Women, Mining and Gender: Experiences in Greater Sudbury

by
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A thesis submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy (PhD) in Human Studies and Interdisciplinarity

The Office of Graduate Studies
Laurentian University
Sudbury, Ontario

THESIS DEFENCE COMMITTEE/COMITÉ DE SOUTENANCE DE THÈSE
Laurentian Université/Université Laurentienne
Office of Graduate Studies/Bureau des études supérieures

Title of Thesis Titre de la thèse	Women, Mining and Gender: Experiences in Greater Sudbury
Name of Candidate Nom du candidat	de Blois, Sarah
Degree Diplôme	Doctor of Philosophy
Department/Program Département/Programme	Human Studies and Interdisciplinarity
Date of Defence Date de la soutenance	december 09, 2022

APPROVED/APPROUVÉ

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Abstract

My interdisciplinary research explores the gendered work experiences of women in mining. Statistics Canada confirms women's unequal participation in the industry, and the Mining Industry Human Resources Council reports that only about fifteen percent of the Canadian mining labour force are women. The literature attests that women often face challenges of acceptance in male-dominated, blue-collar industries. They disproportionately experience discrimination and harassment in industries in which they are the minority, yet the literature does not fully address women's work experiences in this industry and it is important to do so given mining's important place in Canada's economy, both nationally and regionally. My study explores narratives about women's experiences in this male workplace culture. In 2020, I interviewed 35 people who work in the mining industry in the city of Greater Sudbury, Ontario to ask women (N=24) about their direct work experiences and workplace interactions, and men (N=11) about their work experiences and workplace interactions with women. I used methods of analysis that "bricolaged" approaches of thematic and critical discourse analysis. My findings support the need for further initiatives toward equity, diversity, and inclusion, not only in mining, but in other gender-imbalanced industries. Women described how they experienced resistance to the achievement of acceptance and respect at work. Many experienced harassment and discrimination, and spoke about the masculine organizational culture present in their work environments. Nevertheless, they also described job satisfaction in the work that they perform, and described bonds of kinship with peers. However, these bonds were usually described in gendered terms. Women revealed that the camaraderie they seek most to achieve is to be "one of the boys" or "one of the guys." At the same time, they spoke about bonds of "sisterhood" in mining, and how the mining industry offers a space where they celebrate alternate expressions of femininity, such as being a "tomboy." Men confirmed that resistance toward women in mining

exists, and that notions of gender essentialism continue to impact perceptions about traits linked to men and women. In sum, my study reveals that the masculine organizational culture of the mining industry is complex. The purpose of my interdisciplinary, community-based study was to understand this complexity and offer solutions for creating more equitable, diverse and inclusive work cultures within the industry for all workers.

Keywords

Canadian mining industry, mining, Greater Sudbury, women, gender, occupational segregation, work, blue-collar, equity, diversity, inclusion, othering, masculine organizational culture, sisterhood, camaraderie, critical discourse analysis, thematic analysis, interdisciplinarity

Acknowledgments

What a ride it's been, this PhD journey! I have learned so much about myself - my PhD journey has opened my eyes more fully to the world, has fortified my passion for research, has made me more inquisitive, and has also taught me compassion and empathy. This journey has taught me kindness… not only to remember to be kind toward others, but also toward myself.

I've learned that life, including this PhD journey, is not without its challenges, but that along every hurdle, I was able to gain more confidence in my internal strength - my internal "toughness." I've learned resilience, and I've learned about experiences of resilience. To the women in my study, I salute you. To me, you are courageous. You are powerful. You are brave. You are women who inspire. You are women who conquer. My first thank you is to each and every participant who interviewed for my study. Thank you for trusting me with your experiences. I hope that I have done you justice.

I have many others to thank as well for supporting me throughout my doctoral journey. So many of you have encouraged me along the way. So many of you have offered kind smiles, warm hugs and words of wisdom - words of strength. I appreciate all those who have stood beside me as I learned and as I grew.

I am consistently inspired by the many graduate students I have had the pleasure of meeting along my PhD journey. There are countless of you I could mention, and please know that each of you have helped guide me. Especially in this last year, I have been thankful for you, my friend and study buddy, Stacy. So many Saturday and Sunday mornings, we connected to write, we connected to help inspire each other, to motivate one another to persevere. Thank you. A special mention as well, to Amanda, who has been pivotal to my success, always encouraging

me and offering me a new perspective. Someday soon, I'll look forward to celebrating the culmination of your own doctoral degree.

I'm also thankful for the powerful support I received from leaders of Graduate Studies at Laurentian University. I had never felt more encouraged to apply for scholarships such as the Ontario Graduate Scholarship, thanks to Dr. David Lesbarreres. The conversations we had about my ability to work full-time (and then part-time while on scholarship) at Laurentian, and simultaneously accomplish my PhD, you may not have realized were so positively impactful for me. You helped me learn to make an effort toward a healthy work/life balance. I appreciate you. I equally thank Dr. Tammy Eger who is precisely the type of fierce woman leader I aspire to be. You make such a difference in the graduate student experience. Your positivity and uplifting motivation have inspired me.

Thank you as well to the Ontario Graduate Scholarship funding body for having believed in my research and my efforts as an academic. The four years of funding I obtained from OGS during my Master's and PhD journeys enabled me to truly give the attention, energy, and effort that my research merited. I am ever grateful.

I also thank the office of Graduate Studies, including Stacy, Ken, and Dayna. You consistently make graduate students feel welcomed and supported. To the Human Studies department, thank you for your guidance. Special thanks to Dr. Simon Laflamme, Dr. Ali Reguigui, and Eileen Connolly.

To the Graduate Students' Association - thank you for your constant advocacy. Thank you as well to the many kind librarians I encountered as a graduate student.

To so many amazing friends and colleagues whom I have been humbled to know and meet, you are incredible! To the many students, faculty, and staff at Laurentian University who I have worked with collaboratively, I appreciate you! You are the fabric of our institution, and you

contribute to making Laurentian a great place to study, learn, and inspire. Thank you to all those who continue to believe in Laurentian University. It goes without saying that we've gone through some trying times, especially these last couple of years, but the sense of community that I have felt has remained at LU, continues to make me proud. Special thanks to friends in Liaison Services, Communications, and Digital Strategy.

To professors at undergraduate and graduate levels, you are the reason behind my success. Most especially, I thank my faculty supervisor, mentor, and I feel confident and humbled to say, friend, Dr. Linda Ambrose. Words are difficult to string along to emphasize how much I have and continue to appreciate you. Your wisdom, kindness, and brilliant mind have been powerful to learn from. I thank you for your patience, your guidance, and your unwavering support of my efforts. You make me feel empowered and have inspired me to continuously reach for my goals. I am proud to know you.

Infinite thanks also to my committee members, Dr. Sara MacDonald and Dr. Parveen Nangia. Both of you have been such positive sources of encouragement. Thank you for your consistent advocacy for my research and for your contributions. Thank you also to reviewers Dr. Jennifer Johnson and Dr. Meg Luxton. I thank you sincerely for your knowledge and insight. Thank you as well to Dr. Victoria Kannen who chaired my PhD defense. You made me feel comfortable during this experience.

To my family, I share this accomplishment with you! My in-laws, Carol, Albert, Byron, Mel, Wade, and Jake have been a part of my PhD journey from start to end. Thank you for being supportive. To my parents, grandmothers, Amy, Mitch, and Jaxon, I love you and couldn't ask for a better family! I'm so blessed to have you, and I appreciate you and all of my extended family members so much.

To my Hungarian road family - I love each of you. Thanks for listening to my many rants about my PhD and its accomplishment. You've been a source of support, probably more than you know.

And to my husband, Scott, the man of my dreams who grew up next door. We did this together! What a team! The choice to accomplish my PhD, we made together, and I am ever grateful for your constant and loving support. This journey has only made us stronger. You're my soulmate. My love love. My bean. I must say that I have also appreciated our fur babies, Nala and Wesley. Your cuddles have been instrumental to the maintenance of my positivity.

And finally, my thanks and love to my future baby. Mommy and Daddy didn't expect that you'd be conceived a short couple of weeks after I defended my PhD. To our surprise, we couldn't be more excited to welcome you into this world. You and I have carried on through the final hurdles of this PhD, and I couldn't be prouder of us! Thank you for instilling in me the excitement to become a mother, an experience that has made me believe more fully in the power of women.

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Chapter 1: Introduction

In March 2019, when I began to develop this study, the Greater Sudbury Chamber of Commerce held its annual International Women's Day. At this event, Samantha Espley, who at the time was the Director of Mining Technology and Innovation for Vale's base operations, was invited to provide a keynote speech. Espley explained that though on average, women in 2019 account for about 47 percent of the Canadian nation's workforce, in the sphere of mining, women remain "a big untapped resource" (Carmichael, 2019). In a world that seems to be moving toward greater equality, diversity, and inclusion, the hypermasculine mining industry seems to be moving slower than others.

Espley was right: women in mining are the minority. This is true in Canada, and in other nations. In June 2022, the Mining Industry Human Resources Council, who provide monthly statistics about the composition of the Canadian mining labour force based on data from Statistics Canada, provided that Canadian women in mining account for only about 15.5 percent of workers. This figure was 13.2 percent in June 2021, and 14.7 percent in June 2020 (MIHRC, 2022). It has changed very little in the last decade. For instance, the 2011 and 2016 census reflected similar gendered imbalances in the composition of workers employed in the industry (Statistics Canada, 2020). Though organizations such as Women in Mining (WIM) Canada and International Women in Mining (WIM) strive to increase awareness about the importance of diversity in mining, including women's participation, and it appears as though many mining companies are taking a more proactive stance toward diversity in their hiring efforts, these figures reflect stunted efforts to meet this diversity imperative. Why is this the case? That is the focus of my study.

According to WIM Canada (2016), an organization keenly invested in women's participation in mining, active and increased inclusion of women in mining will enable the industry to:

> Create a healthier resource base of skills and leadership.
>
> Surpass our current levels of performance in safety, health and wellness.
>
> Grow public and stakeholder confidence in tomorrow's mining industry (p. 5).

These objectives have potential to positively transform the industry, and better represent Canadian workers' talents in mining. Notably, not only is improved gender parity needed in the industry to work toward these efforts, but to retain women in the industry, "inward-focused action that changes workplace cultures" (WIM Canada, 2016, p. 6) are needed. While there may be improved advocacy for women and girls to enter non-traditional industries such as mining, mining workplaces foster valuation of masculinity (Laplonge, 2014; Tallichet, 1995) and by extension, a masculine organizational culture that can be exclusionary toward women (Lahiri-Dutt, 2012; Mercier & Gier, 2007; Somerville & Abrahamsson, 2003).

My research focuses on understanding the gendered organizational culture of mining by studying the work experiences of women in mining. By speaking with women in the industry about their direct work experiences and interactions, and men about their work experiences and interactions in the industry with women, the purpose of my study is to understand what it's like to be a woman in mining. Mining contributes not only to the overall Canadian economy, but is also important at local community levels. Honing a particular interest in my community of Greater Sudbury, Ontario, a city historically referred to as a "man's town" (Keck & Powell, 2006) given its establishment in the masculine milieu of mining, my research pivots specifically on understanding the work experiences of women in mining employed in this city. To Halseth et al., (2016), there is significant value in community-based research, because the involvement of

people directly affected by a study produces greater findings and community-based research also ensures that findings actually contribute to community members. Knowing that women in the Canadian mining industry are so few and far between, and that previous studies confirm resistance toward women workers in mining and in other male-dominated, blue-collar industries (Bagilhole, 2002; Benya, 2016; Botha, 2016; Braundy, 2011; Burczycka, 2021; Greene, 2006; John, 1984; Keck & Powell, 1996, 2006; Laplonge, 2014; Luxton & Corman, 2001; Mansfield et al., 1991; Meyer, 2016; Milkman, 1997, 2016; Mulroy, 2008, 2019; O'Farrell, 1999; Palmer & Lee, 1990; Papp, 2006; Powell & Keck, 1995; Reskin & Roos, 1990; Schroeder, 1990; Tallichet, 1995; Thomas, 1989; Tripp-Knowles, 1999), what is it like for women to work within these hyper-masculine workplace environments? How are they treated and communicated with by their peers? What are some of the challenges that women in mining encounter? What are some of the triumphs? These questions are just some of those that influenced my study.

In the chapters that follow, I strive to provide a space for the marginalized voices of women in the city of Greater Sudbury's mining industry to be heard. As the next chapter's literature review explains, not since the 1970s has scholarly attention focused on this topic (Keck & Powell, 1995, 1996). Though I was inspired to read about the work experiences of Cathy Mulroy (2019) in her autobiographical account about being one of the first women hired to work underground at Sudbury's Inco, Mulroy and I agree that more current voices of women in Sudbury mining need to be heard. Deep-rooted gender issues in mining merit attention, and in conducting research with feminist principles in mind, it is my goal to contribute to the industry and to my community in a positive way.

Especially because my project was guided by interdisciplinary principles, I recognize plurality and heterogeneity of the human experience. Keeping this in mind, my study draws attention to the diverse and multifaceted experiences of women in mining. It sheds light on

imbalances and inequalities still present in Canada's mining industry, but also considers the many satisfying work experiences women report in mining. My thesis reveals that the culture of the mining industry is complex, and that especially for women, the industry can be unwelcoming. Men continue to represent the quintessential worker in mining, especially in underground, blue-collar settings. Women are, as a whole, less valued in the industry than men, and they perceive that their efforts to prove themselves and experience a sense of belonging is more difficult for them than for male counterparts.

The literature review in *Chapter 2* begins with a discussion of interdisciplinarity, and provides justification for my study's interdisciplinary approach. This chapter then contextualizes the city of Greater Sudbury as a place that a hypermasculine milieu of mining was established. This chapter highlights the characteristics conventionally associated with the mining industry, including that although not all jobs found in the industry are labourers underground, the mining industry *is* usually considered a blue-collar industry (Lucas, 2011; Lucas & Buzzanell, 2004). A review of the literature about blue-collar work environments including mining, follows, as well as a review of women's minority presence within the persistent masculine organizational culture of mining. I consider concepts such as the doctrine of separate work spheres, the male breadwinner[1] social norm, and women's broad historical subordination in the labour force generally and in mining more specifically. Finally, this chapter outlines my study's research questions.

Chapter 3 explains the methods I adopted for this research. Some key terms are defined, and I situate myself in my study by explaining how my identity impacts this project. I clarify

[1] The term "breadwinner" assumes a Euro-North American context and is acknowledged as contested. "The family's primary income" may according to Janssens (1997) be substituted as a more inclusive term to refer to the generation of income needed to sustain a family.

reasons that influenced my undertaking of this study, and why I perceive my study to be valuable.

Chapters *4, 5* and *6* present the results of my study, based on interviews with women. Collectively, these chapters focus on better understanding the work experiences and interactions of women in mining. Results are based on women's perceptions about their workplace culture and climate, and on how they perceive that colleagues treat and communicate with them at work.

In *Chapter 4: Proving themselves in a man's world – Challenging resistance to acceptance and respect,* women report encountering resistance in the industry, especially from men, which affects their sense of belonging as well as efforts to prove themselves as equally valued as men. Women in mining often perceive themselves underestimated and undermined in their jobs, and they encounter barriers to equal opportunities. Persistent gendered occupational segregation in the industry contributes to this.

Chapter 5: The most troublesome experiences of women in mining – The gender pay gap and harassment, demonstrates that the majority of women in mining have experienced harassment and discrimination in their jobs. This is especially true for women in the early stages of their careers or upon moving to a new job site where they encounter new peers. Experiential examples of harassment are considered in this chapter, as are impacts that these experiences have affecting women's self-worth and interest to remain employed in the industry. Gender is a contributing factor to the experience of workplace harassment, especially in male-dominated industries like mining. The hesitancy of women to report instances of harassment is also examined.

In *Chapter 6: The most rewarding experiences of women in mining – Job satisfaction and camaraderie,* some of the more satisfying experiences of women in mining are considered. This chapter makes it clear that the experiences of women in mining are complex, and that the

masculine organizational culture of the industry contributes to this complexity. For many women in mining, job satisfaction is high, as are experiences of camaraderie with peers. Nevertheless, bonds of camaraderie are typically described by men and women employed in mining, in masculine terms of reference. For example, becoming "one of the boys" or "one of the guys" represents the ideal sense of belonging in mining which reveals the masculine organizational culture still at large in the industry. While this may be true, many women in mining enjoy the nature of the work that they perform, and some also spoke about a "sisterhood" in mining with women peers. Even though the culture of resistance toward women in mining is challenging for them to overcome, mining offers work environments for women where they celebrate alternate expressions of femininity, such as being a "tomboy."

Chapter 7: Men's perceptions about women in mining takes into consideration how men in mining see female peers, and how they perceive they treat and communicate with these women. This chapter argues that especially in blue-collar, underground settings, resistance toward women in the industry is high. Men in mining frequently recognize that it would be challenging to be a woman in mining, and that they perceive women who do work in mining are "tough." This toughness, however, is gendered, where being tough as a man in mining represents being able to perform the most physically demanding and valued jobs in the industry, and being tough as a woman in mining represents women's mental and emotional toughness to persist in an industry that can be unwelcoming. Age is a factor that impacts how men perceive, communicate with, and treat women peers. I also explain why I chose to include the perspectives of men when seeking to better understand the work experiences of women in the industry.

Finally, *Chapter 8: Summary and future directions* summarizes my findings, and offers future directions of research on this topic. My study has an impact for the city of Greater Sudbury's mining community, and other mining communities and workplaces that remain gender

imbalanced. Women in mining challenge the organizational culture of mining and encounter resistance in their work environments. While progress toward enhanced equity, diversity, and inclusion has been made, much remains to be accomplished. My study helps to bring awareness to these necessary improvements to ensure that all workers feel safe and welcome within their places of employment. Women's potential to contribute to the success of the industry needs to be respected, and my study draws attention to this. My study may catalyze improved policies and training practices in mining for all workers to build a more inclusive industry and improve confidence in the future of the Canadian mining industry.

Chapter 2: Literature review

This chapter has two main components: a discussion of interdisciplinarity that justifies my study's interdisciplinary approach, and a review of literature on the topic of the hypermasculine blue-collar mining industry. The industry's persistent masculine organizational culture is examined, as is women's minority status within this culture. This chapter also takes up the concept of the doctrine of separate work spheres that contributes to the male breadwinner social norm and gendered occupational segregation. Women's broad subordination in the labour force, especially in male-dominated, blue-collar workplaces such as mining is considered. The research questions of my study are also outlined, and the integrated disciplines that guided my study are described. I discovered that the literature does not fully address women's work experiences in this industry, especially given mining's important place in Canada's economy, both nationally and regionally. This gap in the literature justifies my interdisciplinary study, and points to the need for further initiatives toward equity, diversity, and inclusion, not only in mining, but in other gender-imbalanced industries.

Part 1) Justifying my study's interdisciplinary approach

Disciplinarity and the principle of historical specificity

Interdisciplinarity cannot be fully understood without first considering the formation of disciplines (Chettiparamb, 2007). In striving to understand any particular research question, I believe that an awareness of the topic's history is important. Morin (1999) adopts this standard in his work, and argues that because there is so much scattered knowledge and compartmentalization in society, it is important to aspire toward complex thought by keeping in mind the essential contributions of history. This aligns with Marx's "principle of historical

specificity" (Milkman, 1997, p. 149); a principle that reminds us to acknowledge social, historical, and material contexts of a given concept in order to better understand its full depth and scope. In their respective work, theorists including Dorothy Smith (1987), Ian Burkitt (1991), and Joanne Naiman (2004), also maintain the significance of framing any inquiry in historical perspective. Speaking to the concept of gender specifically, Rose (2010) asserts that gender is socially constructed and historically produced. Social constructions inform us as to what it means to be masculine and what it means to be feminine. Because these definitions transform in place and time, gender is inextricably bound in history (Rose, 2010).

According to Klein (2011), disciplines in modern universities were created in the late 19th century and early 20th century. At this time, Repko (2011) explains that traditional disciplines generally fell into four categories:

1) The *natural sciences* (biology or "life sciences," chemistry, earth sciences, mathematics, and physics)
2) The *social sciences* (anthropology, economics, political science, psychology, and sociology)
3) The *humanities* (art and art history, history, literature, music, philosophy, and religious studies)
4) The *applied professions* (business and its subfields, communication and its subfields, criminal justice, education, engineering and its various subfields, law, social work, nursing, and medicine) (p. 4).

Before the growth of interdisciplinarity, it was rare that these traditional disciplinary fields collaborated in order to construct complex research questions, and address complex problems. Rather, each discipline generally followed particular means of establishing validity, using their own epistemologies, ontologies, and research tools to answer research questions that found focus

in their disciplinary boundaries (Chandler, 2009). To Moran (2010), disciplinary research projects should be critiqued for their confining structures that do not enable complex thought. Augsbury and Henry (2009) concur, and associate problems with the fragmentation of knowledge that monodisciplinary pursuits have the tendency to augment. This fragmentation ascribes to each discipline a particular ideology that yields specific, limited cultural productions (McDonell, 2000). To Newell (2008), in order to solve complex problems and be able to draw broad cultural conclusions related to any given subject matter, there is a need to take into consideration the perspectives of multiple disciplinary fields. Each discipline offers unique strengths and capabilities, and there is value in integrating the benefits of varied perspectives.

Defining disciplinarity

Disciplines are defined as "thought domains – quasi-stable, partially integrated, semi-autonomous intellectual conveniences – consisting of problems, theories, and methods of investigation" (Aram, 2004, p. 380). There are typical methods, procedures, and styles of thinking espoused to each discipline, and each customarily finds preference in their own epistemologies and ontologies (Chandler, 2009; Salter & Hearn, 1996). Rules and regulations exist for each discipline; regulations that experts in their respective disciplinary fields are expected to follow (Weingart & Stehr, 2000). In adhering to such precepts, Henry (2005) argues that disciplines are institutionally produced. When researchers choose to adopt the rigidity of disciplinary practices in their work, the boundaries that distinguish one discipline from another are both strengthened and maintained.

To Kane (2016), disciplines control the intellectual landscape, where disciplinary boundaries keep distinct "the origins not only of ideas and materials, but of work practices, lines of authentication and accountability" (Strathern, 2004, p. 45). Monodisciplinary knowledge is

understood to have come from an institutional need for separation and classification of concepts (Chettiparamb, 2007). The formation of disciplines finds fields of knowledge in competition, where the goal has traditionally been to claim superiority over others (Moran, 2010). Though the presence of competition in academic institutions may enhance the vigorous proponents of research, disciplinary competition can alternatively be counterproductive to the advancement of knowledge, especially that which seeks to address complex problems. In this vein, Bergvall and Sotirin (2008) argue that disciplinarity maintains a keen interest in the systematization of knowledge production. This systematization of knowledge is a primary driving factor behind the creation of disciplinary structures in modern universities; limitational structures that Weingart (2010) states act as "function[s] of mediating and directing social change" (p. 4).

While organizational structure is certainly a defining characteristic of disciplines, Jacobs and Frickel (2009) explain that disciplines endure for both organizational as well as intellectual reasons. Though a great deal of separation between various thought domains continues to prevail in modern universities and other educational institutions, one of the major motivations propelling interdisciplinarity is "the idea that individual disciplines focus on particular phenomena and ignore myriad others" (Piso et al., 2016, p. 645). Disciplines preserve an interest in maintaining the status quo (Turner, 2000). In its attempt to move past these boundaries, interdisciplinarity is often perceived as a viable and valuable means of addressing many of the limitations imposed by monodisciplinary structures.

Defining interdisciplinarity

In simplest terms, interdisciplinarity is defined as the collaboration and communication between and across academic disciplines (Jacobs & Frickel 2009). In blending theoretical frameworks, research methods, and ontologies, interdisciplinarity promotes research projects that

intersect the strengths of a variety of disciplines that best suit a research project's needs. Scholars who adopt interdisciplinarity as a framework to ground their research find many associated advantages. To Klein (1990), interdisciplinarity enables the solving of complex problems and research questions that cannot be tackled using single methods or approaches. Going further, Mansilla (2010) explains that interdisciplinarity is:

> a process by which individuals and groups integrate insights and modes of thinking from two or more disciplines or established fields, to advance their fundamental or practical understanding of a subject that stands beyond the scope of a single discipline (p. 289).

This definition aligns with Szostak's (2013) contention that interdisciplinarity is about "the integration of insights from multiple disciplines in order to better understand some complex topic that is addressed from different perspectives by different disciplines" (p. 44). Integration is a central value associated with interdisciplinarity, differentiating it not only from monodisciplinarity, but also from multidisciplinary research approaches that use information and knowledge from two or more disciplines without integrating this knowledge holistically (Aboelela et al., 2007; Repko et al., 2014).

Without the integration of multiple perspectives or expertise, research projects cannot address the complexities of "grand challenges" which are classified as social problems that can only be addressed through the application of interdisciplinarity (O'Rourke et al., 2016). To Klein (2005), it is the integration of disciplinary voices, tools, methods and theories that enables interdisciplinary research pursuits to meet "grand challenges" posed by modern society. Argued by Klein (2012) is that "integration is widely regarded as the primary methodology of interdisciplinarity" (p. 283). Other scholars such as Newell (2013) and Repko (2011) concur, contending that integration is of primary concern when leveraging interdisciplinarity to conduct research.

In addition to being integrative, interdisciplinary research is also a complex process; a process keenly invested in "problem-centered activity" (Salter & Hearn, 1996, p. 8). Indeed, one of the greatest values of interdisciplinary research is its ability to answer real world problems (Repko et al., 2014). Interdisciplinarity avoids the reductionist explanations of monodisciplinary research (Aboelela et al., 2007). Rather, interdisciplinarity supports ""plurality" and "heterogeneity" [as opposed to] "unity" and "universality"" (Klein, 2005, p. 55). Accepting this, it may be argued that interdisciplinarity supports more inclusive and integrative research practice (Weiss & Wodak, 2003), enabling a holistic perspective to emerge (Newell, 2013). This may support the eradication of traditional gaps in research that stem from monodisciplinarity in research practice. This tenet is especially important to my study that provides space for the diverse voices of women in mining to speak about their work experiences.

My interdisciplinary study's integrated disciplines and research questions

When developing my interdisciplinary study, I loosely followed Repko's (2011) first three steps to beginning an interdisciplinary research project:

1. define the problem or state the focus question,
2. justify using an interdisciplinary approach,
3. identify relevant disciplines (p. 74).

The research questions of my study, which take a bottom-up approach to addressing the social problem of longstanding and ongoing gender segregation in the Canadian mining industry, including in the city of Greater Sudbury where women continue to be the gendered minority (Jackson & Thomas, 2017; Moyser, 2017) was developed with Eric Jantsch's model of interdisciplinarity kept in mind. This model can be found in *Appendix 1*. Jantsch's diagram represents the crucial roles that cooperation and coordination play amongst and between the

disciplines, where each square represents a disciplinary field (Newell, 2013). Arrows that move in each direction depict how each discipline is interactively related in interdisciplinary studies; coordinated and integrative.

The disciplines that guided my study include Communication Studies, Labour Studies, Sociology, and Women and Gender Studies. All were founded on interdisciplinary principles. Integrated, they support the address of my study's research questions which are as follows:

1. What are the gendered work experiences of women in mining in Sudbury, Ontario?
2. As gendered "others," what perceptions do women in mining in Sudbury, Ontario have of their workplace culture and climate?
3. How do women in mining in Sudbury, Ontario perceive they are treated and communicated with by their colleagues in this primarily masculine organizational culture?
4. How do men in mining in Sudbury, Ontario perceive the women in mining that they work with? How do they perceive they treat and communicate with these women in the workplace?

Because these questions are complex, addressing them necessitated the integration of theories, methods and ontologies derivative of multiple disciplinary perspectives. Using integration, my project sought to endogenously transform disciplinary knowledge by producing new forms of knowledge (Moran, 2010). This type of knowledge can, according to Peter Weingard, former director of the Centre for Interdisciplinary Research, help foster enhanced innovative, inclusive environments (Weiss & Wodak, 2003).

Communication Studies is known to be a space for other disciplines to congregate (Kane, 2016), where Benoit and Holbert (2004) argue that Communication Studies should not be

regarded as an isolated discipline. As an interdiscipline, Herbst (2008) details that such a field has the potential to enhance coherence and legitimacy of research projects.

Labour Studies also supported my study and has a history of connecting well with other disciplines (Sankova & Dudko, 2016). In fact, Block (1990) argues that labour is simultaneously "the most fundamental and the most inherently problematic of all economic categories" (p. 75). To McKinnon (2015), labour is complex because it is not solely represented in the economic landscape, but is also necessarily about social relations.

Sociology, a discipline founded on understanding social relations given its interest to investigate structures of groups, organizations, and societies and how these people interact (Giddens et al., 2016), is another discipline upon which my study relied. It is also a discipline that has the potential to engage well with other disciplines, though Lyle (2016) suggests that interdisciplinary projects interested in adopting sociological tenets to study social behaviour should focus on addressing a specific social problem - which my study does - so as to effectively contribute to social issues.

A social problem is defined by Bassis et al. (1982) as "a social condition that has been found to be harmful to individuals and/or societal well-being" (p. 2). Expanding on this definition, Best (2017) interprets social problems as "trouble spots within society - social arrangements that do not work properly" (p. 3). Providing examples of social problems to illustrate a more thorough description of the term begins to explain how my study sought to address a specific social problem. Best (2017) outlines that with the rise of the feminist movement in the 1970s, "people began including sexism, sex discrimination, and the like on their lists of social problems" (p. 4). My study focuses on the social problem of women's minority status in work environments that are male-dominated, which can exacerbate

experiences of discrimination. Given its gendered orientation, my study also relied on approaches of Women and Gender Studies.

To Kaplan and Grewal (2002), the interdisciplinary nature of Women and Gender Studies cannot be denied, and interdisciplinarity enhances this field's social pursuit that is interested not only in destabilizing and critiquing more rigid monodisciplinary research practices, but also challenging these practices. Women and Gender Studies is diverse and can be defined as "a broad, dynamic, interdisciplinary, and global field of inquiry" (Hobbs & Rice, 2018, p. 2). Women and Gender Studies seeks to understand how power relations are embedded in societal institutions and in everyday taken-for-granted values, practices and social relations. Gender scholars often understand gender as a social construct (Rose, 2010), something that all persons perform in their everyday lives (Butler, 1990; Ridgeway, 2009), in private as well as in public spaces. Gender influences the way people work, relate and communicate. In the workplace specifically, traditional cultural expectations of gender impacts performance at work as well as interpersonal communication and interactions between colleagues (Lease et al., 2020). Women and Gender Studies can be leveraged to support a better understanding of these interactions by intersecting the teachings of a variety of disciplines which have vested interest in the promotion of social equality which regards equality not only of the sexes, but also of other categories of difference such as race, national identity, class, sexuality, and ability (Hobbs & Rice, 2018). It is this centrality of acknowledging intersectional social experiences that supports the interdisciplinary paradigm of Women and Gender Studies (Canadian Research Institute for the Advancement of Women, 2006; Davis, 2010; Yuval-Davis, 2006).

The interdisciplinary methods that supported my study and the address of its research provide further evidence of the interdisciplinary paradigm of my study. These methods are described in the next chapter. The subsequent sections of this chapter consider the literature on

the topic of the blue-collar work environment of the mining industry, and women's minority status within it and within other blue-collar, male-dominated industries. Links are made when possible, to a Canadian context. Also considered in remaining sections of this chapter is literature specifically about the city of Greater Sudbury's mining industry, and literature about the historical gendering of work spheres.

Part 2) The hypermasculine blue-collar mining industry

Greater Sudbury - a Canadian city established in the hypermasculine milieu of mining

Mining is an essential industry across the globe, and internationally, Canada is a leading country producing minerals and metals (Government of Canada, 2020). Canada's mining industry employs about 409, 000 workers directly, and 217, 000 workers indirectly in jobs falling into four categories: mineral extraction, smelting, fabrication, and manufacturing (Mining Association of Canada, 2020). In 2018 alone, "the industry accounted for 20 percent, or $104.5 billion, of the overall value of Canadian goods exports" (Mining Association of Canada, 2020, p. 6). As a province, Ontario supports extensive ventures in mining. In fact, the Government of Canada (2020) labels Ontario the leading province in mineral exploration.

Based on a survey conducted by Ontario Nature, active mining claims account for over 5.4 million hectares of Ontario land (Burkhardt et al., 2017). The mining community in the city of Greater Sudbury is essential to Ontario's mining success. The city of Greater Sudbury (2020a) mines more than 50 percent of the province's ore, and supports about one-third of Canada's mined metal production (Burkhard et al, 2017). Over 300 companies support the mining supply and service sectors in the city of Greater Sudbury (2020b), which employ approximately 6, 000

people directly, and another 10, 000 people indirectly. Recognizing that the city of Greater Sudbury (2020b) is "a world class mining centre," but also that the mining industry remains heavily gender imbalanced (MIHRC, 2022), it is an ideal location to study gendered workplace dynamics as they affect the work experiences of women who form the gendered minority. Though Greater Sudbury's 2019-2027 Strategic Plan outlines the city's intention to "position Greater Sudbury as *the* global leader in mining and mining supply/service innovation" (City of Greater Sudbury, 2019), the distinct, unequal gender composition of Sudbury's mining workforce needs to be examined. It reflects the area's establishment based on labour and production in the hyper-masculine milieu of mining (Laplonge, 2014; Leadbeater, 2008). To work toward improved equity, diversity, and inclusion in this industry and others similarly gender imbalanced, I examine the mining industry's persistent masculine organizational culture.

The blue-collar mining industry and masculinity

Mining is often perceived as a quintessential job for men (Keck & Powell, 1996, 2006; Lahiri-Dutt, 2012; Mercier & Gier, 2007). Men employed in the mining industry significantly outnumber women who account for only about 15.5 percent of Canada's mining workforce (MIHRC, 2022). This figure has changed very little in the last decade (MIHRC, 2022; Statistics Canada, 2020). Some of the characteristics associated with mining align with characteristics conventionally associated with hegemonic masculinity, which is a form of masculinity that is defined as an idealized or dominant type of masculinity (Buschmeyer & Lengersdorf, 2016; Greig & Pollard, 2015). In the workplace, Lease et al. (2020) explain that hegemonic masculinity is usually "characterized by competition, aggressive interactions, and exercising control over less powerful workers" (p. 139). Central to the concept of hegemonic masculinity is the idea that masculinity and femininity are "inherently relational concepts, which have meaning in relation to

each other, as a social demarcation and a cultural opposition" (Connell, 2005, p. 43). As this chapter reveals, where some of the shared characteristics associated with mining and masculinity include physical strength, toughness, bravery, and risk-taking (Abrahamsson & Johansson, 2020), femininity is by contrast, conventionally defined by characteristics such as nurturance and submissiveness (Levant & Richmond, 2016). To Lahiri-Dutt (2015), discourses of hegemonic masculinity are normalized in and by the mining industry. Phallic imagery is often correlated with the physical act of mining, where masculinity symbolizes the dominant capability of men to penetrate the feminized mother earth. The domination of men in mining represents "men conquering nature" where mining and masculine virtue are duly represented as "mysterious, dangerous, filthy and heroic" (Lahiri-Dutt, 2015, p. 524).

Illustrating the link between mining and masculinity, mining can broadly be associated with the blue-collar workplace, which has a history of promoting a masculine organizational culture (Gibson & Papa, 2000; Wright, 2016a, 2016b). According to Statistics Canada, it is within blue-collar workplaces where women are most outnumbered by men and experience the most hostile forms of sexism and discrimination (Burczycka, 2021). Though not all occupations found in mining are considered blue-collar, mining *is* usually perceived as a blue-collar industry (Lucas, 2011; Lucas & Buzzanell, 2004). Therefore, all workers immersed in the blue-collar industry are impacted by the culture present within that work environment.

The origin of the term "blue-collar" can be traced back to the conventional colour of work shirts that demarcated various groupings of workers. While white-collar shirts were originally reserved for workers found in professional office-settings, pink-collar shirts were once worn by workers in caring industries (Lucas & Steimel, 2009). Comparatively, blue-collar work shirts, traditionally fabricated out of durable material such as blue-jean denim or canvas, were sported by workers performing work characterized as hyper-masculine (Lucas & Steimel, 2009)

and labour intensive (Gibson & Papa, 2000; Krymkowski & Mintz, 2008). Blue-collar shirts could sustain the dirty work conditions representative of many manual, blue-collar occupations; dirt is a defining characteristic of work in blue-collar industries (Reskin & Roos, 1990). This characteristic is one that Meyer (2016) explains continues to exist in many blue-collar work environments. It is especially emblematic of the mining industry where "getting dirty and wet from black mud and water" (Somerville & Abrahamsson, 2003, p. 28) is the norm. Using the example of industrial automobile factories, Meyer (2016) states that many of these factories operate under deplorable work conditions known to harbour filth in the absence of decent sanitary facilities, where workers are "perpetually coated with industrial fluids, oils and paints" (p. 30). Other scholars have similarly linked dirt to work in blue-collar industries, including but not limited to Ashforth and Kreiner (1999), Bagilhole (2002), Ciulla (2000), Greene (2006), John (1984), Keck and Powell (1996, 2006), Lucas (2011), Powell and Keck (1995), Rose (1968), Rothman (1998), Slutskaya et al. (2016), and Torilina (2011). Though a shared finding of many of these studies is that dirty work is devalued work (Mansfield et al., 1991), manual workers who get "dirty" on the job have been found to "elicit higher identification and collective esteem than [workers in] many other occupations" (Ashforth & Kreiner, 1999, p. 427). In their comparative examination of blue- versus white-collar workers' job satisfaction, Hu et al. (2010) theorize that blue-collar workers find more satisfaction in their co-workers and pay than do their white-collar counterparts. Some may argue that this is precisely because stigma associated with dirt and "dirty" blue-collar work finds those employed in blue-collar workplaces adopting "robust protective techniques for warding off social threat and enhancing self-image" (Ashforth & Kreiner, 1999, p. 427). However, it may be countered that workers with jobs deemed physical by nature, jobs that may or may not also be associated with dirt, find higher levels of satisfaction in the work that they do. Previous studies that have examined the concept of job satisfaction find

that being satisfied at work is positively correlated with good mental health (Rubin et al., 2017; Thompson & Phua, 2012; van der Walt et al., 2016).

Physically demanding work conditions are emblematic of many jobs that involve blue-collar work, and these conditions are another characteristic that links blue-collar industries, including mining, to masculinity. The terms "blue-collar" and "manual work" have actually been considered synonymous (Komarovsky & Philips, 1967). Although manual work remains the norm for many employees in mining, it is also true that blue-collar industries have changed drastically over time (Bradley, 1989) and that increased and enhanced mechanization has transformed the jobs of many workers in blue-collar workplaces (Boulding 1976; Spencer, 1977). These transformations have been especially pronounced in the mining industry because mechanization alters both the type of work performed as well as the type of workers employed by the industry (Robbins, 2000).

To Davidson (2020), Chair of International Women in Mining, the role of technology and innovation in the mining industry is important and has potential "to reshape traditional roles and create new and more inclusive workplaces" (p. 42). Abrahamsson and Johansson (2020) agree, and argue that ongoing technological innovation in mining makes the industry an especially useful location to study gendered relations. This is because changes in work and organization stemming from the increase of mechanization in the industry may "challenge existing gendered norms and roles" (para. 1, line 4-5). Hypothetically, mechanization in mining has the potential to support a more inclusive work environment for both men and women, and therefore, it is important to consider how technological innovation in blue-collar industries has affected both sexes. Though it is possible that mechanization in the industry may support inclusivity (Davidson, 2020), it needs also to be said that mechanization has been shown to have negative effects on blue-collar workers and their dignity on the job (Sennett & Cobb, 1973). This is

because manual workers have been known to celebrate and value the manual work that they do as they often:

> delight in what educated professionals often consider mediocre mass arts and activities; they do not accept the idea that their skills, knowledge, and jobs are unimportant or of little value (Sennett & Cobb, 1973, p. 138-139).

Expanding on this, Thomas (1989) posits that the pride that blue-collar workers exhibit in their job stems from a sense of dignity associated with work skills where "many [blue-collar workers] pride themselves on having the ability to conceive and execute intricate tasks and treasure the responsibility it entails" (p. 369). The physical components of many jobs in blue-collar industries make it possible for these workers to actually see tangible progress that they have accomplished at work. Even with the help of automation, these workers witness firsthand the product of their labour. Rather than the more abstract "mental" accomplishments made by other types of workers, such as those holding white-collar jobs (Rothman, 1998), blue-collar workers find dignity in physical labour and the tangible accomplishment of their work (Dunk, 1991). They also find meaningfulness in their work, which according to Lucas (2011), leads to improved self-esteem.

In their study that examines women's experiences of challenging gendered divisions of labour in Sudbury, Keck and Powell (2006) discovered that most women who entered traditionally male-dominated, blue-collar jobs in the mines during Inco's (formerly the International Nickel Company) 1970s campaign to hire more women, did so because they had the preconceived notion that these jobs offered greater satisfaction as well as greater financial independence than the majority of traditionally female-dominated jobs they previously occupied.

As described in Keck and Powell's (2006) study, many of these women saw value in challenging longstanding, stereotypical social constructions about gender and work. Many of them felt that in occupying blue-collar jobs that previously excluded them, they might find worth.

Another study based in South Africa surveyed 121 workers in a mining organization, and found higher than average levels of job satisfaction and organizational commitment (Rannona, 2003). Tshivhase and Vilakazi (2018), whose work is also based in South Africa, equally link high levels of job satisfaction to blue-collar mine workers. They argue that the factors that correlate most with job satisfaction in mining include a sufficient work/life balance, a welcoming workplace culture, opportunities for growth, good wages, and the support of management.

In her project exploring the challenges of women mitigating mostly hostile blue-collar work environments, Greene (2006) also discovered that prior to entering these jobs, women felt strongly that levels of satisfaction in these jobs would be superior to those achieved in more traditionally feminine occupations. Reasons cited for this perceived satisfaction included that these jobs are challenging and exciting, and reap better economic rewards than do many other jobs. Similarly, in her narrative that details her experience as a female construction worker, Papp (2006) shares that in choosing to pursue work in construction, she:

> wanted to understand why women *didn't* make this choice [to work in blue-collar industry] more frequently, when it seemed to be well known that earning a wage at a "woman's" job made it hard to pay the bills, whereas earning the wages of a man's job made paying bills possible (p. 10).

Papp's (2006) statement illustrates that while the perception of blue-collar work may be that its offer of better pay could lead to improved job satisfaction, this satisfaction remains highly

gendered where not only are some jobs considered masculine or feminine, but the pay associated with jobs has also dichotomously been gendered.

In part, the characteristics of dirty and manual labour conventionally associated with mining has contributed to women's exclusion from the industry and others labelled blue-collar. Those who sustain work in these environments are often considered "tough," the fundamental feature of "toughness" in blue-collar industries correlating with workers' abilities to carry out work that requires physical strength (Dunk, 1991), and previous studies have shown that dirty, manual work has historically been deemed better suited for men than women (Reskin & Roos, 1990). The same is true of jobs deemed dangerous; danger is commonly associated with many jobs in blue-collar work environments, including mining (Somerville & Abrahamsson, 2003). Although improvements in health and safety protocols have minimized levels of danger in most workplaces over time (Lucas & Buzzanell, 2004; Meyer, 2016), danger in mining remains high given the significant incidents of injuries on the job (Donoghue, 2004; Groves et al., 2007; Stewart, 2019).

In their study that seeks to understand practices of learning safety in the mining industry, Somerville and Abrahamsson (2003) connect injury in mining to not only danger, but also masculinity. Having interviewed mine workers, they discovered that risk-taking behaviours are not uncommon in the industry. As one mine worker interviewed for this study, accounted:

> It must be a male thing they...like get the adrenaline going, a bit of danger y'know the danger thing. They just like to be, they should've been soldiers perhaps or something, y'know there's just, that must be that element there and they just like to get into it and take a little bit of a risk (p. 24).

This quote alludes not only to the commonality of danger and risk-taking behaviours in the mining industry, especially for men, but also competitiveness of workers in this blue-collar culture.

