being in the right place at the right time, my strong sense of humour, or even the result of dumb luck. I felt that if people really knew me, they would realize that I'm not actually qualified to do be doing the work that I was doing.

It was not until I read the book, *Kids These Days* (2019) that I heard the term Impostor Phenomenon. Dr. Jody Carrington is a small-town Alberta girl who is now an author, world-renowned speaker, highly sought-after psychologist, and role model to literally thousands of followers. To have Jody Carrington admit in her book that she took solace in the term and then to read the words, "essentially, it's the name given to those of us who feel that at any moment, people are going to uncover what we believe to be the truth: We're actually frauds and don't belong" (Carrington, 2019, p. 169), that I realized that I was not alone in my feelings. Since that

time, I have spoken to dozens of high achieving women, and I have been surprised to hear that many of these talented people also experience impostor phenomenon in some form or another.

Throughout my research, I have learned that impostor phenomenon has been studied extensively by psychologists and among various groups of university students, and the findings on this topic indicate that IP has negatively affected women in a variety of ways. Impostor phenomenon often leads to workaholic behaviours and eventual burnout. Although there have been studies done on IP, there is very little information in the area of education and how female leaders in school divisions have been affected. Therefore, I felt it was important that a study be done to determine how prevalent this issue among female leaders in the education system in Alberta. However, I recognized that my personal feelings and experiences could potentially create bias in my research. Consequently, a quantitative section was used in this study, as numerical data cannot be manipulated.

The qualitative portion of the study is where I needed to pay more careful attention to my bias. According to Creswell (2014), it is important to acknowledge all potential biases before commencing a study. This awareness was helpful to ensure that strategies were employed to prevent bias from interfering with the data interpretation. To prevent bias, I did two pilot studies (one with the colleagues in my cohort, and one consisting of two retired principals and a retired superintendent). It is not possible to eliminate all biases; however, I have done all that I could to ensure that the qualitative data was not influenced by my own personal experiences and feelings.

When using the interpretative phenomenological analysis process, it is essential to identify any personal biases that the researcher has concerning the topic of research. Descriptive phenomenological research suggests using bracketing and setting aside personal biases as the best way to ensure the data are objectively analyzed (Creswell, 2013; Ravitch &

Carl, 2016). True bracketing in this analysis process, however, is impossible (Smith et al., 2009). Since completely setting personal biases aside is not possible, the researcher worked cyclically to identify biases prior to, during, and throughout the varying stages of the study. Thus, the researcher continually employed the strategies listed above to keep as much bias as possible out of the study.

Scope of Research

The study of impostor phenomenon could quickly become too vast to study for this doctorate program. Therefore, it was essential to bind the case to ensure the analysis was done thoroughly and it was well and consistently focused. In binding the case, information that was excluded from the study was how large the school or system that the leaders were currently leading was, was the school located in an urban or rural setting, and what the participants' university majors or past teaching experiences were. Furthermore, the questions asked regarding siblings, birth order, and comparative achievement to siblings were eliminated from the data collection.

The study was also bound by time, as there were only a few months available to gather and analyze the research. Consequently, the focus needed to be on the qualities most important to this case. The primary unit of analysis was the seven interviews mentioned above, and one of the areas focused on was to determine if impostor phenomenon was experienced differently based on the categorical variables. As a result, it was important to include participants' gender, age, position, years of educational experience, and years of experience in the leaders' current role in the study. Experiences of impostor phenomenon, coping mechanisms, causes of IP, and what supports each of the participants have used to successfully deal with feelings of being a fraud were critical aspects of the study.

Data Analysis

Findings from the research included data obtained from the CIPS Survey, the questionnaire, interviews, and the researcher's log, and these were utilized to address the research questions for this study. The researcher's log included journal entries detailing the research process, analytic memos, and questions that arose during the analysis phase of the study. Analytic memos were used to guard against researcher bias and to inform the findings for pattern codes and themes.

Phase 1

The research study received Institutional Review Board (IRB) approval on August 26, 2022, to conduct this study. That approval was the first step in ensuring that ethical practice was maintained, and the survey and questionnaire phase of the study was then able to commence. Instructions for participation in the questionnaire were included in the email that was sent out to all superintendents. The purpose of the study, the approximate time that the questionnaire would take to complete, and categories of information being sought by participants were included in the preamble of the email. Other information provided to the respondents included a statement that participation was voluntary, the participants' option to exit the questionnaire at any time, and the fact that generic ID numbers would be assigned to each respondent designed to protect anonymity.

Furthermore, informed consent was obtained from all those who chose to participate in the online survey through Qualtrics. As using the Qualtrics program did not allow for physical signatures, permission was therefore assumed once respondents moved onto the actual survey. Information on that front was explained, and participants were not able to move onto the survey without acknowledging that they understood that to be true.

Once the survey was closed, the quantitative data were analyzed using descriptive statistics in both Excel software and the SPSS program. Means and standard deviations of each item were determined in order to provide meaningful findings for the survey results. Furthermore, chi square, ANOVAs, and independent *t-tests* were performed to allow comparisons from the varying demographics to be examined. The data collected from the first phase of the investigation were used to "lump and split" (Saldaña, 2016) and to finalize interview questions for the qualitative portion of this study.

Phase 2

To better understand the varying experiences of female educational leaders and impostor phenomenon, a subsample of seven participants was chosen to participate in the interview process. This qualitative phase included three principals, two vice (assistant) principals, one superintendent and one deputy (associate) superintendent. Those leaders then verbally provided a second informed consent which allowed the researcher to record the interview. The researcher also explained the purpose of the study and the data collection procedures that would be used. All interviews were recorded using Zoom and the recorder from the researcher's iPhone. Again, each participant's identity was protected, and participants were reminded that they could withdraw from the process at any time.

To further protect the information gathered as a part of this study, the researcher kept all data on a personal, password-protected computer. The researcher was the only one who had access to the computer or the files. As an additional security measure, data were also copied to a password-protected external hard drive again owned and accessed by the researcher only.

Inductive analysis from the interviews were utilized and notes were made from the first interview and then compared with notes from the second through seventh interviews. After each

interview the notes were carefully examined to identify patterns, themes, and categories containing similarities in responses.

Data collected for the qualitative phase of this study also included feedback from two of the open-ended questions on the survey. The survey data were analyzed and coded first using Dedoose software, and interview data were analyzed thematically following the six-step process recommended by Braun and Clark (2006, 2014). These six steps included familiarizing oneself with the data, generating codes, identifying themes, reviewing potential themes, defining and naming themes, and finally producing the report. Procedures for establishing familiarity with the data involved immersion of the interview transcripts; meaning the researcher read the transcribed interviews three different times with the research questions and impostor phenomenon at the forefront of her mind, looking for keywords, phrases, and statements. The second step in the process was to generate codes, and according to Saldaña (2016) first cycle coding is the process of initiating the codes within the data. The researcher chose to use In Vivo coding during the first cycle as it honours the voice of the participants and the uses actual words or short phrases from the interviewee (Saldaña, 2016). Using In Vivo coding allowed specific words to be identified through the lived experiences of these female administrators.

First cycle coding. First cycle coding was completed utilizing open coding. Saldaña (2016) recommends open coding for researchers learning to code as it prioritizes and honours the participant's voice. There were 309 initial codes identified from the interviews and an additional 263 codes from the two questions on the survey. As part of the process, each code was then cut and arranged into clusters with those of similar meaning (Saldaña, 2016). Each of these In Vivo codes were also assigned a number to assist with easier retrieval during the analysis phase. As an example of the clustering, the researcher grouped together "I wonder am I here on my own

merit? Am I here because there was nobody else? My big worry is that people are going to think that I can't handle this, I don't know what I'm doing" with the In Vivo codes "I sit in fear that someone will say that I'm doing a crappy job" and "They're going to find out that I don't know anything" as all three participants had described similar thought processes.

Transition to second cycle: Pattern coding. The transition to second cycle coding included the use of code mapping. Code mapping organizes the codes from the first cycle coding into categories (Saldaña, 2016). Code collapsing and the identification of outliers also occurred during this phase. All 572 In Vivo first cycle codes were utilized for the mapping process.

Second cycle coding: Theming. Saldaña's (2016) second cycle coding was then implemented to group together the initial In Vivo codes into more meaningful units of analysis. Data were then colour coded into categories and recoded as required. These groupings allowed the researcher to identify themes and to notice patterns thereby further clustering the codes into themes. Identifying specific themes fit with the third step of Braun and Clarke's (2014) process as well. The following two steps in the process entailed reviewing potential themes and ensuring that each of the themes was grounded in data. Once all themes were defined and named, the themes were recontextualized and participant's experiences were shared in the results section of this chapter.

Issues of Trustworthiness

Saldaña (2016) recommends using quantitative data first and then using qualitative data to explain the results from the quantitative phase. Using this organizational comparison of the quantitative and qualitative data to interpret the results ensures transparency, credibility, and transferability (Saldaña, 2016).

The authenticity and quality of educational and social research can be judged by

the procedures used to address reliability, validity, and triangulation. These are all

important and complex terms whose meaning and salience vary according to the

stance of the researcher (Bush, 2012, p. 76).

Thus, it was essential that all of these areas were addressed carefully and thoroughly.

Credibility

Credibility was obtained through the interview process itself. The interviewer maintained

neutrality and avoided leading participants, engaging in debates, or making open judgements.

Each respondent was given the opportunity to choose the interview time and location, and the

way the researcher spoke with each of the interviewees was designed to development a

relationship with the participants (Patton, 2002). The foundation of rapport with the participants

was based on respect for the respondents and their individual experiences and through the

researcher's commitment to building knowledge through participation in the research (Patton,

2002).

Furthermore, to ensure credibility through this process, bracketing was utilized to help

identify and set aside any biases. The researcher therefore revisited her own bias and

positionality to ensure that the participants' perspectives were accurately conveyed. Additionally,

member checking was also used as cleaned transcripts of the interviews were shared with

participants to confirm what each interviewee had said was interpreted correctly by the

researcher (Creswell & Poth, 2018).

Transferability

To ensure transferability, purposeful sampling and detailed descriptions were utilized in

this study. The researcher worked to confirm that the expectation for participation was clearly

explained and that the participants had a strong understanding of the purpose and the knowledge and experience necessary to participate in the interview process. The intent, therefore, was to ensure that meaningful data and conclusions could be drawn from the data provided in this study. A detailed description of the methodology as well as a description of the warrants allow the results to be transferable to other provinces or countries thus further ensuring the trustworthiness of the study.

Dependability

Throughout this study the researcher maintained consistency through data coding, journaling, and the collection of data records. An audit trail was utilized to provide verification that proper steps were employed throughout the course of the study. Moreover, variables identified through the data collection process were documented with the use of anecdotal notes.

Transparency and Validation

Transparency and internal validation were added to the study through member checking, and this was completed through the process of providing the cleaned, transcribed interviews to each of the participants (Merriam, 2014). Member checking was not required of the interview participants, as obligating them to devote more time to the study was not the intent. However, participants were afforded the opportunity to read through summary notes, to ensure accuracy. Only one interview participant did not respond to the member checking request.

Summary

The lived experiences in female educational leaders who exist with the feelings of being an impostor may be influenced by many factors and may be manifested in a variety of ways in their professional careers. Moreover, IP has been studied in university students, among minority groups, and extensively in the area of psychology, yet there is very little research regarding IP

among educational leaders. The paucity in that area therefore enhances the need for such a study to be conducted. Females possess many of the qualities that are deemed to be important in educational leaders and as a result research to assist those with IP is a worthwhile endeavour.

This chapter began with a restatement of the study's purpose and research questions, and it reviewed the methodology that was used to conduct this mixed methods research study addressing IP among female educational leaders in the province of Alberta. The two phases of this explanatory sequential design were outlined, and the first phase of the study included information that was collected as a part of the quantitative phase. The second phase of this design included information that was part of the semi-structured interviews designed to delve deeper into the study. The role of the researcher, ethical considerations, and issues of trustworthiness were also discussed in this chapter. Chapter 4 will provide a summary of the findings.

Chapter 4: Findings

The purpose of this mixed methods research study was to use an explanatory sequential design (Creswell, 2014) to explore how prevalent impostor phenomenon is among female education leaders in the province of Alberta, and to determine what can be done to support these leaders. The aim of this study was to establish if there was a presence of impostor phenomenon among educational administrators and if so to what extent it is present. Moreover, if IP was found to be present, the goal was then to ascertain the perceived factors contributing to IP as well as to determine the reasons for professional success and perseverance of the female leaders despite these circumstances. To further investigate IP among educational leaders in Alberta, the following research questions were examined:

1. To what extent do educational leaders experience impostor phenomenon, and how do these experiences vary by gender, age, position, years of experience as an educator, and years of experience in their current role?

2. For female educational leaders who experience impostor phenomenon, what factors have contributed to these experiences?

3. For female educational leaders who experience impostor syndrome, what supports have helped or are helping them overcome these barriers?

This chapter describes the results of the data analysis for both the quantitative and qualitative phases of this study. Quantitative data were collected and analyzed first and are presented in tables below, including descriptive statistics and with statistical postulations associated with the use of ANOVA's, Chi Square, and independent sample *t*-tests. These data were used to answer the first research question.

Next, qualitative data were examined from the open-ended questions on the questionnaires for female participants, and this information was used to finalize interview questions. Additionally, responses from two of the open-ended questions were saved and coded and included with the qualitative data collected from the seven, 45-minute interviews conducted with the female educational leaders selected. The qualitative portion of the study was used to answer research questions two and three. The two data sets were then merged for the purpose of triangulating the data. Triangulation was used for the purpose of accurately corroborating the results for each of the quantitative and qualitative phases of the study. A mixed methods design was chosen to allow the data sets to inform each other and for the results to the be integrated (Fetters et al., 2013).

Participants

A total of 167 participants fully completed the electronic survey that was sent to Alberta Superintendents. Participants were required to be currently employed as principals, vice (or assistant) principals, superintendents, or associate superintendents. Therefore, superintendents were asked to share the survey with these school and central office administrators. Of the 61 superintendents who received the surveys, 16 (26%) agreed to participate in the study and to forward the survey to the administrators in their school division. If each of the 16 superintendents forwarded the survey to all eligible leaders in their divisions, the survey would have reached a total of 489 potential participants. Therefore, the 167 completed surveys equate to approximately a 34% participation rate.

All participants were asked to complete the Clance Impostor Phenomenon Scale (CIPS) (Clance, 1985) survey and the demographics section of the questionnaire. The remaining six open ended questions were available to the female participants only.

For the purpose of this study, demographic data were examined to answer the research question: To what extent do educational leaders experience impostor phenomenon and how do these experiences vary by gender, position, age, years of experience as an educator, and years of experience in their current role? Research findings reporting the demographic data answering this research question are reported in Tables 2 through 8.

Phase 1: Quantitative Analysis

Phase 1 of this mixed methods research study consisted of collecting quantitative data, and each of the demographic characteristics for the participants are presented in Table 1. Of the 167 participants, 93 were female and 74 were male. Therefore, 56% of the educators who completed the survey were female and 44% were male. When reporting the current position of each of the participants, most of the respondents were school based administrators with 54% being principals and 27% reporting to be vice of assistant principals. Only 31 respondents were superintendents or deputy superintendents. In terms of age, seven participants (4%) fell between the age of 25 and 34, while 48 (29%) were between the age of 35 and 44. Almost half of the respondents stated their age as between 45 and 54, 29 (18%) reported to be over the age of 55, and two (1%) participants chose not to report their ages.

Furthermore, most participants reported to be very experienced in the field of education with 70 (42%) stating that their experience in education was in excess of 25 years. Whereas when it comes to the number of years of experience in the participant's current leadership position, many leaders reported to be relatively new to their current positions with 92 (55%) being in their current leadership position for between one and three years. Conversely, 15 (9%) participants reported being in their current roles for more than 10 years.

Research Question 1: Extent of Impostor Phenomenon Experienced

Clance's (1985) 20-item Impostor Phenomenon Scale (see Appendix D) was used to measure impostor phenomenon and the extent to which it is experienced in the educational leaders who participated in the survey. This scale uses questions such as "I sometimes think I obtained my present position or gained my present success because I happened to be in the right place at the right time or knew the right people," and "I can give the impression that I'm more competent than I really am." These items were measured using a 5-point Likert-type scale from 1 (not at all true) to 5 (very true) where each statement contains an indicator of each of the nine behavioural characteristics of impostor phenomenon (Clance, 1985). The CIPS is based on a raw score number falling between 20 and 100. Higher scores on the CIPS indicate more frequent experiences of IP, and those with intense experiences are likely to notice that IP affects their day to day living (Clance, 1985). Participants who score between 41-60 points are considered as experiencing moderate levels of IP, while those who score between 61 and 80 points are described as frequent, and those scoring above 80 points are labelled as intense on the IP score (Clance, 1985).

The overall frequencies related to the CIPS scores in this explanatory sequential study indicated that 15 participants (9%) reported experiencing low levels of impostor phenomenon. Most respondents reported moderate (47%, $n = 78$) or frequent (36%, $n = 60$) experiences with IP, and 14 (8%) described intense experiences with IP. These perceived experiences with IP are analyzed discussed further by category below.

IP based on gender. Table 2 describes the Clance Impostor Phenomenon score based on gender. While 49% of females experienced IP at the frequent or intense level, 39% of males reported IP scores in those same categories. Furthermore, 6 (6%) of female participants were

found to possess few IP qualities, while 9 (12%) of males reported to have few IP characteristics. These differences were statistically significant (p = .033).

Table 2

Impostor Phenomenon Scores by Gender

Clance Impostor Phenomenon Scale	Few % (*n*)	Moderate % (*n*)	Frequent % (*n*)	Intense % (*n*)	CIPS Score Mean (*SD*)
Gender					
Females (*n* = 93)	6 (6)	45 (42)	41 (38)	8 (7)	61.54 (15.14)*
Males (*n* = 74)	12 (9)	49 (36)	30 (22)	9 (7)	56.73 (13.29)
Overall (*n* = 167)	9 (15)	47 (78)	36 (60)	8 (14)	59.41 (14.51)

Note. * p = .033

A chi-square test was then completed to confirm significant for gender. The chi-square test validated that female participants were statistically significantly more likely to experience IP in their leadership positions than male participants. Furthermore, an independent sample *t*-test involving 93 female participants (*SD* = 15.1), and 74 male participants comparing experiences of IP by gender found females to have statistically significant (p = .033) higher experiences of IP. However, the effect size was established to be weak (t = 2.15). When looking at the raw data, this finding was not immediately apparent as many of the IP scores presented quite similarly.