The fostering of a sense of competition in the workplace, distinctly when it comes to proving one's physical strength on the job, is in fact, another common characteristic broadly associated with blue-collar work (Acker, 2006), specifically, mining (Spencer, 1977). Valuation of competition is deemed central to the blue-collar worker, where Dunk (1991) posits that the blue-collar worker's habitual interest in the leisure activity of sport signifies, in part, their interest in "dominant ideas about self-control, discipline, and fun" (p. 93). In his ethnographic account that considered the culture of various blue-collar workplaces, Spencer (1977) explains that the highest valued worker in steel mills – a prototypical blue-collar workplace, has conventionally been one to harbour a competitive spirit where:

> In the mills, steelworkers of special brawn who worked furiously to out-do their fellow-workers and win favor with their bosses, were good-naturedly nicknamed *Joe Magarac*. It was said *Joe Magarac* was seven feet tall, born from the womb of an ore mine, and made out of steel. He was in perpetual competition with all his buddies in the mill, making work a game, and winning every time. He laughed uproariously at the puny muscles of the others (p. 25).

The above passage links competition to masculinity, which itself is a trait many scholars associate with men (Bielby, 2008; Laplonge, Lucas & Steimel, 2009; Meyer, 2016).

Exploring more the value of competition in light of hiring and firing practices in blue-collar work locations, Armstrong (1984) describes that "when women compete with men, the women are the first to go" (p. 69). In the description of her experience being employed by

Sudbury's Inco during the strike of 1978-1979, Mulroy (2019) concurs that women are always the last to be hired, and the first to be fired. She was one of the first women hired to work underground at Sudbury's Inco. Her work experiences in mining reflect in many ways the male-dominated work environment of mining, and by extension, masculine organization culture of the industry (Mulroy, 2008; 2019). Many of the stories she shares in her text align with characteristics of blue-collar work described in the literature. Unfortunately, as a woman in a work environment that values masculinity above all things, her stories also speak to the "disapproval and harassment at work" (Mulroy, 2019, p. 89) that became her everyday experience. Describing this experience in her own words:

> We knew that being the first women was going to be rough. In fact, sometimes it was nasty and downright cruel. The company didn't want women there, the men didn't want us there, and their wives didn't want us there. The wives would call my house and ask me why I was taking a job away from a man – what was wrong with me? In my opinion, the only reason Inco hired women was because 1975 was going to be International Women's Year. I think Inco feared that, if it did not have any women working in these high-paying jobs, the government would force it to do it by a quota, a minimum number of women per hundred men, or something similar. Inco has always denied this (Mulroy, 2008, p. 261).

As revealed in this chapter, other studies about women in mining have made similar discoveries.

In Tallichet's (2016) study based in a mine in South Virginia, women's sense of "othering" was worsened by their many experiences of harassment underground, most notably perpetuated by their male colleagues and superiors. Overwhelmingly, these experiences of harassment, often sexualized by nature, took the form of "sexual bribery, gender-based jokes and comments, and profanity in order to make gender differences a salient aspect of work relations" (Tallichet, 1995, pgs. 698-699). These became the everyday lived experiences of these female

mine workers, representing men's power to stigmatize women in order to sustain the belief that women do not belong.

A study seeking to understand women's involvement in artisanal mining in South Africa discovered that women's exploitation in the mining industry is commonly sexualized in nature. Daily work experiences of mining in the South African mines surveyed found women's work in the mines peppered with sexual harassment (Botha, 2016). From name calling, derogatory language and non-consensual physical contact on the job to sexual touching and rape, it is evident that women's exploitation in mining is problematic. This was also found by Benya (2016), whose doctoral degree found her immersed in work alongside women in a South African mine for ten and a half months in 2011 and 2012. Her ethnographic account that surveyed how female mine workers understand and construct their identities in the masculine mining world drew insight on the multifaceted work experiences of women in mining.

Revealing that women's exclusion from mining is rooted in history, John's (1984) work exposes the gendered lives of men and women who worked in Victorian coal mines in the 1880s, alluding to the conventional hostility of such a workplace for women. Women workers in the "pit" as many mines in the area were so aptly described in reflection of their dirty conditions, were portrayed in the print media of the period as undignified animals (John, 1984). Work in the mines was depicted as immoral and unsuitable for women, in large part due to the belief that women should focus on child bearing and family caretaking (Bradbury, 1994; Bradley, 1989; Kemp, 1994), a sentiment that problematically endured for the better part of the next century, having stemmed from social divisions of labour discussed more in this chapter's next section.

In his statement to the 1867 Royal Commission on Agriculture, a unit which at the time supported deliberations led by the state to deem it unlawful for women to continue working in

the mines, one farmer brutally described the impact of mining on women workers in Victorian coal mine "pits":

> [It] almost unsex[es] a woman, in dress, gait, manners, character, making her rough, coarse, clumsy, masculine; but it generates a further very pregnant social mischief by unfitting or indisposing her for a woman's proper duties at home (John, 1984, p. 190).

Edgar Wakeman's newspaper article 'Beauties in Black,' published on September 12, 1891 in the *Wigan Observer* claimed similar degradation of women, explaining that women working in the mines:

> fill you with a feeling of revulsion and dread of contact with such apparently saturnine creatures, and a thrill of indignity that women were enslaved by such seemingly degraded work (John, 1984, p. 220).

Such punitive statements illustrate women's degraded portrayal in such jobs as undignified, supporting their exclusion from this type of work and demarcating them as "others" or "outsiders," which Sangster (1995) argues has been all too common an experience for women to fear that blue-collar work and the image it portrays, might jeopardize their status. A similar pattern of indignity was discovered by Tallichet (1995) in a study that shone light on gendered relations and divisions of labour in an underground South Virginian mine, this time, in the early 1990s. Findings suggest that during this time and similar to John's (1984) findings based on the gendering of work in mines over a century previous, women working in the mines continued to be labelled as inferior. This could reflect gendered status hierarchy that is preserved to normalize domination of men and subordination of women, especially in certain jobs.

While some progress on reversing gender segregation and gender inequality in the blue-collar mining industry has been made (Laplonge, 2014), much remains to be accomplished; my study seeks to explore women's current experiences in the sector.

Gendered occupational segregation and the male breadwinner social norm

Unofficial labeling of occupations as either "men's work" or "women's work" prevails in most industrial nations (Bagilhole, 2022; Bradley, 1989; Milkman, 2016). Having linked mining and masculinity, and having described mining as a blue-collar industry, this next section considers how the categorization of work as either masculine or feminine has formed the basis of gendered occupational segregation. This gendering of work supports the male breadwinner social norm which has exacerbated the occupational segregation of men and women, as well as the gender wage gap in Canada (Canadian Women's Foundation, 2021a; Parr, 1990; Sobko, 2021). In Ontario, the reality of the gender pay gap means that women are paid about 30 percent less than men for the same work (Ontario Equal Pay Coalition, 2021).

Reskin and Roos (1990) posit that the history of gender segregation in the workplace is as deep-rooted as the history of the labour force itself. Milkman (2016) agrees and theorizes that gender segregation at work continues to be one of the most stable features of occupational configuration. The workplace encompasses workers belonging to differing social groups where not all social groups traditionally hold the same kinds of professions (Rothman, 1998). While segregation in the workplace is impacted by social identifiers such as age and cultural background, gender is arguably the most pervasive marker of occupational segregation. This reveals that sexism, a form of group oppression, is an institutionalized social problem by which "women are the group most victimized by sexist oppression" (hooks, 1986, p. 127). In fact, Ridgeway (2009) argues that gender is the first thing people tend to notice about others.

Perpetual divisions of labour contribute to continued economic inequality by gender (Ontario Equal Pay Coalition, 2021; Sutton et al., 2016) as well as persistent discrimination of individuals' suitability for jobs in reflection of their gender (Bielby, 2008). Contributing to research by Statistics Canada, Moyser (2017) informs that Canadian women "are concentrated in industries that parallel their traditional gender roles at more than double the rate of men" (section 14, para 1). They continue to predominantly occupy jobs that fall within administrative and service sectors of the workplace, and continue to be the gendered minority within blue-collar occupations. In contrast, men continue to be the gendered majority within these same blue-collar jobs (Jackson & Thomas, 2017).

When it comes to the social division of work, Glucksmann (1995) asserts that work has been organized into categories such as public/private, and paid/unpaid. Where women's work has traditionally been relegated to the unpaid, devalued, private sphere of the home (Corman & Luxton, 2008; Frager & Patrias, 2005), men have traditionally taken on the role of breadwinner, working in paid public spheres (Parr, 1990). As "breadwinners" (Pupo & Duffy, 2008), or in other words, as the family's primary incoming generator (Janssens, 1997), men were believed to possess the skills, norms, values and attitudes necessary to perform occupational roles outside the home in support of the financial needs of the family. To Kelan (2018), men and women "do" gender when at work, following gender-normative expectations that find them behaving in ways that support the continuance of gender differences and gender inequality. Before they entered the paid sphere of work, women were expected to stay at home in light of creating a "'haven' from the frustrations of the world of work" (Milkman, 2016, p. 14). In this "haven," women's unpaid work was traditionally classified into five categories: housework, child care, care of elderly and disabled, social organization and the maintenance of sexual relationships (Armstrong, 1984).

Women, who hone assumed feminine traits needed to successfully carry out these tasks, have a history of being perceived as best suited to perform these jobs.

A Statistics Canada study conducted collaboratively in 2018 by the Centre for Labour Market Information and the Centre for Gender, Diversity, and Inclusion, demonstrates the ongoing social norm of the male breadwinner in Canada via its discovery of a persistent gender wage gap. Though this study found improvement in the gender wage gap between the years 1998 and 2018, in 2018, Canadian women in the workforce aged 25 to 54 were found to earn only 87 cents for every dollar earned by employed Canadian men of the same age (Pelletier et al., 2019). This study suggests that the gender wage gap in Canada can be explained by the disproportionate number of women in lesser-paid, part-time jobs, as well as women's limited participation in well-paid, blue-collar jobs. Specifically, it brings attention to women's gendered minority status in three sectors of blue-collar industries: construction, manufacturing, and mining, quarrying, and oil and gas extraction. To the authors, understanding the evolution of the wage gap remains an important area for future research as it supports a better understanding of how and why gendered occupational segregation persists (Pelletier et al., 2019).

To Lazar (2005), unequal workings of power and ideology in discourse sustain hierarchically gendered social orders where women and men have problematically been categorized as separate social identities because:

> the prevailing conception of gender is understood as an ideological structure that divides people into two classes, men and women, based on a hierarchical relation of domination and subordination, respectively. Based upon sexual difference, the gender structure imposes a social dichotomy of labour and human traits for women and men, the substance of which varies according to time and place (p. 7).

This view of men and women as socially constructed is influenced by the work of Butler (1990). Among others, she argues that normative gender identities are formed out of systems of heterosexism where men are typically socially constructed as dominant and women as subordinate. This binary opposition of roles is what found women over many generations "work[ing] privately to meet their families' personal, social, and emotional needs while breadwinner fathers provided them with the means to do so" (Pupo & Duffy, 2008, p. 289). In her review of literature in the field of gender history, Rose (2010) finds that before the rise of the feminist movement, this divide that hierarchically placed men in positions of power over women was assumed as natural and thereby not questioned. Women were viewed not as workers, but as mothers and wives. They were expected to perform underappreciated "labours of love" (Luxton, 1997) including reproductive labour, care work, emotional work, sexual work/labour, and child work (Collinson & Hearn, 2005). The social construction of gender is a product of culture (Hunter College Women's and Gender Studies Collective & Simalchik, 2017; Rose, 2010), and this culture is performed in the workplace as well as in other social settings.

When structural and ideological transformations in society did eventually lead to women's participation in actual paid spheres of work outside the home, women were segregated in the lowest paid, least secure, and most monotonous occupational positions (Luxton, 1980; Palmer & Lee, 1990). Even when they did collect their own earnings, women continued to be perceived as economically dependent on their husbands. Women's earnings were described as supplementary (Rosen, 1987) or as "pin" money; money a woman assumedly used not to sustain the family economy, but rather, to purchase items deemed extra or frivolous (Gannagé, 1986). Even the social class of women was perceived as an extension of the social class of their husbands. This is described by Levison (1974) in a statement that disregards women's participation in the workforce:

> The best way to clarify [the] confusion [of understanding class relations] is to look at the occupational structure for men alone. Most women are married and therefore live in the class and culture of their husbands. They follow their husbands' lead in politics and all their social life is with their husbands' class (p. 24-25).

While the above statement predates many of the triumphs realized by feminists throughout history, it remains a harsh and gender discriminatory way of explaining social class structure that extends into the workforce. To Smith (1987), the systematic exclusion of women's experiences from the realms of legitimized knowledge supports the status quo of male hegemony. Too often have women's identities been defined as an extension to the identity of their husband, a heteronormative concept (Hunter College Women's and Gender Studies Collective & Simalchik, 2017).

It is this perception of women's dependence on men that stems from the well-established dominant view that women are mothers and wives first, and wage-earners second. When they did work outside the home, women became trapped in the double sense of performing almost endless work (Armstrong & Armstrong, 2010). As bearers of the "double-day," work can and should be acknowledged as experienced not only in paid public sectors of the workplace, but also in other realms of life, notably, the home. This notion is supported in the critique that scholars such as Braverman (1974), who although contributed to the acknowledgement of an unequal sexual composition of the workforce, failed to consider the intersectional relationship between work in the labour force and work in the home (Armstrong & Armstrong, 2010). Consistent and enduring devaluation of work in the home reinforces the gendering of work and women's history of being devalued as contributors to the family economy, which is defined as an order of production whereby all members of the home were expected to support the family by labour both paid and unpaid (Keough & Campbell, 2014).

Socially learned and performed, gender is based on deeply rooted dominant ideologies that constitute masculinity and femininity. To Butler (1990), the gendered experience is an ongoing and active process constituted in and by discourse. People perform their gendered identities as influenced by social orders of discourse, where identities constitute discourses, and in turn, discourses constitute identities. Stereotypical categorizations of what represents masculinity and femininity are learned both inside and outside the home, where Bradbury (2008) argues that socialization shapes normative beliefs, ideologies, and behaviours. Margaret Mead's efforts have supported this view that finds human behaviour, including behaviour that influences the construction of gender roles, largely the result of the process of socialization "by which each generation learns the cultural beliefs and patterns of those who preceded them" (Mills, 1967, p. 48). In addition to within the home, schooling and peer culture also help reproduce gendered roles and expectations (Sangster, 1995). Notably, Naiman (2004) finds that the Canadian school system has been and continues to be especially influential to teaching dominant values and cultural norms. These values and norms inform what it means to be masculine, and what it means to be feminine. Sutton et al. (2016), who conducted a study surrounding the link between high school training and the labor force, argue that even in the 21st Century, girls and boys are socialized to prefer some jobs over others. Jobs in blue-collar industries, such as mining for example, continue to be perceived and encouraged as better suited for boys and men rather than girls and women (Keck & Powell, 2006; Lahiri-Dutt, 2012; Mercier & Gier, 2007).

Sharp and persistent occupational segregation in blue-collar spheres of the Canadian workplace can perhaps best be understood via a review of statistics as they relate to the distribution by percentage of men and women employed in various blue-collar occupations. Considering data collected by Statistics Canada as presented by Jackson and Thomas (2017), it may be theorized that limited progress has been made in the decade between 1995 and 2015, to

equally distribute men and women in blue-collar industries. Statistics collected by the Canadian Manufacturers and Exporters (CME) (2017) show similar constraints to the progress of women's equal occupational distribution in blue-collar jobs.

In 1995, only 2 percent of female Canadians in the workforce were employed in conventional blue-collar occupations including trades, transport, or as equipment operators. This compares to 26.6 percent of all male Canadians in the workforce employed in these same professions. A decade later, 2015 found little change in the gendered composition of the blue-collar workplace, where 2.1 percent of Canadian working women were found in these job categories, and 26.5 percent of Canadian working men in these same occupations (Jackson & Thomas, 2017). In their review of Canadian women in production related occupations in the manufacturing industry, women once again "represent a vast and relatively untapped resource" (CME, 2017, p. 4) since as current to these documented statistics, were employed in only 28 percent of jobs in these industries. What is even more concerning is the fact that according to the CME (2017), there has been no improvement in women's equal participation in these jobs since the mid 1980s.

Notwithstanding the above, one notable time in Canada's history that did find the gendered composition of workers in blue-collar collar industries more equal was during World War II. At this time, women were hired as a reserve army of labour to perform many jobs held previously almost exclusively by men (Dex, 1985; Luxton, 1980; Milkman, 2016; Rose, 1968). Though this temporary shift in the gendered configuration of the blue-collar workforce should have brought awareness to women's abilities as blue-collar workers, women were generally undervalued and viewed as "others" within hyper-masculine, blue-collar work locations (Lewis & Simpson, 2010). When men were available to return to their jobs, women lost their occupations which only further marginalized their gendered status (Mulroy, 2019; Sugiman,

1994). It also worsened already persistent segregation in the workplace, where gendered occupational segregation is most prominent in blue-collar work environments (Sutton et al., 2016). A study that demonstrated this to be true in Toronto in the early 1980s, was one conducted at a garment factory, where Gannagé (1986) discovered that men and women worked different jobs, women segregated in the lowest and lesser valued jobs. In another study, this time conducted in New England by Rosen (1987), similar conclusions were drawn. Her analysis of interviews with Portuguese and American female factory workers revealed that women were concentrated in the least desirable jobs, as did they earn less pay in contrast to men. In these studies and in others that consider blue-collar workers, as this chapter indicates, men typically outnumber women (Jackson & Thomas, 2017) which may contribute to women's experiences of feeling like outsiders.

As outsiders, or "others" within hyper-masculine, blue-collar work locations (Lewis & Simpson, 2010), women become visible minorities (Greene, 2006) and face increased discrimination (Wright, 2016a, 2016b) and harassment on the job (O'Farrell, 1999). According to a recent study about workers' experiences of inappropriate sexualized behaviours, sexual assault, and gender-based discrimination in Canada in 2020, "for women, personal experiences of inappropriate sexualized behavior were most common for those working in certain occupations historically dominated by men" (Burczycka, 2021, p. 3). Undervalued and at higher risk of being discriminated against or harassed, women in blue-collar industries struggle to construct positive occupational identities (Mansfield et al., 1991) which plausibly impacts their identities and lived experiences as a whole.

Notably, values are differently associated with occupations where some jobs are associated with masculine values like dominance, assertion, and strength, and others are associated with feminine values such as warmth, submission, and empathy (Weisgram et al.,

2011). To Mills (1967), value systems are intricately connected to one's personality. Burkitt (1991) suggests that people are bound by social values, where collective values shape the contours of a group's culture, and by extension, a group's identity. Cultural norms are consistently produced and reproduced in organizational settings, where people who hold power typically exercise control over less powerful participants (Fairclough, 1989). Consequently, less powerful participants undergo constraints that affect elements such as their knowledge and beliefs, social relationships, and social identities (Fairclough, 1989). To Gee (2014) there are ""normal," "appropriate," "correct," "natural," "worthy," or "good"" (p. 120) values and behaviours associated with subject positions in any given social setting. This includes in organizational institutions such as workplaces. As this chapter reveals, in the blue-collar workplace, masculinity is valued (Lucas & Steimel, 2009) as is physical strength (Gibson & Papa, 2000; Krymkowski & Mintz, 2008) and toughness (Lubrano, 2004). Blue-collar workplaces are also characterized by work that is often dirty (Reskin & Roos, 1990; Slutskaya et al., 2016), dangerous (Lucas & Buzzanell, 2004; Meyer, 2016; Somerville & Abrahamsson, 2003), and competitive (Spencer, 1977). Combined, these values and characteristics perpetuate the exclusion of femininity within these male-dominated work environments (Gibson & Papa, 2000; Wright, 2016a, 2016b). In these milieus, Meyer (2016) posits that masculinity typically portrays itself in two hegemonic ways: rough masculinity and respectable masculinity.

Rough masculinity adheres to heteronormative codes of gender where stereotypical masculine traits such as physical and emotional strength, domination, competition, and aggression (Greig & Pollard, 2015) are valued, and stereotypical feminine traits such as warmth, empathy, sensitivity, and submission (Weisgram et al., 2011) are devalued. Meyer (2016) suggests that rough masculinity has a tendency to demean and disadvantage women, where women entering the workforce have been labelled an invasion to male culture (Meyer, 2016).

Disrupting the status quo, women have consistently been perceived as threats to men in the workforce, which on a large scale has been "central to the forming, nurturing, widening, and deepening of masculine culture" (Meyer, 2016, p. 2). While this form of masculinity may reveal itself in the workplace in different ways, it harbours an interest in excluding women from occupations deemed best suited for men. Poignantly, not only do women entering the workforce threaten to occupy jobs typically held by men, but they also threaten to alter the culture present in the workplace by introducing new identities into such longstanding, masculine work environments.

Respectable masculinity equally disadvantages women as its performance has the strident tendency to support paternalistic attitudes toward women (Meyer, 2016). While Sugiman (1994) explains that paternalism may have a well-meaning stance, paternalistic attitudes and behaviours tend to uphold gendered divisions and inequalities in the workplace, where the needs of women are most often repressed. To Braundy (2011), many blue-collar workplaces find the exaggeration of "chauvinistic sexuality [and] blatant machismo" (p. 66). Considering "respectable masculinity" in mining specifically, Miller (2004) finds that women who are hired in mining are often treated with condescending chivalry, or as a novelty. Though respectable masculinity emerges from the political construction that man is inherently a good, hardworking citizen who finds pride in the work he performs, this type of masculinity enables ongoing resistance to gender equality (Meyer, 2016). This type of masculinity may also be linked to "benevolent sexism," which describes behaviour toward women that may be well meaning but in fact, is generally condescending and implies that conventional gender roles should be maintained (Barreto & Ellemers, 2005; Glick & Fiske, 2001).

Women's subordination, discrimination, and harassment in male-dominated workplaces and educational environments

I remind my reader that though not all occupations found in mining are blue-collar, mining *is* generally perceived as a blue-collar industry that is male-dominated (Lucas, 2011; Lucas & Buzzanell, 2004). Therefore, all workers immersed in the blue-collar industry are impacted by the masculine organizational culture present within that work environment. However, blue-collar workers are not the only types of workers employed by the mining industry. While a substantial number of jobs remain in labour intensive sectors such as construction and production mining, other workers not necessarily classified as blue-collar are also integral to the success of the industry, including engineers and geologists. Engineers are especially vital to mining initiatives (Hartman & Mutmansky, 2000), but given the male-domination of their profession, studies have shown that female engineers have been discriminated against (Heap & Scheinberg, 2005; Holth, 2014). Geologists are also integral to the mining industry (Roonwal, 2018), but perceived masculine characteristics associated with geology such as rationality and objectivity mean that women in geology are not only outnumbered by men but are also perceived as essentially inferior (Burek & Higgs, 2007).

As this chapter has established, and as other studies have shown, it is especially when women are gendered minorities in a workplace setting that they are most at risk of being marginalized or discriminated against (Burczycka, 2021). For women, while blue-collar workplaces are perhaps the most hostile of workplace environments (Braundy, 2011; Bagilhole, 2002; Reskin & Roos, 1990) because it is within these environments that they most frequently encounter harassment (Burzcycka, 2021), other male-dominated workplaces and institutions that educate people for certain jobs, also disproportionately discriminate and harass women. This is true regardless of protection under Canada's Employment Equity Act (Burczycka, 2021). Before

taking up some selected findings of previous studies from a variety of sectors that speak to the disproportionate discrimination and hostility toward women workers in these male-dominated workplace environments, a discussion about harassment follows.

Harassment is defined as "engaging in a course of vexatious comment or conduct that is known or ought reasonably to be known as unwelcome (Government of Ontario, 2021). Other terms often used interchangeably with harassment include bullying, mistreatment, emotional abuse, mobbing, social undermining, and generalized abuse (Tracy et al. 2006). These experiences undermine and disrespect a person's worth; a person's sense of self. Escartin et al's (2011) research counters prevalent assumptions that harassment is a gender-neutral experience. Rather, gendered harassment is a very real experience that disproportionately affects and discriminates against women, especially those who find themselves in male-dominated environments (Burczycka, 2021). Hostile forms of harassment (Combs & Milosevic, 2016; Cortina & Arequin, 2021; Holland & Cortina, 2016) are often associated with gender harassment (Hitlan et al., 2009), or in other words, broad discrimination based on gender (Mallett et al., 2021), including sexual harassment that can "include behaviours such as remarks of a sexual nature, repeated requests for dates, whistles, staring, and sexual propositions" (McCabe & Hardman, 20005, p. 719).

Harassment has many implications for those who are victimized. This includes that experiences of harassment increase psychological distress (Bergman & Drasgow, 2003; Gettman & Gelfand, 2007), and job stress (Lim & Cortina, 2005), in addition to anxiety and depression. Experiences of harassment may also decrease job satisfaction (Bergman & Drasgow, 2003; Bond et al., 2004) and overall life satisfaction (Lonsway et al., 2013). According to previous studies (McGinley et al., 2001; Richman et al., 2002; Rospenda et al., 2009), women who have

experienced sexual harassment are more likely to suffer from Posttraumatic Stress Disorder (Dansky & Kilpatrick, 1997) and be substance abusers. It is clear that cross-culturally, sexual harassment affects women as victims more often and more severely than men (Holland & Cortina, 2016). This demonstrates that harassment is a gendered phenomenon.

In addition to the many consequences that experiences of harassment evoke for those who are victimized, previous studies have examined the effects of women's strategies to cope with harassment, which includes its avoidance (Cortina & Wasti, 2005; del Carmen Herrerra et al., 2018). There is a high tendency for targets of harassment, especially in workplaces, to question whether they should or should not report experiences of harassment for fear of repercussions. This includes, as examples, repercussions to their careers should they not be believed, and repercussions to their self-worth if ostracized, made to feel humiliated, or labelled as a troublemaker (Holland & Cortina, 2016). To Ahmed (2021), there is extensive labour associated with making a complaint about harassment, because this experience "can often feel like being harassed all over again, becoming subjected, again, to another's will" (p. 45-46). In her study that collected experiences of complaint, Ahmed (2021) made discoveries about the institutionalization of harassment. She drew conclusions about how feeling unsupported is a common experience shared by women who complain about being harassed at work, especially women who complain about being sexually harassed by peers. Where consequences of harassment are themselves damaging, so too are the consequences linked to experiences of making complaints.

Although previous literature confirms the commonality for victims of harassment to not formally report their experiences of harassment (Arnetz, et al., 2015; Kvas & Seljak, 2014; Simpson, 2017), it is also true that previous studies have found that victims of harassment may

link together in solidarity[2] (Ahmed, 2021). For instance, disclosed a participant in Ahmed's (2021) study about making complaints about harassment in the workplace, "collectivity was a way to share the cost of complaint. Rather than each of us being on her own, we would stand together." (p. 266). For women who are the gendered minority in workplace environments such as those that are blue-collar, developing social bonds of support with women who share similar experiences may be a means of coping. According to Kaiser and Spalding (2015), when women in the workplace support one another, they often perform "climb and lift" behaviours, or in other words, are deliberately supportive toward each other. In part, this may be because when women recognize that they form the gendered minority, they also recognize that discrimination works against them and their experiences of social belonging among their peers. To Acosta (2020), women in masculine workplace cultures often seek networking opportunities with other women at work to enhance their sense of belonging. Taking up some of the literature about the disproportionate discrimination or hostility toward women at work and making it clear that it is not only women in blue-collar industries who experience discrimination or hostility, though Adams (2004) unearthed some positive experiences about women dental graduates at the University of Toronto in a study based in the 1920s, findings maintained that female students in dentistry were typically perceived as women first and dental students, second. Similarly, research conducted about women at the University of Toronto studying engineering between 1939-1950 (Heap & Scheinberg, 2005) as well as medicine between 1910-1952 (Millar & Gidney, 1999)

[2] The experience of solidarity, when considered by hooks (2000) as a concept to connect women, is experienced when "a community of interests, shared beliefs, and goals about which to unite" (p. 67) help build a sense of community. While this may be true, it is equally important to acknowledge that it is not only shared experiences that may bind women in solidarity, but also the recognition of social differences, as related, for example, to experiences of social class and race. Moreover, women unite in solidarity not only because of possible shared experiences of being victims of sexist oppression, but when they appreciate their strengths and diversities (hooks, 1986).

discovered instances of women's discrimination. In a study about women science educators at Anglo-Canadian Universities between 1920-1980, Ainley (2006) also discovered challenges of acceptance faced by women. These challenges were equally present in the described experiences of women in accounting in Nova Scotia, who when contrasted with their male counterparts, have perceived themselves underappreciated (Allen & Conrad, 1999). Women in the male-dominated legal field have also and according to Leiper (2005), encountered disproportionate gendered hostility. This was also found to be true of women in the Canadian pharmaceutical industry (Muzzin with Sinnott & Lai, 1999) and finally, of women in conventionally male-dominated veterinary sciences (Woodger & Stone, 2020). Some of the challenges experienced by women in these diverse male-dominated environments mirror the challenges experienced by women in blue-collar industries. Though my study maintains its focus on women's experiences in mining, the experiences of women in other male-dominated workplaces and educational institutions that train for work in specific jobs, merits attention. Via review of the literature, it may be concluded that the male-domination of any industry or institution conventionally finds women in lower positions of power than men.

In their study about women's experiences in the conventionally male-dominated Faculty of Applied Science and Engineering (FASE) at the University of Toronto, 1939-1950, Heap and Scheinberg (2005) discovered that though some women declared that they felt just like "one of the gang" (p. 189), women's entrance into engineering was for many, perceived as an invasion to male culture. In fact, on February 10, 1940, the *Toronto Star* reported on 10 of the 12 women who studied alongside 949 male students in the 1940s cohort. Bringing attention to women's entry into this male-dominated profession, it was reported that "girls have invaded the University of Toronto's School of Applied Science with a rush" (Heap & Scheinberg, 2005, p. 189). Later,

as though trying to ensure that community members should not fret that these women were unfeminine, which would go against gendered social norms and role expectations, it was reported that "they're completely feminine too, just as enticing in an evening gown as the next girl, but they're in love with things like carburetors and aeronautical design" (p. 189). Data from this study suggests that women's challenges at FASE were especially pronounced in their first year of study. For example, describing the experience of her first week in class, one interviewee shared that being a woman at FASE was "a rude awakening" (p. 198). Enrolled women shared narratives of sexist language used by both faculty and fellow male students. Many felt resentment toward them in the classroom, and described not feeling as though they were treated as equals to male counterparts. Being excluded from certain activities outside the classroom due to their gender further exacerbated women's marginalized experiences in this male-dominated locale. Upon graduation, many women found it difficult to be hired for jobs that they were equally passionate and qualified for as men. While women's experiences may be diverse, some similar testimonies allude to the rampant male culture of work in engineering (Heap & Scheinberg, 2005); a culture that persists (Holth, 2014).

The legal profession is another line of work that is conventionally male-dominated. Leiper (2005) explores the literature on women's entrance into legal education in various locations. She argues that not only have pedagogical practices in law schools promoted the ideal of a masculine culture in law, but that the experiences of women law students also reflect their exclusion in this profession. Women have reported feeling threatened in their classrooms as gendered minorities, as well as intimidated by leaders in their law school who promote a masculine organizational ideal in the industry. Overall, studies considered by Leiper (2005) confirm "women's encounters with sexism, discrimination, and sexual harassment in many law

schools" (p. 241). Though they encounter barriers to equal acceptance in the legal profession, aligning with diversity of experience, some women have also accounted for positive experiences in their studies in law school. For some, it is empowering to go against the grain of gendered roles and expectations. By not backing down in this male-dominated industry, women are trailblazers and demand the adaptability of a new culture that includes their identities.

Women in veterinary medicine have encountered challenges in this conventionally male-dominated profession (Woodger & Stone, 2020). Not only have women applying to the Ontario Veterinary College (OCV) been excluded given the longstanding favouring of male applicants, but they've also encountered difficulties in veterinary medicine workplaces. Historically, this profession was viewed as unsuitable for women. Women were expected to adhere to their traditional gender roles that did not correlate with the responsibilities of those practicing veterinary medicine. Considering this, veterinary medicine remained a male-dominated profession up until the end of the 20th century (Woodger & Stone, 2020). One exceptional woman who did persist in the industry in the 1930s described her experiences as a veterinary student as "rough and tough" (p. 53). Not only did handling large livestock demand physical strength, which women were often not perceived to hone as much as men, but intricacies one required to know about medicine and health as a veterinary practitioner also maintained exclusionary attitudes toward women in veterinary medicine. They were viewed as inferior to men (Woodger & Stone, 2020). When women did enter the field, they were usually segregated into jobs that found them caring for small companion animals. This aligned with the gendered perception of women as caring and nurturing, capable only of supporting the needs of small domesticated animals rather than large livestock requiring heavy physical demands (Woodger & Stone, 2020).

Finally, research conducted by Muzzin with Sinnott and Lai (1999) about the experiences of women in conventionally male-dominated professions in the Canadian pharmaceutical industry also contributes to the discussion of women's disproportionate experiences of workplace discrimination. Gendered struggles in this line of work have been well accounted for, where though women have played important roles in Canada's pharmaceutical industry, their contributions have often been undermined and undervalued in light of patriarchal values that dominate the industry. In their study, thousands of workers in the Canadian pharmaceutical industry were interviewed (Muzzin with Sinnott & Lai, 1999). The study discovered that women in pharmaceuticals have been excluded most especially from work in independent pharmacies. Instead, women in pharmaceuticals have most often found themselves working directly and more privately, with physicians. This segregation in the industry was usually not by women's choice but the result of exclusionary practices that perceived men as better suited for certain jobs in this industry. To Muzzin with Sinnott and Lai (1999), the patriarchal subordination of women in the Canadian pharmaceutical industry is concerning and unethical. Feminist ethical orientations have been ignored by this industry, which has affected the masculine culture of the industry that has conventionally celebrated masculinity over and above femininity. The parallels with the mining sector are striking.

Conclusion

This chapter has described the masculine organizational culture of the blue-collar mining industry. It has reviewed literature that contributes to an understanding of the gendering of occupations which has by consequence, led to gendered occupational segregation in the Canadian workforce (Bagilhole, 2002; Bradley, 1989; Milkman, 2016). Central to my study, the literature review suggests that gendered occupational segregation in Canada persists and is

notably problematic in blue-collar industries (Jackson & Thomas, 2017). This is especially true of Canada's mining industry where women hold only about 15.5 percent of jobs (MIHRC, 2022). As gendered minorities, these women have been repressed. They and other women in blue-collar industries have too often experienced hostility, discrimination, and othering on the job (Bagilhole, 2002; Benya, 2016; Botha, 2016; Braundy, 2011; Burczycka, 2021; Greene, 2006; John, 1984; Keck & Powell, 1996, 2006; Laplonge, 2014; Luxton & Corman, 2001; Mansfield et al., 1991; Meyer, 2016; Milkman, 1997, 2016; Mulroy, 2008, 2019; O'Farrell, 1999; Palmer & Lee, 1990; Papp, 2006; Reskin & Roos, 1990; Schroeder, 1990; Tallichet, 1995; Thomas, 1989; Tripp-Knowles, 1999).

While research that takes a social approach to understanding the city of Greater Sudbury's mining industry has been conducted on topics such as perceptions of health and safety in surface mining operations (Babando, 2015), as well as perceptions of the industry's impact on miners' health from occupational exposures (Kramer et al., 2017), not since Keck and Powell (1996, 2006) studied women's experiences working production and maintenance jobs in Sudbury in the 1970s, has scholarly attention focused on the topic of women's gendered work experiences in Sudbury's mining industry. Considering ever-evolving technological innovation in the mining industry that has especially and in recent years changed the work of many jobs that sustain the industry, and that the industry, including the mining industry present in the city of Greater Sudbury remains heavily gender imbalanced (Leadbeater, 2008; MIHRC, 2022), it is an appropriate location to study gendered work relations. Since technological innovation in mining witnesses increased mechanization and automation in the industry, it has been predicted that more inclusivity in the industry could be in the near future of mining (Davidson, 2020). This could help combat gendered norms that persist in society (Abrahamsson & Johansson, 2020).

While local author Cathy Mulroy (2019) published an autobiographical account of her work experiences being one of the first women hired to work underground at Sudbury's Inco, more current voices of women in Sudbury mining need to be heard. My project recognizes this and takes an interdisciplinary, community-based approach to the address of its research questions. Via its address of these questions, my study aligns itself with Gillian Davidson (2020), Chair of International Women in Mining. Her report speaks to the importance of research that gives voice to women in mining:

> The role of women in mining has become a sustainability imperative, essential to the success of our industry and our ability to realize our potential to innovate and create value for stakeholders and society. But change won't happen without asserted action by all of us (p. 42).

Davidson (2020) believes that by starting locally, as my study does, it may be possible to improve the current gendered climate of the mining industry so that its culture includes values of diversity and inclusion. To date and according to literature reviewed in this chapter, values most often associated with workers in mining are correlated with masculinity, such as physical strength (Gibson & Papa, 2000; Krymkowski & Mintz, 2008) and toughness (Lubrano, 2004). Other characteristics usually associated with mining are those shared with blue-collar industries broadly, and include that these industries provide work that is tough (Lubrano, 2004), dirty (Reskin & Roos, 1990; Slutskaya et al., 2016), often dangerous (Lucas & Buzzanell, 2004; Meyer, 2016; Somerville & Abrahamsson, 2003), and competitive (Spencer, 1977). Combined, this chapter has explained that these values and characteristics perpetuate women's exclusion from and devaluation in mining and in other male-dominated, blue-collar industries. Of course, this chapter has also acknowledged that high levels of job satisfaction are often perceived to be

emblematic of workers in blue-collar industries (Greene, 2006; Keck & Powell, 1996, 2006; Papp, 2006; Rannona, 2003).

The next chapter describes methods that were used to address my study's research questions. This chapter further justifies the interdisciplinary approach of my study, which aligns with Klein's (2005) interdisciplinary regime that recognizes the plurality and heterogeneity of the human experience.

Chapter 3: Methods

This chapter outlines the methods that I took to address my research questions, defines key terms, and situates me and my identity as a researcher in this study. Doing so follows Burkitt's (1991) contention that researchers should strive to keep in mind "the social self" when conducting research, thus ensuring that researchers are reflexive in their methods of analysis. This supports the discovery of meaning and meaning-making, especially in qualitative research (Braun & Clarke, 2019; Mihas, 2022b). To Burkitt (1991), self-identity impacts all social activity and social relations, including the analyses of those activities and relations. Being mindful of "the social self" aligns with Baxter's (2003) feminist, post-structuralist position that "any interpretation of data must explicitly acknowledge that it is constructed, provisional, perspectival and context-driven" (p. 59). With that in mind, my project was guided by qualitative inquiry that Denzin and Lincoln (2018) attest is an interpretive approach to understanding social experience. There is value in describing how my identity impacts my project. As this chapter makes clear, as the researcher of this study, I acknowledge that my interpretation of my study's data "is a situated activity" (Denzin & Lincoln, 2018, p. 10) that locates me, as an observer, in the social world being considered.

Key terms

I assert that while gender roles are socially constructed (Butler, 1990) and culturally reproduced (Rose, 2010), gender identity is also self-determined. While this may sound contradictory, this perspective recognizes the importance of inclusivity. Because of this and keeping feminist principles of inclusivity in mind, before engaging in an interview, participants were asked to self-identify their gender. Gender identity is a term that my study defines as a person's inherent sense of being male or a man; female or a woman; or an alternative or other

gender such as gender non-conforming. Accepting gender identity as an identity choice disrupts the traditional notion that gender is a fixed dichotomous variable, which itself fails to recognize gender identities outside of traditional woman and man genders. To Lindqvist et al. (2021), for research to be inclusive and not discriminatory, participants in research studies "should be able to self-define their gender identity" (p. 1-2). I agree with this tenet. Because of this, even if gender is a negotiated experience influenced by social constructions of culture (Butler, 1990; Rose, 2010), the use of gendered terms in my study that includes male or man and female or woman are utilized not because I perceive gender as a binary category, but because these were the two genders that participants used to describe themselves. Consistently when adopting pronouns to refer to themselves, participants who gender identified as male or a man, or spoke about persons they perceived to be male or a man, used pronouns he and him. Persons who gender identified as female or a woman, or spoke about persons they perceived to be female or a woman, used pronouns she and her. Therefore, these are the pronouns I use consistently in my paper when referring to participants.

Data collection - Research Ethics Board (REB) approval for interviews

The endogenous interdisciplinary pursuits of my study are reflected in my study's emancipatory purpose to produce new knowledge, which according to Weiss and Wodak (2003), should integrate holistic approaches that seek to foster innovative, inclusive environments. With the goal of promoting equity, diversity, and inclusion in mining workplaces in Greater Sudbury and by extension in other mining communities, I interviewed workers employed in Sudbury's mining industry with a focus on understanding women's experiences as gendered minorities working in this male-dominated industry (MIHRC, 2022). Participants were asked about the general culture and climate of their work environments to better understand interpersonal

interactions and communications that occur between workers in these environments. How these interactions and communications may or may not be gendered was considered, as was the language used to describe these interactions and communications.

In addition to speaking about the culture and climate of their work environments, during their interviews, women were asked to speak about their direct work experiences in the mining industry. By contrast, men were asked to speak about their work experiences in mining with women.

In total, 36 people gave interviews for my study; 11 of these people gender identified as men and 25 gender identified as women. All but one woman's interview was included in my study's data analysis. That interview was omitted from my study because during this woman's interview, she disclosed that she did not work in the city of Greater Sudbury's mining industry, but in another Northern Ontario city that has an underground mine. Because my project focused on the specific region of Greater Sudbury to draw its data, to maintain consistency, only participants currently employed in the mining industry in this region were included. This does not mean that some participants did not have other work experience in mining workplaces beyond Greater Sudbury. However, all participants were asked to focus their answers to my interview questions, reflecting on work in mining in the specified region.

I selected a semi-structured approach to interviewing participants because this type of interview seeks to elicit detailed descriptions of life experiences in order to deduce meaning about a particular phenomenon or experience. This approach allows more flexibility in the pursuit of knowledge than do other more rigid forms of interview practice such as structured interviewing (Brinkmann, 2018). They enable rich data to emerge from participants, and support

more symmetrical power relations between interviewee and interviewer (Holstein & Gubrium, 2016).

Because a semi-structured approach to the interview process was selected, I was able to ask follow-up questions when clarity about participant responses was needed. This supported a fuller understanding of women's and men's work experiences in Sudbury's mining industry. It also supported a more conversational approach (Holstein & Gubrium, 2016). I perceive that a conversational approach to the interview process is beneficial, because this approach better engages participants and helps develop mutual trust and respect between researcher and participants (Holstein & Gubrium, 2016). These are benefits that DeVault (2018) attests are generally associated with qualitative interviews, which often pursue social justice and seek to better understand the lived experiences of everyday people. About this, Miller and Glassner (2016) suggest that while qualitative interviews may not directly mirror social customs, they "may provide access to the meanings people attribute to their experiences and social worlds" (p. 133). In other words, they help draw meaning and meaning-making from social experience.

Ethics approval to gather data for my study was granted by Laurentian University's Research Ethics Board (REB) prior to any interviews being conducted. *Appendix 2* contains my study's REB approval certificate. The proposal to Laurentian's REB committee was that about 30 people working in Sudbury's mining industry would be interviewed for my study. Because I had ties to three people who work in Sudbury's mining industry, these persons were asked if they were interested in acting as initial participants. All three agreed. A snowball sampling thereafter supported the recruitment of more participants, which means that participants helped me identify other workers in the industry who might be interested in being interviewed for my study.

To support the snowball recruitment method of my study, if participants said that they knew other persons who might be interested in being interviewed, I provided them with a Youtube link (https://www.youtube.com/watch?v=_IC1joz9_4k) to a three-minute video describing my study and its objectives. This video was published on Youtube by Laurentian University's Digital Strategy department, in the summer of 2019. It was also distributed across social media channels owned by Laurentian University. A transcript of the spoken text in this video can be found in *Appendix 3*. This transcript and the video link were provided to and approved for distribution to potential participants by Laurentian's REB prior to the recruitment of participants. People who became aware of my study through friends or colleagues who had already been interviewed for my study were asked to contact me directly if they wanted to participate. My contact information was provided to all participants who were encouraged to share it should they know of other potential participants. If potential participants specified that they preferred to be contacted directly by me as the researcher of this study, to learn more about the project or participate, I made direct contact with them when contact information was provided. This snowball and word-of-mouth participant recruitment method was very successful. In reflection of this success, I interviewed a handful more participants than was proposed to the REB (R=36, rather than 30). In the end, the number of participants was 20 percent higher than predicted.

Three semi-structured interview questionnaires were drafted for my project (see *Appendix 4*.) The first, *Appendix 4a*, was designed to be used when interviewing women who work in Sudbury's mining industry. The second, *Appendix 4b*, was designed for interviewing men who work in Sudbury's mining industry. The third, *Appendix 4c*, was designed to be used when interviewing persons who identified as a gender identity other than, or neither/nor, a man or

woman, and who work in Sudbury's mining industry, but none of my study's 36 participants identified as a gender identity other than man or woman. Because of this, only two of the three drafted interview questionnaires were used to collect data for my project. By interviewing both men and women, my study aligns with Laplonge's (2004) argument that only in capturing narratives about the work experiences of both women and men, can a research project begin to draw conclusions that explain gendered dynamics at work. After all, as the literature review of my paper supports, gender is something that all persons perform in their everyday lives (Butler, 1990) - in private as well as in public spaces. Gender influences the way people work, relate, and communicate. Because my study focused on better understanding the work experiences of women in mining, about two-thirds of interviewees are women, and about one-third of interviewees are men. Laurentian's REB approved this as an appropriate sample of participants to address my research questions.

Ethics approval to conduct in-person interviews was initially granted for my project on March 18, 2020. However, on this same date, Laurentian's REB also announced that they were encouraging researchers to follow protocols newly initiated by public health authorities in response to the COVID-19 threat. This included limiting all non-essential social interactions. Therefore, I was asked by the Chair of Laurentian's REB to consider alternative means to interview participants and have them consent to my project. A revised data collection proposal was then submitted to Laurentian's REB Chair. This revised proposal was approved on March 30, 2020 with the modification that I would no longer interview participants face-to-face in mutually agreed upon public locations, but rather, interviews would be conducted by phone or by a virtual connection such as Facetime, Zoom, Google Hangouts, or Skype. All participants were asked to read through background information and context about my study, and were given

opportunities to ask questions and have any of their concerns addressed before electing to be a participant. This was necessary to ensure that all participant interviews were based on ongoing and informed consent. The participant consent form used for my study is located in *Appendix 5*.

Laurentian's REB approved that informed consent could be provided by participants to me in one of two ways: 1) by signing a participant consent form and emailing this consent form directly to me, or; 2) by providing verbal informed consent to be interviewed, as long as this verbal consent was audio recorded for documentation purposes. Informed consent meant that all participants agreed to allow me to audio record their interviews for transcription purposes, a necessary step for my project's data analysis. Informed consent also meant that participants could retract their participation in my study at any time.

All interviews were conducted between April and November 2020. Slightly over 31 hours of interview talk time comprise my project's data. Just over 24 of these hours are based on interviews with women, and just over six of these hours are based on interviews with men. On average, women's interviews had a duration time of 61 minutes in length, and men's interviews had an average duration time of 33 minutes in length. I transcribed all interviews, verbatim. Only I, as researcher, had access to the transcripts, for data analysis purposes. My supervisor, Dr. Linda Ambrose, was also approved by Laurentian's REB to have access to these documents, as needed to support me in my efforts to accomplish my project. This was explained in the consent form provided and agreed to by each participant.

Notably, gender identity is not the only feature that categorizes participants in my study. What further categorizes them is the type of work that they do in the mining industry. When it comes to the 24 women included in my study, two identified as geologists, six as engineers, three as health and safety specialists, and 13 as blue-collar workers. Most attested that they work in

underground mines in the Greater Sudbury region, though a handful of women participants are employed in various surface mining operations. A few find themselves in jobs that combine work on surface and underground. By contrast, all of the men in my study who are employed in Sudbury's mining industry identified as blue-collar workers, and all but one of them work exclusively underground. The man who is an exception to this described that his work includes roles both on surface and underground. *Appendix 6* provides a general overview of participants. All participant names have been changed to pseudonyms. In chapters of this thesis, further descriptions of the type of work that participants do is occasionally identified, but information about participants and their work is only disclosed when the assurance of participant anonymity is maintained. Though the job titles of interviewees are diverse, further describing job titles of participants could risk their identification. Because of this and following my project's REB certificate, a more detailed breakdown of the type of work that participants do is not described in *Appendix 6.*

I determined that if I were to include more details about the identities of my participants, such as their race, I would jeopardize their anonymity. While I agree with theorists such as hooks (2000), Acker (2006), Slutskaya (2016) and Wright (2016a, 2016b) that there is value in considering how intersectional experiences of a person's social identity shape advantage and disadvantage, discrimination and privilege, these details could have identified participants. This is especially true of women who form the gendered minority in mining (MIHRC, 2022). In fact, two women interviewees who voluntarily described themselves as visual racial minorities asked me *not* to include any detail about their race in my study, as this could risk their identification. Making the decision to not consider intersectional experiences based on the social identities of my study's participants was intentional, because it followed ethical practice.

Before describing my study's methods of data analysis, it is important that I situate myself and my identity as the researcher to this study, which is a reflexive process (Braun & Clarke, 2019). I identify as a feminist, cis-gender woman in her thirties who uses pronouns she and her. I grew up in the small Northern Ontario town of Cochrane, located about 400 kilometers North of the city of Greater Sudbury. I was raised by parents who own full-service gasoline stations. For the most part, labour in my childhood home was divided by traditional gender roles; traditional in the sense that men work outside of the home for a wage, and women work inside of the home for little to no monetary compensation (Livingstone & Luxton, 1998). My mother predominantly performed caring work in the home. My father spent equal amounts of time doing the manual labour at the gasoline station pumps, and the professional work of running a small business. Although owning a business might mean my family should be considered white-collar and middle-class according to some of the literature, I recall that my father more often than not came home smelling like gasoline with oil stains permanently embossed into his clothing. Therefore, I maintain that this also made my family blue-collar.

Though I worked part-time in the blue-collar job of a gas station attendant from the age of 13 to about 18 years old, and like my father, often ended the work day smelling like gasoline and oil, my adulthood has exclusively found me employed in white-collar jobs. My spouse, however, is a blue-collar miner who identifies as a cis-gender male in his thirties. To refer to himself, he uses the pronouns he and him. Considering my childhood background as well as current lifestyle with my spouse, I identify equally with blue- and white-collar lifestyles, about which LeMasters (1975) posits that work identity shapes lifestyle, including hobbies, likes and dislikes. Though my professional work is situated in an office-setting (white-collar), many of the hobbies I enjoy such as fishing, camping and participating in sports, are most often associated

with the blue-collar lifestyle (Dunk, 1991). To Lubrano (2004), identifying with blue- and white-collar identities is a sensation he coins, "straddling." In his book *Limbo: Blue-collared roots, white-collared dreams,* he recounted the stories of "straddlers" that touched on the development of their values, conformity, community, class, and social mobility, as experienced by them at work and in their personal lives. While I identify in many ways with the narratives of these "straddlers," I was disappointed that these stories recounted in Lubrano's (2004) work focused only on the experiences of men. Women's perspectives were ignored.

Since becoming a post-secondary student, I have been interested in gendered relations, especially as experienced in workplace settings. I realized that the mining industry, central to the city of Greater Sudbury, is an industry in which women are the gendered minority (MIHRC, 2022) in an industry traditionally considered best suited for men (Keck & Powell, 1996, 2006). This distinct sector of the workforce, I reasoned, is a good location in which gendered relations can and ought to be studied. As described in March 2019 at the Greater Sudbury Chamber of Commerce during International Women's Day, women in mining are "a big untapped resource" (Carmichael, 2019). Countless conversations with my spouse about his experience working in Sudbury's mining industry have confirmed this. Over the course of my spouse's many years of work in the industry, for instance, he has frequently shared narratives with me about how he works exclusively with men and rarely comes in contact with women at his mine site. The same is true for other mine sites at which he has been employed in the Greater Sudbury region. While there may be improved advocacy for women and girls to enter non-traditional industries such as mining, the literature informs us that mining workplaces continue to foster a valuation of masculinity (Laplonge, 2014; Tallichet, 1995). My research project started because I sought to

better understand this social problem. I sought to support enhanced equity, inclusion and diversity in my community, in this industry and in others that are similarly gender imbalanced.

Data analysis: An interdisciplinary approach "bricolaging" thematic and critical discourse analysis

As described in the previous chapter, my study is interdisciplinary. This approach recognizes that to solve complex problems, the perspective of multiple theories and methods should be considered (Newell, 2008). To Klein (2005), the integration of disciplinary voices, tools, methods and theories enables interdisciplinary research pursuits to meet grand challenges posed by modern society. I leveraged interdisciplinarity from the inception of my study.

To analyse my study's data, two methods of analysis were "bricolaged" to support the identification of findings. The term "bricolage" comes from the work of Lévi-Strauss (1966) who fostered the idea that in order to solve new problems, one should attempt to re-use and re-appropriate already available materials. Denzin and Lincoln (2018) used a similar conception in their work that urges qualitative researchers to recognise strengths of a "bricolaged" style to research, which is an interdisciplinary pursuit. In this vein and related to data analysis, Blommaert (2005) argues that an eclectic theoretical and methodological approach has the capacity to best meet a research project's specific interests and objectives. I ascribe to this, and kept this in mind when undertaking my interdisciplinary study.

The "bricolaged" methods of analysis that supported my project included first and foremost, a thematic analysis (TA) and second and supplementarily, a critical discourse analysis (CDA). While TA enabled me to draw codes and then significant themes from interview transcripts that shaped my study's findings, because I was also interested in understanding structures of power in language present in these transcripts, a hybrid version of CDA also supported data analysis. CDA was, to my study, a supplementary method of analysis to its

primary method of analysis being TA because principles of CDA were leveraged to analyse the data only after the data had been thematically organized. Because there are many different approaches available to researchers interested in both TA and CDA, the approaches that guided my study are described in this chapter. The type of coding that I conducted is also described.

My approach to TA was guided by reflexive principles outlined by Braun and Clarke (2006, 2019) who established that themes are foundational for qualitative analysis. They argue that while there are many approaches to TA, theirs "provides a flexible and useful research tool, which can potentially provide a rich and detailed, yet complex, account of data" (p. 78). Their approach acknowledges the centrality of the researcher to their study, in that the researcher's subjectivity should be considered at all stages of a study's undertaking. To the scholars (Braun & Clarke, 2006, 2019), the researcher should remain thoughtful throughout the research process, and should regularly keep track of their thoughts, feelings, and ideas regarding a study over the course of its progression. This is why I consistently kept a journal during my research process. To Nowell et al. (2017), adopting reflexive activities such as journaling while pursuing research produces "sensitive, insightful, rich and trustworthy research findings" (p. 2). To Mihas (2022), efforts of journaling remind the researcher to keep in mind their research questions and purpose behind addressing their research questions at every step of the research process. Journaling also provides a trail for me to better keep track of data (Nowell et al., 2017). This facilitates the process of decontextualizing and later recontextualizing the data so as to draw conclusions that may confirm, refute, or offer new scholarly contributions.

As Braun and Clarke's (2006) checklist for conducting a good TA suggests, the first step in analysing my study's data was to transcribe, verbatim, all interviews. This process informed my early stages of analysis. As postulated by Braun and Clarke (2006), "the close attention

needed to transcribe data may facilitate the close reading and interpretive skills needed to analyse the data" (p. 88). Transcribing is an interpretive act that found me connecting deeply with the data set. In other words, this process helped me immerse myself fully in the data. Doing so enhanced my efforts to critically analyse the data. While software can support this, manually transcribing each interview had the benefit of ensuring that I was as familiar as possible with the data before the coding process began (Braun & Clarke, 2006). To Vanover (2022), this process of transforming audio recordings of interview data is the first step to drawing connections and insight from data in order to discover meaning and meaning making.

During this process and following reflexive guidelines suggested by Nowell et al. (2017) to enhance the trustworthiness of my study's analysis, I journaled about the experience of transcribing, and about the content of transcriptions. This process of journaling, or in other words, of memoing (Bingham & Witkowsky, 2022; Mihas, 2022a), began as early as during the stage of reading the literature about my topic of study. To Bingham and Witkowsky (2022), memoing at this stage of the research process finds the researcher asking "deeper questions about the data in relation to existing research" (p. 144). This process continued when I conducted participant interviews, as well as after this process was complete and when I was immersed in the writing stages of my project. I would jot down notes and comments, at times, about my thoughts, ideas and emotions related to the narratives shared by participants. At other times, I used my notes to help me connect the narratives of participants to themes, concepts, and ideas that had frequently arisen in my consideration of the literature. These methods supported my critical approach to making sense of my data.

Further enhancing the trustworthiness of my study, all transcriptions were checked twice for accuracy, once they were complete. After this step, I listened again to the audio files of all

interviews, this time without the pauses that are necessary during the transcription process. I then read through the textual transcripts of all interviews, in their entirety, twice. I was careful to ensure that each data item was given equal attention, conforming to point two of Braun and Clarke's (2006) checklist for conducting a good TA. After these steps were taken, the coding process began.

TA coding may be inductive, deductive, or a combination of both approaches (Bingham & Witkowsky, 2022; Braun & Clarke, 2006). To Fereday and Muir-Cochrane (2006), the rigour of a TA can be enhanced when a hybrid process of inductive and deductive coding is adopted. Because I journaled reflexively throughout the research process, and at times this exercise found me connecting the narratives of participants to themes that previous research on the topic of my study had identified, it could be argued that the initial approach to my study's data interpretation was deductive. This is also known as "a priori coding" (Bingham & Witkowsky, 2022; Fereday & Muir-Cochrane, 2006). However, because I did not actually prescribe a set of codes before the process of coding started, but allowed codes to emerge naturally and directly from the data set, my coding approach was more inductive than deductive (Bingham & Witkowsky, 2022; Braun & Clarke, 2006). It was deductive only in the sense that I was familiar with themes described in previous studies about the experiences of women working in non-traditional occupations that are male-dominated, especially those considered blue-collar (like mining). These themes were useful for me to be aware of in advance to my coding process, because I was able to reflect on these themes as connected to the data, over the course of the research process. While this was beneficial in guiding the complexity of this process, I made every effort to inductively allow the data set to guide me in the identification of codes, which are features of the data that I assessed

as meaningful (Braun & Clarke, 2006). These codes were instrumental to my process of determining themes in the data set that guided the address of my study's research questions.

Alongside my study's hybrid coding approach that was predominantly led by inductive methods but also guided by deductive methods, my study's approach to its TA was latent. This means that in coding the data set, I made every effort to critically go "beyond the semantic content of the data" and "beyond what a participant said" to search for meaning in the ideas, assumptions and concepts described by participants (Braun & Clarke, 2006, p. 84). These ideas and assumptions inform the semantic content of the data, and the analysis of this enables a more complex undertaking of a study.

The steps that I took in the identification of codes in the data set were guided by Braun and Clarke's (2006) checklist of criteria for good TA and step-by-step guide in doing TA. Coding took place in two stages. In the first stage, I coded data pertaining to interviews with women. In the second stage, data pertaining to interviews with men was coded. This coding process initially took place manually. In addition to having made notes directly on the printed transcripts and in the margins and diverse journaled notes about the data set, I used many coloured pens, markers, and highlighters to indicate possible patterns in the data. I would highlight or underline, for instance, a particular section of a transcript when I identified its content to address one or more of my study's research questions. I started a legend on a separate sheet of paper that I used to keep track of the codes I was identifying and grouping by highlighted colour or underlining. Once this process was completed for all transcripts on paper, I transferred the coded information to my electronic copies of the transcripts. During this process, I began to modify and group codes that I perceived best represented the data. Doing so meant I was following Braun and Clarke's (2006) guideline that "coding continues to be developed and

defined throughout the entire analysis" (p. 88). This process was active and ongoing until I was satisfied that I had extracted all codes in the data set that could address my study's research questions. These codes were then analysed for common themes in the data set.

To keep track of my study's codes and group them methodically, I generated two files, each with a table of content. One file kept organized the codes extracted from men's interviews, the other the codes extracted from women's interviews. Under each code heading that developed the table of contents, I extracted and labelled particular codes from each transcript. In order to generate a profile for each participant, I kept track of what sections of the data set from each interview fit into a code. Some text from the data set was coded more than once, which Braun and Clarke (2006) suggest is the norm for TA and can in fact, support the complexity of the method. Going a step further to organize my study's codes and triangulate data, I generated tables for each participant to keep track of the coded data connected to each participant. These tables were beneficial in my process of searching for themes in the coded data because during this process, codes continued to evolve as I became increasingly familiar with the patterns emerging in the data. Themes drawn from the coded data set guided the chapters to follow that contain findings about my study. What also helped me keep track of my study's data was the generation of thematic maps to help me make sense of this data. To Braun and Clarke (2006), thematic maps are an excellent tool for researchers as they ongoingly help make sense of data. These visual accounts helped me conceptualize patterns in the data set and helped me identify relationships between these patterns to support the drawing out of findings.

When it comes to how I utilized a hybrid CDA in my methodology, Baxter's (2003) feminist post-structuralist discourse analysis (FPDA) and Lazar's (2005, 2007, 2018) feminist critical discourse analysis (FCDA) were most influential. While there are many more approaches

to CDA, at the core of most approaches is the tenet that language is a form of social practice. Underscoring this, Fairclough (2015, 2018) argues that social practice and discourse are mutually constitutive, or rather, dialectically related. Language is meaningful and can be analysed for discourses of power contained within it.

Baxter's (2003) approach is motivated by goals to eradicate grand narratives. These are stories influenced by personal experiences and extended ideologies that condition themselves as having superior or absolute status in their rationalisation for anything (Locke, 2004). This approach was developed to provide space specifically for female voices traditionally marginalized or otherwise silenced by dominant discourses to be heard (Baxter, 2003). FPDA shares many similarities to Lazar's (2005, 2007, 2018) approach as both see value in uncovering power imbalances in space and place via the critical analysis of language.

Like Baxter's FPDA, Lazar's (2005, 2007, 2018) FCDA supports a feminist ontology to the critical analysis of contemporary gendered struggles in society. These struggles are viewed as existing in everyday locations of talk and text, including within workplaces. In spending time critically analysing power imbalances present in everyday language, this approach aims to socially and materially transform gendered social relations. To Lazar (2005), unequal workings of power and ideology in discourse sustain hierarchically gendered social orders in which women and men have problematically been categorized as separate social identities because:

> the prevailing conception of gender is understood as an ideological structure that divides people into two classes, men and women, based on a hierarchical relation of domination and subordination, respectively. Based upon sexual difference, the gender structure imposes a social dichotomy of labour and human traits for women and men, the substance of which varies according to time and place (p. 7).

The view of men and women as socially constructed is influenced by the work of Butler (1990), who amongst others argues that normative gender identities are formed out of systems of heterosexism where men are typically socially constructed as dominant and women, subordinate. This dichotomous and unequally hierarchical gendered social order described in more detail in the preceding chapter's literature review, is all too real in the social stratosphere of the mining industry. It is also present in language used by participants when they spoke about their work experiences in the mining industry. Because of this, after the data set was coded and analysed for recurring themes, Baxter (2003) and Lazar's (2005, 2007, 2018) approaches to CDA were employed to go a step further in the analysis of language adopted by participants when they addressed interview questions. Consideration was given not only to what participants said in their interviews, but to how they said what they did, and in what context. As will be described in subsequent chapters that contain my study's findings, attention is brought to the analysis of language for its discourses of power specifically related to gender when I deemed it important as part of my participants' meaning-making process. These analyses are meant to be supplementary to the thematic analyses that predominantly supported my study.

Chapter 4: Proving themselves in a man's world - Challenging resistance to acceptance and respect

Women in mining challenge the masculine organizational culture of the industry. This deeply gendered culture continues to be present in mining workplaces in the city of Greater Sudbury. My study finds that not only are women the gendered minority in mining jobs in Sudbury, but are also treated differently than men in their places of work. My study discovers this to be true of women holding a variety of jobs in the industry. While this differential treatment sometimes reveals itself in exclusionary attitudes and behaviours about women's belonging in the industry, women participants described ways that they are treated at work that may be well meaning but are typically condescending or patronizing. In other words, they are often treated with "benevolent sexism" (Barreto & Ellemers, 2005; Glick & Fiske, 2001), a concept connected to "respectful masculinity" (Meyer, 2016; Miller, 2004). Both terms have been defined in the literature review.

My study finds that the masculine organizational culture of the mining industry is so heavily ingrained in the fabrics of mining workplaces that this order becomes normative. Perceptions and actions that seek to exclude women from mining derive most often from colleagues and superiors, who are usually men (MIHRC, 2022), but can and do also derive from other stakeholders and members of the public. Women in mining meet resistance to gaining acceptance and respect. Their authority and professionalism at work is too often underestimated and called into question. They encounter barriers to equal opportunities. They are segregated into certain jobs over others. Many encounter harassment in a variety of forms and are hesitant to report instances of harassment against them. Some women have even encountered the gender pay gap (Sobko, 2021) or in other words, have experienced the discrimination of being paid less to perform the same work performed by a man. All in all, Sudbury women in mining have and

continue to persevere in a masculine organizational workplace culture that is not always welcoming toward them.

This chapter focuses on the resistance that women in mining encounter as they seek to achieve acceptance and respect at work. As several women who interviewed for my study attested, they work in "a man's world." Consequently, they often perceive that their efforts to prove themselves as valuable members of their work teams must be more substantial than the efforts of men who experience privilege more than they do in the "man's world" of the mining industry. This demonstrates that as gendered minorities, women in mining often feel like outsiders amongst their mostly male peers. As this chapter reveals, this sentiment is commonly experienced by women prior to their employment in the industry because they described knowing in advance that they will be the gendered minority in their jobs. My study also unearths that women's sense of gendered othering is typically more pronounced near the beginning of their careers or upon movement to new work sites where they encounter new colleagues, mostly men. Although all women interviewees described encountering resistance in their places of work as they tried to gain acceptance and respect, it is also true that not all men discriminate against women in the industry and that according to women interviewees, more of their peers than not, treat them well. Other sections of my paper will illustrate the complex relations women form with their mostly male peers at work, and also with the few female peers they have. This includes the development of bonds of camaraderie. Even these bonds, however, demonstrate the intensity of the masculine organizational culture of the industry that women encounter. This is because many women outlined that their ideal sense of belonging at work, which coincides with their perception of being accepted and respected in their work environments, is when they are treated as and become "one of the boys" or "one of the guys." This reveals that being a man in

the mining industry is more valued than being a woman. As one female interviewee put it, women working in and proving themselves in the "man's world" of the mining industry, "it's definitely not for the faint of heart."

Although collectively, the experiences of women in mining encountering resistance to the achievement of acceptance and respect are similar in a variety of occupational roles, differences in job responsibilities and positions of power mean that there is some diversity in the experiences that women confront. To explore this diversity, in this chapter, I classify women into four occupational groups within mining: 1) geology; 2) health and safety; 3) engineering; and 4) blue-collar. The overview of participants in *Appendix 6* provides the distinction as to what women, referred to by pseudonyms, are employed in positions of power, or in other words and in the context of my study, in managerial or supervisory roles.

This chapter is organized into three parts. First, it demonstrates that the industry is male-dominated according to all interviewees. That reality often makes women feel like outsiders amongst their male peers, or in other words, as though they stand out and are treated as different. Second, this chapter outlines the experiences of women encountering resistance as they attempt to achieve acceptance and respect in their places of work in each of the four occupational groups representing women interviewees. In all of these roles, the resiliency of women in the face of adversity is revealed, where mental and emotional stability are highlighted by many interviewees as useful characteristics to hone in the industry, especially as gendered outsiders. Third, this chapter describes how women perceive that they must work harder in their jobs than men to prove themselves as equally capable and valuable as men. Overall, this chapter clarifies that the city of Greater Sudbury's mining industry continues to foster a masculine organizational culture that can be challenging for women to overcome. Regardless of whether they occupy a

professional role or work underground, the predominant masculine culture of mining can have implications on women's experiences at work.

Part 1) Mining is "definitely very very [sic] male-dominated." "It's still quite the boys' club."

We know that the mining industry is male-dominated according to statistics (Jackson & Thomas, 2007; MIHRC, 2022; Statistics Canada, 2020). *Appendix 7* reveals this to be true in the specific context of my study. It demonstrates that in at least one instance, if not more, in their individual interviews, every participant who contributed to my study (N=35) spoke to the male-domination of the industry. Explaining the gendered composition of the industry in her own words, female engineer, Natalie, said that mining is "definitely very very [sic] male-dominated." Similarly, Nala, who is also an engineer, said, "[women] are still a minority." It is in reflection of their minority gendered status that Lucy, a geologist in the industry, described that women in mining start their careers "with prejudice already against [them]." Building on this, Tiffany, an underground blue-collar supervisor, indicated about the mining industry that "it's still quite the boys' club." For Brooke, who works in health and safety, it is the ongoing gender imbalance in the industry as well as the differential treatment of men and women who work in the industry that found her drawing the conclusion that "[gender] equality [in mining] isn't a term I think we are anywhere near achieving." Only two interviewees (both women; one geologist and one engineer) said that they perceive that the people they work with represent a fairly even distribution of men and women. The remaining 33 interviewees described a significant gender imbalance at their individual sites of work, where men are consistently the gendered majority.

Nine of my study's 24 women interviewees specifically spoke about the experience of being, or having been at a point in their career, the only woman worker amongst men. Five others spoke about the experience of being one of two women at a previous or current site of employment in Sudbury's mining industry. Apart from two female engineers, and one female health and safety specialist, these women are employed in blue-collar jobs. It is in blue-collar jobs that women are most underrepresented in mining (MIHRC, 2022), perhaps because of the physical demands of their work and because manual work has historically been linked to men's work (Gibson & Papa, 2000; Wright, 2016a, 2016b). The remaining ten women interviewees also spoke about the experience of working mostly with men, though they also described having some opportunities to work with women, even if much less often than with men. Most women in this sample described perceiving themselves as being marked as outsiders because of their gender as women, especially near the beginning of their careers or upon instances of transition to work with new people, usually mostly men.

Explaining what it is like to work exclusively with men, production miner Karen, said: "Being the only female, you're a bit more the centre of attention. You get a lot of unwanted attention." Adding to this, Hannah, who works in an underground mechanical shop, said that working with "mostly men…it's a little intimidating." For Kristine, who is an engineer in the industry, working on a project as the only woman among men has caused her discomfort because she recalled men's reactions of surprise to find her on site. As she said about this experience: "...there must have been about 150 men there, and I was the only women, and I could see people looking at me, and I remember thinking to myself, 'this is really weird.'" For Noel, who is a health and safety specialist, feeling like an outsider happens when "being a woman, I stood out." Similarly for Lara, a supervisor at a mine surface plant, "when I'm [a woman] in this

environment, then they're all gonna look at me." According to Jennifer, "definitely, uh, all eyes were on me going underground," she shared about her first day at work as a heavy equipment operator. The people that she works with, she outlined as "mostly men, obviously." Her inclusion of the term "obviously" is important. It alludes to her perception of normalized male dominance in her work environment meaning that women in mining are out of the ordinary. They constitute a break from the gendered status quo, "obviously," and disrupt the hegemonic masculine culture present in the mining industry; hegemony defined as "processes by which a dominant group in a culture maintains its social, political, and economic power by convincing all members of the culture that the status quo is natural and believable" (Keough & Campbell, 2014, p. 470). In male-dominated work environments such as mining, male dominance is normalized.

Part 2) Encountering resistance to acceptance and respect

Differences in job responsibilities and positions of power mean that there is some diversity in the experiences that women in mining confront. Exploring that diversity, in this section, women interviewees are classified into four occupational groups within mining: 1) geology; 2) health and safety; 3) engineering; and 4) blue-collar. Experiences of resistance encountered by women in each occupational group are considered separately and in this order. What becomes clear is that women's expertise, ability, and authority is called into question regardless of the type of job they perform in the mining industry. However, it is blue-collar women who encounter the most hostile comments and actions that disrespect them. Blue-collar women who work underground are especially at risk. This reveals that gender affects the experiences of all workers in mining, and that when it comes to women workers, all experience

resistance in their efforts to achieve acceptance and respect, women blue-collar workers in underground settings, the most problematic of resistance.

1. Women in mining in geology: “I’ve had a lot of men doubt abilities from women.”

Two female geologists who work in the mining industry were among interviewees, making them the smallest occupational group among my study's female participants. While Lucy spoke about encountering significant resistance as she tried to achieve acceptance and respect at work, saying that her identity as a woman working with mostly men is what she perceives has impacted the majority of this resistance, Serena described experiencing this resistance, but to a lesser degree. She acknowledged the reality of experiences of resistance for most women in the industry, including female geologists, but marked herself as “lucky” to have not met as much resistance as she thinks most women in mining encounter. It is problematic that Serena associates luck with her efforts to achieve acceptance and respect because this reveals that for some women in mining, it is as though they expect to be treated with less acceptance and respect than men from the onset, which demonstrates how men are valued more than women in the industry. What is especially noteworthy about Serena’s account is that although she insinuated on more than one occasion in her interview that she has experienced limited challenges of resistance as a female geologist in mining, some of the workplace interactions that she described indicate otherwise. This demonstrates how heavily ingrained the masculine organizational culture of the industry is, impacting women’s perceptions about their work experiences both consciously and subconsciously.

For the most part, the resistance to acceptance and respect drawn from the narratives of Serena and Lucy, as female geologists in mining, relate to occurrences at work feeling as though their authority and skills are less valued or are undermined more than the authority and skills of

male geologists. About feeling this way, Lucy said that she's "had a lot of men doubt abilities from women." Explaining this more, she said her experiences in her job have led her to draw the conclusion that working in mining is "definitely harder" for women than for men. Contributing to this, Serena shared that especially near the start of her career, her mostly male peers and superiors were "really hard on me." She explained her perception that male supervisors provide less support to her in her field work than to men doing the same work. This counters her statement about being "lucky" to not have experienced much gendered resistance to the achievement of acceptance and respect in her job. "They [supervisors] throw you to the wolves a bit," she said. "At least my supervisor does," she continued. "If I have questions and call [them], often they won't answer. It's just, that's how they think you should learn. You're a girl," she explained. If Serena had not included the phrase "you're a girl" immediately following her narrative about how her supervisors treat her, the conclusion may not have been drawn that this is a gendered experience of resistance that finds men and women treated differently.

Bringing attention to some of her direct experiences encountering resistance to the achievement of acceptance and respect at work, Lucy said that "the way people address me is not the same as how they address somebody with the exact same experience and age, but male," which has put constraint on her sense of belonging with her peers. She explained that in her perception, men doing the same job as she are usually automatically assumed to possess the knowledge or skills needed to accomplish work tasks, whereas the way some men treat her at work reflects that they trust her knowledge or skills less because she is a woman. Illustrating this, she said that she has been held back from opportunities in her job because it has been assumed that because she is a woman, she did not have the technical knowledge needed to operate equipment as well as men. Moreover, she said that, "if they're [men] explaining a geologic

concept to me, umm, they might think that they need to simplify it to something that I can comprehend like a fashion show or something sparkly and pink." She explained that gender stereotypes often find their way into conversations amongst colleagues in the workplace, especially when women are addressed. In her opinion, these conversations, even if subtly, undermine the abilities and expertise of female geologists more than male geologists. "Sparkly pink things" are stereotypically and in this instance, associated with the female gender in a condescending way. By associating female geologists in mining with stereotypes that undermine their abilities, one sees how this imposes limitations on them being fully accepted and respected in their places of work. One also sees how this may contribute to ongoing gender-stratified labour where assumptions about men and women being different from each other and being more or less suited for particular jobs or types of work are invoked (Kelan, 2018; Keough & Campbell, 2014; Milkman, 2016; Sugiman, 1994).

Perhaps the man attempting to explain a concept to Lucy using stereotypical gendered terms did not purposefully mean to undermine Lucy's expertise, though that is what he did. This is an example of "benevolent sexism," a concept that describes how certain forms of sexism may be considered by the perpetrator of an action or behaviour to be subjectively well intentioned, or benevolent, but in fact, this action or behaviour is condescending in such a way that women are characterized as needing to be protected or supported by men (Glick & Fiske, 2001). This positions women as weaker than men, reinforcing traditional gender roles (Bagilhole, 2002; Bradley, 1989; Milkman, 2016). To Glick and Fiske (2001), this form of sexism is generally understood as more socially accepted than hostile forms of sexism, such as harassment, yet they maintain that it contributes to societal gender inequality and should not be overlooked. Barreto and Ellemers (2005) agree and postulate that "expressions of sexism are often quite subtle, and

can even be positive in tone" (p. 633). This is perhaps why this type of sexism is also connected in the literature to the concept of "respectful masculinity" (Meyer, 2016; Miller, 2004), since this concept too, describes how men's behaviour toward women can be condescending, even if intended to be respectful. Women's "othering" in mining workplaces, for example, where they are treated as different by the dominant group, which subordinates them, often works in subtle but impactful ways to maintain and endorse unequal gendered power relations (Keough & Campbell, 2014). More examples of "benevolent sexism" (Barreto & Ellemers, 2005; Glick & Fiske, 2001) and how women in mining experience "othering" will be considered in this chapter by participants other than geologists, as well.

Speaking to how she has perceived that her voice is treated as less authoritative than the voices of men at work, Lucy described feeling underestimated when silenced at networking events for geologists. This is another experiential example that has impacted her lacking sense of belonging with her peers. At these events, she painted the picture of standing in a group of geologists when a potential future employer joins this group "to address the males first, or if there's questions, they'll call on the males." She also once found herself working on a project with a male field assistant. As she explained, she was about five years his senior in terms of work experience. For this reason, she was tasked by her superior with the responsibility of overseeing his work. Although she was in the position of authority over this male field assistant, she explained that whenever someone would visit their job site, they would automatically assume that she was working under his direction and not the other way around:

> Some contractor for the company would come onto the property and would immediately point out my field assistant who is male...and immediately address him. As if he was in

charge. And actually, would make derogatory comments toward me, saying things like, "Oh you must be learning a lot from him," and things like that.

In Lucy's perception, it is lived experiences such as these that have made her draw the conclusion about female geologists in the mining industry specifically, and women in mining more broadly that, "yes, prejudice exists." This aligns with literature that describes women's disproportionate experiences of prejudice, in the form of sexism, in male-dominated work environments (Burczycka, 2021; Greene, 2006; O'Farrell, 1999; Wright, 2016a, 2016b), especially those conventionally labelled blue-collar (Bagilhole, 2002; Braundy, 2011; Reskin & Roos, 1990) such as the mining industry (Lucas, 2011; Lucas & Buzzanell, 2004).

Serena assumes that the culture of the mining industry continues to be dominated by men, in part, because few women hold positions of power in the industry. It is in these positions of power that people hire the next generation of workers. "I feel like things would be different if there was [sic] more women that had, like, a senior role," she distinguished. Recently, Serena celebrated a promotion at work. On the topic of obtaining promotion in the workplace, Ahmed (2021) explains that because of differentiations of power, "some people need to make much more of an effort to get through the same door as others" (p. 238). To Serena, efforts made to be promoted in mining workplaces are greater for women than men. Although this section has already revealed that Serena said that she considers herself "lucky" to have not met much resistance gaining acceptance and respect in her job, her experience obtaining her promotion reveals alternatively that she has in fact endured gendered resistance, even if she downplays it. As she recounted, she and a male geologist who had similar work experience were being considered for a job. Although she illustrated that "we both would have been, like, suited for it [the job]," she was pleased to have been selected for the promotion that she explained required

"a whole lot of effort" on her part to prove herself and her value as a geologist. She recounted being proud of herself for her career advancement, but articulated that her male colleague who did not obtain the job told her that "the only reason [she] got where [she] is because [she is] a woman," ignoring her work experiences that made her qualified for the position. This narrative circulated amongst colleagues at her job site, which was frustrating for her. Not only did she share that this man ended up being difficult to work with after she obtained her promotion, but she also said he called her "a fucking bitch" in front of other co-workers for having been promoted. Although it cannot be known for certain, it is questionable whether a man would have been the recipient of such disdain after obtaining a promotion at work. Such aggressive language used by this man to refer to Serena is an example of "hostile sexism" because it "communicates a clear antipathy towards women" (Barreto & Ellemers, 2015, p. 634).

2. Women in mining engineering: "You can't respect the result of my work because I'm a woman?"

Six female engineers in mining gave interviews for my study. Similar to geologists, Lucy and Serena, for women in mining engineering, the gendered resistance to the achievement of acceptance and respect that they encounter at work most often reflects that their authority and skills are less valued or are undermined more than the authority and skills of male peers. This group of women includes two who hold positions of power; one in a supervisory role over the work of other people, and one in a leadership role over processes in her department. Because both of these women obtained their promotions to positions of power so near the time of their interviews (one only about a month prior, and the other having been hired for her new supervisory position, but not yet at work within it when her interview occurred), these women's experiences working positions of authority do not contrast much with those of their female counterparts not in positions of authority. These women spoke at length about perceiving that

their work is often differently evaluated than the work of men. When they accomplish tasks at work, men are often surprised. This further reveals the culture of the industry that values the work and skills of men more than those of women.

Speaking about the overall culture of the mining industry for female engineers, Nala said that "one thing that was always burning inside me was that as a woman, I was not accepted to be in this field, and I wanted to be there." For Hellen, "as a woman, you're effectively feeling like a little bit of an outsider coming into their [men's] world." For female engineers seeking respect and acceptance in mining, because men are privileged over women, one said that "this is going to sound awful and I almost hate using the term, but you almost have to be a little bit, umm, masculine." To Nora, because of resistance against women in the industry, working as a woman amongst mostly men can be a "not comfortable experience." She described high levels of anxiety when going to work every day and explained that if it were not for her self-discipline, hard-working attitude, and motivation to be an engineer in mining, she likely would not have stayed in the industry. In fact, she reported that during the first five years of her employment as a mining engineer, she "looked for every opportunity to leave." She attested her belief that experiences of gendered othering are not unique to her, but are common for most women in mining, aligning with previous literature (Benya, 2016; Botha, 2016; Keck & Powell, 1996, 2006; Lucas, 2011; Lucas & Buzzanell, 2004; Mulroy, 2019). Detailing this, she said about women's challenges being accepted and respected in the industry, "I went through it, and then my female colleagues went through it. I'm not the only one."

According to Erin, as a woman to be considered equally as capable as her male colleagues, it has "taken me a lot longer - like a lot more time and definitely more hours." Building on this, Kristine implored that women "get questioned a lot more" at work, revealing

that she has perceived that more often, her skills as a female engineer are considered less valuable than those of men. About what makes them feel unaccepted and disrespected at work, Naomi, Kristine and Nala said that they have often perceived that their work is evaluated differently than the work of males. When she receives praise at work for a job well done, for instance, Naomi said that her gender as a woman is usually pointed out. It is as though her skills are not expected to be as great as those of men, the quintessential worker in mining (Keck & Powell, 2006; Lahiri-Dutt, 2012; Mercier & Gier, 2007). As in many gender imbalanced industries, different skills and abilities are, in the mining industry, divided into binary categories of masculinity and femininity. Men are seen as more knowledgeable in their roles as engineers than are women, the result of social gendered construction in mining (Keough & Campbell, 2014). Naomi inquired aloud about this: "Why can't I just be doing a good job instead of saying [it's] because I'm a female?" Contributing to this precept in reference to her own experiences, Nala reported that:

> If I get something done, I notice this: I don't know, it might be negative in different ways. Uh, there was me and a young male engineer hired recently, and we both were working hard on something. But the same thing. Like, we both achieved the same thing, but it was appreciated more from me because they thought, I'm a woman doing this. And it's like, no! We both had the same training and we both did this. Like, you can't respect the result of my work because I'm a woman? Like, do you think I'm not capable of doing this? I achieved this, and you are surprised?

In the above account, although Nala received appreciation for her efforts on the project in question, she perceived that this appreciation was gendered and condescending because it undermined her skills more than those of men. For Kristine, although some men may be well

meaning toward women as they compliment their work, when they simultaneously make note of gender when praising accomplishments, she feels undervalued. Men should not be surprised when women accomplish work of equal quality to them. This example of "benevolent sexism" (Barreto & Ellemers, 2005; Glick & Fiske, 2001) and behaviour associated with "respectful masculinity" (Meyer, 2016; Miller, 2004) is problematic and belittles women's abilities in their jobs. In Kristine's perception, experiences such as these have found her drawing the conclusion that "women have to hold themselves to a higher standard than what would be normal to be in the same job as a man." This exemplifies the resistance of acceptance and respect encountered by female engineers in mining, and contributes to "benevolent sexism" present in the industry (Barreto & Ellemers, 2005; Glick & Fiske, 2001).

In terms of perceiving that as female engineers, their authority is undermined more often than is the authority of male engineers, Hellen, who recently earned a promotion to a position of authority, shared that "sometimes [men] say things that can be seen as a little bit offensive." She provided examples of these offensive comments - some of which relate specifically to how women engineers do not belong in mining. Early in her career, she recounted a male co-worker once ask her, "how come you're underground and not in the kitchen?" This comment illustrates the lack of respect toward women in mining in engineering. This man believed that, as a woman, Hellen's work should be limited to within the home and not outside of it, let alone within a rough male-dominated work environment such as an underground mine. This aligns with the historical dichotomous belief that men belong in public spaces, and women in the private haven of the home, which contributes to the ideology of separate work spheres for men and women (Keough & Campbell, 2014). While Hellen pondered that she does not think that discriminatory statements about women in mining in engineering are right or fair, she outlined that "you have to

be willing to accept that some things are gonna be said that you're not comfortable with or maybe potentially not comfortable with." Even if unfair, she asserted with disappointment that "that's the reality we live in right now." That reality is a masculine organizational culture that can be exclusionary toward women, making it more difficult for women to gain acceptance and respect.

About her experiences feeling as though her authority is undermined at work, Nora disclosed that her voice is often silenced by male peers in meetings. She said that although occurrences where her authority is undermined mostly took place at the start of her career, she continues to feel like she is less respected as a female engineer:

> In all honesty, I didn't have a voice…. I was in a room with males and I would just listen [because] if I did speak up, I wouldn't be heard. And this is still currently happening in my career. My voice is - I guess just not authoritative? Umm, and I'll literally say things in meetings, umm, [and] no one will respond. They'll move on. And five to ten minutes later, a male will repeat my exact words as if it's their idea, and it's all amazing…. I'm not a credit person. I don't want credit, but I do want to be acknowledged. That I'm here, and that I'm providing. You know? The person literally repeated like, as if it was their own idea. And this has happened multiple times. And now I'm pointing it out to people whereas before I wouldn't. I would just sit quiet. I'd be frustrated and angry.

This account provides one example of how male voices dominate in mining workplaces, specifically for engineers; male voices are often more highly valued than are the voices of women. The net effect is that women's skills and authority are undermined.

Building on women's experiences of encountering resistance in mining regarding their authority and skills being undermined, both Nora and Nala described being told by men that they

were undeserving of jobs simply because they are women. “I received this comment once that ‘you are hired because you are a girl,’ and that really sat wrong with me,” said Nala. She went on to explain that this comment bothered her so much that she found herself accommodating her behaviour in the workplace to what she perceives as more stereotypically masculine. “I wanted to make sure that everything I did - all the words that I said had the most distance from what society defines for me within gender; within the [female] gender that I am,” she disclosed. This aligns with what Hellen said about how embodying masculine characteristics as female engineers in mining may support their acceptance by their male peers because of the privileging of masculinity over femininity in mining. Notably, when Nala referred to herself in her interview, she consistently used the term “woman” to describe herself, but when she recounted being addressed by men in her industry, she quoted them, as in the above, as sometimes using the term “girl” to label her. The latter infantilizes her, undermining her authority and showing a lack of respect for her. One study about the use of the term “girl” rather than “woman” to refer to an adult female, discovered that the former term results in women’s perceptions about feeling less valued, especially when it comes to perceptions of leadership at work (MacArthur, 2015).

About her experience being told she didn’t deserve her job because she is a woman, Nora, who like Hellen recently earned a position of authority in her company, shared that although she felt like she was a suitable and qualified candidate for the new position, unexpected negative reactions from male colleagues about her promotion made her feel disrespected:

> I still struggle even to this day...constantly justifying myself. The day I was appointed [to] this role, I had three males come up to me and say, “why did you get that job?” And specifically say, “it’s because you’re a woman and you’re not qualified.” And they expected me to justify my qualifications to them…. I could have been a man with half my

> experience and never been asked that. Never. Not from any of those people. I know for a fact. They could not have said anything. They would have embraced it. They would have just said, "congratulations," and moved on.