IP based on age. The following tables examine the impostor phenomenon scores by age. As there were only six participants who reported to be between the age of 25 and 34, Table 4 combined those scores with individuals falling between the ages of 35 and 44. Participants in this age group reported to experience primarily moderate and frequent levels of IP at 42% and 38% respectively. Participants between the ages of 45 and 54 reported 56% experiencing moderate levels of IP and 35% at the frequent level. Participants over the age of 55 reported experiencing

levels of impostor phenomenon at 31% in both the moderate and frequent categories. All other impostor phenomenon scores related to age are reported in Table 4.

As there is no way to know the age of the two participants who chose not to disclose their age, the data for those two participants was not included in this study. However, for reporting of this demographic, it was included in the following table.

Table 3

Impostor Phenomenon Scores by Age

Age of Participants	Few % (*n*)	Moderate % (*n*)	Frequent % (*n*)	Intense % (*n*)	CIPS Score Mean (*SD*)
Age 25-44	7 (4)	42 (23)	38 (21)	13 (7)	62.98 (12.43)
Age 45-54	6 (5)	56 (45)	35 (28)	4 (3)	57.65 (12.60)
Age 55+	21 (6)	31 (9)	31 (9)	17 (5)	57.55 (16.67)
Prefer Not to Say	0 (0)	50 (1)	50 (1)	0 (0)	59.00 (26.87)

Table 4 further combines the ages into two categories, as these data are explored later in this chapter. The two categories include educational leaders under the age of 45 and those who have identified themselves as being 45 years of age and older. Participants between the ages of 25 and 44 made up one-third of the leaders in this study and reported statistically significantly higher (*p* = .024) IP characteristics than those above the age of 45.

Table 4

Impostor Phenomenon Scores by Combined Age

Participants by Combined Age	Few % (*n*)	Moderate % (*n*)	Frequent % (*n*)	Intense % (*n*)	CIPS Score Mean (*SD*)
Age 25 - 44	7 (4)	42 (23)	38 (21)	13 (7)	62.98* (12.43)
Age 45+	10 (11)	49 (54)	34 (37)	7 (8)	57.43 (15.10)

Note. * *p* = .024

IP by position. Table 5 examines levels of IP experienced by position. The mean score for vice principals was 61.98 (*SD* = 12.60), while the mean score for superintendents was 54.56 (*SD* = 13.78). Results indicated that IP scores were primarily lower as participants move up in leadership roles. Upon originally viewing the data, the means scores for superintendents and deputy superintendents appeared to be significantly lower than that of principals and vice principals, but the initial descriptive statistics did not demonstrate a statistically significant difference among leaders from each of the positions. Therefore, the researcher chose to compare school leaders with central office leaders to understand if there was a significant difference between those groupings. The result of comparing school leadership positions with the leadership found at central office proved to be statistically insignificant (*p* = .067) with a mean difference of 5.29.

Table 5

Impostor Phenomenon Scores by Position

Participants by Position	Few % (*n*)	Moderate % (*n*)	Frequent % (*n*)	Intense % (*n*)	CIPS Score Mean (*SD*)
Vice Principal	16 (7)	38 (17)	33 (15)	13 (6)	61.98 (12.60)
Principal	7 (7)	49 (44)	38 (34)	5 (5)	59.58 (15.75)
Deputy Super.	6 (1)	44 (7)	38 (6)	13 (2)	54.56 (13.78)
Superintendent	0 (0)	67 (10)	27 (4)	7 (1)	55.67 (11.85)

IP by years of experience. Table 6 represents the IP scores based on the years of educational experience of the participants. Educational leaders with more experience demonstrated fewer IP characteristics, as displayed in the table below. Although leaders with fewer years of experience were found to have higher levels of impostor phenomenon, the findings were not shown to be statistically significant ($p > .05$). As there was only one leader with five years of less of teaching experience, that category was combined with the 6 - 15 years of experience, thereby reporting experience in that grouping as 1 - 15 years for data analysis later in Chapter 4.

Table 6

Impostor Phenomenon Scores by Years of Experience

Participant Years in Education	Few % (*n*)	Moderate % (*n*)	Frequent % (*n*)	Intense % (*n*)	CIPS Score Mean (*SD*)
1 - 5 Years	0 (0)	0 (0)	100 (1)	0 (0)	61.00 (0.00)
6 - 15 Years	21 (7)	36 (12)	27 (9)	15 (5)	55.94 (10.65)
16 - 25 Years	8 (5)	43 (27)	40 (25)	10 (6)	62.22 (15.87)
25+ Years	4 (3)	56 (39)	36 (25)	4 (3)	58.49 (14.59)

IP based on years in current role. When examining the data based on the years of experience in their current positions, it was found that 55% of the participants had been in their current position for three years or less. Using an ANOVA to compare the data between these categories, results indicated there was no statistically significant difference ($p > .05$) in IP scores based on the years of experience in current positions (see Table 7).

The majority of educational leaders reported to have been in their current position for three years or less and Table 8 describes IP scored by years in these current positions. Of those participants who had been in their current position for 1 - 3 years, 44 (49%) reported to have either frequent or intense levels of IP. Educational leaders with the most experience in their current positions, those with 10 or more years, reported the least experiences with frequent and intense IP. Only four (27%) participants fell into those categories combined, compared to almost half of the leaders in those positions for three or less years. This finding was proven to be statistically significant ($p = .018$) as illustrated in Table 9, demonstrating that leaders with more years of experience in their roles experienced less IP.

Table 7

Impostor Phenomenon Scores by Years in Current Position

Years in Current Position	Few % (*n*)	Moderate % (*n*)	Frequent % (*n*)	Intense % (*n*)	CIPS Score Mean (*SD*)
1 - 3 Years	7 (6)	46 (42)	40 (37)	9 (7)	58.53 (14.47)
4 - 6 Years	5 (2)	55 (21)	34 (13)	5 (2)	59.32 (13.59)
7 - 9 Years	9 (2)	41 (9)	32 (7)	18 (4)	61.05 (16.22)
10+ Years	33 (5)	40 (6)	20 (3)	7 (1)	62.60 (15.22)

Summary of demographic data. Table 8 collapses each of the demographic criteria into male and female categories and identifies the minimum, maximum, and mean IP scores for each of the categorical groupings. The researcher also reported *p* values and the F or *t* scores in order to state significance and effect size for each of the categories.

An ANOVA was used in order to compare groups based on position, and each position was broken down further to find the minimum, maximum, and mean IP scores as well as the standard deviation (*SD*) for participants based on gender. Overall, there was no statistically significant (*p* > .05) differences in IP scores based on position.

An ANOVA was used in comparing data as it related to age, years of educational experience, and years in current position. The results for each of these categories is reported in Table 9. Of the 165 survey participants who revealed their age, 55 reported to be between the ages of 25 and 44 (*SD* = 12.43) and 110 participants reported to be over 45 years of age (*SD* = 15.10). The difference in reported IP among these age categories was found to be statistically significant (*p* = .024), with reported IP higher among the younger group of participants.

Table 8

Summary of Demographic Data

Demographic	Minimum	Maximum	Mean	*SD*	*t Score*	*p*
Gender					*2.15*	.033*
Females (*n* = 93)	21	90	61.54	15.14		
Males (*n* = 74)	29	88	56.73	13.29		
Combined Age Range					*2.27*	.024*
25 – 44	44	89	62.98	12.43	*1.14*	.258
F (*n* = 28)	46	89	64.86	12.63		
M (*n* = 27)	44	88	61.04	12.14		
45+	21	90	57.63	15.10	*2.05*	.042
F (*n* = 63)	21	90	60.14	15.88		
M (*n* = 47)	29	84	54.26	13.41		
Position					F = 1.42	.238
Vice Principal	29	89	61.98	12.61	*0.98*	.333
F (*n* = 34)	43	89	63.06	11.93		
M (*n* = 12)	29	80	58.92	14.46		
Principal	21	90	59.58	15.75	*0.93*	.355
F (*n* = 44)	21	90	61.16	17.91		
M (*n* = 46)	32	88	58.07	13.41		
Deputy Super.	37	80	54.56	13.78	*1.57*	.139
F (*n* = 9)	39	80	59.11	16.31		
M (*n* = 7)	37	56	48.71	7.02		
Superintendent	35	73	55.67	11.85	*0.98*	.346
F (*n* = 6)	49	73	59.33	8.02		
M (*n* = 9)	35	71	53.22	13.74		
Combined Years of Experience					F = 2.25	.109
1 - 15	35	90	56.09	10.52	*1.91*	.065
F (*n* = 20)	36	90	63.00	16.29		
M (*n* = 14)	35	70	53.50	10.72		
16 - 24	32	88	62.22	15.90	*1.46*	.150
F (*n* = 31)	45	90	63.39	13.04		
M (*n* = 32)	32	88	58.44	13.91		
25+	21	85	58.49	14.59	*0.83*	.410
F (*n* = 42)	21	89	59.48	16.11		
M (*n* = 28)	29	85	56.39	13.83		
Years in Current Position					F = 0.44	.723
1 - 3	21	89	58.53	14.47	*1.57*	.121
F (*n* = 56)	21	89	60.41	15.68		
M (*n* = 36)	29	74	55.61	12.01		
4 - 6	32	90	59.32	13.59	*1.16*	.253
F (*n* = 18)	45	90	62.00	10.96		
M (*n* = 20)	32	85	56.90	15.46		
7 - 9	39	88	61.05	16.22	*0.37*	.713
F (*n* = 11)	39	87	59.73	16.67		
M (*n* = 11)	46	88	62.36	16.46		
10+	45	90	62.60	15.22	*2.72*	.018*
F (*n* = 8)	47	90	70.88	16.71		
M (*n* = 7)	45	58	53.14	4.38		

Note. * = statistically significant ($p < .05$)

Table 8 summarizes information regarding all categories in the above tables and includes the minimum and maximum total impostor phenomenon score for each of the grouping. Furthermore, it provides the F or *t* scores and *p* values for each category indicating whether the differences are statistically significant.

Phase 2: Qualitative Analysis

The qualitative phase of this study consisted of collecting data from female participants to further explore the experiences of impostor phenomenon among educational leaders in the province of Alberta. The data were collected through the open-ended questions on the questionnaire and through seven 45-minute interviews. Participants were chosen based on the highest IP scores available and a willingness to participate in the interview process. Of the 93 female participants, 52 indicated that they were willing to be contacted for a follow-up interview. These 52 willing participants were distributed by position to ensure the interviews were balanced by representation. As 54% of the survey participants were principals, three of the seven interviews were conducted with principals. Vice principals made up 28% of the survey participants and therefore the researcher chose to interview two from this category. Superintendents and associate superintendents represented a much smaller percentage of the participants and therefore only one leader from each of these positions were chosen for the interview portion of this study. Criterion sampling was then implemented in the selection process to ensure that interviewees had experiences with impostor phenomenon and would be able to share their lived instances with the researcher.

Table 9 outlines information pertaining to participants, including their CIPS score, years in education, and how long they have been serving in their current leadership roles. Pseudonyms were used to provide confidentiality, and the names of schools and divisions were not included

anywhere in the study. Furthermore, any information that could be used to identify the interviewees has been excluded.

Table 9

Participant Interview Information

Pseudonym	Position	CIPS Score	Years in Education	Years in Current Leadership Role
Martha	Superintendent	73 - Frequent Feelings	30	6
Amy	Assistant Superintendent	80 - Frequent Feelings	26	2
Penny	Principal	90 - Intense Feelings	27	8
Shawna	Principal	89 - Intense Feelings	24	5
Mary	Principal	87 - Intense Feelings	20	1
Terry	Vice Principal	89 - Intense Feelings	13	4
Heather	Vice Principal	76 - Frequent Feelings	17	1

Just over half ($n = 4$) of the participants reported experiencing intense feelings of impostor phenomenon, while the other participants ($n = 3$) reported frequent experiences with impostor phenomenon. The researcher was specifically looking for participants with the highest level of IP reported on the Clance Impostor Phenomenon Scale to be able to report lived experiences in order to answer research questions two and three. However, the highest scores were not always available as three vice principals, who reported in the intense category, did not express a willingness to participate in the interview process. Similarly, there was one associate superintendent who reported intense experiences with IP, but again chose not to be contacted for a follow-up interview.

Participants were informed that interviews would be scheduled for 45 minutes, however many of the interviews lasted for closer to an hour, with the average length of the interviews being 53 minutes. All interviews utilized the video conferencing application Zoom as participants felt that was the most convenient for them. All participants were informed that the interviews would be recorded, and the Zoom platform clearly stated when recording started and ended.

Each of the interviews was structured in a conversational manner with the intent to provide an environment comfortable for the participant, and there was a standard set of questions outlined. However, each interview expanded beyond this semi-structured set of questions based on the flow of the conversation. The use of a semi-structured interview format was intentionally chosen to allow the conversation to flow and the interviews to evolve and to go where the interviewees felt it needed to go. Following the interviews, Otter.ai was used to transcribe the interviews. The transcription from this web-based program contained numerous errors, so each interview was cleaned by the researcher using a secondary recording device from the researcher's phone. Once interviews were cleaned, copies were sent to the corresponding interviewees for member checking purposes. Once accuracy was confirmed, the analysis of data commenced. Individual profiles for each of the interview participants are included below.

Martha

At the time of the interview, Martha had served as a superintendent in Alberta for less than 10 years. With over 25 years of educational experience, she has held numerous leadership roles, both at the K-12 level and at the college level. Her leadership experience is vast and she has worked diligently to stay current on the most up to date trends in education.

Martha shared that she has had experiences with IP many times, and particularly every time that she took on a new role as a leader. She believes that much of IP is linked to being a woman in leadership and shared that, "you always feel you should have 10 more degrees and 15 more qualifications than a man just to apply for a leadership position." Another specific experience that resulted in feelings of doubt resulted early in her career when she was vice principal in her high school. She held a master's degree and had done copious amounts of research on reading at the secondary level, yet an older teacher on staff insisted that the research meant nothing. Martha inquired, "So you are telling me that all of these researchers and authors know nothing, and you know more even though you have no qualifications in the area?" The teacher insisted that was the case, which left Martha really doubting herself and questioning her leadership.

She has had many experiences, and seen many examples of others, being treated disrespectfully by colleagues and superiors because of being female. She related:

> Boards don't make it easy for female superintendents, like a couple of my colleagues (female superintendents) are taking a bit of a shit kicking. People seem to think that it's okay to take a run at a woman. Things like slanderous comments that they simply would never do a man. There are just completely different expectations if you are female.

The College of Alberta School Superintendents (CASS) is made up of 61 public school divisions, and only nine of those chief superintendents are women. Martha asserted that the other 52 superintendents are almost exclusively white, middle-aged men, and as a result there is an "Old Boys' Club" that exists. They are polite, but they make it clear that you are "not one of

them." "I've experienced the tap on the head "Hello, little girl," type thing and the way they have talked to me was quite condescending," she reported.

"Women seem to top out at deputy superintendent, so there's an innate feeling that you can't break this Glass Ceiling," she asserted. Martha conveyed that she is getting better at dealing with feelings of IP as she ages and sees the bigger picture. She has a mentor and executive coach that has really helped, and she stated, "You have to have the right people in your corner." She also credited being married to an amazing man, loving her job, her faith in God, exercise, and positive self-talk as supports that have helped her to overcome some of the experiences and barriers that come with impostor phenomenon.

Amy

At the time of the interview, Amy was early in her career as an associate superintendent in an Alberta school division. She had been an educator for over 25 years and served in school-based leadership positions prior to her central office assignment. Amy described many of her experiences with IP revolving around new roles and teaching positions. She described teaching students who were not much younger than her and teaching in positions "which was completely out of (her) wheelhouse." She explained a situation early in her teaching career when she had a very large class and felt like she was "flying by the seat of (her) pants" at times. One day a school-based administrator came to her classroom and asked to see her after school. She spent the remainder of the day fearing that they were going to say that they have discovered that she had no idea what she is doing, and they were going to have to fire her. Instead, the conversation was complimentary and intended to share that they were impressed with her teaching. It was then that she first realized much of her IP was the result of her mind playing those "not good enough" games.

Another experience with IP transpired when she was offered the associate superintendent position. She remembered being completely "gobsmacked" and shared:

> I hadn't really even thought that I would be a contender, so it was a huge step for me. I have since then lived very much feeling like, "Am I worthy? Am I way out of my league?" And some days, I really do feel that I'm way out of my league.

Amy knows that many of her experiences with IP are the result of her comparing herself to what she sees other people doing, but that does not help when she is in the throes of those feelings.

When she reflected on factors that have contributed to her IP, she harkened back to her childhood where there was an element of "women aren't leaders and if they are they had to be just like men." Furthermore, there was an emphasis put on education in her home. "Education was everything" she recalls, and her sister was incredibly bright. "She's Mensa smart" Amy recollected. Her sister was the protégé and she remembered overhearing her father say, "Amy is really sweet and she's nice and she's bubbly. She'll make someone a really good wife." Although Amy can laugh about it now, it has impacted how she perceived herself and her skillset. In her current role, Amy explains:

> There are times when people with more experience can sense someone may feel less secure, and I think sometimes there are people who would rather make those people feel worse than to throw them a life preserver. Having people feel insecure somehow makes them feel better. I do think there are some circles professionally where people like the exclusivity of it and they have that higher level and don't want to let people in. I think that certainly causes some IP feelings.

Amy also shared that where she experiences the most IP is in the larger meetings like the College of Alberta School Superintendents (CASS) meetings. She declared "there is definitely a hierarchy of voices and you really do find that you need to know who's who and recognize who it is safe to ask certain questions to." Additionally, she opined, "As women we are sort of taught, we need to do so much more if we are going to move up. There are different expectations and rules for women, and maybe the unequal playing field leads to some impostor phenomenon."

Amy attributes her extremely supportive family, her faith, and positive self-talk with assisting her in overcoming some of her IP feelings. Furthermore, she strives to be a positive example for her children, especially her daughter, which pushes her to be the best that she can be. She says that the community is changing in terms of reasonable job expectations and women in the higher leadership positions, so that is definitely helping." Amy concluded by stating, "I think if there's anything we can do to counteract impostor phenomenon, the biggest thing would be to connect with individuals and connect them to safe resources. Just really that connection piece."

Penny

At the time of the interview, Penny had been principal in a K - 6 school in Alberta for less than 10 years and had been an educator for over 25 years. Penny began her experiences with impostor phenomenon quite early in life by having one of her high school teachers inform her that her brother and sister were smarter than her, and she wasn't smart enough to be in his class. That comment was a turning point for her, and from that time forward she focused all her energy on just "getting out" of school, and both her grades and her self-confidence plummeted. Being compared to her siblings was not new to her as she recognized that they were very bright. Her

brother graduated from university with Dean's Distinction, and never had to work for his marks and her sister was not only academically smart but was also "naturally wiser" than Penny. She was clear that her family never belittled her or put her down, but she always felt that she wasn't as smart as her siblings.