In contrast to men, Nora expressed that female colleagues have mostly made her feel worthy of her new job. Most have congratulated her, and one even celebrated her accomplishment by saying, "good for you! You're breaking the glass ceiling!" This statement reflects how many women in mining internalize that in their workplaces, women encounter resistance that may prevent them from moving beyond a certain level in the company. In Nora's opinion, the controversy that transpired after her promotion "stems from the males who don't think I deserve to be where I am, and think I'm only there because I'm a female." In an industry where few women are employed, Nora and other female engineers in my study have perceived that some colleagues, especially men, may be under the impression that women have opportunities to move up the hierarchical ladder at a faster pace than men. This is not true in their opinions, nor is it true based on statistics (MIHRC, 2022), and as their collective experiences disclose, is rather quite the opposite.

3. Women in mining in health and safety: "Women shouldn't be here. I don't know what you think you're doing, but this is not a place for you."

Three women in mining in health and safety were interviewed and like their sisters in mining in geology and engineering, these women have encountered resistance to achieving acceptance and respect at work. They have similarly felt their skills and authority are often undervalued or underestimated more than is the case for men. This is true of Nicole, employed in a managerial position that oversees the work of others, as well as Brooke and Noel who report to managers in their respective companies. Unlike most interviewees in other occupational groups, the co-workers of these women change regularly because their jobs find them attending to the

health and safety needs of rotational mine sites on any given work day. Nevertheless, seeing as the industry is male-dominated as a whole (MIHRC, 2022; Statistics Canada, 2020), like women employed in other jobs, these women work mostly with men.

About women's disadvantaged acceptance and respect in the mining industry, Nicole shared that "there's a lot of issues that need to be rectified." She suggested that many of her experiences at work have informed her that it is difficult for women to feel a sense of belonging in an industry in which some men continue to utter exclusionary, hostile statements such as "women belong in the fucking kitchen." As it has for the female engineers in my study, comments such as this one aligns with the traditional belief that men belong in public spaces of work and women in private spaces of the home (Keough & Campbell, 2014; Milkman, 2016). As a result, these women feel resistance to the achievement of acceptance and respect in their jobs. "We've evolved but not enough," Nicole described about the resistance that women in mining in health and safety continue to face in the industry. "Based on the way that women are treated, I still don't feel like it's fair," Brooke contributed to this. For Noel, "I think it's important [that]...the younger generation of women needs to understand that the fight hasn't finished." In other words, she perceives that because of the industry's differential treatment of women and men, the culture of the industry still needs to be challenged.

Sharing what it has been like for her to work in an industry that employs mostly men, Brooke detailed that "I did get a lot of challenges from the beginning." Similar to other interviewees, she said that most of her challenges as a woman in mining occurred near the beginning of her employment in the industry. Moreover, as she put it, "most of my interactions that have been negative have been with an older workforce…. They don't feel maybe that females should be in that line of work [mining]." Noel said almost the same thing, that she's

“had to work with some very, umm, especially some of the older gentlemen who are like, ‘women shouldn’t be here. I don’t know what you think you’re doing, but this is not a place for you.’” A common theme emerged in the interviews that it is often an older generation of male workers who have made women feel as though they don’t belong. This could be because women’s entry into mining has been very slow since women only started to be hired to work in the industry in the 1970s (Keck & Powell, 2006). The older generation of men therefore have had fewer opportunities to work with women, unlike younger men more recently employed in mining. Brooke suggested this when she said that because younger generations of workers have “grown up with females being just as involved [in the workforce] as they [men]...that they’re a little more used to it and a little more accepting, versus the older generations.” Notably, age is a social identifier that can affect workplace interactions and communications, because lived experience across the lifespan influences people’s behaviours, ideologies, values, and worldviews (Ayyavoo et al., 2007; Zacher et al., 2019). Complicating the finding that an older generation of men are most resistant toward women in mining, other sections of my thesis describe ways that older men in the industry are supportive of women peers.

One experience near the beginning of her career exemplifies how Brooke experienced being treated differently than men in her job. She detailed that too often, she has felt that her knowledge about health and safety has been underestimated and considered less valuable than the knowledge of men. “With anything I said or brought forward, a lot of guys would challenge me,” she said about this. “It was almost intimidating to speak up and speak [my] mind, because everyone would kinda just look at me and be like, ‘you don’t really know what you’re talking about...being a young female, I was challenged a little more,” she suggested. Something that has

made her feel undervalued is that too often, it has been assumed she is the person present at meetings to support administrative duties:

> It was like I was automatically the secretary. It would be like, "uh, somebody's gotta type up - okay! There's the only female in the room!" Like, "do you want to type up and go through our in-meeting notes?" Like, okay. But umm, I felt often I was called on to do the secretary role.

For Brooke, these experiences have challenged her sense of belonging and respect in her job. Considering that in blue-collar industries, women have conventionally been segregated into administrative jobs (Jackson & Thomas, 2007), Brooke's experience reinforces how much remains to be accomplished to change perceptions and meet imperatives of gender equality in the mining industry.

For Noel, the biggest problem for women in mining is that it can be difficult to identify co-workers who are allies versus men who think women don't belong in the industry. Like Brooke, she disclosed that she has also been told by some men at work, "'you don't know what you're talking about,'" which undermines her knowledge in her job. She labelled men who are most threatening to women in mining, "closet sexists," such as this report:

> My biggest problem that I've had are those that pretend to not be sexist, and are. I call that closet sexist. So, these are the ones that will sabotage your career, and you won't even know it's happening because on the surface they'll say and do all the right things…. Those are the ones that I don't want to work with and I don't want to work for them, because they are not good people…. I'd rather you be honest about who you are, and uh, we will find a way to work together, but if you're gonna lie to my face and at the same

time sabotage me elsewhere? I can't do anything about that, so those [types of sexist men] are the ones that I have the most trouble with.

In Noel's opinion and which builds on the above, "there's this hierarchy" that exists in mining that most highly values men who perform physically demanding, blue-collar labour. "Even males who haven't actually drilled holes and blasted rock are looked down upon," she said. "There's definitely a meaning toward you having to earn your stripes to be a part of it [the mining community]." This is why Noel found herself leaving her job in health safety early in her career to pursue blue-collar work in mining and specifically, underground. Although she returned to her job in health and safety after three years as a blue-collar worker, she disclosed that she didn't perceive she had enough knowledge "realistically and authentically" about the industry to support her job demands in health and safety without doing this physical work. She outlined that although she still encounters occasional resistance to being accepted and respected by men in her job, that once they discover that she has worked blue-collar jobs in underground mining, they usually respect her more. This reveals the industry's value associated with those who engage in physical, blue-collar work, especially in underground spaces. While this might be true, the experiences of women working blue-collar jobs in mining, soon taken up in this chapter, reveal that these women experience especially problematic resistance.

Nicole has a unique vantage point in the industry because as a manager, her position of power finds her hiring people to work in mining. She echoes what has already been suggested by geologist, Serena, that more women in mining should strive for positions of power. When women do not hold positions of power, such as in managerial roles, Nicole perceives that women are less able to challenge the masculine organizational culture that permeates the industry. Nicole is the only woman in a managerial role in her company, describing all others in positions of

power as “male, every one of them.” For Nicole, the resistance of male counterparts in management to hire women in mining reveals that men experience privilege in the industry more than women. She reported once informing her male director that she had hired a female administrator only to have him ask her, “aren’t there any guys applying?” This insinuated his preference that a man be recruited rather than a woman. About another similar experience, she said that she met resistance from her company’s Vice President (VP) when she hired a woman whom she characterized as exceeding the qualifications needed for a job. This woman was “absolutely stunning,” Nicole admits about this woman’s appearance, and it was in reflection of beauty that her Vice President discouraged this woman’s onboarding:

> When I first hired her, my VP said, “are you fucking nuts?”...When I brought her on, I thought, “Oh my God, she’s got the perfect attitude for this. She’s outgoing. She’s outspoken. She’s smart. She’s witty. She can handle this.” I thought, “she would be perfect,” for it [work in mining in health and safety]. And I wasn’t wrong! And my VP, when he seen [sic] her, he goes, “are you fucking nuts?” I said, “excuse me?” He said, “the guys are gonna eat her alive.” I said, “really? Then we have bigger issues, you and I.” “You don’t understand,” I said. “What you’re telling me is that I can’t hire a woman because of how she looks. And how the guys are going to treat her.” And I said, “if you think that that’s what’s going to happen here,” I said, “you have bigger problems on your hands and I am in the wrong field here, and I’m in the wrong company.” And he said, “well no,” but he said, “you know how our guys are.” I said, “I do. And it’s about time that changes.”

Nicole went on to describe that what the phrase “how our guys are” in her testimony refers to how in mining, some men’s treatment of women ranges from unwelcoming at best and

discriminatory and sexist at worst. While she countered that not all men in mining are resistant toward women, it would be naive to say that problems associated with women's lesser acceptance and respect in the industry, is not systemic and persistent.

4. Women in mining supervising or working blue-collar jobs: "You're going into a man's world. You adapt. They [men] don't adapt to you."

Women supervising or working conventionally labelled blue-collar jobs in Sudbury's mining industry represent the largest occupational group in my study (N=13). Three women in this category supervise or manage the work of others. The challenges these women face in achieving acceptance and respect are considered in tandem with those of the ten women working blue-collar jobs in mining not in supervisory roles. This is because before the women in supervisory or managerial posts obtained their positions of authority, these women worked in the blue-collar jobs that they now oversee. References to their experiences of authority are made in this section alongside those described before they were in supervisory roles. Almost exclusively, the blue-collar women I interviewed work underground, however, a few women in this occupational category have experience working both underground and in surface mining operations. Common job titles include heavy equipment operators, production miners, and construction miners, as examples.

According to the 13 women in this section, many of their experiences about encountering resistance to the achievement of acceptance and respect build on those outlined by women in professional roles in geology, engineering and health and safety. Blue-collar women in mining also perceive that their skills are undervalued or underestimated at work. The knowledge that they possess about their work is often undermined by men, just as it is for female geologists, engineers, and health and safety professionals. What stands out as different about the experiences of these women is that they encounter more overt hostility than women in other occupational

groups categorized by my study. Their blue-collar jobs are generally characterized by more physical demands (Gibson & Papa, 2000; Krymkowski & Mintz, 2008) than management or professional jobs connected to this sector, which may contribute to this hostility because female blue-collar workers, especially those employed underground, are seen as a more direct threat. Mining has quintessentially been considered a blue-collar industry that employs men (Lucas, 2011; Lucas & Buzzanell, 2004) and women working blue-collar jobs in mining challenge most especially the longstanding belief that men belong in these jobs, and women do not. Blue-collar women in mining disrupt the order of gendered relations that have existed to classify certain jobs, notably those that demand physical abilities, as men's work, and not women's (Corman & Luxton, 2008; Frager & Patrias, 2005; Kelan, 2018).

Blue-collar women described being made to feel as though they are unable to accomplish manual work as well as men. More often than any other group of women in my study, these women encounter exclusionary comments and actions that disrespect them and have implications on their sense of belonging, and for some, their safety with their peers. Similar to some professional women in mining, blue-collar women in the industry said that it has mostly been an older generation of male workers who have made them feel less accepted and respected in their jobs, especially in contrast to men. However, complicating this finding, blue-collar women also spoke about how older male workers have been supportive toward them. This is described in *Chapter 6*.

The work environments of blue-collar women are collectively described by them as tough, rough, and often dirty, which are environments historically considered as unsuitable conditions for women's work (John, 1984; Tallichet, 1995). It is perhaps in part because of their conventional exclusion from manual work (Corman & Luxton, 2008; Frager & Patrias, 2005;

Kelan, 2018) and work considered dirty (Meyer, 2016; Reskin & Roos, 1990; Somerville & Abrahamsson, 2003) that these women encounter so much resistance being accepted and respected in their jobs. They are perceived to not belong from the onset.

Speaking generally to the resistance in achieving acceptance and respect as a blue-collar woman in mining, Karen, who predominantly works as an underground heavy equipment operator but also performs long hole blasting, said that in the industry, "there is still discrimination against women." She recounted that her first male superintendent upset her when he told her that "women shouldn't be underground." A similar statement was described by Hannah. She works in an underground mechanical shop and disclosed being told by a male co-worker that she didn't belong; that "women shouldn't fucking be here." Production miner Karla has also encountered men at work who have made her feel as though they "did not want women in the workplace." Speaking about this, she said that her first supervisor treated her differently than men in her job, which impacted her sense of belonging:

> He did not believe in women in the workplace, umm, they can't handle it - especially mining. And I mean, that was a struggle. I knew I was gonna come across people like that, especially in my career and whatnot, but...that avenue was tough…. [He was] just really really [sic] against women working there.

Building on the above and according to Claire who works in an electrical department at a surface mine plant, what characterized a challenging workplace environment for her is that women in mining in blue-collar jobs, "always are undervalued [and] always [are] under the test." In other words, she perceives that the skills and knowledge of blue-collar women in mining are more often challenged than are the skills and knowledge of men doing the same jobs. Being an outsider is something that Claire disclosed she feels regularly because she perceives that she is

"looked down upon" in her job by men. "Overall, like, it's definitely a challenge," underground heavy equipment operator, Jennifer, said about being a blue-collar woman in the industry.

For these women, and aligning with the experiences of women in mining in other occupational groups, it has been especially near the beginning of their careers that the majority of them described encountering resistance. Underground heavy equipment operator, Ruth, for instance, shared that it was made clear to her when she first started work underground that:

> the men didn't want you [women] there. It was not - you know, they felt it was not a role for females. That you're taking a man's job trying to support his family. They didn't see that if you're single, you're trying to support yourself as well, so it was a real difficult time.

Ruth was one of several women employed by Inco in the 1990s, who was transferred to work from a surface to an underground job when the price of nickel dropped. About this experience, she explained that her male peers made her feel excluded from what she labelled as "cliques," which essentially represent a grouping of people who share similar interests or motivations, and can be unwelcoming toward those they consider outside of their group (Pillemer & Rothbard, 2018). "Especially management who put us there," she said, "they thought, 'they're [women] gonna quit. Oh good.'" Speaking about how this made her feel, she said that, "if you think it didn't play on my emotions at times, it did." Nevertheless, she went on to explain that because of how routine it became for her to be treated like an outsider, that this identity was one she eventually sought comfort in:

> I liked being the outsider because I believed there shouldn't be a clique in the workplace at all, so no, I never wanted to be a part of that clique…. What happens I think is you develop, I think, I don't know if mood is - it's a sense of events. Before you even get to

work, you have a mindset that this is what you have to face, and this is what you're gonna do, so you develop that sense of, like, a defense mechanism.

Ruth's perseverance, especially considering her early experiences in the industry encountering barriers to the achievement of acceptance and respect, demonstrates her resiliency.

Other blue-collar women also disclosed that when newly employed in their jobs, they met marked resistance. Tiffany, for instance, explained that she "was the first female employee ever hired to be working at the mine that I worked at." In reflection of how she was treated at this mine, she said that her workplace environment, "it was hell." Lisa, who started out as a mine surveyor but now manages the training of diamond drillers, explained that "a couple years after I was hired, my boss told me that, ah, they kind of hired me as a joke. They didn't think I was going to last," which made her feel undervalued. Speaking about her early encounters with men in mining, production miner Victoria, disclosed that it was brought to her attention that, "there was actually a bet when I was on probation on who would make me cry [at work] first." She recounted that her father who worked many decades as a blue-collar labourer underground, warned her when she started to show an interest in following his career path, that the culture of the industry would be resistant to her because she is a woman. As she recalled, he told her that, "you're going into a man's world. You adapt. They [men] don't adapt to you." Nearly identical statements were spoken by production miner Liane, and underground serviceperson, Josie.

According to Liane, about persevering in the mining industry as a blue-collar woman, "you do it. It's just what you do. I don't know. Just suck it up." She too labelled the industry a "man's world" and explained that to work in mining, "it's definitely not for the faint of heart…. You need to have - you really need to have balls." These words reveal how clear is the masculine orientation of the industry that values men more than women. In saying that you need male

genitalia to succeed as a worker in the industry, even if spoken as a metaphor, Liane reveals how the masculine gendered culture of the industry is so heavily ingrained. Speaking more to the overall climate of her workplace environment, she detailed that:

> At the end of the day, it's a mine, and it's rough and it's tough and you need to expect that. And you can't go in there thinking you're gonna change it. At the end of the day, it's a man's world. It's - it's - it's tough.

Perhaps most problematic is that the above statement demonstrates how the hostility that women in blue-collar jobs in mining face achieving equal acceptance and respect as male peers, is routine. The routinization of this discriminatory treatment normalizes this experience to the point where as outlined in the above, some women even come to expect it. If women expect to be treated as less valuable than men in their jobs, the resistance that they experience as they seek to achieve acceptance and respect equal to their male peers, may be even more pronounced for them.

Simply by being present, women challenge the seemingly natural routinization of masculinity in the industry. It is perhaps in part because of this that several women in this occupational group disclosed that they have perceived men's surprise to find them working alongside them in blue-collar jobs. "I think at first, men are a little bit off set with a woman coming in on a crew," said Josie. Building on this, production miner, Trish, recounted on several occasions overhearing men who had yet to encounter her at work, say things to other men on her crew such as, "'holy crap! There's a woman that works here?'" For Claire, her first experience going underground felt unwelcoming when men seemed surprised to encounter her. "My first experience in the cage was all this hush and whisper of, 'oh my God, she's going in the cage,'" she explained. She went on to say that this cage ride - a "cage" essentially the elevator that

moves up and down a mine shaft to transfer people and materials underground, “was so quiet, you could hear a pin drop.” Speaking later in the day with her male supervisor, she said that he explained to her that although there is usually chatter amongst workers riding the cage, that because she - a woman, was present, this experience was altered, which made her feel as though she didn’t belong. “You wanna work in a man’s world? You can’t expect them to adapt to us,” shared Josie, which aligns with what Victoria and Liane said about the inflexible masculine culture of the industry.

Further exemplifying the masculine culture of mining, two blue-collar women spoke about increased challenges that women experience obtaining employment in the industry. Both experienced difficulties being hired to work in mining and attribute their challenges in part to their gender identity. For Karla, when she completed her Common Core - training modules required for entry to work underground, she recalled studying amongst a group of 25 people. Only she and two others in this group were women. Once she and her cohort obtained the qualifications necessary to apply for work in the industry, she said that “it was a hard pill to swallow” when she recognized that barriers to her employment were up against her because of being a woman. In her perception, her gender identity prolonged her efforts to obtain work, which aligns with the traditional notion that men are the quintessential workers in mining (Keck & Powell, 2006; Lahiri-Dutt, 2012; Mercier & Gier, 2007). For underground, blue-collar supervisor, Tiffany, this experience was much the same, and she too encountered resistance when she sought employment in the industry. From the time she submitted her first application to work underground to the time she was hired for a job, she said that this process took two years. “I was being told that there was a hiring freeze,” she disclosed, “but I know for a fact that males were being hired…. My [male] cousin was in fact hired at the time. He was hired about six

months before I was." According to Tiffany, she had the same qualifications as her cousin and other men whom she perceived obtained employment faster than she in the industry. This made her feel undervalued and contributed to her sense of not belonging.

On the topic of feeling undervalued and similar to women in other occupational groups, blue-collar women in mining often spoke about perceiving that their knowledge in their jobs is undervalued and underestimated more than that of men working the same jobs. In a similar vein, the three women employed in positions of authority over the work of others in this sample, detailed that reflecting on men making them feel less knowledgeable in their job, they perceived that their authority has been undermined more than the authority of men in similar positions of power. Experiential examples demonstrate these findings.

For Hannah, "you're a girl and they [men] think you know nothing," she shared about feeling disrespected when male colleagues criticize or question her knowledge at work. She often gets frustrated when men assume that she lacks mechanical expertise required by her job, and she provided the following example of an experience that undermined her:

> In this job, most times you don't see women doing parts. You just don't, right?... I even find dealing with some of the vendors, when I call them and I'll be like, "hey, I'm looking for this part," and they're like, "well, do you know how it works?" And I'm like, "dude, yeah. I know how it works. This is what I need. This is how-," you know? It's frustrating.

In Hannah's opinion, it is unjust that the knowledge of women in mining is more often criticized than is the knowledge of men. For Jennifer, it has been disappointing to feel this way, and explaining this, she detailed that when she brings an idea forth to contribute to her workplace, "they [men] don't even answer back and instead just give me shit for trying to correct or trying to

suggest something." Adding to this, Claire recounted being told by a male colleague, "I don't think you know what the fuck you're doing." She disclosed that experiences such as this have been troublesome for her and have made her feel disrespected. Other occurrences of disrespect at work have occurred when men do witness her successful accomplishment of a task. Like the women in engineering suggested, the men seem surprised. "I always found it funny when they find it shocking...that I really know what I'm doing," she said about this, revealing that the belief that women are less knowledgeable in their jobs in mining continues to permeate the industry.

For Lara, whose first five years employed in Sudbury's mining industry were spent reporting to a supervisor on the same surface plant floor that she now oversees, "being a woman, that's where it's challenging, 'cause you will say something and oftentimes they [men] don't hear you out." She revealed that in the early days of being a supervisor, she had to bring to her mine manager's attention that the men working under her direction were not respecting her authority. She explained that she had to express to her manager that "nobody answers me on the radio;" the "radio" being a device that all persons on her shop floor are required and expected to use in order to ensure open lines of communication between all workers present on site on any given work day. About this, she disclosed that not only have male employees not answered her calls on the radio when she has tried to make contact with them, but also, they would "give me a hard time" whenever she addressed them. This unwelcoming culture was recounted by Lara as troublesome, and in reflection of the resistance she has faced in this regard, she shared that she started to follow a personal mantra, being that "you gotta be strong and let them [men] know that, 'no you're not gonna bring me down just because I'm a woman.'"

For Lisa, who also works in a position of authority, one of the ways that she has perceived that she has been "treated a lot differently than the guys that [she has] worked with,"

has been when she too has experienced having her knowledge and authority questioned at work. "When I first started [as a supervisor] they [men] didn't really take me seriously," she said. "Sometimes people don't take me seriously because I'm a girl," she went on to say, explaining that in her opinion, her gender as a woman has impacted this differential treatment. In her job, she disclosed that she is often required to make presentations in sales meetings. At these meetings, she has perceived that her knowledge and authority is more often questioned than is the knowledge and authority of her male counterpart, alongside whom she typically leads presentations:

> If we go [present] together, it seems that ah, and I've brought this up to him too, it always seems like they're [people in these meetings] trying to stump me. Ask me questions that I might not know or they think I might get wrong.

This demonstrates that it isn't only direct co-workers and supervisors who make women in mining feel undervalued and by extension as though they do not belong. Other stakeholders make them feel this way too, which has implications on women's experiences of achieving acceptance and respect in their jobs.

A handful of women in blue-collar jobs detailed that when members of the public discover what they do for work, they are often surprised. "It's almost like it hurts their ego," said Lisa specifically about men's reactions when she tells them what she does for work. This reveals that the stereotype that circulates about the mining industry remains that it is men who belong and can take on the responsibilities of work in the industry, and not women. As Karen put it, when she meets someone new and tells them that she works underground, "they're actually quite shocked…they look at me like, 'you don't look like a miner. You look like a girl that could be

working in an office or as a nurse.'" Remarks like this show the ever-prevalent intensity of the gendering of occupations, most especially and in this case, in blue-collar occupations in mining.

According to Hannah, when she shares with people what her occupation is, she said that "they literally look me up and down...they're looking...because like, [they perceive me as] dainty and girly and they're trying to like, process it." In her opinion, this reaction stems from the fact that her body type is not the stereotypical masculine body expected of blue-collar workers in mining, most especially those employed in tough and rough underground environments. Jennifer and Liane said much the same, where according to Jennifer, she is perhaps "not as strong [physically] as the others [who work underground]," but that doesn't mean she doesn't deserve to work in mining. For Liane, "we [women] don't always have the bull strength, so you...get creative, because we have to figure it out, right?" Other blue-collar women who participated in my study described using their ingenuity to accomplish, sometimes in unconventional ways, physical tasks at work. For instance, when Ruth carries heavy weighted buckets filled with oil to fuel a scoop tram, she outlined that, "if I have to bring the oil up to the tank one cup at a time, I will. Like, I find other ways to do it [physical tasks]." For Rose, and other blue-collar women in mining, because they perceive so often that as women, men at their job sites undervalue and underestimate their capabilities to do manual work, asking for help from these men could risk their being considered capable in their jobs. As detailed by Ruth about this, "you never never [sic] ask [for help].... They wanna see me struggle. They wanna see me fail." Her statement describes her experiences at work that have undoubtedly impacted her sense of belonging and achievement of acceptance and respect in her job.

For these blue-collar women, the intensity of the many physical demands of their jobs influences their experiences of underestimation and undervaluation. This is perhaps what has

most catalyzed these women's challenges of resistance to the achievement of acceptance and respect. As health and safety specialist Noel implied, Claire explained identically that "there's this hierarchy" present in the mining industry that values first and foremost men, but more importantly, men who are physically strong and capable of taking on manual work. Discussing this as a whole, Karen explained that "blue-collar women [in mining] are generally underestimated for what they can do." In Lara's own words about this, "men did not think I was capable of doing that [physical labour] at all." Like Ruth, she too explained that because of her perception of being undervalued by men specifically about her abilities to accomplish manual work, "even if it was challenging doing what I did, uh, you know, I'd do it on my own because there was no way I was gonna ask a guy for help." Lisa similarly reflected on an occurrence at work that made her hesitant to request assistance on the job:

> On one occasion, I had my tool in the hole [underground] and I couldn't get it out…. So, it's heavy and I was trying to pull it out of the drill, like, with the rods, myself? And he [a male peer] wouldn't help me take it out of the rods because he said, "if you wanna work underground, you should be able to do all the work that a man does."

To Lisa, there is value to recognizing that people have different skills they bring to the workplace in a variety of ways. The organization Women in Mining Canada (2016) agrees and posits that a more diverse workforce may enable the industry to positively transform by better representing mining workers' talents. As a person of authority over the work of others, this recognition has for Lisa, been especially relevant. In her opinion, it isn't only women in mining who sometimes struggle with physical prowess, but also men. This was repeated by other interviewees, including men who interviewed for my study. Nevertheless, what was also described repetitively by interviewees was that because of the culture of the industry that values

men more than women, it is more common for women's perceived inadequacies to be pointed out and emphasized at work.

Discriminatory language sometimes used to refer to blue-collar women in mining can exacerbate experiences of otherness. For some women, being labelled "girls" rather than "women," for example, is a sign of disrespect that makes them feel undervalued, as discussed in this chapter's section about women in engineering. Another term that Trish recounted is often used in her place of work by men to refer to her is the term "princess." "I've been called that a few times…. Just lots of little comments about 'princess,' right? Like, 'oh 'princess' gets what she wants.'... Sometimes it's [said] in fun [and] sometimes it's not," she explained. This gendered term is one that has made Trish stand out as different in contrast to men. Considering the meaning of the term, its use to refer to her reveals that she is undervalued more than men working the same job. According to Trish, gender-based jokes, often at the expense of women, remain present in the industry and can be disrespectful. About these jokes, she shared that "some of it's just because they see you as a girl, and you gotta let it go," which reveals the inflexibility of resistance toward women's equal acceptance in the industry, and how its routinization has contributed to its normalization.

The Oxford learner's dictionary (2022) defines the term "princess" in three ways:

1) a female member of the royal family, especially the daughter or granddaughter of the king or queen;
2) the wife of a prince;
3) (disapproving) a young woman who has always been given everything she wants, and who thinks she is better than other people.

It is the third definition of the term that is most concerning. While the first two pragmatically describe the term, the third portrays a "princess" as someone to disapprove of; someone to dislike. According to Sunderland (2004) who studies the damaging discourses of gender, the semantics of language can be dangerous and can mirror women's condition. Although for some and depending on context, this label may not be analysed as troublesome, as it was traced by Trish, its use to refer to her reveals the unwelcoming culture of the mining industry for women. This label of "princess" undermines Trish's skill in her job because being a "princess" infers, in the context of her work, her being a person that people should dislike, which may compel them to be unwilling to be inclusive toward her.

For Trish and other blue-collar women in mining, while physical strength may be an important characteristic needed to accomplish many work tasks, because of the resistance they encounter being accepted and respected, mental resilience in the workplace necessitates. In her own words and speaking about useful characteristics to embody in her job, Trish said that:

> physical strength is good…but mental [strength]? Mental is a big one [characteristic needed of women in mining]. It's a huge one. You gotta be able to deal with what's coming at you. Deal with it fairly, and then you also gotta be able to let it go at the end of the day.

Lara said almost the same thing, and disclosed that blue-collar women in mining need to be, "very mentally stable [to]...go through many challenges without letting them bring them down…. Being strong in saying that, 'I will survive this.'" For Tiffany, who shared that, "I haven't worked with a female employee - a female miner, that I haven't encountered in the dry[3] crying because of something a male colleague has done," this mental and emotional strength is

[3] "The dry" refers to the area where underground mine workers change into work clothes and safety gear.

imperative. While discussion of women in mining's tenacious resilience is important, these interviewee statements problematically put a great deal of responsibility on women to overcome and by their own accord, challenge the resistance that they encounter to the achievement of acceptance and respect. Problematically, the onus of responsibility from men to be respectful and accepting of women from the first point of contact, shifts onto women, further victimizing them and potentially worsening their experiences of otherness and disrespect.

A theme that emerged in the narratives of blue-collar women, as it did in the narratives of women in mining in health and safety, was that men's resistance toward them most often derives from older and not younger men in their places of work. Speaking about this, Karla explained that it has mostly been "old school miners" who construct what can be "a tough environment for anybody, umm, especially being in an underground environment, to have those bullies." Josie too, shared that it has mostly been older male workers who have given her the impression that they "don't like women underground." The same was disclosed by Karen, who elaborated that some men she's worked with have told her that women are bad luck underground:

> They've always said that women are bad luck underground and that's one of their beliefs. So, ah...I always called them the older generation; the old timers?... It's been known as a rumour. It's been hundreds of years of mining where they traditionally did not like women underground. You know, women were, you know, they always had the old-fashioned mentality where women should be in the kitchen cooking and raising kids. So that's why they did not - they weren't too fond of having women underground.

When asked how recently she has been subjected to such a statement about women causing bad luck in mining, Karen shared that she has heard this from a man as recently as a year ago. In the context of my study, this means that this statement of exclusion about women in mining was

spoken by a man in 2019. Although Trish did not say that it has specifically been older men who have told her that women are bad luck in mining, she too described being told by men in the industry something along the lines of, "it's bad luck for you [a woman] to be down here. You shouldn't be here. You should be home barefoot and pregnant," which repetitiously highlights the idea of separate spheres of work for men and women (Corman & Luxton, 2008; Frager & Patrias, 2005; Parr, 1990). According to Tiffany, even when "you get to that point where you're considered proficient at your job, the men will constantly remind you that you don't fit it." "It's hard," said Karla about being a blue-collar woman in mining when faced with gendered challenges that affect experiences of achieving acceptance and respect.

Part 3) Proving themselves at work: "women need to prove themselves that much harder than their male co-workers."

Women in all occupational groups categorized by my study reported feeling as though they must work harder in their jobs to prove themselves as equally valuable workers in the mining industry as men. This reveals the intensity of the culture of the mining industry that continues to operate under a masculine organizational regime.

Representing women in mining in geology, Lucy said that to be valued, "women need to prove themselves that much harder than their male co-workers."

For women in mining in engineering, "there's more pressure" to prove themselves on the job, said Hellen. "There's pressure to push yourself past your limit," she continued. Adding to this, Kristine emphasized that to feel as equally valued in her job as men, she has perceived that she has had to "put more time into everything" and that only "once [she'd] proved [herself]...it became a lot more apparent that the men started to respect [her]." For Erin, this has also been true, and she shared her perception that she has had to "work twice as hard just to make sure that

I'm as valued" as men in her job. She went on to say about this that "we've [women in mining in engineering] all sort of felt the same. It's this underlying thing." It is perhaps because of this that Nora similarly described that as a female engineer, and especially when in contrast to male engineers, she has perceived that she has had to "work two or three times harder, umm, produce twice as much to get half the credit." For Nala, to be valued as a female engineer in mining, she articulated that she has perceived a necessity to "work a hell of a lot harder than they [men] do."

For women in mining in health and safety, Brooke suggested that respect for her at work only derived after "a few months proving myself and not backing down." According to Noel, who believes that all persons in the industry need to prove themselves as capable workers, she disclosed that because women are the gendered minority in mining, and men, the gendered majority, that women's capabilities are appraised more acutely than are those of men:

> I needed to prove that I could work my way up. I needed to prove that I can march to the beat. I needed to prove that I'm not scared in the face of fire. You know? I needed to do all those things to be part of this group of soldiers…. They watch you. They observe you. They test you out.

This is also true according to Nicole, who outlined that in her line of work, women have to prove themselves more than men "all the time."

Finally, for women in mining supervising or working blue-collar jobs, many disclosed that as women, they must work harder to prove themselves and their value. Representing this group, Hannah said that in her job, "I really had to work my ass off to earn respect." She explained more about this saying that, "you have to work a little harder as a woman" to earn the same valuation as men. For Karla, this has also been true, and she said that although men need to prove themselves as capable in their jobs to be considered valuable workers in the industry, that

these efforts are “absolutely just not as much” as those expected of women. To Lara, she estimated that as women, “it’s almost like you gotta work, I’d say like, 20 percent more in order to get the respect from the guys.” According to Ruth, because “they [men] expect us not to do well, we work that much harder, and it becomes a habit…. I worked a hell of a lot harder than they [men] did [to earn valuation].” Building on this, Lisa described that “I feel I’ve worked a lot harder to get where I am than a man would have,” and Trish said that what tells her most that blue-collar women are expected to work harder than blue-collar men to prove themselves as valuable is that she “still feel[s] like [she has] to prove [herself] every day.” About this frustration, she inquired aloud, “how many guys do you know that would have 24 years [of] experience [employed in mining as a blue-collar worker] and still feel that way? I can guarantee there’s not one of them. Not one.” “You have to work ten times harder,” said Victoria, about how earning the same respect as a blue-collar man in mining is more difficult for women.

Conclusion

This chapter has described some of the many ways that women in mining in four occupational groups - in geology, in engineering, in health and safety, and working or supervising blue-collar jobs, encounter resistance to the achievement of acceptance and respect. They are often undermined or underestimated in their jobs. They frequently feel as though their voices are silenced more than are the voices of men. They perceive as though their work is less valued than the work of men. This chapter has also described how women in mining perceive that their efforts to prove themselves in their jobs are expected more of them than men. In sum, this chapter concludes that mining continues to operate under a masculine organizational regime that finds men more valued than women in the industry.

The chapter to follow is about the most troublesome experiences of women in mining, including experiences of gendered realities of unequal pay for equal work, and encounters of harassment and sexual danger.

Chapter 5: The most troublesome experiences of women in mining - The gender pay gap and harassment

The previous chapter revealed the persistent masculine organizational culture of the city of Greater Sudbury's mining industry that values men more than women. It demonstrated that women in mining continue to encounter resistance to achieving acceptance and respect, which has implications for their workplace experiences. When women in mining perceive that they are less accepted and respected than their male counterparts, they often internalize a sense that they must work harder than men to prove themselves as equally valued workers. These experiences of resistance are exacerbated for women in mining when they encounter other experiences at work that further marginalize and discriminate against them. This includes when they encounter pay equality discrimination as well as harassment at work, and women who interviewed for my study described both those things. This chapter considers these experiences, which reinforce that the climate for women in mining is a difficult and problematic gendered workplace culture.

This chapter is organized into three sections. The first section reveals that five women in my study spoke about their experiences of being paid less than men when working the same job in mining. It is important to clarify that no interview question asked these women anything related to their pay or perceptions of a gender pay gap in their jobs (see questionnaire in *Appendix 4a*). Rather, women's experiences encountering a gender pay gap were raised and recounted voluntarily. It is possible that if interviewees had been asked directly about this topic, more of them may have described similar experiences. This is plausible based on census data released by Statistics Canada's Income Survey, which the Ontario Equal Pay Coalition (2021) considered when calculating that the Ontario gender pay gap means women are paid roughly thirty percent less than men for the same work. According to pay equity specialist and legal counsel, Andrea Sobko (2021), the gender pay gap in Ontario, based on average annual earnings

of men and women of working age in the province, is an indicator of gender inequality. In a public address in March 2021, she clarified that contrary to popular belief when situating Canada in a global context, that Canada is *not* a leader in narrowing the gender pay gap (Sobko, 2021). The Canadian Women's Foundation (2021a) confirms this, citing that a 2015 UN Human Rights report introduced concern about "the persisting inequalities between women and men in Canada, including the high level of the pay gap" (para 2) and its effect on women. My study and its finding that some women in mining have experienced and continue to experience a gender pay gap in their jobs, confirms that reality.

The second section of this chapter focuses on harassment experienced by women in mining. According to Mendonca and d'Cruz (2021), mining is considered dirty work, which for:

> marginalized social groups such as women…doubly devalue[s] [them] due to their tainted occupation and their marginalized identity [where] their experiences of emotional abuse and harassment, which stem from the two interrelated reasons, are more pronounced and intense (p. 563).

Like the gender pay gap in the industry, my questionnaire did not specifically ask interviewees about experiences of harassment at work. Nevertheless, women in all four occupational groups represented in my study voluntarily disclosed having experienced harassment in their workplaces.

While harassment was a term adopted by some women to label the experiences that they described on a spectrum ranging from uncomfortable to fearful, others spoke about occurrences of harassment in their jobs but did not necessarily label their experiences using this term. This could be because a range of terms are used by members of the public as well as scholars to describe harassment (Djurkovic, 2021), where the following terms are often used

interchangeably: harassment, bullying, mistreatment, emotional abuse, mobbing, social undermining, and generalized abuse (Tracy et al., 2006). For the purpose of my study, the term harassment is most often employed when outlining women's experiences of mistreatment deemed harassing at work. My study accepts the term as delineated in Part 2, Section 10 of the *Ontario Human Rights Code* which defines harassment as "engaging in a course of vexatious comment or conduct that is known or ought reasonably to be known as unwelcome" (Government of Ontario, 2021). As stipulated in this Code in Part 1, Section 5 on employment, "every person who is an employee has a right to freedom from harassment in the workplace" (Government of Ontario, 2021). This means that women in my study who have experienced harassment have had their human rights violated.

Gender complicates definitions of harassment further, because not only is gender a major contributing factor impacting the nature of harassment in the workplace and elsewhere (Ahmed, 2021; Djurkovic, 2021), but studies have found that in contrast to men, women conventionally describe a wider range of behaviours as harassing (De Judicious & McCabe, 2001; McCabe & Hardman, 2005; Rotundo et al., 2001). For instance, Escartin et al. (2011), whose research counters prevailing assumptions that harassment is a gender-neutral phenomenon, discovered in two distinct but connected studies, that women perceive negative acts of bullying in the workplace more severely than men do. This aligns with findings of my study, because as this chapter reveals, some interviewees spoke about how they perceive that men and women understand harassment and the way it affects people, differently.

Women interviewees discussed verbal, non-verbal, physical, and sexual forms of harassment. Most often, they spoke about harassment perpetrated by men at work, which includes male colleagues and superiors. Women's narratives illustrate that sexual harassment is

the type of harassment they experience most frequently, in that they have often been made to feel as though they and their bodies are sexually objectified. Like the generalized definition of harassment, sexual harassment is a specific type of harassment, and its definition is something scholars debate. About this debate, McCabe and Hardman (2005) assert that "although researchers often agree on the extreme cases of sexual harassment and define them as such, researchers do not always clearly identify the milder, more ambiguous forms of sexual harassment as sexual harassment" (p. 719). These milder forms, they suggest, should "include behaviours such as remarks of sexual nature, repeated requests for dates, whistles, staring, and sexual propositions" (p. 719). These are behaviours that women described, and they are included in my project as examples of sexual harassment.

Arguably most concerning are occurrences of harassment experienced by women in mining that threaten their bodily agency and safety. This type of harassment is what my study understands as "hostile environment harassment" (Cortina & Areguin, 2021), which "refers to sexist and sexualized conduct...that is severe or pervasive enough to create a hostile work environment" (Holland & Cortina, 2016, p. 84). Accepting this definition, hostile environment harassment includes conduct considered sexually harassing. According to Combs and Milosevic (2016) who examine workplace harassment of minority women, hostile environment harassment threatens especially underrepresented women in male-dominated workplaces because it is in these environments that women conventionally encounter severe discrimination, where gender plays a salient role impacting this discrimination. Hitlan et al. (2009) generally label this type of harassment, "gender harassment," which they argue refers broadly to discrimination based on gender (Mallett et al., 2021).

Women working in or supervising blue-collar jobs most frequently experience what my study considers hostile environment forms of harassment, especially those that sexually objectify and harass them. In blue-collar underground work environments, my study illustrates that the threat of harassment is especially high for women. This could be because of women's gendered minority status in these jobs (MIHRC, 2022) as well as my study's discovery that it is within these jobs that women in mining encounter the most hostile resistance to the achievement of acceptance and respect. Some women interviewees also brought attention to the fact that underground mines offer more isolated spaces than do other workplaces both within and outside of the industry; spaces that may increase the threat of harassment.

While my study reveals that harassment of women in mining is an ongoing problem, the third and final section of this chapter demonstrates that it is rare that these women report their harassment, especially sexual harassment, to their superiors or human resource (HR) channels. In fact and significantly, 70 percent of women interviewees described their hesitance to report instances of harassment against them. For some women, this is because it was their superiors who have harassed them, which further complicates power imbalances in the workplace as well as implications of harassment for these workers. For others, previous struggles in perceiving that these channels have not taken their claims of concern about their workplace treatment seriously has resulted in their lost trust in these official channels. Many women concluded that bringing attention to their struggles with harassment at work could worsen what are already hostile relations with some of their co-workers. These conclusions are drawn, because women interviewees outlined in various ways how they are often labelled "troublemakers" if and when they report wrongdoings. This aligns with research conducted by Canada's Ministry of Employment, Workforce Development and Labour, whose Minister Patty Hajdu said,

"harassment and sexual violence in workplaces are underreported, often due to a fear of retaliation, and that when they are reported, they are not dealt with effectively" (Simpson, 2017, 1st para). This was also found to be true in Ahmed's (2021) study about experiences of making complaints about harassment in the workplace. Most often, women in my study rely on their tenacity, or on what many of them refer to as their "toughness" to overcome and in some cases, avoid their experiences and perpetrators of harassment at work which aligns with findings reported in the previous chapter. Reasons for which women in mining often do not report their harassment, as well as implications, are the focus of the next section.

Part 1) The gender pay gap in Sudbury's mining industry: "You're a girl. How much did you think you were gonna make?"

Five women spoke about gender-based pay discrimination. These women report that some men who work in the same jobs as they do in Sudbury's mining industry were being paid more. According to Statistics Canada, women's gendered minority status in three sectors of the workforce (construction; manufacturing; and mining, quarrying, and oil and gas extraction) accounts for the majority of the ongoing effect of the gender pay gap in Canada (Pelletier et al., 2019). It is perhaps not surprising, then, that my study discovered that some women in mining have experienced a gender pay gap in their jobs. Notably, not only are four of these five women categorized by my study as blue-collar, but three of these four women (Lara, Lisa and Tiffany) are in positions of authority supervising blue-collar workers. It is within these positions of authority that workers are less often unionized (Stanford & Poon, 2021). Non-unionized women workers, according to Sobko (2021), are disproportionately impacted by the province's gender pay gap. Karen is the fourth blue-collar worker who described experiencing a gender pay gap in her job. The fifth interviewee who spoke about this was Nora, an engineer.

About her experience, Lara said that it came to her attention that men in her same position were earning higher wages than she was. Other supervisors at her job site are men, and about being paid less than these men, she said:

> I know for a fact that there's a lot of supervisors that do make more than me…there's some people who don't have as much seniority as me, and I know - I'm quite - I've got a lot more - I'll just say I have a lot more to give, and I have a lot more drive than they do, and they get paid more than me. So that is frustrating.