Going to college was a new start for Penny. She was able to re-do her high school courses and she "aced them this time." It was there that she realized that she was very capable when she put her mind to it. Unfortunately, impostor phenomenon reared its head again when she was diagnosed with some serious health issues nearing the end of her university journey. Those feelings have continued through her teaching career and when she entered the world of administration, she learned within the first half hour who she could ask for support from and who the boisterous voices were that would quickly look for ways to put her in her place. Penny acknowledged that some of what she experiences comes from comparing herself and her inner feelings with what she sees other people doing and allowing herself to feel targeted by other administrators.

Penny has found that surrounding herself by positive, supportive people helps to assuage some of the IP feelings. Furthermore, her sister (who has been a principal for 10 years longer that she has) is her mentor and provides great support to her. Penny's husband is also a "huge support." Impostor phenomenon has absolutely been a part of her career, but it has also been the result of some very serious trauma that she has experienced. This trauma has resulted in her seeing counselors and participating in a 13-week Cognitive Behaviour Therapy course. Therapy has helped her to change the way she looks at things. She is now able to put things in perspective, surround herself with supportive and positive people, and she utilizes positive self-talk to get her through difficult situations.

Shawna

At the time of the interview, Shawna had been the principal of an Alberta school for more than three years and had been in education for over 20 years. Prior to her role as a principal at that school, she had held other administrative positions including the principalship of a small, rural school where there were some challenges within the community. She reported having to deal with parents fighting in the front atrium, and as a result she feared that staff would figure out that she didn't know what she was doing. She stated, "I was afraid that they were thinking, "How are you going to lead me in literacy, if you can't handle this?"

Some of the factors that Shawna identified as contributing to IP were her own mind games, comments made by other people, and the realization that there is always more to know. She said that she had not understood how many questions come your way as a leader until she became a principal. "It's constant, and you realize how much you don't know," she posited. She also identified the behaviour of staff members influencing her playing mind games. She opined:

> As much as we say that it's always collaborative in education, it becomes quite judgemental. We can all be kind publicly, but I know that that's not what's happening when we're not around. The talk is not always kind or constructive.

For her, hearing conversations and comments that people made was when her IP "got really bad." She also identified inexperience as a factor. "In your first year of an admin position, when you probably know the least, is when you experience the most impostor phenomenon."

Shawna identified having support as helpful in overcoming some of the feelings of being an impostor. She is also willing to admit when she doesn't know something, and she allows her staff to see her being vulnerable. She is willing to say, "You've really made me think" or "I'll have to go look that up" and she has found that being authentic and having open conversations

has helped her to feel less like an impostor. She also finds that being vulnerable builds relationships with her staff, which results in a higher level of trust. Overall, Shawna has identified "surrounding yourself with people who are positive and willing to be open and vulnerable" as a key to overcoming feelings of impostor phenomenon.

Mary

At the time of the interview, Mary was early in her career as a school-based leader and had been in education for over 20 years. Mary graduated high school at a very young age and completed most of that independently in the library, as the school was unable to offer her the gifted program that she required. After high school, she completed two bachelor's degrees and then moved overseas where she taught "everything from 3-year-olds to molecular biology at the university level" for four years. She returned to Alberta where she has completed three master's degrees and taught in a variety of teaching roles including a very specialized one where she had been for the fifteen years before accepting her administrative role. She reported that she has had many doors open for her and she never seems to fit into the norm, making her feel like her life "just doesn't follow the rules."

Mary explained that her current leadership position is at a grade level outside of her previous teaching experience. Moreover, she became principal without first having a vice principal. As a result, she had endured comments that have enhanced her feelings of being a fraud. She has heard, "You skipped being a vice principal. Some staff members applied for this position, and they have admin experience. They should have gotten the position instead of you." and "This is your first rodeo; you don't know what you are doing." Comments such as these were not new for Mary. When she got the teaching position 15 years previously, she was told that other people had more right to that job than she did. She "stuck out like a sore thumb" while

she was overseas, community members have told her that she will never be accepted "in this community, because you're not from here," and she completed her high school education alone in the library "because a 14-year-old with raging ADHD doesn't fit into the Gifted and Talented program." Mary reported having many experiences with impostor phenomenon.

Furthermore, Mary had experienced some trauma, and posited that she has not had much in terms of support, so she "continues to pursue educational pursuits as it is cheaper than therapy." Other profound philosophies that she shared included "Fake it till you make it" and "Coffee and Cover Girl. Coffee to caffeinate so you feel less tired, and Cover Girl to cover the raccoon eyes" helping you to look less tired.

Mary maintains a mindset that some of these adversities have helped to make her less threatening. She admitted that she does not mind "playing that super naïve, mouldable card" or admitting that she doesn't know something. Mary also declared that some of her impostor phenomenon is the result of mind games that she plays with herself and stories that she thinks others are thinking. Although she reported that she has not had much support in her life, or throughout her career, she acknowledged that she uses positive self-talk to help her navigate IP. She finds that surrounding herself with positive people and implementing the use of positive self-talk have helped her to get through some of her difficult situations.

Terry

At the time of the interview, Terry had been the vice principal of an Alberta school for less than five years and had been teaching for more than 10 years. She held two university degrees and firmly believes in doing her research to staying current on all trends related to education. Terry reported that she is married with children, and she held several positions in a variety of industries before entering the field of education. As such, she attributed some of her

impostor phenomenon to being an older student when she decided to attend university.

Furthermore, teaching a male dominated subject has caused her to experience some impostor

phenomenon and consequently she reported:

> So even though I have an extensive background in athletics, you still have
>
> to have a certain persona to be able to pull off teaching phys ed. There are
>
> different expectations for men. It was okay for men to do certain things, but
>
> for a female there are different rules. It's okay for men to sit on the sidelines
>
> and be overweight and not do any athletics, but for women to teach physical
>
> education, you better be in shape and participating with the kids. It's a total
>
> double standard.

When completing her graduate level courses, Terry sometimes questioned her place in

higher education. She felt that the major that she possessed in her undergraduate program was

not as academic as others and made her question what she was doing there. "Did she belong?"

She recounted the same experience in administration. She reported that she "has a huge portfolio

in her position" and sometimes she feels like people are going to see through her cracks.

Furthermore, there are male administrators in her school district that have expressed they are not

going to listen to research and ideas that come from a female vice principal. These types of

comments have resulted in her questioning herself. She opined that, "it took a long time for

people to buy into who I was and to listen to what I had to say. Whereas if a man walks in, it's a

right away thing. Yeah, he's got it. He's supported just because he is male."

Feelings of being an impostor did not begin as an adult for Terry. She experienced some

childhood trauma which included her parents' divorcing and her dad decided to move a long

distance away. During those years she lived with her mom and endured comments like, "You

will never amount to anything." Her stepmother shared similar comments with her, and in the world of competitive sports, she experienced comparable comments from the mother of another athlete. Terry has viewed these types of comments as a challenge, and they have fueled her to continually do better and push herself forward. Other supports that have helped her to overcome some of her feelings of being an impostor included having a super supportive family, including her husband, children, and father. She also had a university professor who became a mentor to her, and she surrounds herself with positive people who are a great support system for her.

Heather

At the time of the interview, Heather had been in administration for less than five years and had taught for more than 15 years. She had experienced many difficulties growing up, including the divorce of her parents. That divorce resulted in her moving three hours away to live with extended family so that she could "finish her high school in a more stable environment." She worked various jobs that involved long hours in order to pay her rent and later to pay her university expenses. She also recounted that she had gone through a couple of bad relationships before obtaining her education degree. Heather has experienced many trials and frustrations in her teaching positions and has contemplated leaving the profession on more than one occasion.

It is her passion for students that has kept her in education, but she admitted to not doing politics well and it was that factor that kept her "out of administration for so long." It was not until she became "frustrated with the lack of academic support, the lack of resources, and the lack of advocating for these children" that she asserted, "Well maybe I need to walk the walk." It was then that she decided to try her hand at administration. Unfortunately, administration for Heather has not been "as promised" and she has had some very difficult and political situations

to circumvent. She felt targeted and disrespected right from the start. When she was first hired, the human resources director

> introduced me as the new person - "the new Karen" - he introduced me as that to everyone. Karen was the person who had held this job before me and there was clearly an inside story. So that gave people almost a target on my back right from the start.

Additionally, Heather has had superiors treat her in a very condescending manner and has been told in front of staff members things that completely undermined her confidence. She has a graduate level degree in leadership and described herself as being very well read, but having no support and having people demoralize her has caused her to question herself and her abilities. She recalled, "The way I was treated by central office staff and my own school could have definitely impacted my impostor phenomenon."

Heather also cited the treatment she experienced from colleagues and superiors as contributing to her IP. She has had people say, "Oh, you just got this position because of the way you look." A former principal commented on her good looks almost daily. In another district, she had a central office staff member stop by the school regularly and say, "Oh, Heather, they are very lucky to get to work with you" which caused her to wonder if people take her seriously at all.

She credited a former vice principal as being an incredible role model for her and one who helped her through some very difficult times. She also recognized her husband as being "a great support for her" and her belief in education and her passion for the students is what has kept her from giving up. She opined, "It feels like there's so much that I have to offer education, with my background. My specialty is always to go in and build programs wherever I'm at."

Results

The data in this study were organized according to the research questions. Phase one, the quantitative phase, addressed the first research question: To what extent do educational leaders experience impostor phenomenon, and how do these experiences vary by gender, age, position, years of experience in education, and years of experience in their current role? The second phase of this study, the qualitative phase, set out to answer research questions two and three. The second of the research questions was: For female educational leaders who experience impostor phenomenon, what factors have contributed to these experiences? The third research question asked: For female leaders who experience impostor phenomenon, what supports have helped to overcome those barriers? These questions were addressed using the results from two of the open-ended questions, as well as through information obtained from the interviews. Each research question was addressed with the use of themes and sub themes that arose from the responses.

An overview of the themes and subthemes along with the frequency of the coding and a quotation related to each of the themes are provided in Table 10.

Table 10

Summary of Themes and Subthemes with Coding Frequencies for RQ 2

Theme	Subtheme	Number of Coding References	Quotations From Participants
Cognitive Distortion	Self-Imposed Pressures	42	I put a lot of pressure on myself to succeed – I think people make things look easy where I may struggle a bit
	Mind Games	33	A huge component on imposter syndrome for me is me allowing myself to feel this way – my own mind games.
	Comparing Self to Others	27	I have a tendency to compare my insides with others' outsides. I know every foible I have but am only aware of the short comes others are willing to reveal to me.
Impact of Adverse Relationships	Gaslighting – Comments or Treatment by Other People	58	Having people make comments to your face wondering if you are qualified because I went straight from the classroom to a principal position. I skipped the VP position
	Lack of Support Acknowledgement	22	I believe it comes from always being pushed to do better by senior leadership and not getting a lot of praise for what is actually going really well. I feel

			like what I do I never enough.
	Being Undermined	21	I have been harassed and bullied by female administrators and coworkers who saw me as a threat and this has done extensive damage to my mental health and confidence overall.
Overwhelming Expectations	New Role or Situation	33	Each new role came with IP. It takes time to feel secure in the knowledge of a new role.
	Revolving Door of Expected Expertise	23	People rely on me to provide the best, most up to date research or to interpret research, which impacts initiatives across the division.
	Lack of Job Preparation	22	There is a lack of training when you move into admin. I don't feel prepared to do all that is expected of me.
Gender Biases	Glass Ceiling	18	For some women, I've seen gender hold them back. There's still kind of sense that top jobs are for men.
	Differing Expectations or Uneven Playing Field	13	There are different expectations and rules for women who want to move up. You need

			way more qualifications just to apply for a job.
	Demeaning Gender Directed Comments	16	I experienced a lot of inappropriate comments and "jokes" from male coworkers, principals and district staff and comments from other women that I got where I was at because of my breasts and my looks.
Early Life Experiences	Familial Factors	12	I think I was always insecure in my skills. I had some family issues that contributed to my insecurities making me a pleaser.
	Sibling Comparisons	14	My brother caused a lot of trouble in my family and although I worked very hard, I got little recognition.
	Trauma	9	My parents divorced when I was in grade 6 and I lived with my mom. She was hard on me and would tell me that I'll never amount to anything.

Research Question 2: Factors Contributing to Impostor Phenomenon

The second research question (RQ 2) examined for this study was: For female educational leaders who experience impostor phenomenon, what factors have contributed to these experiences? Interview participants were asked to elaborate on their experiences and five themes emerged from the data and are discussed in this chapter.

Theme 1: Cognitive Distortions

Cognitive distortions were originally defined by Beck (1979) as the result of processing information in ways that predictably resulted in identifiable errors in thinking and these distortions were prominent among participants both on the open-ended survey question related to this RQ and through information obtained from the interviews. These false narratives that people tell themselves result in IP as demonstrated by the fact that there was a total of 102 codes identified through the data collected. Although cognitive distortions were demonstrated in multiple ways, those most frequently identified have been assembled in the following subthemes; self-imposed pressures, mind games, and the comparison of self to others.

Self-imposed pressures. These self-imposed pressures were prominent in the data collected, as there were 42 codes that referred to these pressures. Comments from the surveys included: "I am extremely hard on myself," "I tend to put a lot of pressure of myself," "I doubt my abilities and feel that others might be more qualified than me," "I want to live up to the expectations," and numerous other comments similar in nature to those. Findings from the interviews echoed that thinking. Terry expressed:

> For my 30th birthday present, I applied to university and decided to get my degree.
> My husband moved our family down here, so then I finished my undergrad in
> three and a half years. The pressures on me were exponential, because I was like,
> we just uprooted our family, my husband's job was uprooted, and he had to take a
> job working in the states, so there was a lot of pressure.

Shawna echoed those pressures asserting, "I have 40 staff members who depend on me to know what to do." Heather, too, knows about self-imposed pressure. She worked two and three jobs to pay her way through university, has fought the system "the whole way" in order to auger

for her children who have learning disabilities, and experienced an extremely difficult year as principal being promised support that never did transpire. As she reflected on her previous year, she shared:

> I was doing everything on my own. The teachers had issues with all of the pressures brought on by Covid, and they did not volunteer for anything. So, I just worked. I had no choice. If I wasn't there, nothing got done. So, there was no one to fill in for me. I just worked every day and just did it all. There was very much work to rule thing that was happening at that school, so I did everything. I put on family nights, once things opened up, I ran everything including after school clubs. The school had to function, and those kids deserved opportunities, so I just did it.

These administrators are not alone. There are multiple stories like these, that demonstrate the passion and dedication of these leaders possess. They are willing to do what it takes to provide excellence for students, but it does come at a cost, and in this case the cost is that of self-imposed pressure.

Mind games. Mind games are also a common sub-theme that occurred for leaders who practiced cognitive distortion. There were 33 instances of self-induced mind games brought up by the participants of the survey and interviews. Survey assertions included, "I feel judged quite often by those who I lead and think that they think I am less competent than I have been told I am. I know lots of it is in my own head, but I continue to feel that way." and "There have been a lot of struggles this year and I feel inadequately prepared and like I am failing at every turn. I also know some of it is in my own mind." From the interviews, participants shared experiences of playing mind games as well. Shawna identified one of the factors contributing to her IP as:

My own mind games - thinking that people are going to find out that I really

didn't know what I was doing. How are they going to trust me on this next

situation? I am a very black and white thinker, so when there's something vague,

like discipline, it's very hard for me to work through.

Penny has experienced similar thoughts when she attends principal meetings. She has one

colleague who "has no social skills" and "doesn't know when to stop," and when he speaks, he

has a way of implying that others are not good enough. She asserted:

I'm definitely not going to contribute to the conversation because obviously

anything that I say, you're going to put me down or I feel like you are going to

put me down. So, in situations like that I sit with people in the room that I know

will not cut me down or make me feel belittled, even though that's coming from

my own head. My head tells me that this guy is specifically and intentionally

targeting me.

These leaders were able to admit that much of what they were feeling does come from their own

mind games, yet somehow, they internalize those feelings anyway.

Comparing self to others. A third subtheme for cognitive distortions is that of

comparing self to others. Martha stated:

One factor that causes some imposter feelings is comparison. I mean you're

holding yourself to a certain standard and comparing yourself to what you see in

other people. It's the comparing of what you are feeling on the inside to what

other people are doing on the outside and assuming that are not experiencing IP.

Amy has experienced comparable feelings as demonstrated when she shared:

I hadn't actually even considered senior leadership at all, and the person I

replaced is a formidable woman. She is a very strong woman and incredibly

knowledgeable, and she works very hard. The whole time that I worked with her,

when I was a principal and she was in my current role, it would never have even

dawned on me that I could ever even be in that same playing field.

Upon completion of the first cycle coding, it was abundantly evident that leaders who had experienced feelings of being an impostor consistently compared themselves to what they see in other people. Survey results shared experiences such as, "I think that often I feel others feel that I am smarter or more capable than I feel I am. I feel that maybe a situation will occur that someone else will be better equipped at handling than myself." Another example shared by a survey participant was, "I see others around me who appear to know more than me."

Although cognitive distortions were identified as a theme shared by the majority of participants, it was not alone in scoring high among educational leaders who contributed to the data for this study. The second theme, impact of adverse relationships, was identified at almost exactly the same frequency as the initial theme ($n = 101$).

Theme 2: Impact of Adverse Relationships

Respondents of the survey question related to factors contributing to impostor phenomenon consistently identified experiences with adverse relationships as a rationale for feeling like an impostor in their leadership position. Many participants identified comments made by other people as having impacted them in the work that they do. The study found myriad impacts of adverse relationships, but those identified most frequently make up the subthemes gaslighting, lack of support, and being or feeling undermined by colleagues.

Gaslighting: Comments or treatment by other people. Gaslighting is a form of psychological manipulation of a person usually over an extended period of time and is designed to create self-doubt (Merriam-Webster, 2023). Being treated poorly or having colleagues or superiors make negative comments to female educational leaders came up 58 times in the surveys and through the interview process as a contributing factor to IP. Participants reported gaslighting as a major factor in causing them to question themselves and their abilities. This is evidenced by survey comments such as, "Team members devaluing the work I have done" and "lack of respect from staff members causes me to question my skills." These survey respondents were not alone in having experienced comments that resulted in the questioning of leadership skills. Mary has had a few experiences of people making comments that are hurtful or disrespectful. When Mary started her position as principal, she was welcomed with the words "You shouldn't be here, you skipped steps. You skipped being a vice principal." That was not the first time Mary had experienced such comments from colleagues. She reported:

> That happened when I became a teacher at a (specialized) school as well. When I walked into my classroom, the first day a staff member greeted me with, "Someone who (has a disability) applied for this job. You shouldn't have it." That was my welcome. I have also had multiple staff here tell me that I don't know what I'm doing and that they should have hired someone with some vice principal experience.

Martha is no stranger to the effects of negative comments either. She asserted, "People think that it's okay to take a run at a woman. Things like petitions, slanderous comments etc., that they simply would not do to a man." Often negative comments are reserved for work, but Martha shared an experience that occurred with friends.

On weekends we get together with our neighbours and we are quite social. We will do croquet or something like that and then they invite us over. One lady is a former educational assistant, and another is a former elementary school teacher, and they got going after a few drinks, and they're like, "Yeah, women leaders. I never want to work for a woman. Working for women is awful." They like me, but they don't like women in leadership.

There are several examples of comments that have been made to and about female educational leaders, and it goes beyond remarks made. Some of these leaders have shared treatment that they have endured from others as well. Heather described:

The way I was treated by central office staff and my own teachers at my own school could definitely have impacted my impostor syndrome. I really felt like I was in over my head, and I had been assured that I would be supported and then the superintendent left, and I had worse than no support. I was treated in a very condescending manner and rude comments were made not only in front of me, but in front of my staff.

Lack of support. A second subtheme from the theme "Impact of Adverse Relationships" was that of a lack of support and it was also prominent being mentioned 22 times by participants. Two of the survey respondents included this subtheme in their battle with IP. Participant 51 stated, "I seldom receive praise or support from my superiors, so I feel that I lack the ability to do the job well. I second guess decisions, lose a lot of sleep over situations, I'm not as happy as I used to be, and I feel exhausted a lot." Participant 3 has had similar experiences as she identified, "a lack of support and recognition from staff members and senior administration for things done/gone well" as a contributor to IP for her.

Furthermore, respondent 31 declared, "The evaluation process was disappointing, and I was given zero feedback throughout the year and then criticized in areas that made sense to me, but that I would have liked to have had some prior feedback, as opposed to hearing about it at the very end of year when it was too late to make changes."

During the interview process Mary echoed these thoughts as she shared:

> I feel like my support has been learning to survive on my own. In my 15 years in the specialized teaching position, I was on my own. Myself and one other teacher in there dealt with our own discipline, we took care of all the paperwork, we essentially did the admin work for our department. Then as I moved into this principal position, it has been without any support. I am "training" the vice principal at our school, and I can't help but feel like, "I wish I would have received some training."

Being undermined. Many of the respondents both to the survey and those who participated in the interview identified being undermined by staff members or senior administration as a part of the reason that they have experienced feelings of being an impostor. Terry identified the following situation:

> There is another administrator and I who started to re-evaluate our reporting system and make sure that we get assessments to our parents appropriately. Are we fulfilling our mandate, the guide to education, and our school and division policies? And we came up with, "No we don't think we are fulfilling it to the degree that we need to." After the meeting, four male principals proclaimed, "No female vice principals are going to tell us what we're doing." They have also made comments to me about the fact that "I don't even need to work" because my

husband makes enough money for the household. It just feels demeaning and I

can't help but feel undermined.

Another respondent recalled, "At times I have been hesitant to bring attention to achievements

even though they are worthy of recognition out of fear of "whack a mole." As soon as a female

leader sticks up their head, people tend to look for ways to put them back in their place."

Theme 3: Overwhelming Expectations

The third theme that arose from the data was that of overwhelming expectations. There

was a total of 74 codes that identified being new to a role, the lack of job preparation, and the

revolving door of expected expertise, as contributing factors of impostor phenomenon. One

survey respondent identified, "The large number of tasks and issues that I need to be well-versed

in, and the quickly changing pace of our profession" as contributing factors of IP.

New role or situation. The first subtheme to be identified under the theme of

overwhelming expectations was being in a new role or a new situation. There were 33 codes

identified in this subtheme. Survey participants shared "I feel like I'm learning the ropes as a

new admin. It takes time to feel secure in the knowledge of this role but I'm good at learning"

and "being new to the position I don't feel confident in my decisions, and I often feel like I

should get a second opinion." These leaders were not alone as many respondents shared these

sorts of feelings when new to their position. Martha expressed similar feelings when she stated:

> I have experienced impostor syndrome many, many times. I think each new role
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> as a leader, there's always a part of me, that's like, "I'll get found out," and I think
>
> it's linked to being a woman in leadership, because you always feel you should
>
> have 10 more degrees and 15 more qualifications. And you don't know enough. I
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> mean, I'm getting better, but I can remember my first (leadership position), and

there were teachers that were older than me, and of course, and you're like,

"They'll find out, they know more than me, they're going to catch me out." So,

I've had that experience all the way along.

Another survey respondent understands the pressures of starting out in an administrative

position as she described:

There are so many talented and knowledgeable people on staff, and I feel a lot of

responsibility to be able to lead them well. Especially in my first year as an

administrator, there was so much to learn, coming into a new position, school, and

age range of students."

Being in a new administrative role affords a leader the opportunity to make a positive difference,

but it also brings with it many challenges and questions. Additionally, it introduces the leader to

the many aspects of the position that they do not yet know.

Revolving door of expected expertise. Being expected to be an expert on all things and

having a steady stream of traffic in and out of one's office all day long was the second subtheme

identified with 23 codes. Survey participant 43 described those emotions as:

It is difficult to "know everything" and I feel that there are others who are just as

qualified or even more so to do the job I have been blessed with. While I would

describe myself as confident, there are times that I am doubtful with my ability

and feel that there is someone else that might fit the role better.

Survey respondent 58 also explained that the expectations placed on the principal are beyond

what she had envisioned as she reflected:

You really do not have any understanding of just how many questions come your

way as a leader. When I got my first principal position, I was shocked at how

many interactions come your way each day, and everyone expects you to have all

the answers.

Shawna had a very similar experience as she asserted, "A factor contributing to imposter

syndrome for me was not knowing how many questions actually come my way as a leader. It's

constant and you realize how much you don't know."

Participants who identified that they felt they needed to be everything to everyone

claimed that these external pressures certainly created some of the feelings of being an impostor.

Having the plethora of questions come their way made them realize how much they didn't know.

It also made them question if they should have known more before they got into leadership.

Lack of job preparation. A lack of job preparation was also identified as a subtheme of

"Overwhelming Expectations", and there were 18 codes identifying this as a contributing factor

in possessing some IP characteristics. In fact, part of not having all the answers, as identified in

the above subtheme, was due to the fact that many respondents felt that they were not adequately

prepared to take on their administrative role. Mary recalls stepping into her principal position,

coming straight out of the classroom, with a level of amazement. "I skipped being a vice

principal, and I guess I was expecting some sort of training." As Heather reflected on her first

year as principal, she recalled:

> I told the superintendent that I didn't think I was ready to be a principal, and I
>
> spent last year doubting myself and my abilities. I felt like a fraud, like I didn't
>
> know what I was doing. Nobody was helping me, and I would get told after the
>
> fact what I should have done instead of being given support at the time. So, I felt
>
> out of my element and completely vulnerable.

Respondent 34 also explained feeling unprepared to take on all the responsibilities of being a principal when she wrote:

> Sometimes I still identify as a teacher and forget that I am an administrator. At times, I do not feel prepared to lead staff in certain areas as I have not received enough training or education on the topic myself.

Survey participant 63 also expressed those same feelings of not having been provided enough training to truly feel prepared to do the work she was walking into:

> I had a turbulent beginning to being a first-year assistant principal. My principal died in the first three months of school and I took over that position during COVID. The mentorship program for our district is supposed to be two years but mine was cut to one year, because of new senior admin. I think that because I had taught for 28 years in the district first, they felt that I knew more than I did.

There are a vast array of expectations and responsibilities when taking on a leadership role in the field of education, and participants in this study have clearly expressed a desire to be properly trained and prepared to take on these roles. Leadership is stressful and beginning a new position and learning the responsibilities that go with the role should include training to allow leaders the best possible opportunity for successful.

Theme 4: Gender Biases

Gender bias was identified as the fourth factor contributing to impostor phenomenon from the data that were collected through the surveys and by those who participated in the interview process. The subthemes that resulted from respondents were glass ceiling, differing expectations or there being an uneven playing field for women, and demeaning gender related

comments. One respondent from the survey conveyed, "The factor that most contributes to my impostor phenomenon is how hard people are on strong women."

Glass ceiling. The glass ceiling effect is a metaphorical barrier that prevents women from advancing to the top of the hierarchical ladder or from obtaining upper-level positions (Merriam-Webster, 2023). This intangible barrier was referred to as a contributing factor of impostor phenomenon by seven participants in this study. Respondent 47 stated, "I get great accolades for my work; however, I can never move forward beyond my current position. Personal confidence is noted as reasoning almost always. Glass House??" She is not alone in her feelings, and the experiences with the glass ceiling effect was referenced more prominently by leaders who had risen to higher educational positions. Superintendent Martha has seen this invisible barrier firsthand in her position. She asserted:

> Women seem to top out at deputy superintendent, so there is an innate feeling that you can't break this glass ceiling. Then we see these kinds of hiring patterns, and you kind of go maybe that's true. Some districts are going to BC and Manitoba to hire superintendents (who do not know the culture, curriculum, etc. of Alberta) because they cannot find superintendents here??? There are females applying for the position and have come through the system, but NONE of them have qualifications???

Associate superintendent Amy reported a parallel finding when she espoused:

> A former colleague of mine did some research and learned that 75% of education positions are held by women, yet only 25% of the top positions are held by women. So, there is kind of a sense that top jobs are for the men, and I think sometimes women don't bother applying for those jobs.

Differing expectations. There were 13 codes that identified that there was an uneven playing field for women aspiring to higher leadership positions in the field of education. Participants reported that there was clearly a different set of expectations for men in educational leadership than there was for women. Terry identified having experienced this when she commented:

> When I look at the inequities of male and female, I was actually chatting on the phone last night with my dad and talking about that. I'm not a big feminist, that's not who I am, but I think it's time we acknowledge that there is an inequity in the leadership roles across all of our division. It's all female in the inclusive education positions and in the athletics portfolios, it's all male regardless of if they have any athletics experience or not, it's all male. And we have all male principals. There is an uneven playing field.

Survey respondents also identified having experienced this inequality. Participant number 15 stated:

> I have felt that although I deserve my role and position, I need to do it perfectly to prove it and that others may question whether I deserve this job or am capable of doing it well. Whereas if you are a man, people just assume you know exactly what you are doing.

Another participant reported:

> You know, the research says men have people who map their careers for them – like one administrator that I worked with. He was on the career path to superintendency from the get-go before he even became a principal. So, people in central office identified him as "the guy" and that was his career path. I have

never seen women getting mapped like that.

Gender related comments. Also dissimilar to the journey of men, is the treatment that some women receive from colleagues, superiors, and even from those that they lead. The comment "they simply would not treat a man like that" has played in the head of this researcher as she has read through supplementary comments made by other participants. That comment was not isolated. Survey participant 31 recalled:

> It really embarrassed my teenage and young adult sons because their friends, teammates, and students I worked with that they met in the community or at parties would make comments about me. They would get defensive of me being objectified and we would talk about it and use it as an opportunity to talk about how we should or should not talk about women.

Other gender related comments that were reported by female administrators in this study included Penny reflecting, "So, yeah, having male colleagues tell me they are not going to listen to all of the research I've done adds a little to the impostor syndrome."

Martha also related what it is like to be in situations where you are made to feel like you don't really belong. She recounted that it is not always a comment:

> I'll go out in the hallway and there'll be a group of male superintendents and they'll all be chatting together. So, I'll walk over because I'm like "well I'm one of you" in my head. They're polite, but it is very obvious I'm not one of them.

Penny also reflected on experiences of feeling "female" in a male dominated environment when she described:

> There are other men too at our (principal) meetings that can make you feel inferior. So, I feel like I have to be super prepared and have everything really

planned out well before I will even speak. Then this one guy takes over the whole

conversation, so I just sit there in fear of him saying, "You're doing a crappy job."

Many respondents identified having experienced gender bias in their leadership experiences, and

as such they have felt their work or confidence had been affected by the comments, treatment,

and differences in expectations.

Theme 5: Early Life Experiences

Not all factors that have been identified as contributing to impostor phenomenon have

come from experiences in the workplace. The final theme identified as a contributing factor of IP

was that of early life experiences. Some occurred in the home, some in school situations, and still

more in the community. Nonetheless, they have all left their mark on these female educational

leaders and make up the subthemes familial factors, sibling comparisons, and trauma.

Familial factors. There were 13 codes that made reference to family factors, as a

contributing factor of IP, provided by the participants in this study. Comments from survey

respondents included, "I grew up in a traditional European family (father was an immigrant to

Canada) where males were favoured" and "There were family issues that I had to deal with

growing up and when I went to university for my under grad and my graduate degrees I was

always stressed and worried about failure." Leaders who participated in the interviews also

shared familial factors that have influenced them and contributed to their feelings of being an

impostor. Heather shared:

> My parents went through a separation when I was in high school. So, I left and
>
> lived with other relatives so that I would have a stable home and I started working
>
> so I could pay rent while I was going through high school. I didn't have a lot of

support and I found that I was on my own a lot. I ended up getting married very

young, right out of high school. I also ended up getting divorced very young.

As Amy reflected on her upbringing, she recalled:

In my home I would have been grossly overlooked on the emotional quotient for

sure. You know, your ability to work with others and those kinds of things. My

dad would say that's just fluff, that's nonsense. You gotta go in there and make

the rules, and if you're the boss, you're the boss.

Terry also shared what it was like to come from a home where there were some struggles. She

posited:

I think because of my experiences and being kind of a survivor in the sense that I

had a terrible upbringing. I feel like I'm a survivor in the sense that people told

me, "Well, you'll never be like your dad, he's like super educated."

Mary reflected on her family issues and how they are still relevant today as she expressed:

I'm the disappointment of my family, and they will tell you why I disappoint

them. I could not decide what to be when I grew up. I have three master's

degrees, so they will say, "Mary, make up your mind to get a job like a normal

person." I'm always the odd duck, and I don't conform to the group.

Although sibling comparisons could be considered a part of familial factors, it was not always

family members that made the comparisons and therefore it warranted its own subtheme.

Sibling comparisons. A part of the familial factors that have impacted many of the

female leaders who have shared their experiences, is that of being compared to siblings. There

were 14 codes that referred specifically to sibling comparisons and therefore was named as the

second subtheme in the early life experiences theme. Some of the reflections of being compared

to family members include the experiences of Penny and Amy. Penny reflected to high school and shared:

> I went to my chemistry teacher, who had been teaching for 30 plus years and said, "I'm not really understanding this, and I'm scared I'm going to fail. Can you please help me? He went into the back and got a textbook from the 1960's and said, "Here, read this. Your brother and sister were smarter than you." My brother graduated with top honours from university, electrical engineering, got into the Co-op program, and graduated with Dean's Distinction. I always felt like my sister was smarter than me too, but also just naturally wiser. I felt a little bit like the black sheep of the family.

Amy also explained what growing up in her household was like:

> In our house, education was everything. Really sports, and anything like that was a frivolous distraction. Everything was about education, and my sister, who's two years older than me, is incredibly bright, she's Mensa smart. Legitimately, I think her IQ is probably in the 140's. She was like a protégé to my dad.

The experiences of Amy and Penny are not isolated. Some of the survey respondents also shared the experience of being compared to family members. One respondent wrote, "I always felt like I didn't measure up to by siblings. They were both so smart and I had to work way harder than either of them, just to get a C." Respondent 28 declared:

> Because I was not an A student in regular school, and I was often compared to an older sibling, I definitely experienced some imposter syndrome. And the one time that I received a top merit award in high school, I was told by a teacher that they were shocked that I received it.

Three participants also made comments about having a turbulent relationship with a brother including the comment, "My brother has taken advantage of my parents and it has made be very angry."

Trauma. The third subtheme identified in early life experiences is trauma, and although there were nine comments that referred to early life trauma as a contributing factor of IP, several other participants have experienced trauma in their adult life as well. From the interview process, 29% ($n = 2$) of participants identified parents divorcing as one reason for them experiencing feelings of being an impostor. Penny explained, "I've had (a life-threatening disease) twice and have battled different things, so I am no stranger to trauma." She also stated, "Having been diagnosed with other health issues growing up leads to imposter syndrome. I have gone through severe trauma in my life." Terry was a high-level athlete and as such participated in competitive events. She described one situation where she was left feeling shocked:

> So as a youth, we had to go away, we would fly for events all the time. There was one mom, I don't know why even in my adult life it still kind of plays in my head, but there was one mom who would constantly tell me I wasn't good enough and I was never going to be good enough.

Mary also described several situations in her life that have caused her trauma and ultimately resulted in a further battle with impostor phenomenon. Mary did not fit in at school because she was academically above the other students, so she was sent to the library to work alone, where she could complete an entire high school course in a month. She worked overseas for four years, and then returned to Canada where she experienced a great deal of trauma in her life. She has been told she does not belong and she took an admin position at a completely

different age group than she had ever taught previously with no training either for the new grade level or her principal position.

Conversations and survey responses provided a wealth of insights that address contributing factors of impostor syndrome. Respondents also shared multiple supports and techniques that they use to combat the effects of impostor phenomenon and have discussed how these strategies have allowed them to achieve accomplishments within their leadership positions.

Research Question 3: Supports Contributing to Success

The same methodology was utilized in the compilation of data to answer research question 3. All data were coded, assembled into themes and subthemes, and then reported in this chapter. An overview of these themes and subthemes along with the frequency of the coding and a quotation related to each of the themes are provided in Table 11.

The third research question (RQ 3) asked: For female leaders who experience impostor phenomenon, what supports have helped to overcome those barriers? In order to elicit responses to answer this RQ, the fourth question in the open-ended section of the survey asked; What supports have helped you to overcome the barriers of experiencing feelings of being a fraud?

Table 11

Summary of Themes and Subthemes with Coding Frequencies for RQ 3

Theme	Subtheme	Number of Coding References	Quotations From Participants
Relational Influences	Family Supports	27	My husband is an amazing man, like an amazing human being. He is super supportive.
	Mentorship	24	This year our division has hired a mentor for principals and that has been very helpful.
	Peer Networks	14	Connecting with colleagues or asking for help in developing my understanding.
Intentionality Related to Self-Care	Close Connections	25	Support from some of my close friends who are very supportive and encouraging. Their reinforcement helps build my self-esteem.
	Journaling/Self-Reflection	16	I am a very reflective practitioner. This helps remind me of how far I've come. Every day in my day planner I write down things I learned that day, or if I received a compliment.
	Spirituality/Exercise	9	I am a Christian. I pray. Prayer plays a big part in my life and helps me get perspective.

			Exercise clears my head and it grounds me.
Professional Supports Specific to Education	Colleagues/Superiors	26	The support and encouragement from Central Office, my team and other administrators, my staff.
	Professional Development	13	I have found doing my learning and professional development has helped me to understand and grow my own skill set in handling conflict and situations.
	Experience	12	I would say as I age and have had more experiences, my IP has improved. You just start to accept that you can't know everything, and leadership can mean facilitating the strengths of staff.
Positive Self-Talk		14	I do a significant amount of self-talk, or I talk with trusted friends/family to overcome the feelings of doubt and anxiety. I ask myself if it will matter in five weeks from now or five years from now.