In the example above, one presumes that Lara must not work a unionized job, because if she did, her company would be required to pay her the same as men for the same work (Ontario Equal Pay Coalition, 2021). As Sobko (2021) articulates, legal mechanisms to address the gender pay gap in Ontario include the *Pay Equity Act*, the *Employment Standards Act*, and the *Human Rights Code*/*Canada Human Rights Act*. Though Lara could make a complaint to her company, citing any of these legal mechanisms that she must be paid the same as those employed in the same job, she has not done so. About this decision, she said, "I don't go to work for the pay...it's not something that I've ever really focused on." Nevertheless, because she shared her frustration that she perceives herself as a more motivated worker than some of her male peers who earn higher wages for the same work, it is implied that this gender pay gap bothers her. This experience troubles Karen in a similar way, who said about a male colleague who was "getting paid more than [her]" when working the same job, that she thought this was "unfair" because as she described, "I was the one that was doing the majority of the work." Considering these women's experiences of gendered resistance in the mining industry, it is possible that women like Lara and Karen might fear the repercussions of complaining about these unjust circumstances. This is certainly possible, especially because many women interviewees detailed that when women

complain about unjust treatment at work, that they are often labelled “troublemakers.” In her discussion about making complaints in the workplace, Ahmed (2021) makes it clear that “to become a complainer is to become the location of the problem” (p. 3). In other words, those who complain are often perceived as the problem, rather than the circumstance itself that led up to the experience of making a complaint. Experiences of complaints in institutions are often experiences of struggle (Ahmed, 2021).

For Tiffany, who did make a complaint to her male superior when she discovered that her male colleague working the same supervisory job “was given a raise for performance while I didn’t receive a raise,” she said that this superior insulted her by asking her the following question: “You’re a girl. How much did you think you were gonna make?” Not only did her superior’s choice of the term “girl” rather than “woman” infantilize Tiffany, his statement also challenged her authority and worth. This reveals another example of how men in mining are valued more than women. And, it is not a surprise that for these same reasons, many female interviewees consciously adopt the term “woman” rather than “girl” to refer to themselves.

Upon being mocked by her superior when she complained about the gender pay gap that she was experiencing, Tiffany explained that she “handed in an instant letter of resignation that day.” She went on to say that her company’s HR department ended up having to get involved in the situation. Although she said that they eventually rectified the wrongdoing of her unequal pay, she emphasized that she has little faith in her company’s HR department because too often, she has perceived that they do not take seriously complaints that women bring forward about their unequal treatment in contrast to men. To Ahmed (2021), experiences of complaint in the workplace are generally exhausting for the victim because institutional mechanics rarely made

experiences of complaint an easy process. Speaking about this in reference to her experience with a gender pay gap, Tiffany explained that:

> The workforce knew of it. HR, he knew about it - everybody knew this kind of stuff was going on, but nobody ever did anything. It's definitely swept under the rug. It's the kind of stuff that's hidden.

As this chapter demonstrates, workplace problems are too often ignored, especially when women and their worth in the mining industry are involved. Adding to this, Nora shared that she has been keeping track of all instances that have come to her attention that she is paid less than men for the same work, but that because she has "been denied through some of the proper channels for something that a male would have been paid for," that she is "getting so angry and frustrated," and that her trust in these channels has dissipated. As Stanford and Poon's (2021) address from Canada's Centre for Future Work makes clear, when it comes to making complaints about their work experiences, "historically marginalized groups often don't feel comfortable using formalized workplace procedures." This is echoed by Ahmed (2021) who considers that marginalized groups such as women in male-dominated workplaces often struggle extensively with experiences of complaint because they encounter institutionalized sexism that undermines or disregards their experiences of inequalities.

For Lisa, it was when she disclosed that she went on maternity leave that she discovered that the man who was hired to take on the responsibilities of her job in her absence, was being paid more than her. She said that in an honest conversation with this male replacement in her job, he told her that he was being paid a supplementary wage that she had not been paid when working the exact same position:

> He was receiving $1,500 a month for living expenses. I wasn't. I was never offered that. And he told me! It was an open conversation that he was getting it [a supplementary wage]. And I went to my boss when I returned to work, and asked him for it and said: "Why's he getting that? Why was he offered that and not myself?" And he told me that if I were to bring it up again, he would fire me. It was grounds for termination because I - I was talking about another employee's salary.

In the above, not only is Lisa's unequal pay problematic, but so was her male superior's reaction to her inquiry into the injustice. Instead of fairly addressing the situation, he opted to challenge Lisa and threaten insubordination for inquiring about another employee's pay. "He was a very unreasonable boss," concluded Lisa. The fact that this superior was in a position of power over Lisa certainly worsened this situation.

Speaking overall to their opinions about the gender pay gap that remains present in Sudbury's mining industry, interviewees brought attention to what they have perceived as a general belief in society, that gender pay gaps no longer exist. According to the Canadian Women's Foundation (2021b), this is a myth that needs to be challenged. About this myth, Nora countered:

> I have multiple examples of it [experiencing a gender pay gap], and it's shocking to me how blind people are. Or maybe not blind, but they're ignorant to it because they just don't think it's possible in 2020, but it's extremely prevalent…. That's my perception and that's what my paycheck shows me.

For Nora, recognizing on several occasions that she has been paid less for the same work performed by men, has made her question her career choice in mining. She argued that it is imperative to recognize that women in mining as well as in other industries are "still fighting to

this day for even pay equality." Addressing this herself, Tiffany made note that "you wouldn't think that people have to be educated in this day and age in what's appropriate and what's not, and that women doing the same job deserve equal pay, but we are still fighting for that." About this, Karen said "there is a lot of discrimination still, and you have to - for women, you have to kind of fight and stand up for yourself." Although women in mining acknowledge inequalities in their gender pay gap experiences, they often hesitate to advocate for themselves. This ongoing issue is all too common.

Part 2) Women in mining's experiences of harassment: "What happens is you get badgered and bugged and harassed and it's repetitive stuff."

Women participants disclosed numerous and diverse experiences of harassment including verbal, non-verbal, physical and sexual forms. Most of this harassment was perpetrated by male peers, with only one blue-collar woman specifying that another woman at work had harassed her. As outlined, women in all four occupational groups categorized by my study have experienced harassment at work, about which underground blue-collar worker, Liane said that generally in the mining industry, "there has been harassment over the years that is not justified." Behaviours labelled "hostile environment harassment" (Cortina & Areguin, 2021; Combs & Milosevic, 2016; Holland & Cortina, 2016) or gender harassment (Hitlan et al., 2009), which includes sexual harassment (McCabe & Hardman, 2005), were most frequently experienced by women working in or supervising blue-collar jobs. Women in geology, health and safety, and engineering jobs in mining also described accounts of these types of harassing experiences, though often with less severity. Another discovery of my study is that while women working surface jobs in mining are certainly not exempt from harassment, women employed underground

are at a higher risk of being harassed based on the frequency and degree of hostility described in their accounts.

Providing insight about how isolated work spaces in underground mines can increase the threat of harassment, production miner Trish said:

> It's still pretty creepy. I mean, you think about it: I'm underground. You can corner me in some dark place, and nobody would ever know about it, right? It's - it's one of those things that travels through your mind if you don't trust the guys you work with, for sure.

In ending her statement with the words "for sure," one understands that Trish meant to emphasize her argument, bringing attention to the significance of her experiences of harassment and how they have impacted her. Other women interviewees spoke similarly to the fact that it is when working underground, or more generally, in isolated work locations with male colleagues or superiors, that they are most frequently harassed. To Ahmed (2021), this is not uncommon in the workplace, and the risk of harassment is often greater in spaces that are isolated - spaces that are behind closed doors. Illustrating this by drawing on her experience of being harassed by a male supervisor, surface mine worker Claire disclosed that "this particular supervisor, there's a pattern that I've watched. Observed. And when I saw the pattern was consistent, I started documenting going, 'what the hell?' And it was always about trying to get me alone." On one occasion when alone with this supervisor, Claire was sexually harassed by him, saying, "his hand cupped my breast." Because women in mining often work exclusively with men, and because as Hannah, who works underground in a mechanical shop, explained that for safety reasons in many jobs in the industry, "you never work alone," it is not out of the ordinary for women in mining to work one to one with a man or be the only woman worker amongst men. The narratives interviewees offered about their experiences make it clear that when working underground or in

other isolated spaces, the risk of women's harassment increases. This point will be revisited because other experiences disclosed by women in my study reinforce this finding.

When it comes to harassment at work and sentiments about these experiences for women in mining, interviewees described feeling a range of emotions, including discomfort, unease, annoyance, and even fear. Discomfort was the most common emotion when harassed, and in fact, this term was used by nine women who put into words how some of their experiences of being harassed have made them feel. Overwhelmingly, the majority of these women described being recipients of unwanted attention by men; attention that more often than not made them feel sexually objectified, something that clearly falls into the category of sexual harassment (McCabe & Hardman, 2005). It is a type of "hostile environment harassment" (Cortina & Areguin, 2021; Combs & Milosevic, 2016; Holland & Cortina, 2016). By consequence, research has associated many implications for the well-being of working women who experience sexual harassment, including that this treatment increases anxiety and depression (Bond et al., 2004; Lonsway et al., 2013), psychological distress (Bergman & Drasgow, 2003; Gettmen & Gelfand, 2007), and job stress (Lim & Cortina, 2005), while simultaneously decreasing job satisfaction (Bergman & Drasgow, 2003; Bond et al., 2004) and overall life satisfaction (Lonsway et al., 2013). Research also finds that women who identify as sexual harassment victims are more likely to be substance abusers (McGinley et al., 2011; Richman et al., 2002; Rospenda et al., 2009), and suffer more often from Posttraumatic Stress Disorder (Dansky & Kilpatrick, 1997). Overall, and cross-culturally based on their review of the literature on this topic, Holland and Cortina (2016) argue that "it is clear that sexual harassment is a prevalent and significant stressor in the work lives of many women (but a minority of men)" (p. 87-88), demonstrating the gendered nature of this type of harassment that disproportionately affects women.

Speaking about the correlation of harassment, especially sexual harassment, and the emotion of discomfort stemming from this, engineer Kristine revealed that "sometimes it gets kind of uncomfortable because I've had experiences with, like, being sexually harassed." For geologist Lucy, she provided the example of an "uncomfortable, umm, situation, where you know, during...mining conferences, men just completely just stare at your [women's] chests the entire time." To health and safety specialist Brooke, "circumstances [at work] that have made me feel, like, uncomfortable" are when "men have gotten too physically touchy," behaviour that she attested as being both "unwanted" and "unprofessional." According to Claire, because she explained that at work, she has been "hit on like a walking piece of meat," she described feeling "very uncomfortable." While most of these harassing experiences are according to women interviewees, perpetrated against them by men, Lisa was the one woman who described that another woman had harassed her because she became aware of "inappropriate comments" that were being made about her and her body, by this woman, being circulated to other peers. This experience was to Lisa, "not mature at all…really inappropriate." For these women and others, discomfort at work is a gendered experience that unjustly objectifies them.

Jennifer, underground blue-collar worker, related that her annoyance at feeling sexually objectified at work stems from her wanting to be perceived "not just like this little pretty girl there, looking for attention, kinda thing, you know? Like, I'm going to work, to work…. I got bills to pay just like you," she described. Adding to her statement about feeling like "a walking piece of meat," because of men's unwanted attention directed toward her, Claire elaborated that for women in mining, "what happens is you get badgered and bugged and harassed and it's repetitive stuff." Victoria, underground production miner, described the unwanted attention that she has received at work from men as repetitive because she has felt as though especially when

she broke off a relationship and "ended up single years ago, there must have been a bulletin board 'cause everybody and their best friend came to my drop point to hit on me." In other words, men interacted with her in the workplace suggestively and flirtatiously. She said about these experiences that they are gendered because she has not witnessed men being treated in this way at work, concluding that these experiences have in her opinion been "different when you're a girl." For Kristine, "unwanted flirtation, I don't want that [but] I've experienced that at a couple of [mine] sites that I've worked on," which she reported as troublesome. It was troubling especially because this attention, in her opinion, has taken away from her professionalism. Explaining this, she said, "I want them [men] to relate to me because of the quality of the work I'm doing, [and] not because I'm pretty that day," drawing attention to how women's physical appearance impacts how they are perceived.

Underground blue-collar worker Karen, was once offered training from a male colleague on a scoop tram. She expressed being disappointed when his offer of support took a sexual tone when he said suggestively, "'I'll teach you how to run the scoop, [but] you gotta sit on my lap,'" which she explained felt like "unwanted attention." She also disclosed once having a male colleague say inappropriately to her, "'come into my office and take your coveralls off,'" which she revealed made her feel "dirty." A nearly identical experience occurred to Jennifer, who said that not only have "guys [said] sexual comments" to her at work, but that in 2018, the following occurred in her place of work, underground:

> My supervisor totally, like, verbally [and] sexually harassed me, there. Like, he would call me to his office just to say, like, "I wanna bend you over the desk and spank you." Like word for word is what he said.

Although Jennifer asserted that she managed to avoid this supervisor by finding work elsewhere soon after this experience, she revealed that her move to a new job site was necessary because it wasn't only her supervisor who had harassed her at this job site. She had also been physically assaulted, describing that at this location, "someone punched me." What's more, another instance of sexual harassment occurred against her when she explained that "someone touched my butt...and wink[ed] at me." About these experiences, she reported angrily that "this is not okay…. Like I'm not - I'm not coming to work to be fucking touched and harassed." For Jennifer and other women in the industry, experiences such as these infringe upon their human rights, because, as the legislation states, this behaviour "ought reasonably to be known as unwelcome" (Government of Ontario, 2021). Training for workers in mining at all levels of power about what constitutes harassment, may help improve this workplace culture.

Brooke said that she too has been the recipient of what she described as "cat calls." She explained, "a worker once rubbed dirt on my face and said to me 'now you're a dirty girl,'" inappropriately bringing attention to her sexuality. Hannah also explained having been a recipient of flirtatious comments at work by men, which she asserted she makes every effort to "always put a stop to right away and be like, 'thank-you, but no, I'm married. This is inappropriate.'" However, "he wasn't understanding my boundary," she continued about a male colleague who she said "you could very visibly see that he was interested and you know, flirting and trying to like, umm, get me to flirt back with him." About this experience, she said "it just continued to get worse," making harassment such as this doubly problematic, not only for its occurrence in the first place, but also because of its ongoing occurrence when asked to stop.

Similar to Hannah, other women described making attempts to tell men that things they said or did to them, some of which they labelled as "harassing" behaviour, caused them

discomfort or other more grave emotional reactions. Positively, my study discovered that most women who described speaking directly to perpetrator(s) about their discomfort or other unsavory emotion, had the result of alleviating instances of future harassment. According to engineer Hellen, this is because most men in the industry, "they're not bad guys." Saying nearly the same and when speaking specifically about sexist men at work, health and safety specialist Noel suggested that "most of them don't want to be an asshole. They don't want to be a bad person. Sometimes they didn't even realize [that their actions were sexist or harassing]." Many women interviewees in fact, admit that although there may be one or two men at their places of work who increase their threat of harassment, most men do not harass them, or at very least, they perceive that they do not purposefully harass them. By contrast and as the next chapter takes up, according to women in my study, many men seek to support them, some, protect them.

Nicole, who provides training about harassment in the workplace as part of her job in health and safety alluded to the idea that not all men seem to consistently understand that harassing behaviour is in fact, harassing. While this might be true, Nicole said that in her experience, men who are educated about behaviour in the workplace that is unacceptable and harassing, usually repress this behaviour for fear of repercussion to their jobs:

> That whole aspect of the violence and harassment in the workplace, once that comes into play, they kind of back off.… When we put that into perspective for them - for those specific guys, usually that tends to back them off a bit.

While this is encouraging, not all women interviewees, (Hannah for instance), agreed that simply speaking to men who had harassed them caused this behaviour to cease. "I think it's a totally different world for the men. Umm, they don't look at harassment the same way that females do, I think in the workplace," said Tiffany in trying to understand this. "So, they will fool around and

do silly things that umm, wouldn't be acceptable to do with female colleagues, and I don't think they consider it harassment whatsoever," she continued, bringing attention to this important finding that aligns with research positing that men and women often have different perceptions about what constitutes as harassing behaviour (Berdahl & Aquino, 2009; De Judicibus & McCabe, 2001; Escartin et al., 2011; McCabe & Hardman, 2005; Rotundo et al., 2001). Adding to this, engineer Nora perceived that "because they'd [men] perceive me as cool, let's say, and down to earth…when the males perceive me in that fashion, they actually think they can say anything to me," which she went on to explain can make it "extremely difficult to continue to build...relationship[s]" with these men, when she is uncomfortable with some of their comments and behaviours.

Lisa has also been a recipient of unwanted attention both as an underground blue-collar worker and in her more recent managerial role. Her experiences of harassment, like those of many other women interviewees, have most often taken the form of sexual advances. She recounted that she was once told by a male foreperson when she arrived on site to support the training of a work crew that, "we're just waiting for your sexy ass," which made her feel uncomfortable because she wasn't being taken seriously as a professional. Instead, she and her body were being sexually objectified. On another occasion, she described being in a meeting when asked by a male cage tender if she wanted to "blow this shift," after which she said "he unzipped his coveralls and said, 'okay start blowing.'" In other words, he insinuated suggestively that she perform oral sex on him, which Stick and Fetner (2021) argue is a way of asserting dominance where "the sexual dominance of women [is] enacted in part through the prioritization of men's sexual pleasure" (p. 790). "I turned beet red…. I was like, totally embarrassed," she expressed about how this experience made her feel. What worsened this experience for Lisa, was

that a very powerful man in a position of authority in Sudbury's mining community was present to clearly overhear this comment, yet did not come to her defense. Instead, he gave her the impression that like the man who had sexually harassed her, he "thought it was funny," which reveals how intensely problematic occurrences of sexual harassment are for women in mining, especially when men in positions of power ignore or condone harassing behaviour. According to Lucy:

> Respect [for women in mining] is hard because there's a lot of like, sexual connotations still in the mining industry that I've seen. It's just - it's a dirty industry. It's really dirty. And you can't escape that. You're female. Right? But like, definitely derogatory comments have been thrown my way.

In regards to these derogatory comments and behaviours, and asserting further that men and women may perceive differently what constitutes harassment, Hellen suggested that although "we give ah, training on sexual harassment… [that] the training we give people is like, motherhood statements…. It's not practical." She suggested that in the industry, there is a "need to increase [the] level of uh, gender specific training for supervisors and managers, umm, and [that]...we need to start talking more about what the barriers are that women face." These barriers, as my study reveals, are plentiful and troublesome, especially when they infringe upon women's human rights, as so many of the experiences described in this chapter do (Government of Ontario, 2021).

Notably it is not only discomfort, unease and annoyance that women in my study reported about experiencing harassment at work. Some women also reported that because of hostile occurrences of harassment against them, they have felt fear for their personal safety in their jobs. This finding was reflected in Peetz and Murray's (2016) study that surveyed 137 mine

workers in Australia to discover that women in mining often feel fear at work because of the threat or actual experience of harassment, as are they are twice as likely as men to "often" feel unsafe at work because of attitudes and actions of their colleagues. To Bericat (2016), fear is defined as "the prototypical emotional state of an actor that faces a dangerous or threatening situation with insufficient power resources" (p. 636). My study finds that workers who described feeling fear in the workplace conventionally perceive limited control over their situations at work, which can have negative emotional and psychological consequences (Bericat, 2016).

For Ruth and in reflection of persistent harassment experienced at the beginning of her blue-collar career in underground mining, she eventually came to feel as though "it was no longer safe for me to work there." She explained, similar to other interviewees, that one male colleague continuously made unwanted flirtatious advances toward her and "had a tremendous infatuation…. But once he realized that I didn't have the same mindset...he became angry." What ended up occurring was a harassing situation where this man aggressively operated a piece of machinery in such a way that as Ruth described, "almost crushed me between two trucks."

In a formal proceeding after this occurrence with their company's HR unit, Ruth said that this man admitted to his wrongdoing, saying that he operated his equipment in an intimidating way toward her even though he knew this was dangerous. "That's the kind of anger he had," she said about the hostility of this man. "That was the day I was taken off, uh, that particular crew, and put onto another crew," she continued, explaining that after this occurrence, her company decided to transfer her to a different mine site. Although this transition ensured she was rid of this man and others whom she said harassed her, she explained that she "was really uh, angry at the decision made…. Why the hell did I have to do that [transfer job sites]?" "It's almost like changing your life when you change crews," she went on to say, contributing to the finding in

the previous chapter about how women's challenges in mining are especially complex and often difficult near the beginning of their careers or upon transfer to work with new people, mostly men. In her opinion, "it is unfair" that her company's way of dealing with this issue that resulted in her fear for her safety at work was to move her elsewhere rather than focus on reprimanding her harasser. This is a clear example of how power operates in institutions - women, or those belonging to other marginalized groups, often have less power. And power in the workplace, "determine[s] who can proceed and who cannot, for whom a door is opened, for whom it is not" (Ahmed, 2021, p. 227). Though it is possible that this man was disciplined, because of Ruth's relocation to a new job site, details about this are unclear.

Blue-collar Karla also disclosed that because of harassment that she has experienced at work, there have been times that she has felt unsafe in her job underground. "My jacket was actually sliced up with a knife, [and] umm, my lunch pail was beaten with a sledge hammer," she said about two experiences in the workplace that made her feel fearful for her safety. She explained that these experiences took place when she was one of two blue-collar women employed at her mine, meaning she usually worked exclusively with men. This vandalism to her personal belongings occurred after she discovered non-verbal, sexual harassment directed toward her in the workplace in the form of derogatory sexualized graffiti about her and her body, an example of "hostile environment harassment" (Cortina & Areguin, 2021). About this graffiti, she reported that it became clear to her that someone or some persons at her job site, obviously did not want her present:

> You would go to a latrine underground and it would be written in big black marker. Umm, you know, "[Karla's] pussy is this and this." Just really stupid shit. Yeah. Really

silly. But I mean, you know, you see one [hostile graffiti about yourself] and you're kind of like, "okay, whatever," but after years of it, it really - it starts beating you down.

In the above, it is undeniable that Karla was being aggressively sexually harassed at work, which impacted her emotionally. "It's probably a huge topic, harassment - sexual harassment in the workplace?" she inquired near the start of her interview when asked if she had ever experienced any type of conflict or difficulty with persons she works with. By asking this question in response to a question I asked during her interview about conflict in the workplace on a general basis (see *Appendix 4a,* question 7), it is as though Karla desired to validate her experiences because over the course of her interview, it became clear that she perceives that harassment is all too common for women in mining. "For the harassment side of it [work experience of women in mining], you know, there's - there's a lot of things that have happened," she disclosed. "You remember those times. You know? Going to work sick to your stomach every day," she continued. About how the sexualized graffiti about her in her workplace as well as vandalism to her personal belongings made her feel, she attested further about her jacket that "you could see it - just shreds, and I'm thinking, 'does this person wish I was dead?'" This statement very powerfully demonstrates Karla's fear for her safety.

Like Karla, other women also spoke about the presence of sexualized and gendered graffiti or other inappropriate images at their job sites. For instance, Claire recounted that there once was a poster of "a girl standing there absolutely stark naked in a pose" in her company's locker room. Engineer Naomi disclosed much the same, and said that although she doesn't see sexualized images at her work site anymore, she does recall earlier in her career the presence of "calendars or whatever of big busted women." Blue-collar worker Karen also addressed the tendency of nude images of women posted in offices and underground headframes, remarking

that although it has been several years since she has personally seen one of these images at her job site, these sexualized images of women and their bodies are but one facet of "the jokes that they [men] make. It's just, I guess, a typical male environment." According to Victoria, "you see things written on the walls and in the bathrooms" that she confirmed are sexualized, gendered, and near exclusively at the expense of women. "Like you go to the porta potty and there's things written about your other female co-workers and stuff like that. It's not great," she concluded. Engineer Nora disclosed a particularly hostile experience of graffiti at her place of employment at her expense, when she once discovered a degrading caricature that she said was obviously meant to represent her. "I've had people draw pictures of me and write awful notes umm, in the bathrooms, umm, of me nude, in a very characteristic form," she revealed, saying how instances of sexual harassment such as this nearly made her rethink her career choice to work in mining.

Returning to the idea of fear in the workplace, Victoria, Trish, and Tiffany are three other women in mining who, like Karla, have experienced harassment that has made them fear for their safety. It should be clarified that all of these women are categorized as blue-collar and work underground. About her experience, Victoria reported:

> I went through a pretty crappy harassment - sexual harassment with a co-worker…. I had to give this guy a ride. And I worked with this guy for probably about six months before and never thought anything of it. He was married with kids. And I had to give him a ride somewhere, and as you know, down there [underground] you're all by yourself. You're alone. And he started grabbing me while I was driving. We were driving in, like, a Jeep kind of thing, where you're side by side. Like a normal vehicle? And he was grabbing me, and I kept telling him to stop and he kept doing it, and I kept telling him to stop and -

it gets a bit scary ‘cause you have no - you’re by yourself. There’s nobody anywhere near you. Umm, I actually pulled over and told him to get out…. I cried my eyes out.

This example not only reveals another instance of inappropriate sexual harassment in the workplace, but also how violent this type of harassment can be, which can have negative occupational, psychological, and economic consequences, especially for women (O’Donohue et al., 1998). Once again, it must be emphasized that isolated environments underground can increase the threat of harassment, most particularly for women who work exclusively or near exclusively with men. Trish’s experience of a fearful occurrence of harassment mirrors in many ways that of Victoria, because she described similarly having been accosted in a remote work space underground. “This guy was absolutely like - just chased me around a truck. And I’m telling him, ‘get the fuck away from me!’ Like, ‘stay away from me! I want nothing to do with you,’” she said about this frightening experience.

Tiffany’s internalization of fear at work has also been in reflection of experiences of harassment, some of which she labelled as “terrifying.” Similar to Karla, she explained that because of the intimidation associated with some of her experiences, she came to feel as though someone, or perhaps more than one person, was attempting to send her the message that she didn’t belong in her job. About one experience of sexualized hostile environment harassment, she attested that “in the beginning of my supervisory career, somebody ejaculated on my keyboard.” What worsened this experience for Tiffany was that as she detailed, “there was no female management [on site apart from me], but the male management team at the mine I worked at laughed.” She said that about this occurrence of hostile sexual harassment directed toward her that, “they [male management] found it hilarious,” disregarding her worth as well as her human rights. About another fearful experience at work underground, she said:

> I was going to the washroom in one of those green little outhouse type things? And somebody came by with a piece of equipment and flipped it over with me in it…on its back so I was able to, like, push the door open and stand up and climb out, but now I'm covered head to toe in like, the blue water and stuff.

These experiences were extremely degrading, and Tiffany added about her own experience of sexual harassment that "early on in my career, one employee used to pinch my bum every time he got off the cage." For Tiffany, these experiences "hardened" her, contributing to her toughness.

As my study has revealed, the emotions that women in mining internalize in reflection of their experiences of harassment are varied, but so are the ways that they address their experiences. Up to this point, this chapter has described how some women choose to confront those who harass them, but it needs also be said that my study also discovered that many women choose to avoid situations and persons they perceive as harassing or that may increase the threat of harassment directed toward them. Previous studies have examined the effects of women's strategies to cope with harassment, which includes its avoidance (Ahmed, 2021; Cortina & Wasti, 2005; del Carmen Hererra et al., 2018). Speaking to this generally, engineer Kristine said that, "I think a lot of women know to kind of change the way they're talking to avoid those situations…. I try to mitigate against those things [harassment] before they become bad." To Nora, because of "communication with males that stems from way too much flirtation and feeling uh, very awkward...I have to make steps to avoid people." Similarly, according to Lisa, accommodating her behaviour in the workplace helps her "avoid the conflicts," whereas to Ruth, "I've changed my behaviour to avoid any confrontation." Adding to this, Hannah shared that, "as a woman underground, there's a certain way you need to act, right? You need to present yourself

in a certain way." Though for some women interviewees, their decision to accommodate their behaviour to avoid situations or persons they perceive could increase their threat of harassment is a defense mechanism, these choices clearly reveal gendered power imbalances in the industry where women are at a disadvantage.

In reflection of some women's discussion of strategies of avoidance in my study, it should be revisited that the characteristic described most often by women interviewees as useful for them in the mining industry, is to have mental and emotional strength; in other words, to be "tough" or have "some type of a tough skin or a backbone," said Karen. Most women who participated in my study acknowledged, like Karen, that in mining workplaces, inappropriate comments and behaviours can and do occur; these are often sexist in nature and at the expense of women. "Men are pigs. Miners are the worst by the same," said Hannah, returning to the common use of sexual and sexist language by many men in her place of work; language that she explained she often opts to ignore. "That's the thing, as a woman, you have to be able to handle some of those conversations without like, umm, taking it to heart, you know? Because it happens all the time," she continued, revealing how routine is sexist language in mining.

According to Kristine, especially "if you're the only woman there [at work with men], you'll hear inappropriate things." Even interviewees like Naomi, who said that personally she has encountered no conflict of concern at work, acknowledged that she too has been privy to "a few different inappropriate situations" in her job. About this and underground work environments specifically, Lisa said, "it's just the way it is down there - it's a different world…. At the end of the day, it's a mine, and it's rough and it's tough and you need to expect that." Many women in mining seem to feel limited power to rectify their situations of harassment, and this may account in part for why so many of them spoke about needing to be tough; needing to

be willing and able to either brush off, shrug off, or ignore situations in the workplace that cause them concern, discomfort, or even fear. Though choosing to ignore certain comments and behaviours may mitigate some instances of harassment for these women at work, research has discovered that women who ignore sexist behaviours generally have more tolerance for the harassment of other women (Mallett et al., 2021). Ignoring harassment has been coined the "bystander effect," argued to disproportionately have a negative impact on women in heavily male-dominated workplaces (Paull et al., 2012). Though ignoring behaviour does not necessarily endorse behaviour, when it comes to harassing behaviour, it does little to counter harassing attitudes, especially sexually harassing attitudes toward women (Mallett et al., 2021). This further complicates women's experiences of harassment at work and elsewhere.

Some women in my study even suggested that having a sense of humour in response to what may be deemed inappropriate behaviour to most, can support better working relations with peers. "Showing that you're not too uptight and able to take a joke a little can be, ah, beneficial," said Brooke about this, whereas Kristine implored:

> Working with men, you really have to be able to umm, take things with a grain of salt and joke around a lot, but also, umm, have like, a really good sense of humour is what I mean. Because they [men] say inappropriate things a lot…. I think women wouldn't be okay with some of those things if they were not only working with men, if that makes sense? So sometimes, you just have to be able to, you know, laugh it off.

Kristine's narrative further contributes to the finding that women in mining often accommodate their behaviour when working with men, especially if they have concern for inappropriate or harassing behaviour. According to Kristine and as she states above, this is especially when women work exclusively with men, as has been her experience. In saying that she perceives

women would likely not be okay with some things said by men at work, things she labelled as "inappropriate," she recommends that on the job, it is often easier to "take things with a grain of salt and joke around…laugh it off," revealing men's privileged positions of power in her place of work, an accommodation of self-preservation that women make that subtly and inadvertently reinforces the existing gender dynamics. Putting this in other words, Ahmed (2021) explains that in the workplace, it is common for workers to be "encouraged not to complain, to "let it go" by resolving things in some other way or by hoping for some other resolution" (p. 72). This is because to be a complainer, is to make a fuss.

The previous chapter demonstrated the intense gendered resistance to the achievement of acceptance and respect that women encounter in the mining industry regarding their work ability, and here, one sees another aspect of that male-dominated workplace culture. By adopting a sense of humour, even in situations where they do not necessarily condone what they are laughing about or shrugging off, women in mining seek the approval of integration in the workplace with their peers. While this might be true, when she spoke about the importance of having "a sense of humour" at work and choosing to not "take everything seriously or personally," Noel circled back to the idea that what may not be considered threatening to one person may be threatening to another:

> I think that you need to be cognisant of what is being said or done, and put it through a lens of, 'how would this affect somebody coming after me?' Another young girl who is maybe not as confident, and experiences this. What if she was exposed to this? Do I need to do something about this? So, it's about putting - having that lens of saying, 'who's coming after me?' If I just brush this off and ignore it, it doesn't help anybody else.

Here, Noel brings attention to a sisterhood in mining where women often support other women - a concept that will be described more fully in the next chapter. Of additional importance and correlated with this, is that many women who participated in my study said that they perceive themselves as being hard to offend. Hellen for instance, attested that "you'd be hard pressed to offend me," whereas Liane disclosed that she is "not easily offended," and Tiffany said that "it takes a lot to upset me." In other words, Nicole implied about women who work in the mining industry that "we can handle it" - the word "it" in her statement, representative of the male culture of the workplace that is sexist toward women.

Reflecting on some of their experiences of harassment specifically and of mistreatment at work more generally, several women offered that they would not be comfortable having their daughters work in the industry. This is not something I asked women about during their interviews, so the fact that this topic was introduced freely by several women is significant, raising concern. "If my daughter was to tell me she was going into mining, I would probably ask her not to," said Trish. Nora explained that she "struggle[s] with if I had a child, would I want my daughter to work here [in mining], and the answer is no." Lara said more or less the same, and that her "daughter, she is, you know, very intelligent; she's strong willed, but there's no way I could see her surviving that environment [mining]. There's no way." Said Josie also about this:

> I would hate it if, like, I had my daughter go into mining and like, some pervert is doing that to her [harassing her]. You know? 'Cause I can handle my own, but like, some people can't, right?... Some girls that don't have a tough skin will get reeled into that and then it would have been an even bigger shit show after.

In the above, when Josie used the word "it," she was referring back to an occurrence of sexual harassment that she experienced at work that challenged her and what she explained as her

ability to "be tough." This experience for Josie, occurred when a male superior once smelled one of her personal belongings in front of her, and said to her in a sexually flirtatious tone, "'I wish I knew what the rest of you smelt like.'" As she expressed her concern about this, she said that "obviously he was talking about my vagina…. Like gross. Don't even say that to me. It was disgusting. Disgusting." Having experienced this hostile environment of sexual harassment, it is not surprising that Josie and other women in my study would worry about their daughters (or sons for that matter), if they were to choose to work in mining. Notably, women who spoke about this, worked exclusively underground.

Part 3) Women in mining's tendency to not report their harassment: "I think there's a lot of fear for women to speak up."

This chapter has offered examples of some of the many experiences of harassment of Sudbury women in mining. It concludes with discussion that more often than not, women in my study described their tendency to hesitate or to not report occurrences of harassment. This is the most significant finding about women's harassment in this chapter: 17 of the 24 women who participated in my study, just over 70 percent, described hesitance to disclose their mistreatment. Previous studies have found that workers who are harassed often do not formally report their harassment (Ahmed, 2021; Arnetz, et al., 2015; Kvas & Seljak, 2014; Simpson, 2017), and that gender can impact this (Ahmed, 2021; Holland & Cortina, 2016). It is important to restate and emphasize that no specific questions in these women's interviews asked about harassing experiences at work. However, when they participated in their interviews, women voluntarily described experiences deemed harassing according to violations to their human rights based on the *Ontario Human Rights Code* (Government of Ontario, 2021). When I asked follow up

questions about these experiences, this included questions about the choices women made about their harassment.

Speaking generally about why women in mining often do not report their workplace harassment, and introducing several reasons for this, Brooke said:

> I think there's a lot of fear in women to speak up. With fear of reprimandation [sic] or having that person - I guess it depends on their role [to the woman being harassed] as well, like what that other male figure is to them. If it's a boss or if it's a supervisor, or some sort of umm, versus just a co-worker? In fear that it [reporting occurrences of harassment against them] may reflect on their job or reflect on how they're treated…. I've felt like that personally where I've had some questionable experiences with superiors, and I'm like, you know, you kind of fear wanting to report it based on the fact that you don't want to take it out of line or get them [your supervisor] in trouble, or like, maybe that's not what they meant by it...which is upsetting.

Not only does Brooke's narrative reveal how imbalances of power in the workplace further complicate what are already challenging experiences of harassment for women in mining, which was addressed in my study as well by Jennifer, Hannah, Claire, Naomi, and Josie, Brooke's disclosure demonstrates the tendency for women to question themselves when considering whether to report their harassment. To Holland and Cortina (2016), power in the workplace is an important determinant affecting perceptions of the severity of harassment and its reporting, where in "male dominated workplaces [like the mining industry] the favouring of stereotypically masculine characteristics, and rigid gender roles are just a few reasons that women may lack access to interpersonal/personal power in the workplace" (p. 90). Power is often unevenly distributed in the workplace (Ahmed, 2021) and the fact that Brooke even used the word

"questionable" when speaking about experiences at work that have caused her concern, is significant.

The tendency for targets of harassment to question if they should or should not report their harassment may in part be because of the desire to avoid being perceived as victims (Ahmed, 2021) which can induce emotions like shame, embarrassment, and weakness (Einarsen et al., 1994; Rayner et al., 2002). Sexual harassment, which is very prominently and commonly experienced by women in mining, is especially underreported because targets fear "blame, disbelief, inaction, humiliation, ostracism, and damage to their careers and/or reputations" (Holland & Cortina, 2016, p. 92). All of these implications are factors which women in my study spoke about when they considered whether to report their harassment or not. Other studies have discovered similar findings (Ahmed, 2021; Cortina, 2004; Gill & Febbraro, 2013; Kvas & Seljak, 2014; Wasti & Cortina, 2002), which may account for why many women in mining said that they prefer to rely on their own strength, tenacity, or toughness to deal with harassment at work rather than seek the assistance of official workplace channels. As an example, to illustrate this, Kristine said, "I feel like I have to depend on myself mostly to be tough enough to deal with those situations myself as opposed to going to some other resource." In a workplace where women encounter intense gendered resistance to the achievement of acceptance and respect, they may fear enhanced repercussions that could stem from choosing to report harassment against them. They could also be trying to seek the approval of their peers in being perceived as tough enough to belong in the industry that is unwelcoming toward them. Considering the narratives of women interviewees, reporting instances of their mistreatment could threaten to mark them as outsiders even more than they already perceive they are based on exclusionary but also harassing behaviours of their male peers.

Speaking about the internal struggle to officially make a report or complaint about workplace harassment, engineer Nala attested that "there are always always [sic] rumours - word of mouth, that you don't want to go that way…Because you will lose." About this, Karla asked with concern, "what if somebody doesn't believe you?... It's a tough situation to be in," whereas Kristine described that she "just [doesn't] think anything like that [making a report or complaint about harassment] would be taken seriously." From experience, Nora confirmed this, saying that when she once brought up to supervisors her experiences of harassment, "people don't believe you, or they'll say, 'oh you're just exaggerating.'" Much the same, Claire disclosed that her company's HR unit "brushed off" an occurrence of harassment that she attempted to disclose, which made her distrust what are supposed to be official channels of support. Hannah had an experience that was more or less the same, saying that it was "frustrating because they [HR] should be taking care of the people...and they don't." For Lara, her trust in her company's HR unit has also been tainted, because she too had experienced a previous supervisor not taking her concerns about her harassment seriously. Explaining this, she said that when she told a previous supervisor about a male colleague whose flirtatious behaviour was making her uncomfortable, he questioned the validity of her experience, saying he just couldn't believe that her perpetrator would behave in this way. Victoria has also experienced this, describing that especially in the early years of her career in mining, "if you went to HR back then as a woman, you were the problem." She said that she once went to a supervisor in tears because of an experience of sexual harassment. About this experience, she attested that he and another co-worker were present and "they didn't believe me. They said, 'oh he's too nice. There's no way. I'd never picture that,'" which led her to question her faith in the process of reporting her mistreatment. According to Tiffany, when women in mining do report their harassment, they are "probably going to

encounter [being questioned], 'did you encourage it?'" This has had the implication of making her feel as though the best course of action is not to report her harassment officially, but rather "deal with it yourself, because you don't want to be 'that girl.'"

Several interviewees spoke about not wanting to be labelled either "that girl," "that woman," or "that troublemaker" if they reported their workplace harassment. For many, the threat of these labels deters them from seeking support, where for instance, Josie explained, "that's where one will get a bad name in the workplace, because of certain things that they report."

Mostly, this is because women in my study described impacts to working relations with their peers, almost exclusively male, if they did or were to report their harassment, which aligns with findings of other studies that suggest that harassment targets are often concerned with the deterioration of relationships with their workplace peers (Ahmed, 2021; Rayner et al., 2002; Vega & Comer, 2005). Explaining this, Lucy said that "culturally, it's so embedded that, you know, you don't wanna be that person that's all dramatic," whereas Jennifer attested that if "you do that [report your harassment], then you're all looked at differently and no one talks to you anymore." Building on this, Tiffany described how "you're kind of told early on in the workplace, 'you don't want to be *that girl*.'" Explaining what this term means to her and attesting that this label is gendered, she continued in saying that "you don't want to be 'that girl' because 'that girl' ends up being, umm, the girl that nobody wants to work with. That no man wants to work with, because she's 'trouble.' She caused something." For Trish, she described this implication of being labelled as "trouble" as "horrible" but also shared her concern that when women report their harassment, "then you get yourself in that position where the guys aren't talking to you anymore." Aligning with this, Nora disclosed:

> When you get someone disciplined, if something actually ever comes from it, which typically it does not, then you're just - you know, you're "that person." You're perceived as "oh, gotta be really sensitive around her. She might call HR on me." You know? And so no one is the same around you anymore.

Considering that the narratives of these women about the threat of being perceived by their peers as in the wrong if they were to report their harassment, and the fact that many of these women's attestations about their experiences in this regard are gendered, the dangers of the gendered culture of the mining industry are apparent. To Cregan and Kelloway (2021), whose review of the literature about intimidation and bullying in the workplace argues that the organizational culture of a workplace can impact the risk of harassment and choices made to report harassment, there is value in establishing cultural norms to counter workplace violence and harassment. On this topic and about mining workplaces specifically, Lucy described:

> Maybe the practice [to report harassment] is in place, but people don't follow through because to follow through means that you're blowing this [your experience] out of proportion. It's not a big deal. Blah, blah, blah. Right? So practically, it [current practices set in place to counter or support harassment] doesn't work.

My study hopes to bring attention to this.

Conclusion

Based on the experiences of women interviewees in this chapter, the gendered masculine organizational culture of the mining industry is not only problematic because of its resistance to accept and respect women, but also because it disproportionately negatively impacts women's experiences of a gender pay gap as well as harassment. As this chapter reveals, harassment of women in mining is all too common as it is perpetuated against women in the industry in many

forms, including verbal, non-verbal, physical, and sexual forms of harassment. These experiences evoke a range of emotions in women in mining, including discomfort, unease, annoyance, and for some, fear. Most concerning, are experiences of "hostile environment harassment" (Cortina & Areguin, 2021) that includes conduct considered sexually harassing. Women in all occupational groups categorized by my study are impacted by this form of harassment, however, it is blue-collar women who work underground who experience this form of harassment and others with the most hostility. For these women, the threat of harassment is especially high considering the isolated spaces within which they work, and because they work jobs in mining conventionally performed by men (MIHRC, 2022).

Another finding, perhaps the most significant in this chapter, is that while women interviewees spoke about harassment being a very real experience for women in mining, 70 percent of women interviewees described their hesitation to report their harassment, especially sexual harassment, to their superiors or HR channels. For some women, this is because it was their superiors who have harassed them, complicating power imbalances in the workplace as well as implications of harassment for these workers. Previous struggles in perceiving that their claims of concerns about their workplace treatment is not taken seriously by superiors and HR personnel have also impacted women's perceptions of trust in these channels. Moreover, some women interviewees spoke about perceiving that by reporting their struggles with harassment at work, they could risk worsening what are already hostile relations with some of their peers. Many described the threat of being perceived by peers as "troublemakers" if and when they report wrongdoings. Instead, many women described relying on their resilience or tenacity, or in other words on their "toughness," to overcome and in some cases, avoid, their experiences and perpetrators of harassment at work.

Clearly, my study provides evidence that there is a need to improve training policies and practices within mining workplaces to better educate workers about what constitutes harassment, and what implications harassment has on workers and workplace culture. Training is needed for all workers in the industry, including within the highest levels of management because as my study reveals, some of the most egregious behaviours that are harassing toward women in mining are perpetuated by supervisors or other men in positions of power. As some women described, when channels they perceive are meant to support them and take their complaints of harassment seriously, disregard their concerns or question the truth behind them, they lose trust in these channels and experience worsened discrimination. Concrete examples of harassment experienced by women in the industry included in training workshops or other forms of training developed for workers in mining may contribute to improvements. Training about harassment needs to make it clear that workplace harassment is a gendered experience. As a study based in the mining community in Southern Laos found, training that focuses on the promotion of equal opportunities and gender equality can help support a more gender equitable workplace culture (Pimpa & Nunkoo, 2019). To the Sudbury Community Legal Clinic, training that focuses on how harassment in the workplace can be addressed can help draw attention to the severity of problems associated with harassment (Sobko, 2021) - problems that affect workplace cultures, relations amongst peers, and experiences of workers. They describe and based on a study conducted by Statistics Canada in 2020 that sexual harassment disproportionately affects women who work in certain occupations historically dominated by men. For example, this study found that nearly half (47 percent) of women working in equipment operation, trades, transportation and other related occupations have experienced behaviours at work that sexually objectify and

discriminate against them (Burczycka, 2021). This needs to change, including, for women in mining.