In addition to survey respondents being asked to share supports that have helped them to overcome barriers with IP, interview participants were asked to elaborate on their experiences. Data collected were then compiled and analyzed, and four themes emerged. These themes were

relational influences, intentionality related to self-care, professional supports specific to education, and positive self-talk. Each theme was disaggregated further into the subthemes, and the results of these findings are discussed below.

Theme 1: Relational Influences

Participants in this study identified the importance of relational influences as one of most important factors in dealing with issues of impostor phenomenon. Having the support of family was the most frequently referenced code, as it was appeared twenty-seven times in the data. Mentorship was identified twenty-four different times in the data and having a strong peer network was discussed fourteen times.

Family supports. Participants consistently identified having a supportive family or family member as being instrumental to their success. "My husband is very encouraging," "Marrying a great guy," "I have a really supportive family," and "A strong partner in my marriage," were among the many comments that survey respondents specified as being important supports in helping them to overcome some of the experiences they have acknowledged has been a part of their journey with impostor phenomenon. When asked: What supports have helped you to obtain your success and to overcome some of those feelings of being an impostor? Terry quickly responded:

> My immediate family. My husband is super supportive, and when I was having
> doubts about if I could continue to do this, he would be the one who would say,
> "No, Terry, you are good. You're fine. Like, you can do this." My dad is also very
> supportive. I can bounce ideas off of him and we run marathons together, and he
> is an amazing listener. And my boys. My children are super supportive.

Martha shared the same sort of support system regarding her family when she posited:

> My beautiful daughter is always supportive, and I have an excellent husband. And, he's a man's man. He's so confident, like the opposite of me. He has no imposter syndrome, and he's a very devoted and supportive husband.

The idea of having a healthy, supportive marriage and a family that these female educational leaders could depend on was mentioned frequently in this study, and as such made up an important part of support required to assuage feelings of being an impostor.

Mentorship. Another aspect of working through the process of possessing fraudulent feelings was reported to be having a mentor or participating in a mentorship program of some sort. Having someone to support the leader in their new role was cited as being important and in cases where that advisor was not made available, it was expressed that participants felt it would have been beneficial to have had that support. Penny asserted, "Definitely my sister as a mentor has been an important support for me. She's probably been my number one support." Mentorship was considered to be a very important factor, but being a formal mentorship was not necessarily a requirement. Mary posited, "I do reach out to people I consider to be my mentors." In another interview Heather declared:

> I had an amazing opportunity to work with an incredible vice principal. She was a great support and mentor to me, and she really impacted my confidence, my career, my life. She was just an amazing mentor for me, and she always had my back. I just learned so much from her. It was incredible. I really am grateful for those years that I had.

When Amy reflected on her opportunities to work with people that she would consider to be mentors to her, she opined:

> I noticed a big difference in my confidence when I had people that I felt I could trust and share things with when I didn't know what I was doing. Having a mentor made a huge difference in how I approached my position. You'll always suffer from a bit of that feeling of inadequacy, and I think that having people to rely on really makes all the difference in terms of building your confidence.

Many of the leaders who participated in the interviews identified mentorship as an important factor in overcoming some of the feelings of being a fraud. Similarly, many of those who responded to the survey also noted the importance of having a mentor.

Peer networks. Many respondents identified the importance of having a network of peers that they were able to debrief and reflect with on issues. Respondent 9 asserted, "The support of other women, unsolicited compliments, and working collaboratively with other people helps me to overcome those feelings." The response from participant 43 on the survey was, "Working in a community of practice has been helpful to overcome those barriers. Recognizing that others also struggle, at times, with leadership is also helpful and affirming." "Reflecting on success and creating a network of accomplished female leaders helps me get past the feelings of being an imposter," stated respondent 47.

Interview participants also spoke of the importance of surrounding themselves with positive people. Shawna conveyed, "So, I wholeheartedly believe that you need to surround yourself with the right people." Terry asserted, "You really learn to surround yourself with people that want to support you, versus those that are like ready to just hammer you down." Moreover, Penny posited, "I find that it is just so important to surround myself with positive people. I am known as a Positive Penny, and I choose to be with other positive people."

Theme 2: Intentionality Related to Self-Care

Intentional self-care was also cited often in the data as a resource that participants in this study used to overcome barriers associated with impostor phenomenon. Respondents named having close connections, most often with friends, journaling and self-reflection, and spirituality and/or exercise as the factors most effective in assuaging the feelings of being an impostor.

Close connections. One important aspect of self-care was identified as having close friends to network with. Terry reported:

> So, I have surrounded myself with a really good support system. I have close friends outside of education that I enjoy spending time with because I don't always like to be talking about education. I've realized that even though we're in different industries, we all kind of feel the same way at times.

Penny concurred when she stated, "I have a few very close friends that I can talk about anything with." Heather was also able to identify "that one close friend" and she described:

> I could always go to her and tell her exactly what was going on. There was never judgement. I could be completely honest with her about anything, and she would always go to bat for me. She was always encouraging, and she empowered me to do things I didn't think I could do.

Respondent 24 on the survey reported, "I find that good friends are important as a support system. I also surround myself with people who are loyal and respectful." Additionally, respondent 46 reported that, "The reinforcement of respected colleagues/friends" to be influential in overcoming barriers that affected her imposter phenomenon.

Journaling and/or self-reflection. There were 16 participants who reported that they used journaling or self-reflection to alleviate feelings of being a fraud. Survey respondents

asserted, "I use lots of journaling to help me when I am struggling," "I am a very reflective practitioner. This helps remind me of how far I've come, where I need to still grow, and puts my personal expectations into perspective," and "Journaling. I write things down and then reflect on what is working well." Penny also learned the importance of self-reflecting as she proclaimed:

> I will reflect and think things like, "It's going to be a moment, it's going to be really hard, it might suck a whole lot, but you know what? It's not going to last forever." If it's not going to last forever, then I ask myself, "Is my worrying hindering me or is it helping me?" And then in those moments, I need to choose. If it's going to help me, then I'm going to push through. If it's hindering me, I need to release it and let it go. I've just learned to reflect on if something is actually important or not.

Although there were several people who identified journaling and self-reflection as important factors in caring for their own well-being, most participants simply responded with those one of two words.

Spirituality and/or exercise. Another important aspect of self-care included that of spirituality and exercise. Again, most of these were documented in one and two word responses, however due to the number of times those responses occurred it was determined that it should be identified as a subtheme of intentional self-care.

Amy spoke of the importance of self-care and looking after her spiritual needs in her response to the question; What supports would you say have helped you to obtain your role or have helped with overcoming the feelings of IP? She responded: "Well definitely one thing that has been really instrumental is my faith in God." She also described attending faith-based meetings as both an opportunity to enhance her relationship with God and as a building of

community. She opined, "There is a component of these meetings that is all about mentorship, and it gives young leaders a chance to learn from more experienced principals and compare leadership styles."

Martha also spoke of her being a Christian as a fundamental factor in working through impostor feelings. Additionally, she expressed the importance that prayer plays in her life and how it has been helpful for her. Martha identified exercise as another important element of self-care. She posited:

> Exercise is one of the things that helps me. I walk my dog, my husband and I go swimming, and there is nothing like a good walk to clear your head. Just getting outside is helpful, and I love gardening.

Intentionally taking care of oneself physically, emotionally, and spiritually was an important aspect for respondents in terms of overcoming feelings of being an impostor.

Theme 3: Professional Supports Specific to Education

The theme professional supports specific to education was prominent in the coding process, and the data were used in creating the subthemes supportive colleagues, professional development, and experience.

Supportive colleagues. The subtheme centering around having supportive colleagues was identified 26 times in the responses that were collected from participants. Heather identified a secretary that she credited with being an amazing support for her. She explained:

> My secretary would say, "Heather, they don't see what you are doing here. You are running this whole school. You live and breathe your job and no one is helping you." She would help me see the good things that I was doing and that I was there for the students. Her support really got me through those tough times.

Amy also identified some of the colleagues she has had privilege of working with as helping her through times when she felt like a fraud. Amy described the support from one of her colleagues as:

> She really reinforced some confidence that maybe my opinion was important. It is just really important to have supportive colleagues that help you out. You know, even just check in. It allows to have someone to ask, "What are you doing on this? or What does your administrative procedure say on that? It gives you a network and some really tight relationships where you can just say, "Hey look I have no idea what to do with that" and being able to say out loud and not feel terrified of what the repercussions of that might be.

Shawna reiterated these thoughts when she asserted:

> Support is so important. Having someone, a colleague, to support you and someone who shares. For me it was actually one of our strongest principals, who happens to be a friend of mine, who just started sharing everything. That was impactful and very helpful.

Survey respondent 6 also spoke on the importance of working with supportive people. She asserted:

> Structured evaluations and open-to-learning discussions with senior leadership as well as collegial conversations supports me. Talking with colleagues builds collective efficacy and allows me to realize that we are all feeling very similarly, and that we are all doing a great job as well. A reminder of collective successes is a big deal.

Other respondents shared, "Close connections with other administrators have helped. Where I can be vulnerable and engage in authentic conversations," "Having an amazing admin partner and supportive senior leadership team has allowed me to overcome some of the feelings of being a fraud," and "(having) a wonderfully supportive principal, and a teaching team that is so flexible and understanding." The importance of having supportive colleagues and impactful conversations was a key factor that was identified by respondents as factors contributing to success for these leaders.

Professional development. Professional development was also an important subtheme, that emerged from the comments that were collected in this study. "Learning the work, by doing the work and participating in professional development opportunities as often as possible," "Taking on personal learning and working hard to learn everything I can, so I can become an expert," and "Leadership conferences and divisional leadership specialists" were specific comments made by respondents on the survey. Furthermore, respondent 32 explained:

> I have found doing my learning and professional development has helped me to understand and grow my own skill set in handling conflict and situations. My background is in special education, so I am continually working through an asset-based approach and am being more purposeful in being more positive and seeing others (not just students) through that lens as well. I am continuing to look for opportunities to learn more so that I can continue to develop as a leader.

Mary disclosed through her interview that she did not have an abundance of support in dealing with her feelings of being an impostor. However, the one thing that she admitted did seem to help was learning. She hypothesized that perhaps that was the reason that she has three master's

degrees. Through her reflection on what has helped her to overcome some of her feelings of being a fraud she posited:

> Well, I think that's why I keep going back to school. School is where I can get that support. I am just always determined to learn more. I feels like I can never learn enough, like I'll never know enough to be able to say, "I actually know this!" Learning is the one place that deep down does make me believe that maybe I do know a few things.

The importance of professional development and continuing to learn throughout one's leadership career was mentioned 13 times and was clearly a central factor in supporting respondents with their struggle to overcome experiences with impostor phenomenon.

Experience. There were 12 codes that identified having experience as a factor that has contributed to the success of some of the educational leaders who participated in the study. Martha proclaimed, "I am getting better as I age, and as I have more experience, but I can clearly remember the impostor syndrome in my first leadership position." Penny also shared how her feelings of being an impostor have lessened slightly with experience as she described:

> So, I've been at this school in a principal role for (almost 10 years) now, and I am learning that it's okay to not have all the answers. And sometimes I will just say, "I'm not too sure. Let me check on that." Then I'll research it to the best of my ability.

Shawna reported that she had been principal at her current school for quite a few years and had served in other leadership positions before that. She opined, "In your first year of an admin position, when you know the least, you have the most impostor syndrome." Additionally, she has learned that she is okay asking for help, and she went on to assert:

I want criticism because I want to get better, and I find just being able to support

other people while you're being vulnerable, has helped me to feel less like an

impostor. I feel it less and less. The more experience I have and the more open

conversations that I have, whether with another admin partner or with a teacher,

the better I am at being okay that I don't know somethings. And I've learned that

it's my own battle.

Responses from the survey data included "The longer that I am in leadership, the more I am able to trust my own judgement and show my vulnerability," "Entering situations where I know I can succeed and use my skills and knowledge and drawing on my expertise and experience helps me," and "Through experience and talking with colleagues make me realize that we all have these feelings sometimes." Many survey respondents and interviewees acknowledged that experience has been a factor that has assisted in alleviating some of the pressures experienced through feeling like an impostor.

The quantitative phase of this study revealed comparable findings as administrators between the ages of 25 and 54 were found to be statistically significantly ($p = .024$) more likely to experience impostor phenomenon than those educational leaders who identified as being 55 years of age and above.

Theme 4: Positive Self-Talk

There were no subthemes identified for the theme of using positive self-talk as a strategy for dealing with IP as most respondents did not elaborate beyond stating the importance of self-talk. One survey respondent revealed, "When I start to question how I got such a great admin position, I always stop and remind myself that if I wasn't the right person for the job, I wouldn't have gotten it." Other participants affirmed, "I have to do significant self-talk to overcome the

feelings of doubt that I feel on a regular basis," "Other people having confidence that I am doing well leads me to tell myself that too. When I use self-talk, I always feel a bit better," and "I just tell myself that we all have different skill sets and that I bring value to the table, and slowly I'm learning and that's okay."

Furthermore, 71% ($n = 5$) of those administrators who participated in the interview process of the study identified using positive self-talk as an effective aspect in assuaging the feelings of being an impostor. Penny proclaimed, "So, when I'm experiencing IP, I use a lot of positive self-talk. Martha acknowledged that she occasionally worries that people are going to "catch (her) out" and realize that she doesn't know as much as they thought. To counter that type of thinking she shared that she uses self-talk. She proclaimed, "So, there's a big need for self-talk and to ask yourself the question, "so what would they find out?" I just ask myself what I think they would find out about me." Similarly, Mary espoused:

> Sometimes I use positive self-talk. I will say things like, "I don't like it right now, but I will learn to enjoy it." I try to look at things like they are a gift. When I am feeling dumb or like people think I don't know what I am doing, I just try to find a way to talk myself out of that corner. Sometimes deep down I believe that I do know things and sometimes I have to remind myself that I have three master's degrees and I am a published author.

The use of positive self-talk was identified 14 times by respondents on both the survey and in the interviews. The importance of self-talk was also spoken about with great passion by many of the participants, which emphasized the prominence of utilizing this skill to assist in overcoming the feelings of being an impostor.

Summary

This chapter reported the results of this mixed methods study that sought to explore how prevalent impostor phenomenon (IP) is among educational leaders in the province of Alberta. Through surveys and interviews, leaders in Alberta shared their experiences with IP as well as the perceived causes and supports. RQ1 described the extent to which leaders experienced IP according to gender, age, position, years in education, and years in current administrative role and used Excel and SPSS to compare demographics and determine if there were any statistically significant differences based on demographics. There were statistically significant differences for gender and age, but no statistically significant differences based on the other categories. RQ2 examined that factors that contributed to IP based on the responses from the female participants. These responses were coded, and themes and subthemes were established and shared. The five themes that emerged were cognitive distortions, impact of adverse relationships, overwhelming expectations, gender bias, and early life experiences. RQ3 examined the supports that have helped female leaders to overcome barriers caused by IP. Data were studied and the four themes that emerged were relational influences, intentionality related to self-care, professional supports specific to education, and positive self-talk. Chapter 5 will include a summary of the study, a discussion of the findings, implications, recommendations, limitations, suggestions for future research, and a summary of the study.

Chapter 5: Summary, Discussion, and Implications

This mixed methods research study used an explanatory sequential design to explore how prevalent impostor phenomenon is among female education leaders in the province of Alberta. It was grounded in Bandura's (1986) Social Cognitive Theory, Jackson's (2018) Leadership Impostor Phenomenon Theory, and Shield's (2011, 2018) Transformative Leadership Theory. The quantitative phase of this study involved 167 participants who completed the survey. Subsequent to the survey, seven follow-up interviews were conducted in order to build upon the survey findings and to provide context related to experiences of impostor phenomenon in leadership positions. Furthermore, the interviews were utilized to determine factors that have contributed to IP as well as the strategies that female leaders have used to persist and continue to pursue leadership positions even when they experienced feelings of being a fraud. Moreover, the study sought to establish supports, or coping mechanisms, utilized by leaders who had experiences with IP to provide suggestions to future leaders who may share feelings of being an impostor.

Summary of the Study

The purpose of this mixed methods research study was to explore the lived experiences of educational leaders in the province of Alberta to determine the factors contributing to impostor phenomenon as well as to understand the strategies used to overcome feelings of being a fraud. Female participants were asked to respond to six long answer questions, two of which were utilized for this study, and seven interviews were then conducted to develop a deeper understanding of the participants' experiences allowing the researcher to respond to research question two, *For female educational leaders who experience impostor phenomenon, what factors have contributed to these experiences?* and research question three, *For female*

educational leaders who experience impostor syndrome, what supports have helped or are

helping them overcome these barriers? The interviews were recorded with verbal permission

from each of the participants and later transcribed using a transcription application software

entitled otter.ai. Data collection and analysis were completed to find key words and phrases that

described the experiences of the interviewees. These codes resulted in the emergence of several

themes for each research question and were then examined and disclosed in the study.

The intent of this study was first to determine if impostor phenomenon was experienced

by educational leaders in the province of Alberta, and if so to what extent, and then to determine

if IP varied by the categories outlined in research question one, *To what extent do educational*

leaders experience impostor phenomenon, and how do these experiences vary by gender, age,

position, years of experience as an educator, and years of experience in their current role?

The second purpose was to establish the contributing factors of IP and to empower female

educational leaders to conquer the feelings of being an impostor by implementing strategies that

have worked for other leaders in the field of education. Thirdly, this study's purpose was to add

to the body of literature related to impostor phenomenon and overcoming feelings of being a

fraud.

Thus, Chapter 1 provided information on IP and specifically for female leaders (Dahlvig,

2013; Fraenza, 2016; Wrushen & Sherman 2008) as well as a discussion of the three theoretical

frameworks that this study was grounded in. Secondly, Chapter 2 examined the body of literature

regarding the evolution of the role of the principal and how complex it has become (ATA, 2014;

Heffernan, 2018; Hunt & Fedynich, 2018), changing leadership styles (Banjarnahor et al., 2018;

Bell et al., 2014; Hussain et al., 2017), the impact of principals (Bickmore & Dowell, 2019;

Leithwood et al., 2004; Tschannen-Moran & Gareis 2015), qualities of effective school leaders

(Banjarnahor et al., 2018; Mikkelson et al., 2015; Obiekwe & Ezeugbor, 2019), female leadership (Murakami & Tornsen, 2017; Vroman & Danko, 2020), and impostor phenomenon (Clance & Imes, 1978; Sakulku & Alexander, 2011; Seritan & Mehta, 2016). Next, Chapter 3 discussed the methodology, research design, and rational for using a mixed-methods design (McMillan and Schumacher, 2014; Tashakkori & Teddlie, 2009; Watkins & Gioia, 2015). Furthermore, it shared information about the participants, the instruments used, the interview protocol, and the design and procedures for the study. The scope of research, the programs used for the data analysis, and issues of trustworthiness were also important aspects that were examined. Finally, Chapter 4 explored the results and findings from both the quantitative and qualitative phases of this mixed methods survey.

Purpose Statement and Research Questions

The purpose of this mixed methods research study was to use an explanatory sequential design (Creswell, 2014) to explore how prevalent impostor phenomenon is among female education leaders in the province of Alberta, and to determine what can be done to support these leaders. The aim of this study was to establish if there was a presence of impostor phenomenon among educational administrators and if so to what extent it is present. Moreover, if IP was found to be present, the goal was then to ascertain the perceived factors contributing to IP as well as to determine the reasons for the success and perseverance of the female leaders despite these circumstances. To further investigate IP among educational leaders in Alberta, the following research questions were examined:

1. To what extent do educational leaders experience impostor phenomenon, and how do these experiences vary by gender, age, position, years of experience as an educator, and years of experience in their current role?

2. For female educational leaders who experience impostor phenomenon, what factors have contributed to these experiences?

3. For female educational leaders who experience impostor syndrome, what supports have helped or are helping them overcome these barriers?

Discussion of Findings

This study addressed the paucity of literature relevant to experiences of impostor phenomenon among educational leaders, specifically female leaders. By using the Clance Impostor Phenomenon Scale (CIPS) survey and the researcher generated questionnaire to gather data, along with the semi-structured interviews, the researcher was able to collect information pertinent to this study. Survey responses ($n = 167$) were analyzed, and the data were used to inform the interview protocol. Interview responses ($n = 7$) were then coded and separated into themes to provide an in-depth analysis of the participants' perspectives and experiences.

Moreover, this dissertation helped to focus attention on the factors that female leaders identified as the cause of their fraudulent feelings as well as providing suggestions for how to manage those experiences. An analysis of the key findings from chapter 4 is discussed in this chapter, and the findings and interpretation of themes are described as they relate to the research questions. Furthermore, evidence for each finding will be supported by either the quantitative or qualitative data, as well as past studies on leadership styles, female leaders, barriers, and impostor phenomenon.

Research Question 1: To what extent do educational leaders experience impostor phenomenon, and how do these experiences vary by gender, age, position, years of experience as an educator, and years of experience in their current role?

One overwhelming finding that surfaced from this study was that many educational leaders in the province of Alberta have experienced and continue to experience feelings of being an impostor in their leadership positions.

Gender. The quantitative findings revealed that women experience impostor phenomenon statistically significantly ($p = .033$) more frequently than the men surveyed in this study. Of the 167 leaders who participated in the survey, 93 identified as female and 74 identified as male. Results from the CIPS indicated that females were more likely to experience impostor phenomenon at the frequent and intense level than men (49% and 39% respectively). Similarly, there were many more male participants who indicated that they had few experiences with IP as compared with their female counterparts (12% and 6% respectively). Therefore, it is important that IP be addressed by school divisions and that there be explicit gender specific training offered to female leaders as part of a leader preparation program. Therefore, the researcher recommends that school divisions provide female leaders the opportunity to participate in a workshop which includes sessions that discuss impostor phenomenon and the impact that it can have on leaders. Furthermore, divisions should consider bringing in an expert on IP as a guest speaker to prepare female leaders for this challenge they may experience in their leadership position.

Research affirms that women are more likely to experience impostor phenomenon (Clance & Imes, 1978; Dahlvig, 2013; Seritan & Mehta, 2016). Additionally, women who reach successful positions experience higher levels of stress and are prone to fraudulent feelings due to

gender socialization (Iwasaki et al., 2004; Kets de Vries, 2005). Young (2011) reported the same findings, asserting that women are particularly at risk for feeling fraudulent in their workplace environments. However, not all women experience impostor phenomenon. In fact, the lowest overall IP score on the survey was reported by a female leader with a score of 21. The lowest possible score on the CIPS is 20, therefore a score of 21 indicated that this participant experienced virtually no IP at all.

Age. Educational leaders under the age of 45 scored statistically significantly ($p = .024$) higher on the CIPS survey with a mean score of 62.98 as compared to a mean score of 57.43 scored by those 45 years and older. Furthermore, 51% of those who identified as being under the age of 45 reported frequent or intense experiences with IP as compared to those 45 years old and above who reported frequent or intense experiences at 41%. This indicates that as educational leaders get older, they tend to experience feelings of being an impostor less frequently. Qualitative data from this study supports that finding as one respondent stated, "I would say as I age and have had more experiences, my IP has improved. You just start to accept that you can't know everything, and leadership can mean facilitating the strengths of staff." Martha also affirmed, "I am getting better at dealing with feelings of impostor syndrome as I age, and I am getting better at seeing the bigger picture." Additionally, there were 10 other specific qualitative comments made during this study that supported that there are lessening experiences of IP as leaders age.

Position. As the researcher examined the descriptive statistics according to position held, she was surprised that the findings were not statistically significant. The mean score for vice or assistant principals was 61.98, whereas the mean score for those holding a superintendent position was 55.67. Moreover, 46% of vice principals reported experiencing IP at the frequent or

intense level compared with 34% at the superintendent position. The implication of this would appear to be that as a leader moves up the leadership ladder, they tend to experience feelings of being an impostor less frequently. However, the mean score for associate superintendents is lower than that of the superintendent, and 16% of vice principals reported having few experiences with IP. Therefore, it does not follow the pattern hypothesized above.

The postulation of this researcher is that the 16% of assistant principals who reported that they experienced few IP characteristics skewed the data which kept it from being statistically significant. Additionally, extant literature identifies the principal as being responsible for all aspects of the school (Hussain et al., 2017). Moreover, the principal directly affects the environment, culture, and overall quality of the school (Cray & Weiler 2011; Stein, 2013; Tschannen-Moran & Gareis 2015). The impact of the principal is far-reaching, measurable, and observably vast according to Banjarnahor et al. (2018). This impact and responsibility are stressful, and the demands on the superintendent are the same except for on a larger scale. Therefore, it is possible that the vice principal and associate superintendent, being in assistant roles and having the support of the organization's leader to fall back on, may be less likely to experience fraudulent feelings at the same level as principals and superintendents.

Years of educational experience. Of leaders who identified as having been in the field of education for more than 25 years, 40% reported having frequent or intense experiences with impostor phenomenon and reported a mean score of 58.49. Whereas those who had been in education for less than 25 years reported at 45% experiencing IP at a frequent or intense level. However, the mean score for the less experienced group was 56.09 illustrating that IP experiences were not statistically significantly impacted ($p > .05$) by the number of years that participants had been in education. In fact, 57% of those who reported to have been teaching

between 6 and 15 years described having few or moderate levels of IP. Furthermore, the researcher was unable to find any literature that equated years in education with lower levels of impostor phenomenon.

Years in current leadership role. Participants who identified as being in the same leadership role for 10 or more years reported to have statistically significantly ($p = .018$) less experiences with IP than those who had been in their positions for less time. In fact, of those who had been in the same position for at least 10 years, 33% reported to have few IP experiences and an additional 40% identified as having moderate levels of IP. Additionally, only 7% reported to have intense experiences with impostor phenomenon. Although there was a statistical difference in the group who had been in their current positions for 10 or more years, there was no statistically significant differences among any of the other groupings.

However, from the qualitative data in this study, there were some participants who identified that more years in the same position has helped to assuage feelings of being an impostor. Martha espoused, "I'm getting better as I have more experience, but I can remember my first administrative positions and feeling like the teachers knew more than I did and that they were going to catch me out." Shawna shared similar reflections as she commented, "I feel it (IP) less and less. The longer I am in my position and the more open conversations that I have." A respondent from the survey espoused, "The longer that I am in leadership, the more I am able to trust my own judgement and show my vulnerability." There were no studies found to validate the feelings of these leaders, and the quantitative data did not corroborate their thoughts, nevertheless this idea has merit and warrants further study.

Summary of RQ1. The first research question focused on the extent to which educational leaders in the province of Alberta experienced impostor phenomenon, and this study

determined that many leaders have experienced feelings of inadequacy or feelings of being a fraud while serving in their leadership roles. Furthermore, the study identified gender and age as demographic categories that experienced statistically significant differences ($p < .05$) with women and leaders under the age of 45 reporting more frequent experiences with impostor phenomenon. Additionally, leaders who had served in the same position for more than 10 years experienced statistically significantly less ($p = <.05$) impostor phenomenon than those with less time served in their roles.

Therefore, findings from this study indicate that educational leaders in the province of Alberta do experience impostor phenomenon and these experiences significantly vary based gender, age, and the number of years that leaders have served in their role. Consequently, it is safe to conclude that female educational leaders experienced higher frequency and intensity of impostor phenomenon than male educational leaders, and as a result this needs to be addressed by school divisions and through additional research.

Research Question 2: For female educational leaders who experience impostor phenomenon, what factors have contributed to these experiences?

The results of the responses from female participants to the open-ended questions ($n = 93$) and from data collected from the interview phase of the study ($n = 7$) revealed several factors that have contributed to experiences with impostor phenomenon. These factors were divided into five themes and the findings discussed below.

Cognitive distortions. The first theme identified by participants as a factor that has contributed to impostor phenomenon was cognitive distortions. Respondents identified self-imposed pressures, mind games, and comparing themselves to what they see in other people as some of the cognitive distortions that have shaped fraudulent feelings. One of the interviewees

spoke of the mind games she plays with herself and stated, "(It's me) thinking that people are going to find out that I really didn't know what I was doing." Another respondent asserted, "I think that often I feel others think that I am smarter or more capable than I feel I am." Additionally, another participant espoused, "I put a lot of pressure on myself to succeed. I think people make things look easy where I may struggle a bit." Others discussed the pressures that they put on themselves with comments such as, "I tend to put a lot of pressure of myself," "I want to live up to the expectations," and "I have 40 staff members who depend on me to know what to do." Prevailing literature concurs reporting that participants from their studies believed they were not worthy of the positions they had obtained and thought others were better in their positions. These thoughts resulted in a fear that they would be exposed as frauds (Mullangi & Jagsi, 2019; Sakulku & Alexander, 2011; Seritan & Mehta, 2016). Furthermore, women put a lot of pressure on themselves trying to be everything to everyone and attempting to be what they perceive others want them to be (Vroman & Danko, 2020).

Participants in this study conveyed findings consistent with previous literature regarding the cognitive distortions that make up part of the impostor phenomenon that they have experienced. Consequently, this finding indicates that negative self-talk, self-imposed pressures, and comparing self to others are common among those who experience IP. Therefore, normalizing these thoughts and actions may be helpful for female leaders in the realization that they are not alone in their experiences with such feelings. Providing workshops, or an expert speaker on the subject of IP, would be beneficial in bringing this awareness to women.

Impact of adverse relationships. A second theme that emerged was the impact that adverse relationships have had on respondents. Participants identified the comments or treatment that they have received from other people, a lack of support, and having had others undermine

their work as factors that have contributed to IP. One respondent commented, "I have been harassed and bullied by female administrators and coworkers who saw me as a threat, and this has done extensive damage to my mental health and overall confidence." Other respondents spoke of being publicly devalued and disrespected, and Heather recounted:

> The way I was treated by central office staff and my own teachers at my own school could definitely have impacted my impostor syndrome. I really felt like I was in over my head, and I had been assured that I would be supported and then the superintendent left, and I had worse than no support. I was treated in a very condescending manner and rude comments were made not only in front of me, but in front of my staff.

Other respondents also felt unsupported both by colleagues and superiors. This was demonstrated with comments such as "I seldom receive praise or support from my superiors, so I feel that I lack the ability to do the job well," "As I moved into this principal position, it has been without any support," and "There has been no support or recognition from staff members or senior administration."

Furthermore, extant literature describes prejudice towards women and lack of support issues for female leaders (Eagly & Karau, 2002; Hutchins & Rainbolt, 2017; Larrson & Alvinius, 2020). Additionally, women are often held to a higher standard than men in the workplace (Eagly & Karau, 2002; Lyness & Grotto, 2018). Moreover, Hoyt and Simon (2017) contend that women in leadership positions face the risk of being mistreated or criticized because of the negative stereotype that is associated with female leaders.

The participants of the current study felt alone in their feelings of being undermined and unsupported or in dealing with the negative comments and treatment that they received from

colleagues. However, there is abundant literature that demonstrates that these experiences are not isolated (Eagly & Karau, 2002; Hoyt & Simon, 2017; Lyness & Grotto, 2018). This indicates that experiences with adverse relationships are not uncommon, and again participants in this study share these experiences with others and therefore, can take solace in knowing that they are not alone. Furthermore, this is an issue that needs to be addressed to allow female educational leaders the same level of respect that male counterparts receive. School divisions may need to provide professional development opportunities to their leaders to bring awareness of these findings, and so that leaders can be made away of the fact that they are not alone when they have experiences such as those described above.

Overwhelming expectations. Participants acknowledged being in a new role or position, having people expect them to know the answers to everything, and a lack of job preparation as some of the factors that have contributed to the overwhelming expectations that they experienced. Consequently, these expectations made up the third theme identified by responds as contributing factors of impostor phenomenon.

One survey respondent identified, "The large number of tasks and issues that I need to be well-versed in, and the quickly changing pace of our profession" as contributing factors of IP. Another stated, "You really do not have any understanding of just how many questions come your way as a leader." Yet other participants discussed the lack of training as an issue. These comments included, "I do not feel prepared to lead staff in certain areas as I have not received enough training or education on the topic myself," "I skipped being a vice principal, and I guess I was expecting some sort of training," and "There simply is not training to do the principal's job. I guess they just expect you to learn as you go."

These comments were consistent with that found in literature as Paul (2022) opines, "extensive study into principal preparation and professional learning demonstrates the need for more intentional and systemic support for these leaders" (p.66). Furthermore, it is posited that districts must share their expertise regarding a program's leadership framework, coursework, and instruction, with the principals in their districts (Wang et al., 2022). Additionally, opportunities for principals and aspiring principals to access authentic job-based training are not readily available (Paul, 2022). Moreover, it was recognized that little attention has been paid to how principals are developing the necessary skills required to meet all the job expectations leaving leaders underprepared for what is expected of them (Caselman et al., 2006; Thessin & Louis, 2020).

Again, many of the participants indicated that they felt like they were alone in their feelings of being overwhelmed with the myriad expectations and did not want to share their feelings of inadequacy for fear that they would be judged harshly or would lose their jobs. However, extant research reveals that one consistent belief among those who experience IP is that the feelings are unique to them and if they revealed feelings of phoniness, they would face criticism and a lack of understanding from others (Clance & Imes, 1978; Mullangi & Jagsi, 2019). Therefore, it is important that educational leaders are made aware of the fact that these feelings exist and that they are not alone in their experiences with IP.

Gender biases. The fourth theme that was identified as a contributing factor of impostor phenomenon for the participants in this study was gender bias. Respondents referred to the glass ceiling effect, the differing expectations for female leaders, and gender related comments as some of the reasons for the feelings that they have experienced. One respondent stated, "There are different expectations and rules for women who want to move up. You need way more

qualifications just to apply for a job." Another affirmed, "Women seem to top out at deputy superintendent, so there is an innate feeling that you can't break this glass ceiling." Still another participant opined, "I think it's time we acknowledge that there is an inequity in the leadership roles across all of our division." These are not isolated comments, and they are not unique to this study.

Previous literature indicates that there is a male network that excludes women from climbing the corporate ladder (Goethals et al., 2011). Additionally, Goethals et al. (2011) assert that despite the similarities of men and women in terms of educational attainments, ambitions, and commitments to career, men typically progress faster and reach higher-status positions much more quickly than women. Additionally, Dyczkowska and Dyczkowski (2018) and Eagly and Carli (2007) discuss at length the "glass ceiling effect" and how it impedes women from progressing up the career ladder. Similarly, women are often held to a higher standard than men and as a result emerge less frequently as leaders (Eagly and Karau, 2002; Lyness & Grotto, 2018).

This study, as well as earlier works, have identified gender bias as a contributing factor of IP as well as a barrier for women aspiring to leadership positions, especially at the senior level. Addressing these issues and eliminating stereotypes from hiring practices will assist in leveling the playing field and allowing more women to take on educational leadership roles. The result of implementing such practices might result in a more equal representation of women in the top leadership positions.

Early life experiences. The fifth theme, identified as impacting experiences of IP, that surfaced from this mixed methods study was early life experiences. It included familial factors, sibling comparisons, and trauma as subthemes. When participants discussed these factors as

contributors of impostor phenomenon one respondent revealed, "Because I was not an A student in regular school, and I was often compared to an older sibling, I definitely experienced some imposter syndrome." Another participant discussed her life stating, "There were family issues that I had to deal with growing up and when I went to university for my under grad and my graduate degrees, I was always stressed and worried about failure." A third participant espoused, "Having been diagnosed with other health issues growing up leads to imposter syndrome. I have gone through severe trauma in my life."

Many leaders have dealt with trauma, familial issues, or experiences with being compared to others. In fact, existing literature identified family upbringing and challenges experienced by leaders (Murakami & Tornsen, 2017) as factors of impostor phenomenon. Clance and Imes (1978) determined that many of the participants in their seminal study experienced being compared to siblings. They were either the perfect, intelligent child or they had a sibling with that designation and were unable to win their parents respect no matter how successful they were (Clance & Imes, 1978). Clearly this is not a new phenomenon, but it is one that has left its mark on numerous people. Therefore, it is vital that those who have experienced feelings of being a fraud understand that they are not alone and that there are strategies that can be implemented to help alleviate those feelings.

Summary of RQ2. The second research question focused on the factors that have contributed to female leaders' feelings of being an impostor. Female educational leaders identified cognitive distortions, adverse relationships, overwhelming expectations, gender biases, and early life experiences as being factors contributing to their experiences with impostor phenomenon.

Understanding and addressing the factors that have contributed to feelings of being a fraud and allowing female educational leaders to express their feelings of inadequacy, may result in a removal of the perceived stigma attached to IP. Many women have the skillset to be very effective leaders (Barsh & Yee, 2012; Morison & Zeimba, 1997; Ramaswamy, 2020), yet females continue to be underrepresented in leadership positions (Hoffman, 2017). Therefore, bringing awareness to the fact that some of these fears and feelings are a normal part of administration and providing strategies for leaders to use may help those who have experienced these feelings and could potentially help in recruiting more women into educational leadership positions.

Research Question 3: For female educational leaders who experience impostor phenomenon, what supports have helped or are helping them overcome these barriers?

This study found that impostor phenomenon is experienced by educational leaders in the province of Alberta and there are numerous factors that contribute to the feeling of being an impostor in these positions. However, the study also identified a variety of strategies that participants have found to be effective in assuaging the feelings of being an impostor and thus allowing respondents to perform their leadership duties with competence and professionalism.