The troublesome experiences of women in mining described in this chapter, are concerning. However, not all experiences of women in mining are so problematic. Many are in fact very positive as well as rewarding, upon which the next chapter focuses most of its attention.

Chapter 6: The most rewarding experiences of women in mining - Job satisfaction and camaraderie

Up to this point, my study has described that Sudbury women in mining encounter gendered resistance to the achievement of acceptance and respect, the gender pay gap, and gendered harassment and violence. These are not isolated events: most women spoke about experiences of harassment at work, and the majority (70 percent) asserted being hesitant to report instances of harassment against them. They spoke about this, having experienced harassment, even when they were not prompted to speak about it. For these women and others employed in the mining industry, their gendered minority status as well as the higher value associated with male workers in the industry, are factors that impact their work experiences. And yet, while the challenges and discrimination that these women encounter in their jobs are significant, there is another side to their stories. Women also report many rewarding experiences in their work in this sector. This chapter focuses on the most rewarding of these women's work experiences while maintaining its critical gendered lens of analysis on their interactions at work.

Themes of job satisfaction and camaraderie arose frequently in the narratives of women in my study. Alongside the more troublesome experiences featured in preceding chapters that reveal how the masculine organizational culture of the industry can be problematic, more positive themes also merit consideration because they are part of women's perceptions about their workplace culture and climate. Whereas the earlier themes in my paper dealt with perceptions about the negative treatment and communication women receive at work, this chapter explores women's positive motivations for staying in the industry. These findings support the conclusion that women's relationships and interactions with co-workers in mining, mostly men, are multifaceted and complex. While some experiences are troublesome, many are also rewarding.

This chapter has two parts. First, it considers the concept of job satisfaction as described by women interviewees, to demonstrate that as a whole, women in mining attest to high levels of job satisfaction. Half of the women who participated in my study used the term "love" to explain how they feel about their satisfaction in their jobs. The majority of other women interviewees described liking or mostly liking their jobs. An analysis of women interviewees' own words, proves their high attestations of job satisfaction.

The second part of this chapter has four sections. The first section takes up the theme of workplace camaraderie, bonding with co-workers, and the associated positive emotions that emerge according to women in my study when they described that most of the people they have worked with in mining have, as a whole, treated them well. In other words, those who have treated them poorly are the minority, and those who have treated them well, are the majority. This has enabled women to experience workplace camaraderie, which other studies have linked to positive emotions (Baumeister & Leary, 1995; Haller & Hadler, 2006; Hornsey & Jetten, 2004). The next section links camaraderie with teamwork, exploring how mutual bonds of support relate to a sense of belonging and job satisfaction. The hazardous conditions underground play a significant role in this. Sections three and four illustrate how bonds of camaraderie are gendered, both in relating to men and to women. These last two sections also describe ways that women's identities in mining and their sense of belonging are interrelated (Fiske, 2013), based on the ways they present their gendered selves in the workplace, seek to become "one of the boys" or "one of the guys," and celebrate alternate expressions of femininity. For example, some women in mining spoke about being a "tomboy," and how the mining industry offers a workplace for them within which they can truly be themselves.

In sum, this chapter explores the efforts that women make to establish and maintain camaraderie and how this relates to job satisfaction. While the development of camaraderie is a complex gendered experience for women in the mining industry that finds them interpreting and adapting to the culture around them, the fact that so many women in my study spoke so positively about meaningful and supportive bonds with people they encounter at work, is encouraging. Bonds with co-workers are significant factors in job satisfaction and in the women in my study's overall perceptions of the culture and climate of their workplaces in mining.

Part 1) Job satisfaction: "I love my job."

Women in all four occupational groups in my study attested job satisfaction. Responses to the two following questions (see line 13 in *Appendix 4a*) were considered to measure this satisfaction: "Do you like your job? Do you have reasons to support why you do or do not like your job?" Some women described aspects of job satisfaction at other stages in their interviews as well. A full 50 percent of women respondents said they "love" their job (N=12), about 33 percent attested that they "like" their job (N=8), about 4 percent responded that they "mostly like" their job (N=1). Thirteen percent attested neutrality when speaking about satisfaction at work, because they spoke about liking some aspects of their jobs, and disliking others (N=3).[4] When women were responding to these questions, their answers were similar, no matter which occupation they held within the mining industry.

Women in my study who described that as a whole they "love" what they do for work, include Trish who said, "I love my job. I absolutely love my job." Victoria reported, "I love my job as much as anybody can love their job." Moreover, Erin attested, "I love my job…. I just

[4] Percentage values have been rounded to the nearest value.

love every part of it." Others said similar things using other terms. Noel, for instance, described that, "I've had a great career and I've met so many fantastic people, and I've had so many opportunities and done some really cool things. Umm, yeah, I've loved it. I've loved my career," whereas Kristine attested her love for her job in saying, "I love it! I totally love it." Similarly, Lucy enthused, "I love my work…. I feel like I'm on top of the world, right? So, I don't know how to explain it. It just makes me happy." Happiness is a driving factor positively correlated to job satisfaction (van der Walt et al., 2016). Notably, these statements align in many ways with the 4-item "Index of Affective Job Satisfaction" validated by Thompson and Phua (2012). That scale has previously been used in the context of the mining industry by Rubin et al. (2017), who studied job satisfaction and mental health of women miners in Australia.

In my study, five women used the word "like" to describe their job satisfaction as a whole. Three others are also included in this grouping to account for eight women who "like" their jobs because of their descriptions that speak to this in their own words. For example, in response to the question, "do you like your job," Brooke answered, "yes, I enjoy going to work." Lisa said, "I do," and Ruth responded, "I actually do." Articulating this directly, Naomi explained that, "I like it [my job].... I like the people that I work with." Serena said, "I like - I always liked being outside and I wanted, like, a job that - I didn't want an office job, right?... I feel independent. I do my own thing." Nala explained, "I do like it [my job] because I get, umm, different exposures from - exposures to different types of people…. Mining is such a small community." Rounding out these attestations, both Karla and Hannah said identically, "I do like my job." Adding to this, Karla said "I'm still enjoying it [my job]," and Hannah contributed that she would "One hundred times over" opt to start her career in the mining industry again if she were given the choice.

To Rubin et al. (2017) and as previously applied by van Dick et al. (2004), a good measure of job satisfaction in workers is if they express strong interest to remain in the industry in which they currently have a career. In their quantitative study about job satisfaction in women miners, for example, agreeing with the statement, "I want to stay in the mining industry for as long as possible," was correlated with positive job satisfaction. By contrast, agreeing with the statement, "I often think about leaving the mining industry," was correlated with poor job satisfaction (Rubin et al., 2017, p. 402-403). When follow-up questions in the interviews of women addressed their interest to remain working in the mining industry, they nearly all attested that if given this choice, they would again pursue a career in mining. When speaking about this, however, my study finds that women often took the opportunity in response to follow-up questions about their intention to remain in the industry, to acknowledge the gender-based challenges and discrimination that they have encountered in their jobs. After acknowledging their obstacles, they generally attested that these experiences have made them stronger, which expands on some of the findings described in previous chapters about the internal toughness and resilience of women in the industry.

For example, Hannah described her "bad experiences," saying that "the ones I did have, I mean, that's what builds you up and your character too." In a similar way, Victoria revealed her perception that her job:

> gave me an opportunity to have a good career…. The downside, like, all the - any harassment I went through - any struggles I went through, all of that made me who I am. I would go through all that again to get where I am.

Aligning with this, Nora said that going through gender-based challenges at work has "given me all these opportunities and those struggles that I've gone through have also made me stronger."

These testimonials represent examples of the toughness emblematic of so many women in mining, building on findings in previous chapters.

Returning to the concept of job satisfaction, Hellen, the only women interviewee categorized by my study as "mostly liking" her job, reflected:

> Mostly I like my work. Umm, I umm, yeah. I would say, you know, 80/20. Mining is very stressful. Mining can be very harsh…. It's a tough world to work in, and unless someone has worked in mining, it's almost really hard to put your finger on what it is. But umm, certainly there have been times in my career where I've felt: "What? Why am I doing this?"... And there's lots of times where I think, "I don't know why I still wanna work in mining,".... But that's the 20 percent of it, and the 80 percent of it is very rewarding. Umm, you know, the challenges - when you're able to overcome those challenges and when you see umm, the passion that people have...the "get 'er done" attitude, umm, I truly have a joy working in the mining industry.

This answer demonstrates how experiences at work, some of which are challenging and others rewarding, can complicate job satisfaction and create internal conflicts in workers as that relates to their job satisfaction. For Hellen, being able to overcome obstacles in her job, which aligns with attestations of other women interviewees, has had a mostly positive effect on her job satisfaction. Overcoming workplace obstacles is positively correlated with pride (Tracy & Robbins, 2007) and the achievement of success is known to positively impact satisfaction (Campos et al., 2013). By contrast however, some of the "battles" that Hellen described confronting have poorly impacted her job satisfaction. About this, she attested that one of the battles that challenges women in the mining industry is their gendered minority status, which has been described in this paper. Doing her part to change the gender imbalance in the industry

which may have an effect on her job satisfaction and that of other women in the industry, she said that she is "often out talking about how important it is to have women in the [mining] industry." Further, she described her personal mantra to "stick it out," or in other words, maintain her job even in the face of challenges. She explained that she tells herself, "you can make changes. You can - you can have an impact and you can make, you know, a positive and long-lasting impact." Like many of her other sisters in mining, Hellen's passionate account about her work experiences reveals how although the industry may be "tough," women's internal toughness advantageously supports them through the cultural challenges of the mining industry. This has a mostly positive effect on women in mining's job satisfaction, though attestations like Hellen's bring attention to the complexity of this satisfaction for some women.

Rounding out this section about job satisfaction on a general basis are the attestations of women who claimed neutrality in regards to their job satisfaction. They described liking some aspects of their jobs but disliking others, such as when Nora claimed that she is "in that in-between phase right now" of liking versus disliking her job. Explaining this, she reflected "it's [her job] given me all these opportunities…. It's painful. You know? Like, all the struggles I've gone through." For Nora and similar to Hellen, she is not fully satisfied in her job mainly because she has perceived being treated differently at work than male counterparts, often unfairly, and at times, even with discrimination. For Jennifer, although she detailed "hoping to stay in the mining industry," because her education is not linked to her job (or in her own words, "it's not what I went to school for"), she claimed neutrality when speaking about her satisfaction at work. "I don't mind it. I don't love it," she reported.

Similarly, Lara said about her job that she "[likes] some aspects, yes, and some aspects no." For her, requirements of shift work and overtime in her job often pose inconveniences in her

work/life balance. Notably, previous studies have argued that non-standard working hours including evening, weekend, and shift work generally have negative effects on people's work/life balance which can infringe upon job satisfaction (Arlinghaus et al., 2019; Bittman, 2005; Cha, 2013; Iskra-Golec et al., 2016). Some studies have specifically focused on this imbalance in workers in the mining industry (Dennie, 2020; Halvani et al., 2009; Keyser et al., 2020; Omidi et al., 2017). For example, Peetz et al. (2014) consider how gender influences this imbalance and demonstrate that women experience greater interference to their work/life balance than do men. Rubin et al. (2017) made a similar discovery. In the context of my study, struggles achieving a work/life balance were reported by several women, especially mothers who are shift workers. These women often spoke about the necessity to rely on close friends and family for support with childcare when working long, evening, or weekend hours. As an example, Lisa said:

> Any woman that works in the mine can tell you, day care is next to impossible because our hours are way too early and often, we - most of the time I'm done early, but you never know when you're gonna get stuck underground.

Adding to this, Trish said that reflecting on her shift work, she feels as though "because of the time constraints, I'm not able to spend as much time with him [her son] as I want to." Victoria correspondingly described that she and her partner, "we would be screwed if we didn't have our babysitter" and that she "struggles sometimes when it comes to umm, the shift work [and] being away from my kid." For these women and others, these experiences about work/life balance impact their perceptions of their workplace culture and extended satisfaction in their jobs. It is for these reasons that I report on these types of experiences in my study. When it comes to the achievement of a healthy work/life balance, it is possible that challenges introduced by a poor

work/life balance may impact worker job satisfaction to greater extents than women in my study described.

What accounts for the greatest source of job satisfaction, however, is the bonds of camaraderie that women develop with co-workers and it is these bonds that are the focus of this chapter's remaining sections.

Part 2) Camaraderie in the workplace

1. "There's way more good stuff than bad stuff."

Most women interviewees spoke at length about positive relationships of camaraderie that they develop at work. Although my study has discovered that these bonds rarely develop without extensive effort or action on the parts of women[5], this aligns with other studies about women's experiences in male-dominated industries (Denissen, 2010; Montague, 2017; Stead, 2017). When these bonds do develop, they tend to enhance women's sense of belonging and job satisfaction in mining. In other words, camaraderie has a positive effect for women in mining because it reinforces their perception that they belong in their workplace culture, about which Malone et al. (2012) conclude, "regular social contact and emotions related to connectedness are essential components of belongingness" (p. 312). Camaraderie is thereby essential to the development of social belonging because it is interrelated with an individual's identity and their concerns about acceptance, recognition, motivation, achievement, and success (Malone et al., 2012; Stead, 2017).

[5] See *Chapter 4* to review the frequency with which women spoke about their perceptions of needing to prove themselves as equally capable workers as men to male colleagues and superiors, to seek acceptance and respect.

Speaking generally about her sense of belonging in her job, for example, Josie attested that she experiences, “camaraderie like you wouldn’t believe.” Tiffany agreed and said that she’s built “some lifelong friends” with people she works with. Moreover, when describing her peers, Noel explained that they overall form “a very tight, tight bond.” Aligning with this and speaking about her colleagues, Nicole said, “there’s a lot of us that get along great.” For some of these women, camaraderie in the workplace has carried over into their personal lives. Illustrating this, Nicole went on to say about her colleagues that, “we’ll go for beers, we’ll go for wings, we’ll watch sports,” whereas Victoria attested that even on “days off, we [she and people she works with] tend to just be with each other all the time.” Adding to this and based on strong bonds of kinship that they’ve developed with some of the people they work alongside, according to Noel, Lisa, Lara, Hannah, Victoria, and Serena, they consider some of their colleagues as “family.” A sense of familial bonds at work is an effective measure of perceptions of camaraderie in organizations (Malone et al., 2012; Rego & Cunha, 2009).

The above descriptions may seem to counter some of the previous findings of my study about problematic interactions that occur for women in mining in their jobs. However, the fact that women interviewees spoke so frequently about forming meaningful bonds with men and women at work demonstrates the multifaceted complexities of the culture and climate of the mining industry for women. It also demonstrates that women’s perceptions about how their colleagues treat and communicate with them in the workplace is complex. While it is undeniable that women frequently encounter marginalization and discrimination in mining, their narratives about positive relations with people at work are encouraging. In fact, a theme that emerged in women’s interviews is that despite problems with a few colleagues and while not all people they’ve worked with have treated them with acceptance and respect from the onset, most insist

that the majority of people they encounter at work have treated them well. While this may be true, previous studies have found that employees who have faced challenges of acceptance or have struggled with their sense of belonging, as women in my study have (especially early in their careers), usually perceive more positively behaviours conventionally associated with camaraderie than do workers with less threat to their sense of belonging (De Cremer, 2002; Pickett et al., 2004; Rego et al., 2009). Moreover, according to Montague (2017), women in male-dominated occupations typically exhibit more effort when forming social bonds with their mostly male peers, than is the norm. Other scholars have made similar discoveries (Buse et al., 2013; Denissen, 2010). While this does not take away from the significance of women interviewees' descriptions of camaraderie at work, it does contribute to a more complex understanding of these relationships and interactions that are gendered, providing justification as to why I include this observation in this chapter.

Speaking about camaraderie, Hellen insisted specifically about male colleagues that although some initially treated her differently than men, and some resisted her, that the majority of these men, she considers, "not bad guys." Similarly, Noel spoke about how men have treated her at work, declaring that "most of them [male colleagues] don't want to be an asshole. They don't want to be a bad person." Hannah too made it clear that in her perception, "it's not always bad experiences" being a woman in mining. Like Hellen and Noel, she felt it important to express that while she has encountered challenges with how colleagues have treated and communicated with her, she also "feel[s] like there's way more good stuff than bad stuff" when it comes to her interactions with men at work. Erin confirmed this to be true in her perception too, and attested that the majority of people, including men that she has worked with, "honestly [have contributed to] her positive experiences" in her job.

Josie also claimed “overall very positive” relations with fellow workers in mining who are near exclusively men, even though she too has encountered gendered resistance as well as harassment at work. She made her belief clear that “you’re always gonna get that one [bully] - that one guy that you’re gonna get anywhere. I could be working in an office job and have that one guy.” Victoria said much the same, resigned to the fact that, “there’s always gonna be assholes. There are gonna be people who pick on [others].” Though this is likely true, the reality of the gender imbalance of the mining industry where women are minorities amongst men and are less valued than men (Laplonge, 2014; Tallichet, 1995), means that women workers in mining are in more precarious positions where the threat of their mistreatment is higher than for women in more gender-balanced workplaces. Previous studies have confirmed this (see for example: Adams, 2004; Ainley, 2004; Allen & Conrad, 1999; Bagilhole, 2002; Braundy, 2011; Heap & Scheinberg, 2005; Leiper, 2005; Meyer, 2016; Millar & Gidney, 1999; Muzzin with Sinnott & Lai, 1999; Reskin & Roos, 1990; Woodger & Stone, 2020). However, because women in my study also typically described being satisfied with the way most of their peers in mining interact with them, especially after they have proven themselves (as taken up in *Chapter 4*), we can conclude that Sudbury women in mining also experience workplace camaraderie, and this is linked to enhanced job satisfaction (Baumeister & Leary, 1995; Haller & Hadler, 2006; Hornsey & Jetten, 2004; Rubin et al., 2017).

2. “It’s about building teamwork.”

Based on what interviewees said, it is rare that workers in mining work alone because mining most often involves working in pairs or teams. For many women in the industry, this serves as an incentive to develop bonds of camaraderie. “It’s about building teamwork,” said Lara when she described what the foundation of camaraderie is to her, whereas Lucy explained

that there is value in being "a team player." Erin described that "being able to like, build relationships with people and get along" is what has most supported her development of bonds of camaraderie with her peers. Aligning with this, Naomi described that "helping each other out" is essential in the mining industry, and Nicole similarly implied that camaraderie means that colleagues, "we get along…[and] we've got each other's backs no matter what." In other words, workers in the mining industry rely on one another for mutual support and safety. When this support is perceived as established, Karla attested that she and the people she works with are able to "have a lot of fun together." This plausibly enhances interpersonal bonds, and by extension, strengthens bonds of trust between workers which is essential to the formation and maintenance of camaraderie for women in mining, even though establishing trust in male-dominated workplaces can for women, be problematic to achieve (Wright 2016a, 2016b).

When speaking more about teamwork, several women in my study explained that colleagues who have been willing to help teach them the demands of their jobs have positively contributed to their job satisfaction. These colleagues are most often, an older generation of male workers in mining who have extensive years of experience working in the industry, and who are able to transfer their knowledge to less experienced workers. To Fleig-Palmer and Schoorman (2011), experience in the workplace often correlates with age, and to Tempest (2003) and Ayyavoo et al. (2007), knowledge transfer, or sharing between and amongst colleagues, is essential, most often taking place from more experienced to less experienced workers. This complicates the previous finding revealed by my study that it is an older generation of male workers in mining who are most resistant toward women workers.

Speaking about how older men have supported her, Victoria said that because "you only learn mining by doing," new workers in the industry rely heavily on the support of people,

usually men with extensive experience in mining, to help them in their jobs. Tiffany also confirmed this to be true, and spoke fondly about people, mostly older men, she has worked with who "have been very encouraging to teach me how to do things." Much the same, Noel values men at work who she described have "brought me into the fold by educating me and showing me" ways to most effectively accomplish tasks at work. Similarly for Hannah, the strongest bonds of camaraderie she has developed at work are with people who have "been willing to show me the ropes and stuff I didn't know. Explain to me policies, procedures, whatever. Like, [they] kinda just took me under their wing." This phrase was also adopted by other women when they spoke about camaraderie - usually experienced with men at work. Colleen, for instance, said that she has encountered men in mining who "take you under their wing and treat you like you're their daughter," whereas Josie declared that many men at work have made her feel more secure by "taking care of me, taking me under their wing and helping me out." Lara added about this, "for the most part, guys have taken me under their wing…. They teach me how to do things." Lisa also described being grateful for men at work, especially those belonging to an older generation who she said have "taken me under their wing and taught me a lot and defended me when I needed to be." For some of these women, they described supportive men in their work environments as mentors - one woman adopted the term "hero" to label a particularly supportive older male colleague. Based on these attestations, it is clear that not all men in mining, including older men, have treated women poorly. Instead, many have engaged in team work with their female peers, and have contributed to work experiences that women described as satisfying. As Hellen put it so well, "the only way for us women to umm, progress in the world is by having men on our side. We can't do it alone. We need those men to be feminists for us." Her statement speaks volumes about the need for teamwork to thrive between all workers in mining in order to

continue to improve equity, inclusion and diversity in the industry. My study argues that all persons connected to the industry have their parts to play in making these ongoing improvements.

Significantly, women in my study who work underground spoke most frequently about the importance of teamwork that helps them develop camaraderie with their peers. Explaining this, some women described that because their work environments are more dangerous and have more potential hazards than do other types of workplaces, their reliance on their peers to safely accomplish work tasks, increases. Women who spoke about this also generally attested that they perceive their bonds of camaraderie in the workplace to be greater than those formed in other work environments, including those in the mining industry but located on the surface. For example, Noel provided a detailed account about this, when she spoke about working underground compared to jobs on surface:

> There's definitely a camaraderie that you will find, and it's stronger underground than it is on [the] surface. Because I've worked in both environments. And the underground camaraderie is much more intense than it is on [the] surface. Yeah. I think it's about having blue skies above you. You know? Underground, if something goes wrong, the guy or girl standing next to you is going to potentially save your life. In a surface environment, you've got cell phones that you can use. You've got a whole lot of other escape mechanisms, which you don't have underground.

Noel's argument is reinforced because she has had work experience in both environments. Notably, she went on to describe her perception that workers in underground mines are a lot like soldiers seeking "to protect the next soldier around them." Agreeing with this, Victoria also said about camaraderie underground, "it's not comparable to anything else and the only thing I've

ever heard it compared to is being in the army." Hannah said much the same about how the underground setting means workers need to rely more on one other to safety get home at the end of the work day, and more so than in other jobs with less dangerous work environments:

> I feel like when you work underground, it's definitely that family because you have to have each other's backs here, right? Like you're always watching out for umm, falling rock, or, you know, if you hear a blast, you're gonna go check and make sure your guys are good, or - you know? Like, that's just kind of what you do under here…. I've built a lot of really close relationships with some of the guys that I work with…. So, you definitely have that umm, that camaraderie. 'Cause you have to.

Significantly, both Noel and Hannah, after having described in their own words that being underground enhances camaraderie between workers, sought to justify their statements by asking me, their interviewer, "you know?" after explaining their perceptions about this. In so doing, it is as though they may have assumed that I may be unable to fully appreciate how close the bonds that develop between colleagues in underground mines can be, as I have not lived this experience. Not long before speaking about high measures of satisfaction in the camaraderie they have developed with their peers at work, both of these women attested having encountered gendered challenges in their jobs, as previous chapters have explained. This reaffirms that women's interactions with their peers in mining are multifaceted and complex.

3. Celebrating the tomboy and being "one of the boys" / "one of the guys"

Women in my study often adopted gendered language when describing satisfying bonds of camaraderie at work. For instance, when describing positive relations with male peers, women frequently attested that it is when they perceive themselves, or better yet are considered by men at work, to be "one of the boys" or "one of the guys" that their sense of belonging is best

achieved. Women in mining feel deep satisfaction after attaining recognition of belonging from men, and this section focuses on this achievement. Yet while it builds on the section about women interviewees' efforts to prove themselves in the industry, addressed in *Chapter 4*, this section focuses most on how gendered language is used by women to describe satisfying bonds of camaraderie. Significantly, even before entering the mining workforce, many women who participated in my study self-identified as "tomboys." This is something that they celebrate. They are most comfortable in settings at work and leisure, doing activities that are not typically regarded as feminine. Being a "tomboy" is an expression of femininity that defies stereotypical notions about womanhood (Rolston, 2010) and is one that makes women in mining feel as though they are suited for work in the industry. For these women, coming to be perceived as "one of the boys" or "one of the guys" is not such a stretch from how they already perceive themselves. This align with Denissen's (2010) study whose gendered analysis of workplace interactions drew from in-depth interviews with 51 tradeswomen, discovered that seeking to achieve status as "one of the boys" is a way that women employed in male-dominated industries transcend traditional boundaries conventionally prescribed for them according to their gender. For women in mining, they never identified as hyper-feminine from the onset, and instead, mining provides these women with an outlet for expressing their femininity in alternate ways.

Tiffany voluntarily described being "one of the guys" at her place of work on several occasions during her interview. When asked what this phrase means to her, she answered, "to me, it's a good thing. It means they [men] can talk to me about anything and they - and they include me in 98 percent of the shenanigans going on." Liane said much the same and that for her, being "one of the guys" represents that she has achieved camaraderie with her male peers. In her perception, this label means that her efforts to prove herself as "tough" in the challenging

work environment of the mining industry, have been successful. She described that this is evident to her when men interact with her in much the same way that she perceives they do with other men at work. “I guess I just fit in,” she surmised.

Speaking along the same lines, Serena relayed her own experience about what being “one of the boys” represents for her:

> “One of the boys,” you know… I don’t walk in and like, they [men] go silent. They will talk about anything in front of us [women who have achieved the status of being considered “one of the boys”], you know? So, I guess you feel like you fit in…. It makes you feel, like, included.

This experience of inclusion when considered “one of the guys” was also described by Karla, who added that for her, embodying this identity represents reaching the status of “being an equal when it comes to the work part of situations.” Before achieving this status and aligning with what Tiffany, Liane, and Serena suggested about the meaning of this status, she explained that she felt as though she stood out more as a woman in her job. She also described her perception shared with Serena that this label was attributed to her by men at work only after she had put significant effort into proving herself an equal in her job with the men doing similar work as she. Essentially, and like many of her sisters in mining, she perceives that she had to prove her toughness in order for her mostly male peers to accept her, which has for her, been essential to the development of her sense of belonging, especially for the development of camaraderie with male peers. Notably, the fact that Karla and other women in my study described perceiving themselves as equals when considered “one of the guys,” may initially be analysed as positive. However, if Karla and other women in mining had not perceived themselves as equals to men before attaining this masculine status of belonging, complicating findings of my study, this

represents another example of the gendered hierarchy present in the mining industry that conventionally finds women in less powerful and valued positions than men.

Previous studies concur that when it comes to women working in male-dominated industries, women value being considered "one of the boys." For example, Wright's (2016b) study about women's interactions in male-dominated construction and transport sectors revealed that because they seek to achieve a sense of belonging, "women's priority is to become accepted as "one of the lads"" (p. 354). In the context of the mining industry, Rolston (2010) also observes that becoming "one of the boys" or "one of the guys" helps women in mining "navigate the competing and contradictory pressures of enacting gender sameness and difference" (p. 911). For women who participated in my study, because the mining industry is tough and toughness required to succeed in mining has conventionally been associated with men and not women (Laplonge, 2004), women interviewees seek most to embody this stereotypical masculine characteristic because it usually results in their male peers perceiving them as more capable workers. This supports women's blending into their work environments and its inherent masculine organizational culture. Women in my study therefore perceive that the performance of toughness, especially in the presence of their mostly male peers who value that characteristic, is essential to their sense of belonging.

One way that women in mining demonstrate their toughness (most especially to their male counterparts) is by accepting and in many cases, finding satisfaction in their work environments that are dirty. This defining feature of the industry contributes to its toughness and roughness, and is usually associated with work deemed hyper-masculine (Lucas & Steimel, 2009; Reskin & Roos, 1990). Because of this, women who are perceived to thrive in these work environments may be better able to integrate with their male peers. As Nicole explained about

women in mining, “we don’t mind getting dirty.” Jennifer elaborated, saying that one reason why she thinks that she’s earned respect in her job is because she embraces the challenging, dirty work environment of underground mining. “I don’t mind getting dirty,” she declared. “If anything, it makes me feel more badass…if you have clean coveralls, you are right away the centre of attention because you’re just so clean. So bright. Like, you wanna be dirty,” she continued, implying that getting dirty with “the boys,” as she referred to her male counterparts, has supported her integration with these peers and by extension has resulted in her development of camaraderie with some men at work.

Hellen said more about this topic: “Talk about rough. I mean, if you think about working underground...you come up to [the] surface and your face is covered in dirt and umm, your fingernails are dirty. You’ve got a black nose. That’s rough.” To many women interviewees, sustaining work in tough, dirty environments not only helps women mask their feminine appearance and blend in with their peers (Buse et al., 2013), but this work is enjoyable. “We [women in mining] look like disgusting men, but we don’t mind getting dirty,” Victoria attested, “even if we don’t look cute at all.” It is perhaps because of this that several other women expressed a similar point of view. Trish, who also spoke about finding pleasure in her dirty work environment underground, explained that “not all women are cut out for that [how dirty and tough the mining industry is],” because as she attested, “if you’re into looking really good all the time, this is not a job for you.” Josie said, “you can’t have nails or nice hair or anything. You know? Like it’s dirty, but it’s great.” Lara contributed that she thinks women in mining continue to represent the gendered minority because of work environments in the industry that are “very very dirty, very physically challenging.” When women in mining prove themselves as tough enough to manage work in these conditions, they disrupt normative, socially constructed notions

of gender that have conventionally excluded them from work that is tough, rough, dirty, and often dangerous. Defying conventional gender norms about beauty and physical appearance, and defying conventional hegemonic expressions of femininity is a shared experience among women in mining. And they celebrate this in a positive way.

Another way that women in mining disrupt normative binary social constructions of gender representation, is when they label themselves as "tomboys." This is a gendered term of reference that, according to Rolston (2010), enables women in mining to maintain a gender performance that incorporates their femininity while also adhering to some forms of heteronormative masculine behaviour. This helps women fit in with their male peers. However, what my study found adds to the literature in a new way. Rolston (2010) posits, that "being a tomboy involves strategic shifts in gender performance," where in the mining industry specifically, women who are tomboys, "downplay gender difference - without erasing it completely - in order to craft camaraderie with their coworkers" (p. 910). What I found is something else: women in mining do not modify the presentation of their gendered selves to be more like "tomboys." They already are "tomboys," and rather than assume that there is only one hegemonic or essential way of being a woman, they are proud of this identity. Women in mining genuinely find joy in getting dirty, being tough, and being "one of the boys" or "one of the guys." This finding is significant and counters not only Rolston's (2010) argument but also Denissen's (2010) that in male-dominated workplaces, women interpret how their colleagues perceive and treat them and "may modify or adapt the presentation of a gendered self for each situation" (p. 1052). To Denissen (2010), this means that depending on context, women may behave in ways that either accentuate or mask their traditional femininity. They may act in ways that they perceive aligns more with stereotypical masculine behaviours, especially if in their

workplaces, these behaviours are more highly valued than are those stereotypically associated with femininity. This modification of gendered behaviour is coined as "identity switching" (Montague, 2017) which Stead (2017) argues can be an active way that some women perform belonging in gendered environments. However, my study finds that this argument cannot be made for women in mining who already celebrate alternate expressions of femininity, such as, in their expressions of being a "tomboy."

As Liane described:

> I think women [in mining] are like me. Well, I know the majority of the women are like me. We're pretty - I mean, I have a lot of male friends. I play in the bush. I fish. We're pretty much - we're tomboyish.

In her remarks, Liane refers to stereotypical leisure activities often associated with men, and justifies that because she also enjoys these outdoor activities, she is more able to develop camaraderie with men at work because of shared interests. According to Dunk (1991), pleasurable leisure activities are gendered because such pursuits have historically been marked as different for men and women. By identifying preference with conventionally masculine leisure activities, women like Liane who refer to themselves as "tomboys" may find it easier to develop a sense of belonging at work. Nicole's testament reinforces this idea because she too described how women who succeed in achieving camaraderie with male counterparts in mining are often, "the hunter, the fisher, the tomboy." Trish, concurs:

> I'm a tomboy, right? So I mean, I was the one that was out there dirty every day. I was the one that was knee deep in muck and bugs and all sorts of stuff.... I think that's [being a tomboy] a definite must for working - doing what we do. Is to be that tomboy.

Notably, other women who did not specifically label themselves a "tomboy," often used other language to justify how portraying themselves as a "tomboy," or rather, in ways that defy conventional representations of femininity, has not only been useful for achieving the status of "one of the boys" or "one of the guys," but is also more comfortable for them because portraying themselves in this way affirms who they already are and how they are already inclined to act. Not being afraid to get dirty on the job, celebrating the fact that they are "tomboys" and proving themselves to be considered as equally tough as the men in their jobs has supported these women in building bonds of kinship with co-workers. In industries like mining, as my study affirms, women and essentialist representations of femininity are conventionally othered and devalued, and by contrast, masculinity is reinforced as the ideal gender identity to embody. This is perhaps why, as Hellen attested, to earn respect as a woman in mining, "you almost have to be a little bit masculine," and being a "tomboy" can be an asset.

4. "It's a sisterhood."

Of equal relevance to my study is that the gendered term "sisterhood" was also commonly used by women interviewees to speak about bonds of camaraderie with colleagues. In context, while being a "tomboy" that men could more readily accept signifies the achievement of camaraderie with men at work, the term "sisterhood" was used by women to identify positive work relations with other women. As much as my study has revealed that most women in mining have limited opportunities to work with other women because of their gendered minority status (MIHRC, 2022), when these opportunities do arise, nearly all women interviewees attest that they form meaningful bonds with women they encounter at work. How most women spoke about interacting with other women in their jobs aligns with behaviour that Kaiser and Spalding (2015) call "climb and lift" behaviour (p. 601), that is, supportive gestures by women in male-

dominated jobs toward other women. Statistically, 16 of 24 women, or the majority of interviewees (66 percent), spoke about the development of these types of bonds that contribute to their job satisfaction. That many women in my study do not or have not had plentiful opportunities to work with other women in their jobs is significant because if given more of this opportunity, more women might have attested that bonds of sisterhood positively impact their satisfaction in their jobs.

About these gendered bonds of "sisterhood," what women spoke of most frequently was how other women have treated and communicated with them in supportive ways. This type of treatment was validated as important for women in masculine workplace cultures in a study by Acosta (2020) that sought to develop a workshop to assist women in overcoming barriers they encounter in male-dominated industries. According to this study, women in masculine workplace cultures seek networking opportunities with other women in their workplaces to enhance their sense of belonging (Acosta, 2020). In my study, many women described a shared awareness that they are the gendered minority and that because of this, they seek unity with other women who likely share similar work experiences. This aligns in many ways with hooks' (2000) definition of "sisterhood" because unity and solidarity are what she explains are the founding principles of the term. Specifically, she argues that "to experience solidarity, we must have a community of interests, shared beliefs, and goals around which to unite, to build sisterhood" (hooks, 2000, p. 67). This doesn't mean that hook's (1986, 2000) definition of sisterhood is solely based on shared experiences because she stresses that another important principle of sisterhood is the recognition of differences in the experiences of women, for example, those influenced by intersectional social differences introduced by lines of class and race. To hooks (1986), though women are the gendered group most victimized by sexist oppression, sisterhood as an expression

of solidarity is achieved best when women make an effort to understand the complexities of their sameness and the complexities of their differences. In other words, women "can be sisters united by shared interests and beliefs, united in [their] appreciation for diversity, united in [their] struggle to end sexist oppression, united in political solidarity" (hooks, 1986, p. 138). According to women in my study, they share many things in common, including goals for more inclusive workplaces in the mining industry. It is these shared goals and women's supportive behaviour toward each other that may help reach these goals. Women spoke about this, revealing their solidarity as sisters in mining.

As Tiffany explained, "females, we tend to - because we're few and far in between in mining, we tend to boost each other up. I think it brings us closer together." Likewise, Lucy surmised that as "minorities, or you know, those kinds of [minority] groups, definitely we band together because we have commonalities and can support each other." Trish added, "it's still a male-dominated field, and so being a woman in that is you kind of have to stick together. You gotta - you gotta have a little bit of a support group. You have to have a good support system." For these women, and specifically in the words of both Hannah and Karla, other women in the industry make them feel "protected." Because they have encountered gender discrimination in their jobs, their awareness that these challenges could arise for other women in mining leads them to behave in ways that make other women feel more secure in their male-dominated places of work.

Elaborating about this, Karen said that she is "kind of like a mother bear" toward other women in the industry, meaning she seeks to protect her fellow sisters in mining. Claire said much the same thing, relating that she makes efforts to ensure new women hired at her place of work know that she is a safe person to talk to should they need support. To Naomi, who when

new women are hired, she attested that she "watches over them, making sure they feel comfortable." This is especially because she said she has noticed that men often tend to "linger a lot longer…[to] stop and talk to the young girls [who are new on the job]," which is an example of unwanted attention described more by interviewees in *Chapter 4*. Based on this and her own experiences of being the recipient of unwanted attention at work, Naomi explained that she wants to "make sure that nobody's making inappropriate comments to them [new women at her job site]."

According to Hellen, a good starting point for sisterhood in mining is for women to align in knowing what needs to change in the culture of the mining industry for it to be more accepting for women. As she expressed it, women in mining connect in solidarity when their shared experiences enable them to unite and say to one another, "'I know what it's like!' And you know what? This needs to change. And this needs to change. And this needs to change." Speaking more about this, she said that "there's a lot of ways in which we can make workplaces better for women." She suggests bonding with women at work, and celebrating the fact that women are sisters in mining, as a good place to start. That kind of supportive behaviour led Jennifer to attest that at work, she "couldn't ask for a better, like, little group of women." Similarly, Karla said that having a woman at work who is "like a sister, it's such a de-stress pill at the end of the day…. It's so amazing…. It's just a blessing having her."

Further addressing what bonds of sisterhood mean to women in mining, and how these ties contribute to women's job satisfaction, Hellen spoke more about how sisterhood develops in the workplace. Her perception, shared by other women in my study, is that these bonds often occur intuitively for women in the industry:

There's a bit of an umm, an unspoken camaraderie between - with other women. So even

> though I didn't necessarily have other women working in ah, directly [with me], certainly, there were women in engineering that would come to the heading [I was working at], or there were women in uh, different roles. I had one woman who was a supervisor at another site I worked at and yeah, so basically, like, we're sisters in this. And so, there is a little bit of, umm, you feel more comfortable talking to them. Umm, sometimes you open up about what some of your experiences have been. But yeah, it's just - it's a sisterhood. And it's interesting, because it's natural. It doesn't matter who the woman is. So, if you're in the dry and there's another woman in there? You know, you could be anywhere else in, umm, you know, anywhere else in the community and another woman walks up and there's - it's - she's just another woman. But when you're at the mine? And there's another woman at the mine? It's, "hey! How's it going?" It's just, the conversation flows naturally because they - you have that comfort level knowing that, "you know what I know." And so umm, this is like, "we're inside and we're doing this together."

In the above, Hellen's account contributes more to the argument that women in mining conventionally treat and communicate with other women in the industry, supportively. This is true according to Hellen, even when women in the industry do not necessarily know each other, or have not worked alongside one another directly. This is because as she described, other women in mining "know what I know," or in other words, are able to form bonds based on their gendered experiences as women. It is in reflection of these experiences and in order to provide a platform for women to connect, that organizations such as Women in Mining Canada and Women in Mining International, exist. Women value these bonds very highly.

Notably, like Hellen, Ruth also described how bonds of sisterhood are intuitive for women in mining. In response to her perception that she shares many gendered experiences with her sisters in the industry, some of them challenging, she recounted her supportive interactions with one particular woman at work:

> One of the ladies...uh, she's on [my] opposite shift. Not even a cross-shift. We get along well…. We pass along information. I'll leave her notes to something that would be pertinent to her that happened when I was [working]. Like if she's coming off of her days off, and it [something at work happened that] may be pertinent to her, I make sure that she knows about it. Or, I'll leave her a voicemail or text her. It's very similar to the biking thing. We acknowledge each other…. We call that sisterhood.

What intensifies the significance of Ruth's above account is that she and the woman she described do not come into any contact during their regular work days. Rather, they work on opposing shifts. They are nevertheless, as she attested, aware of one another's presence, which makes them "acknowledge each other," similarly to what bikers passing one another on a highway do to show respect (Thompson, 2008).

Finally, while women sometimes celebrate their tomboyish tendencies in order to seek a sense of belonging with men at work, at other times, they seem to connect with their sisters in mining by celebrating their femininity or their womanhood. Many described the value of increasing the number of women in their places of work which they attested would not only continue to enhance their job satisfaction, but also contribute to a better workplace culture in the industry. "More women on site is a very positive thing," Erin said. Victoria attested that "we need more women" in mining, and Tiffany described her hope "that they [mining companies] hire more women." Aligning with this, Brooke said, "it's important that we increase it [women in

mining]" and she added that she perceives "females feel more comfortable talking to another female in the field." To Nala, she sees value in "hiring more women just to break this culture," meaning the masculine organizational culture of the industry. To Ruth, it is important to be cognisant that "women bring some seriously good diversity to the workplace." Recognizing this, most women spoke fondly about sisterhood ties at work. In an industry where they often encounter gendered resistance, these sisterhood ties are positively impactful for these women in mining. Of course, these women are also happy about the bonds of camaraderie they develop with men who share some of their leisure time interests and hobbies, all of which contributes to their job satisfaction. Describing overall the comfort that bonds of camaraderie with both men and women in mining provide for her, Lara said about her job, "yes, it's physically challenging [and] it's mentally challenging…. But now you're got camaraderie, like, you're family."

Conclusion

In sum, while it is undeniable that the culture and climate of the mining industry is resistant toward women, it is also true that women in mining frequently spoke positively about their work experiences and co-workers. This includes how their co-workers communicate and treat them. Women interviewees often described that men who have treated them poorly are the minority, and men who have treated them well are the majority. Bonds of camaraderie were described among all workers in mining, including women with men, and women with women. It is these bonds that contribute most significantly to women in mining's attested high levels of job satisfaction. Notably, these bonds are gendered, as revealed not only in gendered language adopted by women to describe bonds of camaraderie, but also in their attestations that to achieve camaraderie, they have to make an effort to prove themselves and their belonging. For many

though, this is a chance to express what they celebrate about themselves: their toughness and their tomboyish tendencies.

The next chapter focuses on addressing my study's fourth and final research question, bringing attention to men, specifically how they perceive, treat, and communicate with women in mining. Men's narratives reaffirm many of the findings already described in this paper, however some also complicate my study's findings. What men shared in their interviews reinforces the fact that the culture and climate of the mining industry, for women, is complex.

Chapter 7: Men's perceptions about women in mining

"It can't be easy," said construction miner, Art, about the general experience of being a woman in the mining industry. "I'm sure there are definitely struggles," he surmised. Other men who gave interviews for my study similarly acknowledged that it would be tough to be a woman in mining. Especially in underground settings where all but one male participant works exclusively, women are few and far in between. Considering the imbalance of women in mining according to statistics (MIHRC, 2022), it came as no surprise that most male interviewees described limited work opportunities with women in their jobs. *Appendix 7* draws attention to this via its list of statements made by all participants about the ongoing male domination of the mining industry that contributes to its masculine organizational culture. What is clear in this *Appendix* is that men who work in Sudbury's mining industry perceive and acknowledge the gender imbalance present in the industry as much as do women employed in the industry. This imbalance affects the culture present within mining.

To address its first three sets of research questions, my paper's preceding three chapters focused on the experiences of women in mining. This chapter focuses on how men in mining perceive, treat, and communicate with women peers. This will enable a more complex understanding of the gendered culture and climate of the mining industry because according to Laplonge (2014) who studied gender in Australia's mining industry, gendered dynamics in workplaces are best captured when narratives of both women and men are considered. Findings in this chapter address the fourth and final set of research questions posed by my study: "How do men in mining in Sudbury, Ontario perceive the women in mining that they work with? How do they perceive they treat and communicate with these women in the workplace?"