Relational influences. Many participants identified the importance of having family members support them, access to mentorship, and a strong peer network as factors that have assisted in their struggle with impostor phenomenon. Participants shared varying stories of how these factors have been influential for them. Some of the comments that respondents on the survey shared included, "My family and close friends who really know me are always encouraging me and building my self-esteem," and "I have a strong partner in my marriage, and I lean on my family when I need support." Other respondents shared, "Strong mentorship with the

right mentor has been important for me," and "I have close peers that are very supportive and encouraging."

Extant literature substantiated the reflections of these survey participants. Women in leadership positions that do not have healthy relationships with a romantic partner, a mentor, and/or other women in leadership roles are at a distinct disadvantage (Sanford et al., 2015). A study conducted by Kaplan (2009) recommended finding a supportive and understanding mentor to assist with their feelings of fraudulence. Additionally, the findings of the Hutchins et al. (2018) study determined that relying on validation from peers, mentors, or romantic partners was a positive coping strategy to interrupt the impostor phenomenon cycle. Furthermore, mentors can serve as sponsors and role models for female leaders, as well as being sources of support and encouragement (Chanland & Murphy, 2018).

Therefore, the findings of this study, corroborated by earlier studies, indicated the importance of having a strong support group including that of mentorship, close friends, and/or a partner that can be depended on. Understandably, school divisions are not able to ensure that healthy personal relationships exist, but ensuring that effective mentorship programs are in place may help new leaders in a school division or any leaders who struggle with IP. Again, providing a leadership preparation programming and mentorship are important first steps in supporting those who experience impostor phenomenon.

Intentionality related to self-care. The second theme that emerged was the importance of being intentional about self-care. This encompassed having close connections, journaling or self-reflections, and spirituality or exercise. There were many strategies that participants employed for self-care, and it consistently emerged as an important factor in combating fraudulent feelings. Respondents shared, "The reinforcement of close and respected friends is

important for my self-care," "I am a very reflective practitioner. This helps remind me of how far I've come, where I need to still grow, and puts my personal expectations into perspective," and "Since starting my new position every day in my day planner I write down things I learned that day, or if I received a compliment to focus on what I've learned and how far I have come."

Similarly, previous literature recognized the importance of self-reflection as a method to assuage the feelings of being an impostor. Harvey and Katz (1985) recommended journaling and make a list of impostor feelings as strategies to diminish feelings of inadequacy. Additionally, having a support system that includes close friends helps to build resiliency and to alleviate feelings of being an impostor (Reeves-Blurton, 2020). Rudenga and Gravett (2020) concluded that self-care including exercise, hot baths, and hobbies were instrumental in coping with impostor phenomenon. Furthermore, they reported that "some respondents indicated that they turn to prayer" (Rudenga & Gravett, 2020, p.16). Additionally, exercise was identified as it is known to raise endorphins and gets the mind away from fears (Rudenga & Gravett, 2020).

Findings from this study correspond with existing literature and conclude that intentional self-care is instrumental in assuaging the feelings of being an impostor. Therefore, awareness of these findings is important to share with those who experience IP and offering suggestions and encouragement to regularly take care of self would be beneficial to leaders. Having an expert speak to the administration group prior to the school year commencing and share both the fact that impostor phenomenon exists and strategies effective in the assuagement of these feelings would benefit educational leaders as they are going into the new school year.

Professional supports specific to education. Having professional supports related to education was proven to be effective in combating feelings of being an impostor and it was the third theme that emerged from this study. The importance of having supportive colleagues and

regular professional development was found to be instrumental in lessening the effects of impostor phenomenon.

Participants from the survey responses indicated that ongoing learning, research, and professional development were key to overcoming the feelings of being a fraud. One respondent asserted, "Talking with colleagues builds collective efficacy and allows me to realize that we are all feeling very similarly - and that we are all doing a great job as well." Still another opined that leadership conferences, opportunities for support on a variety of topics, and having divisional leadership specialists were key factors in helping them overcoming impostor feelings. Another respondent related, "Doing hard things and succeeding, experience, lots of education, and professional development help me. Also, feedback from peers, superiors, and staff." Another participant stated that "support and encouragement from central office, other administrators, and my staff" assist with fraudulent feelings.

Existing literature concurs. In an impostor phenomenon study conducted by Hutchins and Rainbolt (2017) participants noted the advantage of being able to hold small group discussions with faculty and faculty advocates to bring awareness of the signs that faculty may be experiencing impostor tendencies. Furthermore, it was determined that professional development opportunities that offered stress management training and techniques for implementing collegial support rather than competitiveness would benefit participants of the study (Hutchins & Rainbolt, 2017). Additionally, Chakraverty (2020) recommended that professional development programs be specifically designed for those experiencing IP. Moreover, the findings specifically recommended that professional development programs be developed that would:

> 1) address fears and insecurities due to impostor-feelings, 2) normalize
>
> conversations around perceived failure, judgment, and one's lack of belonging,

and 3) provide support with networking, mentoring, academic communication,

and mental health challenges (p. 329).

The current study found similar findings and therefore, implementing specific professional

development strategies into administrative training may be beneficial in reducing the feelings of

being an impostor among educational leaders.

Positive self-talk. The fourth theme that emerged from this current study was the

implementation of positive self-talk. Several participants identified the importance of utilizing

this strategy when confronting their struggle with IP. One respondent stated that, "it is helpful for

me to recognize that others also struggle, at times, with leadership. I find that helpful and

affirming, so I just remind myself of that often." Another participant affirmed, "I have to do

significant self-talk overcome the feelings of doubt." Harvey and Katz (1985) concur identifying

that self-reflection and the participants' own internal dialogue is a way to lessen feelings of being

an impostor. They suggested identifying one's thoughts, making a list of impostor feelings, and

practicing accepting compliments (Harvey & Katz, 1985). Therefore, implementing the practice

of positive self-talk may prove to be beneficial for those who experience impostor phenomenon.

Summary of RQ3. The third research question focused on the strategies and practices

that female leaders use to overcome feelings of inadequacy in their leadership roles. In order to

overcome the feelings of being an impostor, female educational leaders from the current study

revealed that they depended on relational influences, which included family supports,

mentorship, and peer networks. Female leaders also looked to intentional self-care, professional

supports, and positive self-talk as strategies for overcoming feelings of inadequacy. Self-care

involved having a network of close friendships, journaling or self-reflection, and spirituality and

exercise. Professional supports specific to education included having supportive colleagues,

actively participating in professional development, and the confidence that is developed with experience. In fact, three interview participants specifically identified age and experience as factors that had contributed to lessened feelings of being an impostor. Moreover, experience was mentioned nine other times in the data obtained from the questionnaire. Positive self-talk was the fourth theme that was identified by participants in this study as a strategy used to mitigate feelings of being an impostor.

The findings of this study have therefore provided supports that may serve as strategies for overcoming some of the challenges that leaders have experienced as a result of struggling with impostor phenomenon. Bringing awareness to the fact that many leaders are affected by impostor phenomenon, along with some of the factors that contribute to IP and some of the strategies that have been implemented in overcoming IP, will benefit educational leaders. Again, this could be a part of a leader development program or divisions could provide specific professional development on this topic.

Implications

The aim of this study was to establish the presence of impostor phenomenon among educational administrators and to determine the perceived factors contributing to IP. Furthermore, the intent was to identify supports and strategies employed by female leaders to overcome feelings of being an impostor. It is clear from the current study that many leaders in the province of Alberta have experienced IP and continue to deal with these fraudulent feelings. Moreover, female education leaders have statistically significantly ($p < .05$) more frequent experiences with impostor phenomenon. These results suggest that school divisions should implement programs that focus on acknowledging that impostor phenomenon exists and sharing ideas and strategies that will assist in decreasing feelings of impostorism among leaders.

It is important that school divisions recognize that impostor phenomenon is pervasive among leaders and that it may negatively impact workplace productivity and job satisfaction. Additionally, impostor phenomenon impacts leadership identity and self-concept which in turn may result in anxiety, fear, and self-doubt. Participants in this study identified the lack of support, feedback, and training as factors contributing to fraudulent feelings. Furthermore, mentorship, self-reflection, professional development, and positive self-talk were some of the supports that respondents identified as beneficial in contributing to their success. Therefore, school divisions could use these findings to provide specific and intentional support to educational leaders by ensuring that an effective leadership preparation program is in place.

Leadership development programs must be specific to the needs of the participants. Utilizing findings from this study would warrant that one aspect of the program include the acknowledgement that IP is a common issue and that leaders who experience these feelings are not alone. Divisions should consider workshops, seminars, or presentations from experts discussing that aspect of leadership. Additionally, mentorship must be a fundamental part of the development program as most participants in this study identified mentorship as a critical aspect for success as a leader. Moreover, Cohen and McConnell (2019) observe that many studies have identified mentorship as being a recommendation to combat experiences of impostor phenomenon. Therefore, it is essential that educational leaders be given opportunities to participate in mentorship programs. It is recommended that mentors be open about their own experiences with impostor phenomenon and strategies that they have used in overcoming some of the feelings associated with being an impostor.

Lastly, the findings of this study can be used by female educational leaders to understand that they are no alone in their experiences with impostor phenomenon and in implementing

strategies that help to reduce the feelings of being an impostor. Additionally, this study adds to the existing literature on impostor phenomenon and focuses upon assisting female educational leaders in the realization that it is possible to overcome feelings of being an impostor.

Recommendations

While this current mixed methods study offered many findings and advantages, there are recommendations that this researcher believes should be included due to their alignment with extant literature. The first recommendation is that awareness be made of the fact that impostor phenomenon does exist, and it affects many educational leaders. Based on both the quantitative and qualitative data, many participants feel alone in their struggle with IP, consequently bringing an awareness of the issue will help to normalize those feelings and perhaps allow leaders to speak more openly about their experiences. Educational leaders need to understand that IP is often a part of leadership and that most leaders do experience these feelings at some point. Therefore prior to the school year starting, as part of an administration meeting or as a part of the leadership development program, there should be a session provided by an outside expert that specifically addresses impostor phenomenon. Having an advance awareness that fraudulent feelings do occur, and providing administrators with strategies for dealing with the feelings of being an impostor will allow principals to acknowledge when they are suffering from IP. Thus, it will help to remove the fear that they are going to be judged harshly if they admit to experiencing such feelings. Furthermore, it enables the leaders to understand that they are not alone and provides them with strategies and suggestions for addressing IP when it occurs.

The second recommendation is for division offices to provide adequate support for all new administrators and for those who feel they would benefit from additional support. Many participants in this study identified a lack of support from central office as a key factor in their

experiences with IP. Division administrators must ensure that leaders are provided appropriate support, open dialogue and positive feedback, and professional development opportunities to improve in their leadership positions. Chakraverty (2020) recommended that professional development programs be specifically designed for those leaders experiencing impostor phenomenon. In order to be proactive, providing specific professional development that addresses fears and insecurities normalizes conversation around one's perceived failures or lack of belonging, and provides support (Chakraerty, 2020) to all first-year principals before the school year begins allowing them to successfully navigate their way through feelings of impostorism when they do arise. Moreover, this provision for support needs to be written into the job description for, and be clearly stated as the responsibility of, either an associate superintendent or the director of human resources. Having it explicitly addressed in the job description of one specific central office staff member will highlight the importance of providing support to principals and will ensure that this important task is not overlooked.

Additionally, participants in this study reflected that poor and lacking mentorship was a key challenge contributing to impostor phenomenon. Therefore, integrating an effective leadership development program that includes focussed mentorship is essential. It is important that school divisions implement specific, well-matched mentorship programs to ensure that educational leaders are adequately supported. Proper mentoring programs allow leaders to develop confidence, overcome challenges, and combat impostor phenomenon. For these well-matched mentorship programs to work effectively, the organization of the program must again be specific and targeted. Therefore, it is recommended that mentorship partners be assigned by the superintendent based upon characteristics that he/she feels will result in the best suited partnerships. It is also important that the superintendents check in with the mentor and mentee

regularly and be open to changes in partnerships if the pairing is not well-matched for any reason. By overseeing this program, the superintendent has a vested interest in seeing that it is successful and that the principals are supported.

As the school year quickly becomes busy and all of the day-to-day activities are deemed to be important and urgent, it is crucial that time be carved out to ensure that the above-mentioned supports are not lost. Therefore, providing substitute coverage to allow mentor partners time to get together is recommended. Moreover, time freed up by bringing in a sub should be used for the purpose of job shadowing, allowing the principals time to work alongside one other in their respective school buildings for the purpose of expanding their expertise.

Another recommendation is for first year principals to attend quarterly meetings with other first year principals in the school division, or within the zone for smaller school divisions if they do not feel they have enough new principals for this to be effective. The purpose of these meetings is to share experiences, successes, challenges, and any issues that have arisen since the previous meeting. It is important that these meetings be solely for new principals and that division leaders or more experienced principals not be present. A speaker or facilitator can be brought in from the outside, however the focus is to provide open conversation meetings. Participants in the Hutchins and Rainbolt study (2017) noted the advantage of being able to hold small group discussions. Additionally, the study found that providing techniques for implementing collegial support rather than competitiveness to be advantageous for participants. Therefore, allowing first year principals time to meet, examine current issues, and discuss parent and staff relations in a non-threatening environment, would be beneficial and provide support for principals who are experiencing impostor phenomenon.

Leadership development programs were found to be very effective in providing supports for educational leaders and for assuaging feelings of being an impostor. Therefore, it is recommended that divisions provide these programs and that all new principals be required to participate in them. Furthermore, a policy should be written to address the need for both the program and requiring principals to attend such a program. Moreover, the policy could be written to include the ongoing development of all principals, by requiring all principals to participate in the division's leadership development program during their first year as principal and every three to five years thereafter. Incorporating such a policy would allow principals to continue to learn and to be supported throughout their time as leaders. One participant in the qualitative phase of this study stated, "The longer that I have been in administration, the more I realize what I don't know." Providing this type of on-going development may address or prevent the issue of IP in more experienced administrators as well.

A further recommendation is to provide educational leaders with specific information and resources regarding the understanding of IP and coping mechanisms for dealing with feelings of being an impostor. School divisions can provide support in terms of professional development, mentorship, and leadership development programming; however, it is important to note that there are some aspects of IP that can only be addressed by the individual experiencing fraudulent feelings. The current study found some of these effective personal strategies to include family supports, journaling or self-reflection, spirituality, exercise, and positive self-talk. Affording leaders an understanding of the things they can do to ensure self-care may be a positive step toward assisting leaders with strategies that will benefit them in their efforts to assuage feelings of being an impostor. However, the responsibility for implementing the information falls solely on the leader. Leader recommendations include taking advantage of all opportunities offered by

their school divisions. These opportunities include mentorship, leadership development programs, and the implementation of personal strategies shared by experts brought in by central office staff members. Furthermore, for administrators to truly benefit from the opportunities provided at the district level, it is essential that they are honest both with their mentors and during their participation at the quarterly open communication meetings.

Additionally, once new administrators are made aware of the fact that they are not alone in their feelings of impostorism and are provided with strategies to overcome any barriers that they are facing, these leaders must make efforts to implement the information that they received. Recommendations, based upon the research, therefore calls for administrators to ensure that they have a support system or person in place. Many respondents identified the importance of having trusted family members, friends, and peers with whom to discuss their thoughts, experiences, and feelings. Similarly, intentional self-care is essential in assuaging feelings of inadequacy. Suggestions include journaling, gardening, positive self-talk, exercise, spirituality, and connecting with others. Reflecting on things that are going well and fueling oneself both physically and emotionally has a positive impact on the overall health of administrators. Perhaps most importantly, leaders need to understand that they are not alone, and that confidence is just practice. Experience assists in lessening IP, therefore if a leader is well supported and implements the recommendations provided to them, they are much more likely to overcome barriers associated with impostor phenomenon.

Lastly, additional research is required to understand the experiences of female educational leaders who battle impostor phenomenon and to determine contributing factors of IP. Furthermore, additional research is warranted to identify strategies that leaders can use to lessen experiences with IP and to determine how best to support those who experience impostor

phenomenon. Therefore, it is recommended that further studies be completed to address experiences of impostor phenomenon among educational leaders.

Limitations

The study of impostor phenomenon as it relates to educational leaders is a worthwhile and important study, however, it did not come without its challenges. One drawback was structuring the survey process so that it was available to as many educational administrators as possible. I had intended for the study to be open to every educational leader in the province of Alberta, however obtaining access to leaders proved to be difficult. I emailed the chief executive officer of the College of Alberta School Superintendents (CASS) to request a place on the agenda to speak with the members of CASS and provide time for the members to complete the survey. Additionally, I emailed the president of the Alberta Teachers' Associations' (ATA) Council for School Leaders (CSL) requesting that my survey be sent to all members of the CSL. The CSL president affirmed that the ATA was not willing to ask principals to participate in any studies as they felt leaders had enough on their plates coming out of the Covid years. I did not hear from the chief executive officer of CASS, so I sent another email requesting that surveys be sent to all superintendents. I provided a letter for all superintendents requesting that they complete the survey and then forward the email and link to the educational leaders in their divisions. Again, there was no reply. Therefore, I went to the Alberta School Boards Association website and located the email address for each superintendent in the province and I sent individual emails requesting the superintendents' participation in the survey. I then asked that they forward the survey to associate superintendents, principals, and assistant principals. The email also included the link to the secure Qualtrics survey. However, only 16 (26%) of the 61 school boards in Alberta agreed to participate in this study. Furthermore, of the 16 divisions that

did agree to participate in this study, many were small districts thus limiting the number of leaders that had access to the survey and study. Additionally, if each of the 16 superintendents was able to forward the survey to all eligible leaders in their divisions, the survey would have reached a total of 489 potential participants. Therefore, the 167 completed surveys equated to a 34% participation rate.

Another limitation of this study was that the measurement of variables depended on self-reported data, which may include a level of bias. It is possible that participants' responses were influenced by their mood and current circumstances at the time that the survey was completed. Furthermore, respondents were required to be currently employed as principals, vice (or assistant) principals, superintendents, or associate (deputy) superintendents. The demographic portion of the survey asked leaders to identify as one of those four position groups, however it is possible that the survey may have been completed by someone outside of one of these groupings and there would be no way for me to know.

A final limitation to this study was that participants who were chosen for the interview portion of the study volunteered to be a part of that process. Although the selection method was intended to be based on the participants' CIPS scores, not all participants identified that they were willing to participate in an interview. As a result, I was not able to interview the leaders with the highest CIPS scores in all cases. The current study brought with it a number of important findings; however, the subject of IP is vast and therefore all aspects of impostor phenomenon could not be viewed in its entirety. Consequently, further studies on the topic of IP among educational leaders will be required.

Future Research

      The results of this mixed-methods study raised numerous questions for me and revealed several opportunities for further research. First, my initial intent was to survey all educational leaders in the province of Alberta, however because this study took place on the heels of Covid, many divisions, as well as the College of Alberta School Superintendents and the Alberta Teachers' Associations' Council for School Leadership were not willing to participate. Although 167 completed surveys were respectable, the findings may not be generalizable. Therefore, conducting a more expansive study might broaden the understandings of impostor phenomenon among education leaders.

      Another area for possible future research lies beyond the borders of Alberta. The current study could be replicated using participants from another province in Canada, or perhaps utilizing data from participants in some of the states in the US. Expanding the study to other areas might provide additional research on the topic of impostor phenomenon among educational leaders, and it would be interesting to know if the results were comparable in different regions throughout Canada and North America.

      Additionally, since the need for mentorship and enhanced supports from school divisions was such a prominent theme in this study, future research could explore the effectiveness of implementing support initiatives. The study might consider comparing instances of impostor phenomenon among leaders in divisions that currently offer specific leadership development programs and mentoring with those who do not presently have those support systems in place. Those findings would help school divisions in the development and implementation of best practices for addressing impostor phenomenon among leaders. Another comparative study might involve surveying leaders at varying age levels within the K-12 educational system. It would be

interesting to know if principals of a K-6 school experience a different level of impostor phenomenon than those who lead schools at the 7-9 or 10-12 level.

Future studies should also consider focussing on male educational leaders as many of the men in this study indicated that they too experienced high levels of impostor phenomenon. Interviewing other genders might result in interesting findings and provide further strategies for overcoming barriers experienced as a result of fraudulent feelings. Moreover, the qualitative phase of the current study relied solely on interviews with female educational leaders. It is possible that holding focus groups to discuss impostor phenomenon may provide richer data as the participants could trigger thoughts and experiences in other members of the focus group with the stories that they have shared. Finally, intentionally interviewing participants with the lowest CIPS scores might result in different findings as well. Perhaps those with lower impostor phenomenon scores have stronger coping strategies and sharing those in a future study could result in valuable data for those looking for ways to manage their own IP. One thing is for certain, further research is required to understand the contributing factors of impostor phenomenon as well as the supports and strategies for overcoming the fraudulent feelings experienced by so many leaders.

Summary

Although public school education employs more women in administrative roles than ever before, women continue to be underrepresented in comparison to the number of women working in the field of education (ATA, 2020). Furthermore, research shows that females who do hold leadership positions experience many challenges in their roles. Many have little or no preparation for taking on these jobs, there is an absence of mentors for women, and many experience impostor phenomenon (Caselman et al., 2006; Dahlvig, 2013; Mendez-Morse, 2004).

Furthermore, the role of leader has changed immensely over the past two decades, as have leadership styles. Research has found that an authentic and transformative leadership style are now required to effectively lead school systems (Banjarnahor et al., 2018; Shields, 2018; Tschannen-Moran & Gareis, 2015). Additionally, effective school leaders must be relationship based, empathetic, and collaborative (Bickmore & Dowell, 2019; Holt et al., 2017; Sanford et al., 2019). Research also concludes that female administrators emphasize personal relationships, fairness, cooperation, and inclusivity in their leadership style (Smith and Hale, 2002). Consequently, women possess the skills to be strong educational leaders.

Despite an awareness that women are skilled and possess the abilities to lead, there continues to be a systemic issue in mobility (Barsh & Yee, 2012; Grogan & Shakeshaft, 2011; Rowe, 2017). There are a variety of factors that contribute to the underrepresentation of women in leadership positions, and one issue is impostor phenomenon. The current study examined contributing factors of IP and strategies to help assuage feelings of being a fraud with the intent to discover supports to benefit those who experience fraudulent feelings. This study found that many Alberta educational leaders do experience impostor phenomenon in their leadership roles.

Impostor phenomenon often results in issues of self-efficacy; hence this study was framed in Bandura's (1986) Social Cognitive Theory, Jackson's (2018) Leadership Impostor Phenomenon Theory, and Shield's (2011, 2018) Transformative Leadership Theory. Self-efficacy is an integral part of Bandura's Social Cognitive Theory (1986), and it is defined as the belief that one has in their own "capabilities to organize and execute the courses of action required to produce given attainment" (Bandura, 1997, p.3). Leadership Impostor Phenomenon (Jackson, 2018) demonstrates how leaders, as identified in this study, experience IP and how it is accompanied by a fear of failure and a lack of confidence. Transformative Leadership Theory

(Shields, 2018) calls for equity and is demonstrated in the current study by examining the state of leadership and leader efficacy that participants were striving to achieve. Therefore, results from this mixed-methods, explanatory sequential design (Creswell, 2014) align with the theoretical frameworks that the study was grounded in.

The findings of this study suggest that impostor phenomenon is prevalent among educational leaders in the province of Alberta and particularly among female leaders and leaders under the age of 45. Moreover, there are a variety of factors that contribute to the feelings of being a fraud. These factors included cognitive distortions such as self-imposed pressures and comparing self with others, adverse relationships including being undermined and a lack of support, and overwhelming expectations which includes a lack of job preparation and taking on a new role. Other contributing factors revealed in this study involved gender bias comprising of the glass ceiling effect and differing expectations for females and early life experiences including sibling comparisons and trauma.

Many of these factors lie outside the leader's locus of control; however, there were strategies uncovered for overcoming the barriers that exist as a result of experiences with impostor phenomenon. This study determined that relational influences such as family support, mentorship, and peer networks were beneficial for those who experience IP. Other supports that alleviated IP feelings included intentional self-care which involved close connections and journaling, professional supports including supportive colleagues and professional development, and the implementation of positive self-talk.

Ultimately, this research study addresses the importance of supporting educational leaders and recommends that school divisions provide leadership development programs that specifically address the existence of impostor phenomenon as well as strategies for overcoming

these fraudulent feelings. Furthermore, female educational leaders need to be provided with well matched mentors and professional development opportunities that will enhance their skills. The success of schools depends on strong leadership, thus the investment of building self-efficacy among educational leaders must not be overlooked.

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Appendix A
Institutional Review Board Approval

University of Portland

Memorandum

To: Sharon Fischer
From: Nick McRee, Ph.D.
Date: 8/26/2022
RE: IRB Notification of University of Portland Project #2022112

Dear Sharon Fischer:

On behalf of the University of Portland's federally registered Institutional Review Board (IRB00006544), a member of the Board has reviewed your research proposal, titled "Imposter Phenomenon Among Educational Leaders in Alberta." The IRB concludes that the project satisfies all IRB-related issues involving human subjects research under the "Exempt" classification. A printout of this memorandum should serve as written authorization from IRB to proceed with your research.

Projects classified as exempt based on Title 45, Part 46.104 of the Code of Federal Regulations do not require further review by University of Portland's Institutional Review Board unless you modify some portion of your project. If the study is modified, you must submit a Continued Review Form (located on the IRB website) for continuing review before continuing with your project.

Please note that you are required to abide by all requirements as outlined by the Institutional Review Board.

A copy of this memorandum, along with your Request for Review and its documentation, will be stored in the IRB Committee files for three years from the completion of your project, as mandated by federal law. If you have any questions, please contact me at irb@up.edu.

Respectfully,

Nick McRee, Ph.D.
Chair, Institutional Review Board
Professor of Sociology

Appendix B
Permission to use Clance Impostor Phenomenon Scale

Dear Sharon,

Thank you for your replies and consents.

***We have been experiencing some issues with email systems, as some persons have not been receiving my replies (or they possibly go to junk/spam email), so please first only reply back to me (Andra) at pudda67@hotmail.com to let me know you received this (do not click "reply all" or include Dr. Clance's email address (drpaulinerose@comcast.net) as she may not be replying to emails or forwards them to me and similar issues occur).** Thank you. We are working on the issues and appreciate your patience.*

Everything is fine with your methods. You have permission to use and make copies of the scale, *Clance Impostor Phenomenon Scale (CIPS)*, and I have attached it along with the scoring. *Please read the permission form, included with the scale, and reply with your consent.* Consent to permission to use the CIPS includes all the criteria in all our email replies *and* the permission form (not mutually exclusive).

I have further included an IP Reference List (not all inclusive) for your use and/or to make available for participants if they want to know more about the IP and you could refer them to Dr. Clance's website: <http://www.paulineroseclance.com>

We wish you well with your work and look forward to receiving a copy of your IP research!

Sincerely,

Andra

Andra Gailis, M.S., NCC
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Appendix C
Email to Superintendents Requesting Participation in the Survey

Dear (Superintendent's Name),

My name is Sharon Fischer, and I am a Doctoral Candidate at the University of Portland. I am currently **researching Imposter Phenomenon** and its **impact on school and school district leaders** under the direction of Dr. Rebecca Smith in the School of Education at the University of Portland. The purpose of my research study is to explore how prevalent impostor phenomenon is among education leaders in the province of Alberta, and to determine what can be done to **further support leaders**. My study is focused in Alberta as I am Albertan and have spent my entire career in Alberta. I am requesting your participation in this study as I believe that hearing firsthand from Superintendents, Associate Superintendents, Principals, and Assistant Principals will **provide valuable information that may help in recruiting and retaining leaders in our systems**.

Impostor phenomenon is the term used to "designate an internal experience of intellectual phoniness which appears to be particularly prevalent and intense among high achieving women" (Clance & Imes, 1978, p. 241). According to Mullangi and Jagsi (2019), impostor phenomenon is a psychological term that refers to a pattern of behaviour wherein people, even those with adequate external evidence of success, doubt their abilities and have a persistent fear of being exposed as a fraud.

If you choose to participate, your responses will be kept confidential. You and your school, or school district, will not be identified in the study, and only aggregate data will be presented. The survey **will take between 5 and 15 minutes to complete**. In addition to your survey participation, I will be looking for nine leaders to participate in one-on-one interviews. Participants may be offered the opportunity to volunteer for these interviews at the end of the survey, and if selected will be contacted by me directly.

If you are willing to participate in this survey, please click on the link below and respond to this brief survey prior to Friday, October 14, 2022 (this date was later extended). All survey **participants will be entered for one of three $100 Amazon gift cards**. More importantly, all participants will have the opportunity to participate in a study that may help to **enhance leadership training** in this all-important profession.

There are no known risks to participate in this study, and you may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal rights by participating in this research study.

As the leader of your school district, you hold the power to influence your school district and your leaders. It is because of this that I am reaching out to you personally. Thus, I am asking that you consider participating in this survey and/or forward this email to your Deputy or Associate Superintendents as well as to all of your principals and vice or assistant principals. A reminder that you are free to withdraw from the survey at any time, and all findings of this study, or my complete dissertation, will be freely available to any survey participant upon request. This research study has been reviewed and approved in accordance with the University of Portland's Institutional Review Board.

To participate in this doctoral study, please click on the Survey Link

I sincerely thank you for considering this request.

Sharon Fischer

Appendix D
Clance Impostor Phenomenon Scale
Clance, P.R. (1985). *The impostor phenomenon. Overcoming the fear that haunts your success,*
Atlanta: Peachtree Publishers.

Clance IP Scale

1. I have often succeeded on a test or task even though I was afraid that I would not do well before I undertook the task.

2. I can give the impression that I'm more competent than I really am.

3. I avoid evaluations if possible and have a dread of others evaluating me.

4. When people praise me for something I've accomplished, I'm afraid I won't be able to live up to their expectations of me in the future.

5. I sometimes think I obtained my present position or gained my present success because I happened to be in the right place at the right time or knew the right people.

6. I'm afraid people important to me may find out that I'm not as capable as they think I am.

7. I tend to remember the incidents in which I have not done my best more than those times I have done my best.

8. I rarely do a project or task as well as I'd like to do it.

9. Sometimes I feel or believe that my success in my life or in my job has been the result of some kind of error.

10. It's hard for me to accept compliments or praise about my intelligence or accomplishments.

11. At times, I feel my success has been due to some kind of luck.

12. I'm disappointed at times in my present accomplishments and think I should have accomplished much more.

13. Sometimes I'm afraid others will discover how much knowledge or ability I really lack.

14. I'm often afraid that I may fail at a new assignment or undertaking even though I generally do well at what I attempt.

15. When I've succeeded at something and received recognition for my accomplishments, I have doubts that I can keep repeating that success.

16. If I receive a great deal of praise and recognition for something I've accomplished, I tend to discount the importance of what I've done.

17. I often compare my ability to those around me and think they may be more intelligent than I am.

18. I often worry about not succeeding with a project or examination, even though others around me have considerable confidence that I will do well.

19. If I'm going to receive a promotion or gain recognition of some kind, I hesitate to tell others until it is an accomplished fact.

20. I feel bad and discouraged if I'm not "the best" or at least "very special" in situations that involve achievement.

Scoring

When measured on a 5-point Likert scale (1 = not true at all; 5 = very true).

The Impostor Test was developed to help individuals determine whether or not they have IP characteristics and, if so, to what extent they are suffering.

After taking the Impostor Test, add together the numbers of the responses to each statement. If the total score is 40 or less, the respondent has few Impostor characteristics; if the score is between 41 and 60, the respondent has moderate IP experiences; a score between 61 and 80 means the respondent frequently has Impostor feelings; and a score higher than 80 means the respondent often has intense IP experiences. The higher the score, the more frequently and seriously the Impostor Phenomenon interferes in a person's life.

Appendix E
Questionnaire Questions

PART 1: Open-ended Questions

1. As a child, how would you describe your academic performance and/or your ability to socialize in settings such as school in comparison to your siblings?

2. As a child, how would you describe yourself in social settings such as school and/or your academic performance?

3. Have you ever experienced the feeling of being a fraud in your leadership position? For example, you sometimes believe that you are not worthy of the position that you hold?

4. If yes to the above question, what factors have contributed to these feelings and how have they been manifested in your work and personal life?

5. If yes to the above question, what supports have helped you to overcome the barriers of experiencing feelings of being a fraud?

6. Do you currently have, or have you had, any mentorship in your professional career?

7. If yes to the above question, has your mentor helped you to overcome feelings of being an imposter, and if so, please describe how?

8. If no to the above question, do you think that a mentor would be helpful in overcoming feelings of being an imposter, and if so, please describe how?

PART 2: Demographics

1. What is your current position?

> a. Principal
>
> b. Vice or Assistant Principal
>
> c. Superintendent
>
> d. Deputy or Associate Superintendent

2. What is your gender

      a. Male

      b. Female

      c. Prefer not to answer

3. What is the highest level of post-secondary education you have completed?

      a. Undergraduate Degree

      b. Master's Degree

      c. Doctoral Degree

4. How many years, including this year, have you been in education?

      a. 1 - 5

      b. 6 - 15

      c. 16 - 25

      d. More than 25 years

5. How many years, including this year, have you been an educational leader?

      a. 1 - 5

      b. 6 - 15

      c. 16 - 25

      d. More than 25 years

6. How many years have you been a leader in your current position?

      a. 1 - 3

      b. 4 - 6

      c. 7 - 9

      d. 10 or more

7. Where is your school located?

     a. Within a rural school authority

     b. Within an urban school authority

8. What is your school's (or district's) current population?

     a. Under 100 students/staff members

     b. 101-250 students/staff members

     c. 251-500 students/staff members

     d. 501-1000 students/staff members

     e. More than 1000 students/staff members

PART 3: Consent for Follow-up Interview

Would you be willing to participate in a 45-minute interview? Yes or No?

If so, please include your name and email address.

Appendix F
Email to Potential Interviewees Requesting Participation

Good afternoon, (Name)

I would like to take this opportunity to sincerely thank you for taking the time to complete my survey and for forwarding the survey to other administrators in your district (or school for principal emails). I received 167 completed surveys, and this will assist my study immensely. I would also like to thank you for expressing a willingness to participate in the one-on-one interview phase of my study - thus the purpose of this email.

I am ready to begin the interview process of my study, and I would love to be able to connect with you. I can arrange my schedule around you and what works best for you. If a zoom meeting works best for you, I am happy to send you a zoom link at your convenience. If you would prefer to meet in person, I will make arrangements to travel to you.

The interviews are estimated to take approximately 45 minutes, and the format will be semi-structured, as I do not want us to feel tied to a specific set of questions. However, I do have questions prepared and I am able to send those to you in advance, if you feel that would be helpful.

If you are willing to participate in this next step of this study, please let me know what day and time works best for you. As well, please let me know if you would prefer an in person or a zoom meeting. Once I hear back from you, I will check my commitments and we can finalize arrangements for the interview.

I sincerely thank you again and look forward to hearing back from you.

Sharon Fischer

Appendix G
Participant Consent Form – Virtual Interview (Qualitative Phase)

Research Topic: A Contemporary Analysis of Impostor Phenomenon Among Female Education Leaders in the Province of Alberta

Researcher: Sharon Fischer

You are being asked to participate in a research study conducted by Sharon Fischer, a doctoral candidate from the School of Education at the University of Portland. The purpose of this mixed methods research study is to explore how prevalent impostor phenomenon is among female education leaders in the province of Alberta, and to determine what can be done to support these leaders.

By participating in this phase of the study, I agree to participate in a one-on-one interview. The interview will last approximately 45 minutes and will be conducted electronically using Zoom or Google Meets. Individual interviews will take place between November, 2022 and January, 2023. Questions for the interview will be semi-structured and are designed to understand the participants' experiences with impostor phenomenon as well as to learn about contributing factors and supports that have helped in overcoming barriers associated with impostor phenomenon.

I understand that:

a) There are minimal risks associated with participating in this research and that the researcher will protect my confidentiality by keeping the identifying codes and research materials in a password-protected digital file that is available only to the researcher. Furthermore, the results of this study will be used for scholarly purposes only.

b) I understand that the interview will be recorded digitally (both video and audio) and that the recordings will be available only to the researcher. The recordings will be used to capture the interview dialogue and to ensure the accuracy of the information collected during the interview. A text transcript of the audio will be generated using otter.ai and will be checked by the researcher for accuracy. All information will be kept private, and my confidentiality will be maintained. Upon completion of the study all recordings and transcripts will be destroyed.

c) The possible benefit of this study is that my input may contribute to the research regarding contributing factors contributing of impostor phenomenon as well as the strategies used by female education leaders to assuage the feelings of being an impostor. The findings, or complete dissertation, will be available to all interview participants at the conclusion of the study, and I understand that I will not be compensated for my participation.

d) If you have any questions or concerns about the research, please feel free to contact Sharon Fischer (researcher) at shfischer@clearview.ab.ca or by phone at 403-741-6615.

e) My participation in this research study is voluntary, and I can withdraw at any time. I can also decide not to answer particular questions during the interview if I so choose. I understand that I may refuse to participate or may withdraw from this study at any time without any negative consequences.

CONSENT:

Consent will be requested verbally at the commencement of the interview, and I am free to waive my consent at anytime during the study.