Eleven men employed in Sudbury's mining industry gave interviews for my study. All but one of these men work blue-collar jobs in underground settings. The man who is an exception to this has previously worked blue-collar jobs in mining, though is currently employed in the engineering department at his mine site. He works in both surface mining environments as well as underground. Considering that apart from this man, all male interviewees work exclusively underground, and because all men who interviewed for my study identify as blue-collar workers, findings in this chapter speak mostly to men's perceptions about women in underground contexts belonging to Sudbury's mining industry.

This chapter is organized into two parts. The first part begins by describing that men in mining acknowledge gender-specific challenges in the industry for women. Similar to women interviewees, men perceive the mining industry to be rough, offering a tough environment for workers, and more so for women than men. In this industry, men explained that women are usually segregated to work specific jobs, most of which demand less physical prowess than the jobs that men perform. Women, perceived by most men in my study as less physically strong and capable than men, are valued less than are male peers. They nevertheless are perceived to bring different sets of skills and attributes with them into the workplace that benefit the industry, even though these skills are often described in gender essentialist terms that tend to highlight differences between men and women.

The second section of this chapter builds on the first section. It discusses how like women, male interviewees perceive women's efforts to prove themselves in mining more challenging. The expectation that women should prove themselves in the industry and more so than men occurs because men continue to represent the quintessential worker in mining (Keck & Powell, 2006; Lahiri-Dutt, 2012; Mercier & Gier, 2007. Men are more readily assumed to bring

value to the industry than women workers who are assumed as less suitable to work the highest valued jobs in mining that demand physicality. This section also takes up the question of how men frequently adjust their communication in the workplace when they encounter women because they admit that their style of communication can be rough, or in other words, "crude," something they analyse as less tolerated by women than men. This aligns with research positing that men and women often have different perceptions about what should and should not be tolerated behaviour in the workplace, where for example, harassing behaviour is often constituted differently by men and women (Berdahl & Aquino, 2009; De Judicibus & McCabe, 2001; Escartin et al., 2011; McCabe & Hardman, 2005; Rotundo et al., 2001). Women able to adjust their communication toward that of men prove themselves as tough enough to belong in the industry, and are more readily accepted by male peers as "one of the boys," or "one of the guys." That men, like women, use masculine terms of reference when describing the most sought after bonds of camaraderie amongst peers is significant, revealing the masculine organizational culture that persists in work environments belonging to the mining industry. Examples of "benevolent sexism" (Barreto & Ellemers, 2005; Glick & Fiske, 2001) are outlined, as are attestations that most men perceive they treat women workers well, even though some men also acknowledged that women don't consistently achieve the same respect and acceptance from others as do male peers. According to some male interviewees and as taken up in *Chapter 4* in the words of women, it is an older generation of male workers who remain most resistant toward women in the industry. Complicating this finding once again, however, older men also seek to protect women in mining by being supportive toward them. As my paper has already addressed, enhanced training policies for all workers in mining that advocate the necessity of inclusion may contribute positively to inclusivity in mining, especially around gender.

Part 1) "It's hard…underground is not a flower shop."

Women in mining challenge the masculine organizational culture of the industry. They stand out as different in contrast to mostly male peers. This gender imbalance in the mining industry is confirmed by statistics (MIHRC, 2022) and interviewees. When it comes to male interviewees, all described limited opportunities to work with women and frequently said that when these opportunities do occur, women are segregated into gender-typed jobs, which confirms that occupational segregation in mining continues to exist. For example, most men attested that women in mining usually work in professional roles such as geologists or engineers, or they operate heavy equipment. Considering that according to statistics, "women in mining tend to hold postsecondary degrees or diplomas, at the college or university level" (MIHRC, 2022, para "women"), it is perhaps not surprising that they are often found in professional-type roles that require formal education. Less often, male and female interviewees said, do women work jobs in mining that are dirty, dangerous, and physically demanding. Especially in underground, blue-collar work environments, men spoke about how these jobs are less suitable for women than for men. "It's hard…underground is not a flower shop," attested Roman when explaining why he thinks there are fewer women than men employed at his work site. The contrast present in Roman's statement is significant as one could analyse this statement to be gendered where in all of its masculine hardness, underground represents a space more suitable for men and in all its feminine daintiness, a flower shop, a space more suitable for women. Flowers are often associated with femininity and are a stereotypical gendered commodity gifted more often to women than to men (Cote & Deutsch, 2008). Flowers, like women, stand in stark contrast to the perceived norm of the masculine organizational culture of mining. Neither are expected to be found in the industry and neither are assumed to belong.

According to men, women in mining are not only segregated into specific jobs, but they are a particular type of woman, honing particular types of characteristics. “If you’re working underground, you have to be extra hard and extra rough,” said Will. He described workers in mining as a “particular type of breed” adding that “mining is a hard atmosphere that you really have to adjust to and I don’t think that the majority of women would enjoy the kind of work that we do.” The term “we” in Will’s statement assumingly refers to he and other male colleagues, demonstrating resistance to his acceptance of women in the industry. His assumption that most women wouldn’t enjoy work in mining, as do men, counters what women described about job satisfaction, as was taken up in the previous chapter. His assumption is stereotypical and based in gender essentialism where particular features of gender are perceived as fixed to men and women (Butler, 1990; Rose, 2010). In other words, categorizations of what represents masculinity and femininity are socially constructed, which contributes to shaping normative beliefs, ideologies, and behaviours (Bradbury, 2008). Gender essentialism rejects diversity of gender performance and considers biological sex the principal factor that determines gender (Butler, 1990). In mining, at least and according to Will based on his attestation, “the majority of women,” may have a harder time fitting in. Other men who gave interviews for my study made similar attestations.

According to Chris, “it hasn’t been common over my whole 25-year career” for him to work with women. Though he described that he thinks “it’s good that they’re [women] getting more out there [into jobs in mining],” he also said that people who work in the industry need to have “enough guts, you know? We’ll say [they have to] have enough balls to do it.” Chris’ reference to male genitalia as essential to the achievement of success in the industry alludes to his perception that men are quintessential workers in mining, which aligns with previous

literature (Keck & Powell, 2006; Lahiri-Dutt, 2012; Mercier & Gier, 2007). Women, who do not have male genitalia, he is resistant toward:

> They have their place and they'll have their jobs but umm, like, it's not to be male chauvinist, here, but there's certain jobs they're [women] not gonna be able to do. That's it. You'll never see them [management] put a, like, a woman to go do some dirty, dangerous kinda job. Never gonna happen.

Similarly, as Will described about the tough environment of mining, Chris added, "mining is hard work and you gotta work your ass off." Based on this statement and his disclosure in the above that he doesn't want to be a male chauvinist, one assumes that Chris may be aware of his discriminatory bias that women in mining bring less value to the industry than do men, even if he continues to hold this biased belief. That he spoke about women having "their place" indicates his agreement with gendered occupational segregation where women and men have conventionally worked different jobs (Bagilhole, 2002; Bradley, 1989; Glucksman, 1995; Milkman, 2017; Rothman, 1998). When he described that women would not be assigned by management to work certain jobs, Chris introduces us to the idea that the problem of gendered occupational segregation in mining is systemic. It stems from people in positions of power making decisions as to who works which jobs. As was described so frequently by women interviewees in *Chapter 4,* women are provided with fewer work opportunities in mining than men, partially because of their gender.

Throughout his interview and when describing colleagues, like most other male interviewees, Chris generally used the term "guys" as his point of reference. This may be because of infrequent experiences most male interviewees have had to work with women in

mining or because male interviewees perceive mining, especially underground, as best accomplished by men.

About jobs in underground mining that are physically demanding, Chris explained that women are not only less capable but aligning with Will, also less interested in this type of work:

> There would never be, like, I don't think in my life - there might be, but I can't think of any off the top of my head, a woman that would be able to do what I do. Never. That's just my honest opinion…. It's just ah - I can't see it. I'm sure there are some [women] out there but not that I know of.

If, as the above alludes, men do not perceive that women are able or willing to excel at physical jobs in mining from the onset and before they are even able to prove themselves, it is not surprising that they may be resistant toward them as equals.

For Chris, though he said that he "would go out of [his] way to help them [women]" in their jobs, he also shared in the same sentence, "I just feel I have to. You know? More than I would, like, if it [his colleague] were a guy." It is likely that a woman working with Chris may be able to sense his resistance toward them - sense that his actions of support are done out of perceived obligation rather than because he truly wants to be supportive. Chris went on to describe how he was once paired with a woman to accomplish a task at work. This experience found him perceiving that he "pulled more weight than her." Explaining his frustration, he said that the task "would have been something that a guy would have done himself." In this statement, Chris draws attention to his assumption that just because a man is a man, he is more physically capable than a woman. By contrast and revealing that not all men in mining perceive men's physical prowess as superior to women's, Mark admitted more inclusively that "if a woman's in good shape and she's physical, she might be able to lift more than I can or do better

equivalent [work] of what I do, so I guess it just depends on the individual." This sentiment was echoed by Drew who acknowledged that "women can be good at anything they want to put their minds to," and by Art, who admitted that "some guys have a hard time with some jobs, too." He went on to describe that the evolution of mining finds jobs increasingly mechanized, which can have the effect of lessening the physical demands of workers (Boulding, 1976; Robbins, 2000; Spencer, 1977). However, mechanization can also affect how workers perceive control over their work processes (Naiman, 2004). To Abrahamsson and Johansson (2020), changes to the way jobs are performed in mining because of mechanization contribute to the industry being a good location to study gendered relations, especially as they relate to gender norms and roles.

Art was not the only male interviewee to speak about the evolution of mining and how mechanization changes the way many jobs in the industry are performed. In fact, and unexpectedly considering that no question asked men during their interview about mechanization in the industry, this topic was voluntarily introduced by six male interviewees: Mark, Will, Art, Peter, Ron, and Ryder. Though mechanization was described overall as something that contributes to less physically demanding work for all workers, Peter made it clear that "even though mining is modern [and] is mechanized, there are still some brutally physically demanding jobs." Because of this, all male interviewees, like most female interviewees, described that physical strength remains a necessary characteristic of workers employed in the industry. This is true according to interviewees regardless of the type of mining work that one performs. However, as Will clarified, "because of more mechanization [in the industry], you have to be strong, but you don't always have to be the strongest person down there [underground]." Ron said more about this, pointing out that mechanization means that workers can approach tasks thinking, "it doesn't always have to be muscle over mind, it can sometimes be mind over

muscle." Nevertheless, men's sentiments as a whole surrounding the characteristic of physical strength reveals that this characteristic is what catalyzes most men's resistance toward women in mining. This is because though some inclusive statements were made by male interviewees about how physical strength is unique to an individual and not determined by gender, it was more often discussed that the average woman is less physically strong and capable than most men. This affects the perceived value of women in the industry.

On the topic of mechanization and drawing attention to perceived gender differences that contribute to physical strength and capability, Ron attested that in mining, "[mechanization] produces an opportunity greater for women, because now, the workload is much much [sic] less. You know? Everything is pulling levers. You know? The old jackleg stopes and all that? That's almost becoming a thing of the past." In this statement, it appears as though Ron may be well meaning in his perception that mechanization in mining produces greater opportunities for women, but his statement also surmises the paternalistic perception that women are less physically capable than men resulting in greater need for mechanized support to help them accomplish their jobs. This is but another display of "benevolent sexism" (Barreto & Ellemers, 2005; Glick & Fiske, 2001) or performance of a condescending version of "respectful masculinity" (Meyer, 2016; Miller, 2004) in mining. That Ron associates jobs eased by mechanization as being "workload [that] is much much [sic] less" is significant, representing that he values workers whom he perceives capable of accomplishing physical work more than workers he perceives less capable of supporting this work.

Peter similarly perceives lesser physical capabilities in women than men, attributing women's physical limitations to biology:

> Normally, it's the physical size of women that limits what they can do…. I'm not trying to be negative when I'm saying that, I'm just saying that it has to be recognized that sometimes there are limitations to what women can do because of their smaller size on average, than men.

When addressing a follow up question that asked Peter to elaborate on the above, he admitted that he "shouldn't be gender specific with this, but the problem is that most women are quite a bit smaller [than men]. Physically. But it doesn't mean they're not tough." Attention is, here, drawn to the complexities of what it means to be "tough." While physical strength, according to interviewees and described by women in *Chapter 4*, is linked to toughness, so is mental and emotional strength. This concept is revisited in the next section of this chapter.

David, who also perceives that women in mining are less physically capable than men, said "personally, I don't mind it [women working in mining], but uh, the one thing that, like, with the physical side of things, I don't think they can do all jobs." He continued in saying that this perception of his is not based out of experience because he's never had the opportunity to directly work with a woman underground: "I haven't seen it so I'm not saying that they can't do it but they definitely wouldn't be able to do it as fast or, ah, well, I don't know." Hesitation was discerned in this utterance made by David, revealing the likelihood of his awareness that his sentiment is based in perception rather than reality. However, in saying that women could perhaps do physical work in mining but would unlikely be as efficient as men confirms his bias shared by other men, namely associating more physical prowess with men in mining than with women.

Contributing to the complexity of findings of my study, though male interviewees generally associate more physical strength with men in mining than with women, the few men

who participated in my study who have worked with or have encountered women in their jobs frequently described that women bring other assets with them into the workplace. Ryder said for example, about both male and female colleagues: “We are all a team. There’s different processes in mining and everybody has their part to play.” In his opinion, “women, they have something different that they can bring that some guys don’t bring.” Speaking about a woman he described as being a “part of the crew,” he explained that her presence is beneficial because “she takes some of the stress out of things just like, by being there. Right? She brings a different energy.” According to Drew who has also worked with female colleagues, having women around, “tames male attitude down. They don’t get as cocky. They don’t get - they shut up. ‘Cause if she can do it and they can’t, then they have nothing to bitch about.” Drew’s statement reveals his perception of difference in ways that men and women carry themselves in the workplace. His statement also underpins that perceptions about abilities honed by workers in mining continue to be associated with gender, as has been historical, where gender is perceived as salient in determining traits and abilities (Weisgram et al., 2011). “Men and women are so different,” attested Ron who also spoke about this. A significant finding of my study is that men with more experience working with women in mining tended to have more positive perceptions about the value that women in the industry bring in contrast to men with limited or no experience working with women. If more women worked in the industry, more men would have opportunities to work with women, and this may impact more positive perceptions about the value that women bring to the industry.

About occupational segregation in the industry, three men described identically that women in mining are often found in positions of “support” or in other words, in jobs that do not directly contribute to mine production. These jobs, usually held by men, are clearly the most valued. Equally valued are jobs in mine construction, which like jobs in mine production, require

physical prowess. Even when women do work these highest valued jobs in the industry, men typically explained that men are usually tasked to support the most labour-intensive tasks, and women are assigned to tasks that demand less physical exertion. Asked why women are rarely found working the most physically demanding jobs, David offered the example of the operation of a drill:

> I don't think she's [a woman colleague] ever operated it…. Why that is, I'm not sure. But ah - is it because of the physical part of it? I'm not sure…. I don't know what the reasoning behind it is. Whether they [women] don't wanna be on it [the drill] or they can't do it. I don't know.

According to other interviewees, task assignment is not usually a reflection of choice, but a reflection of work delegation by superiors.

Providing an example of segregation of work in mining as influenced by gender, Roman attested about a woman colleague that, "when I went to the mine, she was just doing menial tasks. Like, the guys would just get her to go sweep, clean." He went on to explain that it was made clear to him that nobody liked this woman colleague because she didn't know anything. Taking it upon himself to help this woman, he attested that he told his colleagues, all male, apart from this woman: "'Guys, that's what we do. We're supposed to teach down.'" While it may initially be concluded that Roman meant well in his actions to help his woman colleague, that he used condescending language of "teach[ing] down" to her reveals the hierarchy present in the industry that positions men and their value above women. Notably, Roman continued in saying that he, "kinda took her [his female colleague] under my wing…. I made her take interest in what she was doing…. It kinda instilled in her that she could do it." This detail confirms Roman's efforts to help this woman, yet in taking credit for her interest in her work, he devalues her

efforts and independence in her job. This is another example of "benevolent sexism" (Barreto & Ellemers, 2005; Glick & Fiske, 2001), or practice of "respectful masculinity" (Meyer, 2016; Miller, 2004), terms previously introduced in my paper that represents male behaviour toward women that may be well meaning but is nevertheless condescending or patronizing. As described by Glick and Fiske (2001), though the term "benevolent sexism," "may sound oxymoronic, it recognizes that "some forms of sexism are, for the perpetrator, subjectively benevolent, characterizing women as pure creatures who ought to be protected, supported, and adored (p. 109)." This ideation of women results in the maintenance of traditional gender roles, restricting women and contributing to gender inequality.

Drawing more attention to gendered occupational segregation in mining, "you wouldn't see women in those roles. At least not very often," said Art about women in the industry working labour intensive, blue-collar jobs. Also about this, Will said, "you don't see many women underground, but you do see them on [the] surface more, like, in admin jobs, so like, in HR." He added that most women he has encountered in the industry, which he clarified have been few, have occupied professional-type roles: "They either work in the offices doing admin stuff, or are engineers, geologists, [or are] in safety roles." This was confirmed by other men. While for example, Peter attested that in mining, there are "less women in blue-collar roles," he revealed that in "engineering and geology parts [of the mining industry] I would say it's closer to a 60 percent [male] / 40 percent [female] split. But in the operations parts [of mining] probably [it's] not much more than 10 percent [women]." In this vein and according to Matt, "you don't see many women underground," and he too contemplated the roles in which women are found most often in the industry:

> Now thinking about it - the geologists and the engineering department. We do have a lot of women that are in mining that are in those roles. I don't get to see them that often, but we do have a lot of surveyors and geologists. So, I think they are more, possibly, well, first of all, you have to go to school [to be hired] for a lot of these [positions]. We've actually had a project manager in the mine but she left a couple years ago…. If they can get into the mining industry, it's more of in the - probably the engineering part of the field instead of the general labourers - like the grunt work. So, like, you know what? Now that I'm actually thinking about it, there are quite a few [women] in the office part of the mine, too. Wow, I didn't even think of that. They are just in different positions. So, they would go underground and do surveying. Geologists. You have vent techs. Yeah, the jobs that require possibly a little bit more education or a degree or diploma to get in.

Much is divulged in the above, but perhaps most conclusive is the phrase that makes it clear that women in mining, "they are just in different positions." This confirms ongoing gendered occupational segregation in the industry where men and women not only perform different jobs but are perceived as better suited to work certain jobs over others, based on their gender. In part, this may be because women in mining usually have post-secondary degrees or diplomas which may guide them to work certain jobs over others (MIHRC, 2022). For example, to become a geologist or engineer, post-secondary education is a prerequisite. Women who obtain degrees to work these professional jobs sometimes find themselves in mining because these jobs are needed to support the industry and very often, they are working closely with men whose education levels are lower (Hartman & Mutmansky, 2000; Roonwal, 2018).

In addition to men's perceptions that women are most frequently found in professional type-roles or in administrative jobs in mining, which is confirmed by statistics (MIHRC, 2022),

many male interviewees noted that when women do work blue-collar jobs, even if infrequently, they most often operate heavy equipment. Women's skills operating heavy equipment were generally described as strong by male interviewees, and in many cases, as superior to those of men. That observation is significant. Gender differences were attributed as determinants of men and women's skills to operate heavy equipment, in much the same way that these differences are perceived to affect other skills that men and women bring with them into their jobs. This confirms that ideologies of gender essentialism continue to circulate in the mining industry, affecting ongoing experiences of gendered occupational segregation.

Men reasoned that it is women's attention to detail, "delicate" operation of controls, and general care in the work that they perform that contributes to their strong abilities as heavy equipment operators. These characteristics, associated with women, were described as different to those associated with men. They are characteristics stereotypically associated with women, similar to those outlined by Weisgram et al. (2011) such as warmth, empathy, sensitivity, and submission.

"The girl operators are sometimes better than the guys," said Roman, whereas Will provided that "from what I understand, they [women] are the best operators." He went on to say that his perception is mainly based on conversations with mine mechanics who have told him that women take better care of the equipment they operate than men do, resulting in less frequent mechanical service. Mark also spoke about this, and said that women are "very very [sic] strong, good operators [whose] machinery spends less time in the [mechanical] shop [because] they have more finesse and they seem to care a lot more than a man." He went on to describe women's attention to detail that contributes to their skills as heavy equipment operators, saying that "[women], they're gonna follow a lot of procedures, like, they'll do what they're supposed to

do." Though it is significant that Mark speaks positively about women's skills as operators, his remarks also reveal his association of women with subordination because he describes the tendency for women to follow procedure and "do what they're supposed to do." In saying that women have "more finesse," it is assumed Mark meant to contrast women's finesse to that of men's, drawing attention via another example to gender differences perceived to impact the skills that men and women bring with them into their jobs in mining.

Matt also spoke about his perception that women are excellent operators in mining. His description too, however, is based on notions of gender essentialism that posit that gender is the root of observed differences in behaviours of men and women:

> The other woman I did work with also was a scoop operator. Fantastic operator. And her - very rarely was that machine in to be getting serviced or any work done on it when she was on it. Very - women seem to take a lot more care of the equipment…. Like when you're doing your pre-op, a lot of us when we're on a piece of equipment we do a quick once over - make sure there is air in the tires. But I believe they [women] are more thorough. They really check the equipment out really well. Just ah, like I said, I've heard from many mechanics that the best operators are generally women.

Peter contributed more to this topic:

> It's a proven fact, say like, heavy equipment, you wanna lower your maintenance costs on equipment? You put a woman in an operator seat because they're much easier on the equipment, but on the other side of that, there's not as much production happening. So, there's a tradeoff there saying, okay, well, your equipment - your maintenance is lower. The equipment will always be running, but you have to accept the fact that you won't be getting as much muck up the shaft…. Women are typically easier on equipment than

> men, so they don't beat it up as badly as men, but as a result, maybe at the end of the day the tonnage [the production value] is just not quite there…. It's a different way of doing things.

It is significant that in the above, Peter contrasts so starkly what women and men contribute to the end goal of mine production. His description reveals that he doesn't perceive skill associated so much with an individual and their talents, but rather, he sees skill as pre-determined by a person's gender. Perceptions like this contribute to the maintenance of gender stereotypes.

"Women are always better with controls [and] they're not as hard on the equipment as guys," attested Chris. Similar to other male interviewees, he went on to provide reasoning as to why he perceives women to be the "best operators" in the industry. "They're [women], easy on the controls [and]...they're delicate," he said. Ron used the same word to describe women, contributing that it is because of women's careful attention to detail and "delicate" operation of equipment that results in them being excellent heavy equipment operators. However, it is this same characteristic of being "delicate" that found Ron circling back to his perception shared with other men that women are not suited to work certain jobs in mining, especially those considered dirty, dangerous, or physically demanding:

> I can see a woman doing what I do to a certain extent. Uh, probably 80 percent without any kind of issues… [Women], they're more - they're more in a support role. Umm, a woman in - uh, let's say now you're at the face where you're breaking rock. Now, the workload is a little bit more rigorous. Uh, it would be very questionable where that's the right place for a woman. Now you're talking about injury susceptibility or, uh, you know? Stuff like that. I'm not saying that they [women] couldn't do the job but maybe they become overwhelmed.

The above confirms Ron's perception that men and women are suited for different jobs in mining. Though Ron did attest that he perceives women capable of doing the majority of work in mining that he and other men typically perform, jobs that he deems "rigorous," he associates as less suitable for women:

> Mining is rough. I mean, you get dirty. There's jobs that sometimes I wouldn't wanna be doing. And then to put a woman in there? Not to say, you know, that there's a gender thing, but you know? In all respect, you know, well, they're [women] supposed to be more delicate.

In this statement, hints of gender essentialism are present, especially in Ron's attestation that women are "supposed" to hone the characteristic of being delicate. While it may be analysed that Ron seeks to protect women by his maintenance that they should only work certain jobs and not others in the mining industry, statements such as these reveal "benevolent sexism" (Barreto & Ellemers, 2005; Glick & Fiske, 2001) that exists toward women in mining, undoubtedly affecting their work experiences.

<u>Part 2)</u> "They are gonna be second guessing you from day one…. It would definitely be a lot more work fitting in."

The first section of this chapter revealed that gendered occupational segregation continues to exist in the mining industry. Also revealed was that men in mining associate differentiated characteristics and skills with men and women employed in the industry, based on preconceived ideologies of gender essentialism. This contributes to the persistent masculine organizational culture of the industry because men are more highly valued workers in the industry than are women, perceived to be better suited to work the highest valued jobs in the industry. Women, perceived as workers who "support" mine production but less directly

contribute to this production, are generally perceived to be below men and their value in the industry hierarchy.

This section elaborates on men's perceptions about women in mining, describing how men perceive women's efforts to prove themselves and how men perceive they treat and communicate with women colleagues. It becomes clear in this section that men in mining perceive women in mining to be "tough," even though the definition of toughness that men associate with women in mining is different to the definition of toughness they associate with men employed in the industry. Women's toughness, according to men, is less associated with physical toughness, and more associated with mental and emotional toughness. As the first section of this chapter reveals, men in my study acknowledge that it would be challenging to be a woman in mining. While no male interviewees spoke about directly contributing to these challenges for women, they did acknowledge that they exist, presumedly affecting the experiences of women workers. Also discussed in this section is that much like women interviewees disclosed, the age of men seems to impact how men in mining perceive, treat, and communicate with women colleagues. In short, older generations of male workers are perceived to be most resistant toward women in the industry, though as we have also come to understand based on attestations of women interviewees, many older men are also supportive of women, and seek to help them, protect them, or in the words of a few women, "take them under their wing."

"I can imagine it would be a little intimidating for a woman getting onto a cage [to go underground] with a bunch of men by herself," said Paul. Ron confirmed what several women attested about men being surprised when they encounter a woman amongst them: "There's so few women that it's - it's a shock overnight. You know? 'There's a woman! There's a woman on the cage,'" reported Ron. Because Ron explained that in his nearly 40 years of work experience

underground, he has mostly worked with men, he attested that the experience of being a gendered minority could be troublesome for women:

> You're going down there [underground] for the first time, and now you're surrounded by men. And eyes are gawking and eyes, umm, you know? Some guys - guys are guys! And very very [sic] - umm, well, I can just imagine how uncomfortable they [women in mining] must feel at times.

In the above, Ron admits that behaviours of men in mining could have the implication of making women feel uncomfortable. This is alluded to in his statement of "eyes…gawking" toward women and swift dismissal thereafter that this behaviour represents that "guys are guys." In other words, if the behaviour of men gawking at women because of their physical differences is deemed conventional of men, this behaviour is to be expected, and is not a matter for concern. Presumably, this behaviour may be perceived by women as a form of unwanted attention, which was confirmed as a common experience by women interviewees. "If I was a woman [in mining], I would feel uncomfortable being around - with a lot of men. It's probably an uncomfortable feeling," agreed Mark. He went on to describe that being the gendered minority has its repercussions in any situation: "It's just like any minority would feel. It would feel like - take one black person and put them in a crowd of white people. When you're not represented, you have that." In this utterance, it is clear that Mark is speaking about the challenging experience of being an "outsider," an "other," or someone who may not belong.

According to male interviewees, because the industry is male-dominated, it isn't surprising that its culture may be less welcoming toward women. For the most part, men described feeling comfortable in their jobs and amongst colleagues. By contrast, they described that if put into the shoes of a woman, it would be unlikely they would feel this same comfort, in

great part because of their sense of belonging. Aligning with what women interviewees said, male interviewees confirmed that women in mining are expected to prove themselves more so than are men. Men belong in the industry because they suit the norm of the quintessential worker in mining (Keck & Powell, 2006; Lahiri-Dutt, 2012; Mercier & Gier, 2007), whereas women are perceived as different from the onset. They consequently disrupt the conventional masculine organizational culture of the industry. Though men attested that they treat the rare women they encounter in the industry respectfully, some said that they have been aware of instances of harassment perpetrated against women. More often detailed was men's hesitance to work with women colleagues. While in part, this is because many of them perceive women workers as less physically capable than men which could threaten to increase their own workload or even safety, this hesitance was mostly attributed because men fear repercussions of saying or doing the wrong thing around women in the workplace that could introduce trouble for them. "There's a gender thing," said Ron about the divide between men and women that makes the experience of working with a man different than working with a woman. According to Ron and other men, the tough and rough masculine work environment of mining tends to make these differences more pronounced.

Mike described in detail what he thinks it would be like to be a woman in mining. His narrative draws attention to his perception that women in mining experience challenges fitting in amongst mostly male peers, especially – as the women also said – when newly employed in the industry. In light of these enhanced challenges affecting women in mining's sense of belonging, he questioned whether he'd want to pursue a career in the industry if he were a woman:

> I don't know. It would ah, it would be tough. It's hard enough when you first start at a job being the new guy let alone being the new woman because you know what everybody

> else is thinking. You know they are gonna be second guessing you from day one. But ah, I don't know - most of the women I've worked with...they'll speak their mind. You'd have to be a strong person; you'd have to have a strong back bone. Generally, nobody would say anything to you but you would know what they would be talking about. So, you'd have a lot of work cut out for yourself to prove yourself so I, I don't know if I'd wanna do it [work in mining] if I was a woman? But if I did it would definitely be a lot more work fitting in.

In the above, Mike confirms that men and women are perceived differently as workers in the mining industry. From the onset and as was confirmed by women interviewees, women are labelled with more negative assumptions about the value they bring to the industry in contrast to male peers. This affects women's experiences in their jobs, especially regarding their efforts to prove themselves and their belonging, where a sense of belonging contributes to job satisfaction (Baumeister & Leary, 1995; Haller & Hadler, 2006; Hornsey & Jetten, 2004). These efforts are not only expected more from women, but as described by women interviewees, are expected whilst maintaining a tough disposition, or in other words and according to Mike, "a strong back bone." This is not only because women in mining encounter resistance in their jobs by mostly male colleagues, but according to most women interviewees, because they experience harassment and discrimination.

To Darcy, who doesn't think women in mining are respected as much as men, a way to explain this phenomenon is because there are too few women in the industry, resulting in most men not having had opportunities to value women colleagues in ways they do male colleagues. "They [women] always have to earn their respect because there are not a lot of them," he said. "If there were more of them, it may be a 'meh,' you know, 'whatever'. Second nature." In this

description, the implication is understood that because women in mining are so few and far in between, they do not blend in amongst male co-workers. Having no standard upon which to measure the value of women's contributions as workers, and influenced by preconceived ideas based in gender essentialism that assumes women less capable than men to perform the highest valued jobs in mining, catalyzes some men's resistance to accept and respect women equally as colleagues.

Roman described that one of the reasons why he perceives women to be the best operators in mining is that they are "hires who have more to prove." Because of this, they work harder in their jobs as they seek to belong. Roman went on to explain that a reason why he perceives that women become such strong operators in mining is that when attending training, women (more so than men), "take the time to listen to the instructors, ask questions, master the unit and they can out drill this - the 'I've-been-doing-it-all-my-life guy.'" In his opinion, women who put effort into their work can belong amongst men. However, when they do prove themselves, he confirmed the gender bias that continues to exist in the industry. He said this is because when women excel in their jobs, especially if their jobs are physically demanding – such as the work of a welder, this will "impress the hell out of everybody." In other words, men have lower expectations about the skills of women workers in the industry. Though they may praise women who excel in their jobs, as was described by women interviewees, this praise is often gender imbalanced because women experience praise less in direct reflection of their skills and more in reflection of them defying limitations men prescribe for them. As has been revealed by my study, this is true for women in mining often before being given the opportunity to prove their value.

To Art, it is important to recognize that women's efforts to prove themselves in mining are elevated not only because they are a gendered minority, but because they are typically underestimated for what they can do. Their value being underestimated, confirmed by women interviewees as a common experience for them in their jobs, has the consequence of limiting their opportunities. "I don't think there is quite the same level of respect" for women in mining, Art disclosed. About the culture of the industry for women, he continued saying, "it's certainly not a level playing field…. They don't get the same respect. It's very difficult to break into those, umm, non-gender roles." It is assumed Art meant "non-traditional gender roles," in this statement, where roles in mining, especially underground, fall into this category, having historically employed men (Jackson & Thomas, 2017, MIHRC, 2022).

Providing an example of women being underestimated at work, Art conveyed that it is not only women in mining who encounter this challenge, but women in other blue-collar roles as well: "I have a friend whose daughter is a carpenter and I know she's having a tremendously difficult time being taken seriously, and more, being paid for what she does. So, there's a monetary component," he said. This example draws attention to the potential of a gender pay gap for women in blue-collar jobs, aligning with what a handful of women interviewees described experiencing directly and confirmed as ever-present for women according to the Ontario Equal Pay Coalition (2021). If women workers are not paid the same as men for equal work, it is concluded that their value is not only considered less than that of men's, but that this is a social problem with tangible repercussions affecting women more than men. That women in blue-collar roles, including those in mining, disproportionately experience resistance being taken seriously in their jobs impacts their sense of belonging. This results in lesser experiences of camaraderie

for women, or at very least, more effort on the part of women to achieve this camaraderie which was discovered as the dominant factor positively affecting workers in mining's job satisfaction.

Contributing to the complexity of the topic of women's efforts to prove themselves at work, while most men agreed that proving themselves to their colleagues is harder for women in mining than men, Will suggested that all workers are expected to prove their value. He admits that this is a different and perhaps more "intense" experience for women, but also that a certain "toughness" is expected of all workers in the industry. As he put into words, "men and women, they have their work cut out for themselves to prove themselves, even if this is sometimes in different ways." To Ryder, this is also true and "if somebody is new on the job, you sometimes, you kind of wanna wait to see if they prove themselves. But that's whether they are male or female." Art said more about this: "I have worked with females who you had the impression that they had something to prove, and so they would have to work that much harder. Or they felt they did - whether they did or not." In this testament, Art reveals his awareness that women in mining internalize a heightened perceived need to prove themselves more than do men, in reflection of their status as outsiders. However, and in his opinion, this doesn't always translate to more effort on the part of women.

To Chris, people are generally aware that mining, especially underground work, is hard work. In his opinion, "you wouldn't take a job [in mining] unless you were ready for that." Speaking about a woman he encounters in his job that he perceives excels at her work: "She's not afraid. Like, I've seen her face get pretty dirty, there. She's not really scared of that." It is his perception that to prove themselves, women in the industry need to demonstrate that they are tough enough to sustain the hardened culture of the industry. "You wouldn't be doing it unless you knew that you'd be able to handle it," he attested. What became clear in the analysis of

interviews that men supported was that what Chris and other men mean to refer to when they describe women "being able to handle" the industry, is not only their ability to handle the physical demands central to work in a mine or other job site connected to the industry, but the culture of the industry that remains more welcoming and oriented toward men. If women can prove that they belong in this environment - that they can fit in and overcome the many barriers toward their achievement of equal acceptance and respect – they have proved their toughness. About a woman who impressed him on the job, Ron explained that she "did good work. You never heard her complain."

To Mark, it is not so much that women have to try harder to prove themselves, "but they just need the chance to prove themselves." Aligning with most women interviewees' shared perspective, he doesn't think opportunities are quite so broad for women in the industry, when compared to men, adding that:

> If you can pick up 50 pounds and you can do what I do in a day? Well, you're just "one of the guys." You're "one of the people." "One of the workers." But no, they're [women in mining] not given their - I don't find their fair cut.

In the above, Mark initially adopted the gendered language of "one of the guys" to describe ideal bonds of camaraderie that form amongst colleagues in mining. He went on to use more inclusive language when describing his perception that "people" and then "workers" who are capable of accomplishing the same physically demanding task, belong in the industry. It is nevertheless significant that his initial description found him adhering to a masculine term of reference to describe camaraderie amongst peers, and that he concludes by saying women in mining are not given fair recognition.

Most men, in fact, when describing bonds of camaraderie, adopted masculine terms of reference. To women and men alike, being “one of the guys” or “one of the boys” represents the ideal achievement of camaraderie amongst colleagues in mining. It means that one belongs, and when it comes to women specifically, being “one of the guys” or “one of the boys” represents that men trust women. According to male interviewees, when a woman is considered to belong in this way, they can behave as they normally would amongst men. They can, and according to David, who described a woman peer as a “friend,” and as “one of the boys…. Be yourself. You can talk silly and whatever and there are no issues.” However, and before the achievement of this masculine status, men typically described being hesitant to work with women - hesitant, according to Ron, to “approach a woman the wrong way.”

As men often attested, the mining industry being “rough,” means that language spoken in these environments is coarse. Some termed this “industrial language,” representing language used in the industry that includes cursing as well as, in the words of some male interviewees, “joking around” or “humour” that could be perceived as discriminatory. Several men in my study said, especially when encountering a woman in the industry whom they do not know or who has yet to prove themselves as “one of the boys” or “one of the guys,” they adjust their communication style to one they perceive to be less rough; a style they perceive to more readily be tolerated by women, less likely “to get them in trouble,” said Will.

Based on observations of communication amongst peers in the industry, Will attested the following:

> Because every single thing that comes out of some guys' mouths is derogatory toward women on a daily basis, to keep themselves from getting in trouble, they just don’t talk.

> They are definitely different people when women are around. They are. Not me. But there are guys on my crew who are different when women are around.

In the above, it is clear that Will does not perceive that his communication style changes when he encounters women in his job. Nevertheless, this is an experience that he reports exists in the industry, where some men choose to ignore women or act differently when women are present. As he went on: "A lot of the guys, until you get to know her, know what she is like, like, you determine she's 'one of the guys,' some of them walk on eggshells." Notably and later during his interview, he expressed that "there's some conversations that happen that you wait until your female co-worker leaves, kinda thing. It's just the nature of…you gotta tip toe a little bit more around certain subjects." Though Will doesn't clarify in this instance what subjects he means to refer to, it is significant that he later expressed: "Maybe that's why ah, men haven't hired a lot of women underground, because of, like, some of the things guys say or do that can get them in trouble. Like, sexual encounters and problems, they are trying to avoid." In this same vein and providing examples of the type of topics more readily avoided by men in mining when women are at work with them, Art expressed:

> I'd like to think I treat everyone the same, umm, but I might be a little more careful of the things that I say - in terms of joking around [when women are present]. I know that in the times we are living in now, uh, sexual jokes or racist jokes for example, are not tolerated…. You really have to know your audience before you go that route because it could come back and sting you in the behind pretty quickly. I am very careful with the audience I'm with. I can understand what is tolerated and accepted in the group that I'm in.

Though the above doesn't confirm that Art or other men in mining make sexist or racist jokes in the workplace, that Art brought to attention these topics that he perceives less tolerated by women than men reveals his perception that innate differences exist between men and women, affecting how he communicates with peers. Several men in my study alluded to women in mining who earn the status of being "one of the boys" or "one of the guys," are women who "shrug off" or "brush off" jokes or comments that are rough and may be perceived as sexist, racist, or imply some other type of discrimination. Women in mining who are perceived to tolerate men's roughness are associated by men with toughness. Their mental and emotional toughness in being able to, according to Will, "handle" the culture of the industry, proves their belonging.

Providing another example of men adjusting their conventional behaviour and means of communicating with peers when women are present, Chris described:

> You gotta be paying attention to who's in the cage. Like if it's - you know, if there's a woman in there. And you know, you gotta be - 'cause the way normally, you know the way guys are? They'll talk. And uh, they can be kinda rather uh, what's the word, umm, crude? You know what I mean? Like, amongst each other, like, talking about what they did the night before and yada yada [sic], you know what I mean? You gotta pay attention.

This reveals Chris' hesitance to act as he normally would amongst men, when women colleagues are present. As he puts it into words, he perceives that men can be "crude," and that this could introduce concern for women, which is an assumption based on stereotypes linked to gender. Notably, he went on to elaborate that comments made about women that may be deemed sexist are rarely uttered about women colleagues, and rather, are uttered about women external to the industry. This was similarly attested to by Will who said:

> It's not really women at work guys talk about, but a lot of these guys have wives and girlfriends, or experiences, not necessarily pleasant experiences with women outside of work. So like, when they are telling those stories at work, you can see how if there was a woman present, it may not be the most appropriate situation. And some women brush that off as just a story. That it's funny. But other women may not see it as funny. They may see it as ah, as ah, disgraceful toward women, I guess you could say? And you can see how if a woman was sitting in a lunch room with 12 other guys, and she was on her own, that is not a place for her to speak up at all.

That Will regards the above situation as one that would not offer a woman the chance to speak up is unjust, revealing the ingrained belief he holds, even if unconsciously, that women are or should be considered less powerful than men. This experience of feeling voiceless was described by many women interviewees in *Chapter 4*.

About communicating with men and women at work, Mark said that this "differs big time," and that "I would never talk to a woman the way I talk to a regular man." In his opinion:

> Especially with all the rules and regulations, like, the sexism, like, a woman can turn around and just flip something? You know? It's just a very uncomfortable feeling. I would never - I don't even want to work alone with another woman.

As the above implies, women in mining can be perceived as threatening to some men because according to Mark, they may be less tolerant of some of the things that men say and do in the workplace that they may deem inappropriate. "Sometimes the way we [men] talk, it can be spun around many different ways," he went on to say. "I can talk to [a guy] one way and he'll be okay with it, and I'll talk to somebody else and they'll be totally insulted." When it comes to women, he explained, he generally approaches conversation more cautiously. Similar words were spoken

by Matt who, adding to the complexity of this topic, noted that he modifies his communication around women as a sign of respect:

> I wouldn't say that I have a real foul mouth but I joke around and it's different when you're with guys, right? So, the way I talk with [name of male colleague], I wouldn't talk that way with you or my wife, right? Because I drop a lot of f-bombs and I probably say some pretty inappropriate things at times, but I think most guys in general do, so just to be able to differentiate that and know when you are around women to have respect. You know what I mean?

Here, it is clear that because Matt accurately perceives that I (the interviewer) identify as a woman, he categorizes me as the type of person he adjusts his communication style toward. In his own words, he does this "out of respect." He does this because, as he admits, some of the things he says may be deemed "pretty inappropriate…at times," and especially by women. It is significant that what Matt perceives women may consider "pretty inappropriate" is synonymous with what he perceives men more readily consider "jok[ing] around." Attestations of other men also drew attention to this. That inappropriate language is associated in any way by men with humour in the workplace is concerning. Clearly, gender remains a salient feature affecting interactions and communication amongst peers in the workplace. In blue-collar environments like the mining industry, men's perception that women and men communicate differently and have differing tolerance as to what they consider appropriate and inappropriate, is a factor affecting this.

Ryder too, confirmed that conversations amongst men in mining can sometimes "take a left turn," or in other words, may be considered inappropriate and in his opinion more so by women than men: "Sometimes you gotta tip toe around stuff that you're saying a little bit more -

like some conversations. Some [conversations] can take a left turn and you gotta be mindful of who's around." Though Ryder explained his perception that women in mining are treated respectfully, he also clarified that because of topics discussed at work that may "take a left turn…. I think at some point, guys need to realize - like the men need to realize what they are saying." This reveals Ryder's awareness that workplace interactions need to be based on respect. Workplace training and policies that demand respectful interactions amongst colleagues at all times may contribute to improvement.

Markedly, it is important to detail that though many men in my study described that gender underscores differences in communication styles between and amongst colleagues in mining, men also frequently attested that it isn't only men in mining who say things that may be perceived as inappropriate or discriminatory. Women in mining, too, are perceived to adopt this rough style of communication at work, and according to men, it is these women who most effectively become "one of the guys" or "one of the boys." Engaging in this kind of humour is one way that some women have proven that they can belong amongst male peers. They have proven that they are tough enough not only to "brush off" or "shrug off" comments or behaviours that may be deemed inappropriate, even sexist, but that they can themselves participate in or initiate these conversations.

"She's worse than the guys," attested Chris about a woman peer whom he perceives has a particularly foul mouth, but whom he also perceives fits in well with his otherwise exclusively male crew of colleagues. As he shared, this is in part because "she understands that if you wanna work with the boys, you gotta have a sense of humour like the boys;" a sense of humour that he reiterated, can be "crude." About this woman peer, he explained, "she's got it," the term "it" analysed in Chris' testimony to represent that this woman embodies the toughness perceived as

necessary to succeed and perhaps more importantly, belong in the industry. “If you wanna make it in the game, you gotta, you know, fit in,” he said. “Right? She can’t be all offended that you swore and said - you know? Used different words there.” Much the same was implied by Matt, who when speaking about a woman peer who “gets along well with the guys,” observed:

> You can tell she’s been working underground for a while because she has no problem with the language. She actually - I’ve said it before to a few of the guys on our crew - like, she’s almost worse than some of the men I’ve worked with as far as foul mouth, and I think it’s just the environment. You have to be able to deal with it like that, I guess? It’s bizarre. I found it bizarre…. It was definitely unexpected the way she, ah, the way she talks. It is kinda strange.

In this example and aligning with other men in my study, Matt informs me that the rough and tough environment of mining has a direct effect on the way that peers communicate. Those able to contribute to the masculine organizational culture of the industry are perceived to belong, whereas those less willing to adapt to this environment have a harder time fitting in with peers. They may even be discriminated against. As women described, this can have the consequence of making them feel like outsiders, and it can contribute to experiences of marginalization.

According to Ron, women who excel in mining and who are more readily accepted by male peers “are more boy-ish.” This is an interesting perception for Ron to have, especially because, as some women described and taken up in *Chapter 6*, they pride themselves in being “tomboys.” Returning to the words of Hellen, by being “a little bit masculine,” women in mining are more readily accepted in their work environments that foster a masculine culture.

On the topic of men’s acceptance of women in mining and to address my study’s final set of research questions, is the question of how men treat women at work. Although most men who

participated in my study attested that they treat women respectfully, at the same time, they frequently revealed that not all men in mining are or have been inclusive toward women. For the most part, and like women attested, men perceive that it is an older generation of workers in mining who have been and sometimes still are, markedly resistant toward women as peers. Nearly two-thirds (seven out of 11) of this study's male interviewees drew attention to this perception, making it significant: Art, Drew, Mark, Matt, Peter, Ryder, and Will.

About the way women in mining are treated by male peers, Art perceives this "reception to be very similar" to that of men, however, also elaborated:

> There are variables that might play in. Like, how many of the old-school type of employees do you have?... Older miners, many of them are from an era where, you know, it is a male-dominated society, and they don't temper the things they say? Some still haven't grasped the whole idea of women at work. Especially [in] mining.

In the above, Art makes it clear that the generation that one is raised in, can affect values. In turn, values affect behaviour (Burke & Stets, 2000). Said Ryder more about this, "how people are raised is a factor to consider," and he brought to attention that older men in mining who would have been accustomed to the experience of "back in the day, [when] the women stayed home and took care of the kids and the man went to work," may be more resistant toward women in the industry. Matt said much the same when describing his perception that younger men are generally more accepting of women in mining because they are "more open minded and have seen how the world has changed." As he put into words about men in mining:

> Some are extremely old-school as far as how they talk and if they have something on their mind, they will tell you, no problem. They have no issues hurting people's feelings, some of these guys, so to be a woman, able to handle that is a different scenario.

Will also spoke about this, asserting that beliefs about women in mining "goes for the most part with age," where he perceives that men of a younger generation are more accepting toward women because they grew up with women in the workplace, and grew up with them in a variety of different jobs:

> A lot of the older guys, like, the guy miners? The guys that are 50 [years old] or so now? A lot of them started on a jackleg [drill] and I can tell you, they probably think there is not a woman out there that can hold the job down. Run it as well as them, or a man, or don't run it at all.

Will, like other interviewees, perceives older men as most resistant toward women in mining. Peter concurred, saying that resistance toward women in mining stems mostly from older men, where "25 years ago or more when there was still a lot of - it was a whole different generation. Back then, there were still men that believed it was bad luck when a woman went underground." As discussed in *Chapter 4*, this superstitious myth of women bringing back luck to mining, has had an effect on how women in the industry are perceived, treated, and communicated with.

Notably, when it comes to resistance toward women in mining, several men attested that they perceive this resistance is less pervasive than in years past. In part, this can be traced to what Peter implied, namely that workplaces in mining, like those in other industries, have gradually moved toward policies of "zero tolerance" in terms of disrespectful communication and harassment. "There's always gonna be isolated incidents," Peter described, "but the industry has evolved [and] in the last 30 years, I've seen a lot of changes and one of the biggest things is political correctness." Notably, some men described that in recent years, training in their places of work has more readily touched on topics like gender and inclusion. While this may be true, a

few male interviewees also questioned the limited impacts of these training initiatives, echoing what the female interviewees observed. For example, Ron said:

> I mean, they're [these training initiatives] not forced. I mean, they're [new hires] told on the hiring day a few little things, and the yearly uh booklet uh, review there? A quick review on harassment and stuff like that. But uh, you know, it's not overly implemented, let's say.

Will too, expressed limited trust in inclusive training initiatives and their impact in his place of work. He went a step further in this discussion when he described concerningly that he doesn't think his company considers women's experiences in the workplace as important as they do mine production:

> Production is everything, right? Down there? If it - having women working in some of the jobs fucks up production, the honest truth, in my opinion, is that the company would be like, "fuck women's rights." If production suffers, that's like the big fucking thing down there. At the end of the day, the company fucking knows that. The company wants to hire women and diversity but like, production first, 100 percent. They might deal with some slack from the media [if they don't make progress in hiring initiatives that contribute to diversity in the workplace] but if you don't have production, you don't have a mine.

The above may be but one worker's perception, but it is nevertheless one that draws attention to the importance of recognizing that much more needs to be accomplished in the mining industry to ensure inclusivity. It is problematic that Will perceives that the culture of the mining industry remains resistant toward women, and that this resistance may exist among those in the highest

echelons of power in the industry. These concerns make clear that when it comes to equity, diversity, and inclusion, everyone must hold themselves accountable.

Conclusion

This chapter has described how men employed in the city of Greater Sudbury's mining industry perceive women as peers, and specifically how they perceive they treat and communicate with women peers at work. Male interviewees confirmed that occupational segregation is ongoing in mining, especially in underground, blue-collar roles where women are least likely to work the highest valued jobs in the industry. Though no male interviewee described being unwelcoming, disrespectful, or harassing toward women peers in mining, most acknowledged the reality that women do encounter challenges achieving acceptance and respect in mining, and more so than male peers. Men also confirmed that resistance toward women in mining continues to exist, even though this resistance is perceived by men to be less persistent than in years past. Most attribute the problematic attitudes to an older generation of men in mining, however, it is important to address that older men in mining are also found to be supportive toward women, especially when it comes to attempts to help them learn about their jobs. Also revealed in this chapter is that male interviewees perceive women in mining as tough. However, the interviews with men confirm that notions of gender essentialism continue to impact perceptions about traits linked to men and women. Women's toughness, for example, was generally described by men in different ways than men's toughness. While male interviewees perceive themselves as tough especially because they work the most valued jobs in mining, women in the industry are perceived as tough predominantly because of the mental and emotional resilience they are perceived to hone in an industry that can be unwelcoming or even hostile toward them. This toughness, in part, supports women's efforts to overcome barriers

toward their achievement of equal acceptance and respect in mining. As we saw in *Chapter 4*, women interviewees themselves spoke about their toughness in this way. This toughness in women contributes toward their bonds of camaraderie, and here, the language used to describe these bonds is also significant. In mining, camaraderie is generally described by men and women workers alike in masculine terms of reference i.e., becoming "one of the guys" or "one of the boys." This is an ideal that all workers strive toward as they work to achieve respect, acceptance, and a sense of belonging amongst peers. As my study has also revealed, many women in mining also celebrate a "sisterhood" in the industry, as do many women in the industry celebrate expressions of being a "tomboy."

In light of these findings, what can be done to improve the gendered experiences of women in mining? While my study has woven recommendations for improvements into its chapters, this question is the focus of the concluding chapter that also provides a general overview of the findings of my study.

Chapter 8: Summary and future directions

Cultural norms about masculinity are heavily ingrained in the mining industry. This is true in Canada's mining industry, and in other mining workplaces around the globe. Men have conventionally dominated work environments belonging to mining, and continue to represent the gendered majority worker. As recent as June 2022, women accounted for only about 15 percent of workers in the Canadian mining industry, according to the Mining Industry Human Resources Council (2022). Masculine organizational cultural norms contribute to gendered practices that have historically dominated (and continue to do so) mining and other blue-collar industries, affecting the experiences of women. According to Butler (1990), the practice of gender is a daily experience that impacts values, ideologies, and behaviours. Gender is something every person performs (Butler, 1990) and as stated by Laplonge (2014), "gender is something that is influencing the way employees of the mining industry work," and the prediction is that:

> Without widespread change in attitudes to gender in mining we will never see the creation of gender diversity in this industry [and] mining will continue to be a man-cave for outdated practices of gender. It will continue to be an industry in which particularly, attitudes to gender impact on the safety and well-being of its employees. And it will miss out on an opportunity to transform into an industry which places gender at the heart of its operations (p. iv-v).

Aligned with the above, my study was developed with the goal to contribute to a better understanding of gender in mining, informed by the direct work experiences of Sudbury women in mining and perceptions of the men they work alongside.

The preceding chapters have revealed significant findings about the experiences of women in mining. My study fills a gap in the literature about these experiences, because as

described in *Chapter 2*, the literature has not fully considered women's work experiences in the industry. Previous studies have suggested that women who work in male-dominated, blue-collar industries, including mining, often encounter resistance (Bagilhole, 2002; Benya, 2016; Botha, 2016; Braundy, 2011; Burczycka, 2021; Greene, 2006; John, 1984; Keck & Powell, 2006; Laplonge, 2014; Luxton & Corman, 2001; Mansfield et al., 1991; Meyer, 2016; Milkman, 1997, 2016; Mulroy, 2008, 2019; O'Farrell, 1999; Palmer & Lee, 1990; Papp, 2006; Reskin & Roos, 1990; Schroeder, 1990; Tallichet, 1995; Thomas, 1989; Tripp-Knowles, 1999). My study sought to provide a space for the voices of women in mining to be heard. The mining industry within the city of Greater Sudbury proved to be an ideal location to collect data because industry in this region was established in the hyper-masculine milieu of mining (Leadbeater, 2008). The city of Greater Sudbury has conventionally been considered a "man's town" based on this establishment, and not since the 1970s has scholarship focused attention in depth on this topic (Keck & Powell, 1996, 2006).

Guided by interdisciplinary principles and a feminist, community-based research agenda, my study addressed these questions:

1. What are the gendered work experiences of women in mining in Sudbury, Ontario?
2. As gendered 'others,' what perceptions do women in mining in Sudbury, Ontario have of their workplace culture and climate?
3. How do women in mining in Sudbury, Ontario perceive they are treated and communicated with by their colleagues in this primarily masculine organizational culture?

4. How do men in mining in Sudbury, Ontario perceive the women in mining that they work with? How do they perceive they treat and communicate with these women in the workplace?

In chapters *2* and *3*, theories, methods and ontologies derivative of multiple disciplinary perspectives were employed to address these questions. For instance, methods of analysis "bricolaged" (Lévi-Strauss, 1966) reflexive thematic analysis (TA) principles outlined by Braun and Clarke (2006, 2019) and hybrid critical discourse analysis (CDA) methods, especially Baxter's (2003) feminist post-structuralist discourse analysis (FPDA) and Lazar's (2005, 2007, 2018) feminist critical discourse analysis (FCDA). Disciplinary theories and perspectives that my study relied on most included those derivative of Communication Studies, Labour Studies, Women and Gender Studies, and Sociology. All were founded on interdisciplinary principles.

Chapters *4, 5,* and *6* contain my study's findings, addressing the first three sets of research questions posed. These questions hinge on the experiences of women workers in mining. My findings show that women in mining are in constant negotiation with the masculine organizational culture that remains in the industry, and they are also in constant negotiation with their gender identities in this culture.

Chapter 4: Proving themselves in a man's world - Challenging resistance to acceptance and respect focuses on how women in mining often perceive themselves being treated differently than male peers, especially near the beginning of their careers or upon movement to work at a new job site. Women described feeling as though they stand out in mining, and that men in the industry frequently make them feel like outsiders. Their very presence challenges the masculine organizational culture of the industry, and because of this, women perceive that some men in mining are threatened by their presence. Women interviewees in four occupational groups

(mining in engineering, health and safety, geology, and working blue-collar jobs) all described encountering resistance as they strove to achieve acceptance and respect at work, though this resistance was most problematic for blue-collar women who work underground. Women in blue-collar work experience discrimination more intensely than women in professional roles, often being underestimated or undermined in their jobs. Blue-collar women also experience more hostility in their encounters with male peers. Nevertheless, the experience of knowing they must work harder than men to prove themselves and their right to belong in mining, was described by nearly all women interviewees. This suggests that mining continues to be an industry in which men are perceived as better suited to work than women, where a masculine organizational culture remains. According to many women interviewees, the industry remains unchanged in its orientation as "a man's world."

Chapter 5: The most troublesome experiences of women in mining - The gender pay gap and harassment drew more attention to some of the challenges and discrimination that women in mining encounter. This chapter builds on findings described in *Chapter 4*, reinforcing that for women in mining, the culture and climate of the industry that values men more than women can be resistant toward them. This culture contributes to ongoing gendered occupational segregation in mining. Discouragingly, nearly all women interviewees have experienced discrimination. Moreover, many described having been harassed in their jobs; the harassment they described included verbal, non-verbal, physical and sexual forms. Harassment that objectifies women and their bodies was the most common form of harassment, and most damaging to the well-being of women in mining. Women who experience this type of "hostile environment harassment" (Cortina & Areguin, 2021) often spoke about being fearful for their safety in their jobs, where other types of harassment also had negative repercussions for women, such as evoking a range of

emotions including discomfort, unease, annoyance, and for some, fear. Achieving a sense of belonging amongst peers is significantly more troublesome for women who experience harassment at work. The same can be said for women who described encountering being paid less for equal work when compared to their male co-workers, another significant finding of my study described in *Chapter 5.* This is highly problematic, based on attestations of women interviewees.

Amongst other findings, *Chapter 6: The most rewarding experiences of women in mining - Job satisfaction and camaraderie* draws attention to the value women place on achieving a sense of belonging in the mining industry. In this chapter, it is clear that the culture of the mining industry is complex, contributing not only to troublesome experiences for women in mining, but also rewarding ones. Although it is true that women interviewees described encountering resistance, harassment, and discrimination in their jobs, they also frequently reported high levels of job satisfaction. Moreover, they reported that men who treat them poorly are the minority, and men who treat them well, the majority. They typically enjoy the work that they perform, even if they do not always enjoy the masculine organizational culture sustained within the industry. This chapter, based on women's own stories, attests that especially after having proven their value to peers, even if these efforts to prove themselves are more taxing than those expected of men, women often achieve camaraderie. Women who achieve camaraderie in mining more readily spoke about feeling accepted and respected in their jobs, even if these bonds of camaraderie were generally described in masculine terms of reference. For example, according to women interviewees, the ideal sense of belonging in mining is when they are considered "one of the guys" or "one of the boys." What also contributes to women's sense of belonging are experiences of "sisterhood" that develop for them in the industry. Women recognize similarities

in the experiences of fellow women in mining, and seek to support their sisters in the industry who encounter challenges of resistance. The gendered minority, women in mining often develop strong ties of kinship amongst themselves, as do they celebrate alternate expressions of femininity, for example, in being a "tomboy." Organizations like Women in Mining Canada and Women in Mining International provide opportunities to foster and celebrate this sisterhood.

Keeping in mind Laplonge's (2014) argument that research can only begin to explain gendered dynamics at work if the perspectives of both men and women are considered, as its title implies, *Chapter 7: Men's perceptions about women in mining,* focuses on how men perceive, treat, and communicate with women peers in the industry. This chapter addresses the fourth and final set of research questions posed by my study: how men experience working with women in mining. This inquiry enables a fuller understanding of the gendered culture and climate of the mining industry affecting the experiences of women workers.

Similar to the women I interviewed, men confirmed that men and women conventionally work different jobs in mining, which reveals ongoing practices of gendered occupational segregation in the industry. These practices stem from ideologies based in gender essentialism that associate different traits and abilities with women and men, and in the context of my study, associate higher value with male workers in mining than female workers. Gendered occupational segregation in mining is perceived by men as most pervasive in rough and tough underground work environments belonging to the industry, where most male interviewees work exclusively. It is within these environments that male interviewees attested they have perceived the most resistance toward women. This is true even if no male interviewee personally divulged having disrespected or harassed a woman peer. Because men are nevertheless aware that these experiences exist for their female peers, and based on men's perceptions that women's efforts to

prove themselves are more intense than for men, most agree that women in mining are tough. This toughness is emblematic of women versus men in mining, however, men described toughness differently for women. Whereas men in the industry are predominantly associated with toughness because they work the highest valued, most physically demanding jobs, according to men, women in the industry are predominantly associated with toughness because of their mental and emotional resilience that finds them encountering challenges achieving acceptance and respect and overcoming these challenges. According to male interviewees, though women may have a harder time fitting in, they can and often do become "one of the boys" or "one of the guys," bonds of camaraderie that all workers strive to attain which contributes to job satisfaction.

Impacts and future directions

My study reveals a great deal about women's experiences in the mining industry, and I do this by listening to women's own voices. This fills a gap in the literature, identified in *Chapter 2*, about these marginalized gendered experiences specifically in the city of Greater Sudbury (2020b), a place recognized as "a world-class mining centre." In fact, the city's 2019-2027 Strategic Plan outlines its intention to "position Greater Sudbury as the global leader in mining and mining supply/service innovation" (City of Greater Sudbury, 2019). Considering that the industry remains heavily gender-imbalanced (MIHRC, 2022; Statistics Canada, 2020) and that blue-collar industries including mining have offered discriminatory work environments for women (Bagilhole, 2002; Benya, 2016; Botha, 2016; Braundy, 2011; Burczycka, 2021; Greene, 2006; John, 1984; Keck & Powell, 2006; Laplonge, 2014; Luxton & Corman, 2001; Mansfield et al., 1991; Meyer, 2016; Milkman, 1997, 2016; Mulroy, 2008, 2019; O'Farrell, 1999; Palmer & Lee, 1990; Papp, 2006; Reskin & Roos, 1990; Schroeder, 1990; Tallichet, 1995; Thomas, 1989;

Tripp-Knowles, 1999), Greater Sudbury is an ideal location to study the gendered work experiences of women in mining. These experiences have not been studied fully in the region since the 1970s (Keck & Powell, 1996, 2006). They merit attention. They are diverse and complex, and reveal that much remains to be accomplished in order to change the masculine organizational culture of the industry and work toward improved equity, diversity, and inclusion in mining, and in other gender-imbalanced industries.

The mining industry in the city of Greater Sudbury has the potential to help the industry transcend into one that is not just a bit more inclusive, but *is truly* inclusive. Greater Sudbury (2020a) mines more than 50 percent of the province's ore, and supports about one-third of Canada's mined metal production (Burkhard et al, 2017). As an industry leader, it is the responsibility of Sudbury's mining industry to guide dialogue about the necessity of diversity and inclusion in the industry. Workers bring unique talents with them to mining, and recognizing that diversity of workers, including women, is essential. A healthier base of leadership resources and skills can be built, and current performance in safety, health, and wellness could also be improved. This has potential to increase confidence in the future of Canada's mining industry.

As my study reveals, though women in mining experience job satisfaction, and speak about strong bonds of camaraderie with male and female peers, they also experience resistance to the achievement of acceptance and respect. Many experience harassment, and some, the gender pay gap (Ontario Equal Pay Coalition, 2021). Ideologies based on gender essentialism contribute to ongoing gendered occupational segregation in mining, and it is important to take a careful look within to ensure that any such stereotypes about gender are dispelled. Based on these findings, my study points to the need for improved training policies and practices to be developed for the mining industry around concepts such as gender equity, and what constitutes

harassment. Training that focuses on harassment as a gendered experience is especially needed. To make an impact, I recommend that these training initiatives include concrete examples about the often challenging, discriminatory, and harassing experiences of women in mining, and that these training policies are followed by those at the highest echelons of power, as well as those employed in the lower-paid positions in the industry. These experiences cannot be ignored. According to the women I interviewed, many have lost trust in official channels at work that are meant to support them, such as supervisors and human resource departments. Their concerns for their own well-being and safety are often dismissed, or they fear repercussions such as being labelled a "troublemaker" if and when they report wrongdoings against them. When 70 percent of women admit they decided not to report incidents of harassment, the system is broken, and steps should be taken to improve it.

Studies will be needed that follow up about women's experiences in the mining industry and in other gender-imbalanced industries after training policies and practices have been implemented. Efforts to create more equitable workplaces will be needed to track and evaluate progress, as well as recommend ongoing improvements to the effect of equity, diversity, and inclusion.

Like any study, mine is not without its limitations. Because my study is based in the geographic region of Greater Sudbury, future studies about women in mining in other geographic regions could contribute more to this topic. While the regional scope of my study limits its reach, so does its focus exclusively on gender and not other intersectional experiences such as participants' race. However, I made the intentional choice not to further identify my participants, as described in *Chapter 3: Methods*, in keeping with the ethics requirement to protect participant anonymity. I also acknowledge that my analysis of my study's data is impacted by my own

identity; my "social self" (Burkitt, 1991). The interpretation of my study's data is my own, guided by the literature described in *Chapter 2* and methods outlined in *Chapter 3.* A larger participant sample would have allowed a deeper dive into the complexities of work experiences for women in mining. Among other questions, a larger participant sample of men could have supported a broader exploration of the questions of age and how age may impact women in mining's experiences. That the method to recruit participants relied on snowball sampling is also a limitation of my study. This method introduces challenges that hinder the ability to extend these findings to other groups of men and women in mining or other industries. Despite these limitations, my study includes many significant discoveries. It introduces opportunities for further inquiry into the topic of women in mining. Comparative studies of women in other male-dominated workplaces could also be an avenue for future research.

Clearly, women in mining are tough. They not only challenge the masculine organizational culture of mining, but they consistently overcome challenges of resistance that affect their work experiences. In my opinion, these women are heroic. They defy hegemonic, stereotypical notions about what it means to be a woman, and in doing so, they pave the way for other girls and women to challenge conventional gender norms and enter non-traditional occupations. Women in mining should be celebrated. To me, it was high time to dig deep into the mining industry's masculine organizational culture. I attempted to do so with this study and I hope it contributes toward building a more inclusive industry for all workers.

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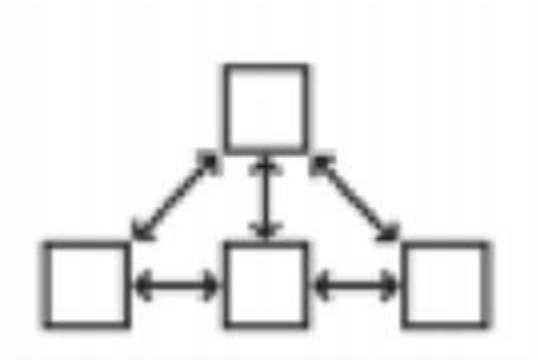
List of Appendices

Appendix 1: Erich Jantsch's model of interdisciplinarity

Eric Jantsch's model of interdisciplinarity represents the crucial roles that cooperation and coordination play amongst and between the disciplines, where each square represents a disciplinary field (Newell, 2013). Arrows that move in each direction depict how each discipline is interactively related in interdisciplinary studies; coordinated and integrative.



Appendix 2: Laurentian University Research Ethics Board (REB) Approval certificate

APPROVAL FOR CONDUCTING RESEARCH INVOLVING HUMAN SUBJECTS
Research Ethics Board – Laurentian University

This letter confirms that the research project identified below has successfully passed the ethics review by the Laurentian University Research Ethics Board (REB). Your ethics approval date, other milestone dates, and any special conditions for your project are indicated below.

TYPE OF APPROVAL / New X / Modifications to project / Time extension	
Name of Principal Investigator and school/department	Sarah de Blois, Human Studies, Linda Ambrose, supervisor
Title of Project	Gender segregation in the workplace: Using an interdisciplinary critical discourse analysis to study the experiences of blue-collar, working-class women in Sudbury, Ontario
REB file number	6020613
Date of original approval of project	March 18, 2020
Date of approval of project modifications or extension *(if applicable)*	
Final/Interim report due on: *(You may request an extension)*	March 18, 2021
Conditions placed on project	Restrictions on conducting in-person research apply during current pandemic protocols

During the course of your research, no deviations from, or changes to, the protocol, recruitment or consent forms may be initiated without prior written approval from the REB. If you wish to modify your research project, please refer to the Research Ethics website to complete the appropriate REB form.

All projects must submit a report to REB at least once per year. If involvement with human participants continues for longer than one year (e.g. you have not completed the objectives of the study and have not yet terminated contact with the participants, except for feedback of final results to participants), you must request an extension using the appropriate LU REB form. In all cases, please ensure that your research complies with Tri-Council Policy Statement (TCPS). Also please quote your REB file number on all future correspondence with the REB office.

Congratulations and best wishes in conducting your research.

Rosanna Langer, PHD, Chair, *Laurentian University Research Ethics Board*

Appendix 3: Transcript of spoken text in recruitment video

Context: In the summer of 2019, the Digital Strategies team at Laurentian featured the researcher's work. With her consent, she was interviewed for a short video about her research. This video was posted to varied social media channels owned by Laurentian University.

Full video can be found via the following link:
https://www.youtube.com/watch?v=_IC1joz9_4k&t=2s

Written transcript (spoken by the researcher):

Here in Sudbury Ontario, we have traditionally and typically been known as a 'man's town.'…when we were first established, given the very high volume of industrial work, such as mining. Here in the Sudbury community, mining is central, and so my interest specifically is to understand the gendered experience of occupational segregation in blue-collared, resource sectors of Sudbury.

Women were only legally allowed to go underground and work in the mines not until the 1970s, so I want to create this space for dialogue; this space for voices that have traditionally been marginalized or silenced – to explain what that experience is like being a minority in a hyper-masculine work environment.

I selected Laurentian University for my PhD program in Human Studies, as Laurentian actually was the University at which I completed my university degree: four years in Communication Studies. I did move on and complete my Master's elsewhere, but my roots are here at Laurentian…I have a love for Laurentian…our community… Sudbury itself really continues to shine through, and what a better place to study my PhD.

Appendix 4: Semi-structured interview questionnaires

**Before the interview commences, all participants will be asked if they identify as a man, a woman, neither man nor woman, or rather, identify as any other gender identity. The appropriate guiding interview questions will be asked of participants, as dependent on their personally declared gender identity.*

Appendix 4a: Semi-structured, guiding interview questions (participant identifies as female)

Note: The aim of the semi-structured interview is to encourage honest and unrestricted conversation, which should enable narratives to emerge. The below questions are to be used as a guideline and need not necessarily be followed point by point, or in the exact same order as described below. Follow-up questions may be asked (as appropriate), as well as clarification questions or questions that seek elaboration as to a response. Participants will reserve the right to not answer any questions they are uncomfortable with, as can they choose to omit any answered questions from the interview.

1) What is your job title?
2) Why did you want to be (or did you become) a _____ (*insert job title*). How did you start working this job? How long have you worked this job?
3) Can you describe a typical work day? What are some of your activities in a day at work?
4) Describe some of the characteristics you think suit the description of your job and its responsibilities?
5) Do you think that you possess / have the skills that your co-workers (those that you work with in an equal position of power) consider necessary to do your job well? Can you describe these qualities?
6) Is communication with your co-workers easy? Is your communication with male co-workers and female co-workers any different, or is this communication more or less the same? Please provide some examples.
7) Have you ever encountered any difficulties or even conflicts working with your male co-workers? What about your female co-workers? Please provide some examples.
8) If you have encountered any difficulties or even conflicts working with your co-workers, are there any procedures or protocols to follow for managing these difficulties or conflicts?
9) If you have encountered any difficulties or even conflicts working with your co-workers, do you perceive that any of these difficulties or conflicts have had anything to do with your being a woman? Please explain and provide examples.
10) As you go about an average day on the job, do you think that your co-workers treat you the same or differently than they do your male co-workers? Why do you have this impression? Please explain with examples of experiences you might have had on the job that have made you feel this way.
11) As you go about an average day on the job, do you think your co-workers respect you to the same degree or differently than they do your male co-workers? Why do you have this impression? Please explain with examples of experiences you might have had on the job that have made you feel this way.

12) Recent statistics tell us that women continue to be very few in numbers in blue-collar work environments and jobs. Considering your minority status as a woman in your blue-collar workplace, what's it like being a woman in your workplace, overall?
13) Do you like your job? Do you have reasons to support why you do or do not like your job?
14) Do you feel that your co-workers value you and the work that you do in the workplace?
15) Is there anything else you would like to share that might support this project's better understanding of women's experiences in blue-collar workplaces in Greater Sudbury?

Appendix 4b: Semi-structured, guiding interview questions (participant identifies as male)

Note: The aim of the semi-structured interview is to encourage honest and unrestricted conversation, which should enable narratives to emerge. The below questions are to be used as a guideline and need not necessarily be followed point by point, or in the exact same order as described below. Follow-up questions may be asked (as appropriate), as well as clarification questions or questions that seek elaboration as to a response. Participants will reserve the right to not answer any questions they are uncomfortable with, as can they choose to omit any answered questions from the interview.

1) What is your job title?
2) Why did you want to be (or did you become) a _____ (*insert job title*). How did you start working this job? How long have you worked this job?
3) Can you describe a typical work day? What are some of your activities in a day at work?
4) Describe some of the characteristics you think suit the description of your job and its' responsibilities?
5) Do you think that your female co-workers (those that you work with in an equal position of power) possess / have the stills that are necessary to do your job well? Can you describe these skills?
6) Is communication with your female co-workers easy? Is your communication with your male co-workers and female co-workers any different, or is this communication more or less the same? Please provide some examples.
7) Have you ever encountered any difficulties or even conflicts working with your female co-workers? What about your male co-workers? Please provide some examples.
8) If you have encountered any difficulties or even conflicts working with your female co-workers, are there any procedures or protocols to follow for managing these difficulties or conflicts?
9) If you have encountered any difficulties or even conflicts working with your female co-workers, do you perceive that any of these difficulties or conflicts have had anything to do with their being a woman? Please explain and provide examples.
10) As you go about an average day on the job, do you think that you treat your female co-workers the same or differently than you do your male co-workers? Why do you have this impression? Please explain with examples of experiences you might have had on the job that have made you feel this way.
11) As you go about an average day on the job, do you feel that you respect your female co-workers to the same degree or differently than you do your male co-workers? Why do you have this impression? Please explain with examples of experiences you might have had on the job that have made you feel this way.
12) Recent statistics tell us that women continue to be very few in numbers in blue-collar work environments and jobs. Considering their minority status as women in blue-collar workplaces, what do you think it might be like to be a woman in your workplace environment, overall?
13) Do you like your job? Do you have reasons to support why you do or do not like your job?
14) Do you feel that your co-workers value you and the work that you do in the workplace?

15) Is there anything else you would like to share that might support this project's better understanding of women's experiences in blue-collar workplaces?

Appendix 4c: Semi-structured, guiding interview questions (participant identifies as neither male nor female, or identifies as any other gender identity)

Note: The aim of the semi-structured interview is to encourage honest and unrestricted conversation, which should enable narratives to emerge. The below questions are to be used as a guideline and need not necessarily be followed point by point, or in the exact same order as described below. Follow-up questions may be asked (as appropriate), as well as clarification questions or questions that seek elaboration as to a response. Participants will reserve the right to not answer any questions they are uncomfortable with, as can they choose to omit any answered questions from the interview.

1) If you do not gender identify as male or female, please can you describe how you do gender identify?
2) What is your job title?
3) Why did you want to be (or did you become) a _____ (*insert job title*). How did you start working this job? How long have you worked this job?
4) Can you describe a typical work day? What are some of your activities in a day at work?
5) Describe some of the characteristics you think suit the description of your job and its responsibilities?
6) Do you think that your female co-workers (those that you work with in an equal position of power) possess / have the stills that are necessary to do your job well? Can you describe these skills?
7) Is communication with your female co-workers easy? Is your communication with your male co-workers and female co-workers any different, or is this communication more or less the same? Please provide some examples.
8) Have you ever encountered any difficulties or even conflicts working with your female co-workers? What about your male co-workers? Please provide some examples.
9) If you have encountered any difficulties or even conflicts working with your female co-workers, are there any procedures or protocols to follow for managing these difficulties or conflicts?
10) If you have encountered any difficulties or even conflicts working with your female co-workers, do you perceive that any of these difficulties or conflicts have had anything to do with their being a woman? Please explain and provide examples.
11) As you go about an average day on the job, do you think that you treat your female co-workers the same or differently than you do your male co-workers? Why do you have this impression? Please explain with examples of experiences you might have had on the job that have made you feel this way.
12) As you go about an average day on the job, do you feel that you respect your female co-workers to the same degree or differently than you do your male co-workers? Why do you have this impression? Please explain with examples of experiences you might have had on the job that have made you feel this way.
13) Recent statistics tell us that women continue to be very few in numbers in blue-collar work environments and jobs. Considering their minority status as women in blue-collar workplaces, what do you think it might be like to be a woman in your workplace environment, overall?
14) Do you like your job? Do you have reasons to support why you do or do not like your job?

15) Do you feel that your co-workers value you and the work that you do in the workplace?
16) Considering your gender identity as _____ (*insert declared gender identity, if any*), do you feel that you are treated or communicated differently in the workplace by your co-workers than are those who identify as men or women, in reflection of your gender identity?
17) Is there anything else you would like to share that might support this project's better understanding of women's experiences in blue-collar workplaces?

Appendix 5: Participant consent form

Study Title:

Gender segregation in the workplace: Using an interdisciplinary critical discourse analysis to study the experience of blue-collar, working-class women in Sudbury, Ontario

Researcher:

Sarah de Blois
PhD Human Studies and Interdisciplinarity candidate, Laurentian University
sl_deblois@laurentian.ca

Faculty Supervisor:

Linda Ambrose, PhD
Professor of History, Laurentian University
lambrose@laurentian.ca

I understand:

- that the **purpose of this research** is to understand better what it is like to be a woman working in the mining industry, or what it is like to be a man working with women in the mining industry.
- the **researcher is a student** in the Human Studies and Interdisciplinarity PhD program at Laurentian University.
- I agree that *(choose one)*
    - as a woman, I will be interviewed about my work.
    - as a man, I will be interviewed about my work with women.
    - if I don't identify as a woman or man, I will be interviewed about my work with women.
    - all interviews will be done over the phone or by using a video conference tool (such as FaceTime or Skype).
- that this interview will take **approximately 1 hour** of my time.
- that I am **volunteering** to participate in the study and will not be paid.
- that if I feel uncomfortable with some or any of the questions, I can choose not to answer the questions and can stop the interview at any time. I can also contact **counseling services**, such as:
    - Sudbury Counselling Centre (705-524-9629)
    - Mental Health Helpline (toll free 1-866-531-2600)
    - Other options (ex: instant message chat, e-mail services) may be located via the Ontario Mental Health Helpline website at: http://www.mentalhealthhelpline.ca
- that **gender-specific support services** may also be contacted such as:
    - the Violence Against Women Intervention Program (705-524-9629)
    - the Voices for Women – Sudbury Sexual Assault Centre (705-671-5495)
    - the Sexual Health Clinic Sudbury (705-522-9200)
        - counselling by telephone is offered, as well as drop-in hours as follow:
            - Monday 8:30-11:30am & 1-3:30pm
            - Wednesday 1-4:30pm
            - Thursday 1-3:30pm

    - Friday 8:30am – 11:30am & 1-3:30pm
- that in the event of an **emergency**, I may visit Health Sciences North at any time, and may locate additional counseling and treatment services by visiting their webpage: https://www.hsnsudbury.ca/portalen/Programs-and-Services/Mental-Health-and-Addictions/Counselling-and-Treatment-Services
- **that in the event that I choose to drop out** of the study, I can ask that all information from my interview be destroyed.
- that all information I give will be treated as **confidential**.
- that **I will remain anonymous** at all stages of the research.
- that this **signed consent form will be kept** a locked box and only the researcher will have access to it. After **ten years**, it will be **destroyed**.
- that the researcher will keep the data secure using **Laurentian University's information system.**
- that with my **permission**, my interview will be **recorded**.
- that should I have any **questions, ethical issues or complaints** about the research itself, I may contact the researcher, Sarah de Blois via e-mail sl_deblois@laurentian.ca or the supervising faculty member Dr. Linda Ambrose (705-675-1151, ext. 4204 or toll-free 1-800-461-4030, ext. 4204), or an official not attached to the research team who works in the Laurentian University Research Office (705-675-1151 ext. 2436 or toll free 1-800-461-4030, ext. 2436).

I agree to participate in this study, and I have received a copy of the consent form.

Participant Name (please print): _____

Participant Signature: _____ Date:_____

Researcher's Signature: _____Date:_____

I agree to have this interview audio recorded. YES _____ NO_____

Participant Signature: _____ Date:_____

Researcher's Signature: _____Date:_____

I would like to be contacted at this e-mail address to get a copy of the full thesis:

E-mail address (please print): _____

Participant Signature: _____ Date:_____

Researcher's Signature: _____Date:_____

I would like to be invited by e-mail to a future public presentation about the research:

Participant Signature: _____ Date:_____

Researcher's Signature: _____Date:_____

Appendix 6: Overview of Participants

Participant Pseudonym	**Participant Gender (self-identified)**	**Type of work in mining performed by participant** (* = in a managerial / supervisor role)
Brooke	Woman	Health and Safety
Claire	Woman	Blue-collar*
Erin	Woman	Engineering
Hannah	Woman	Blue-collar
Jennifer	Woman	Blue-collar
Josie	Woman	Blue-collar
Kristine	Woman	Engineering
Karla	Woman	Blue-collar
Karen	Woman	Blue-collar
Lucy	Woman	Geology
Lara	Woman	Blue-collar*
Noel	Woman	Health and Safety
Nicole	Woman	Health and Safety*
Nora	Woman	Engineering
Nala	Woman	Engineering
Ruth	Woman	Blue-collar
Serena	Woman	Geology
Liane	Woman	Blue-collar
Lisa	Woman	Blue-collar*
Hellen	Woman	Engineering
Naomi	Woman	Engineering

Trish	Woman	Blue-collar
Tiffany	Woman	Blue-collar*
Victoria	Woman	Blue-collar
Art	Man	Blue-collar
Chris	Man	Blue-collar
David	Man	Blue-collar
Drew	Man	Blue-collar
Mark	Man	Blue-collar
Matt	Man	Blue-collar
Peter	Man	Blue-collar
Ron	Man	Blue-collar
Roman	Man	Blue-collar
Ryder	Man	Blue-collar
Will	Man	Blue-collar

Appendix 7: Participant statements about the male-domination of the mining industry

Pseudonym	**Gender**	**Participant statements**
Bryana	Woman	"Worker representation? I would say, like, 90 percent male and 10 percent female."
Claire	Woman	"That's what the big thing is, is that I'm like, one of two women that works in this field." "On occasion you might have a female on site?... But you don't cross paths with them much." "It's not a place a woman should be."
Erin	Woman	"I never thought I was gonna - I would work in an environment I guess that was that shifted [in terms of gender] in one direction. But I know at _____ (*company name*) when I was hired, I was [part of] the 6 percent female hire for the company…. There's probably like 5 or 6 women on site of maybe, like, 100 or something like that? It's pretty true to the number of 6 percent." "Underground today, umm, there may have been two women underground other than me today."
Hannah	Woman	"They're mostly men. Uh, there is one other female on my shift."
Jennifer	Woman	"It was mostly men, obviously." "[I work with] mostly men. But I do work uh, I don't work with them, but I do see them [women working underground], and I wanna say there's about 5?" "Definitely, uh, all eyes were on me going underground."

Josie	Woman	"Going into the industry was fine to be around men all day because that's where I enjoy to be, really." "You need kind of like, a competitive personality where like, 'I can be better than the man. I can do it. I can do it. I can do it.'"
Kristine	Woman	"I think I only worked with one other woman on that project. So there was (sic) almost no other women except for me." "There was a meeting happening there... There must have been about 150 men there and I was the only woman. And I could see people looking at me? And I remember thinking to myself, 'This is really weird.'" "I think a lot of women don't really go into the mining industry, like, from what I've seen."
Karla	Woman	[*Speaking about when she was enrolled in Common Core]:* "There were 2 other women and they got hired. Out of 24 of us, there were 3 women." [*Speaking about her crew at work underground*]: "We're the only 2 women that work underground…. There's not many of us at all."
Karen	Woman	"It's mostly men that I work with. Of all the projects that I've worked at, I was always the only female miner…. It didn't really bother me?... Just being the only female, you are a bit more the centre of attention sometimes. You get a lot of unwanted attention." "[This has] been known as a rumour - it's been hundreds of years of mining where they traditionally did not like women underground. You know, women were, you know, they always had the old-fashioned mentality where women should be in the kitchen cooking and raising the kids? So that's why they did not - they weren't too fond of having women underground." "I kind of heard wind that the superintendent kinda said, you know, 'Women shouldn't be underground' and all that kinda thing. So ah, it made me upset." "There is still discrimination against women underground."

Lucy	Woman	"My personal experience, I've had a lot of men doubt abilities from women." "The way people address me is not gonna be the same as how they address somebody with the exact same experience and age, but male…. Or if there's questions, they'll call on the males. So it's like, it's very - it's still a thing. Yeah."
Lara	Woman	"When I'm [a woman] in this environment, then they're all gonna look at me. So you realize that's not appropriate and just back off. Right?"
Noel	Woman	"Being a woman, I stood out."
Nicole	Woman	"I'd say 98 percent are ah, men in the field." [*Speaking about who she reports to]:* "Every one of 'em (sic) are men." "When I walk into a room where there's a meeting, it's 90 - like 99 percent men. Like, I don't - there's not a whole lotta women uh, unless you're going into a like, a Project Management kind of meeting? Then there's a lot of women."
Nora	Woman	"[I work with] very much mostly men." "We were lucky enough to have a very progressive leader who happened to be female…. It was very male-dominated but we had a bit of additional support I guess you could call it? Uh, but in terms of the actual workplace, being onsite, it was largely male and I don't know. It wasn't very often I was in a room where there was another female, umm, there with me…. Definitely uh, very very male-dominated. It was rare to have another female." "Competition [in the workplace], when it does occur, stems from the males who don't think I deserve umm, to be where I am, and think that I'm only there because I'm a female." "[Mining is] very very male-dominated."

Ruth	Woman	"It's a male-dominated field." "The men didn't want you there. It was not - you know, they felt it was not a role for females. That you're taking a man's job. Trying to support his family. They didn't see that if you're single, you're trying to support yourself as well." "For most of my career [in mining], I was the only woman." "I don't see other women underground. Oh, well, actually never. I'm the only woman underground on my shift."
Serena	Woman	[*Speaking about who she works with*]: "We're two females. The rest are all men…. Geologists and then all the contractors, there's about like, 80 of them? And they're all men."
Liane	Woman	"I've worked with a few of the women underground over the years. Not many. I'm the only one underground at ____ [*named mine site]*." "It's hard. I mean, everything is harder for us [as women], right?" [*Speaking about the culture of mining*]: "It's a man's world."
Lisa	Woman	"Within our company, we're a small company. There's only one woman [aside from me]. But she's [an] admin." "I'm the only - the only female. I've never worked with a woman on the drill." "After I was hired, my boss told me that ah, they kind of hired me as a joke. That they didn't think I [because I am a woman], was going to last." "Like yesterday ah, I seen (sic) one other woman like, set to go underground. And I'm not even sure she came underground. She left the headframe. There were only 2 of us for sure and I think probably, well 100 guys, I would say?" [*Speaking about the culture of mining*]: "It's a man's world."

Hellen	Woman	"Line-up was, you would stand in the room with your entire crew. So there might be 10 or 12 other people in the room. And of course, I was always the only woman. At the mine I worked at, we had no women operators. So when I was there, I was the only woman operator. Uh, so yeah, it would be me standing amongst a bunch of men."
Naomi	Woman	[*Speaking about who she works with]*: "Umm, so for my plant, umm, there's just me. There was one female Operator umm, but she doesn't work there anymore…. It's about 50 people in all, and other than the janitor who's also female, there's me."
Nala	Woman	"One thing that was always burning inside me was that as a woman, I was not accepted to be in the field, and I wanted to be there." "When I'm in a room sitting with like, senior men, they definitely mention something about my gender. Like, 'you're the only woman.' They definitely would mention, like, or highlight it in a way."
Trish	Woman	"It's all men on my crew. All men on my crew. I'm the only girl. I'm the only 'Sheila' as they call me. Or Princess. I've been called that a few times."
Tiffany	Woman	"As much as we like to think umm, women are an integrated part of the [mining] workforce, which they are, they are still treated very differently." [*Speaking about how she felt discriminated against as a woman when going through the hiring process in the mining industry]*: "I was being told that there was a hiring freeze. But I know for a fact that males were being hired at the time. My cousin was in fact hired at the time." [*Speaking generally about the limited women who work at her mine site]:* "Let me think here. We have one female miner and 3 that work in warehousing underground. That's it for underground workers. We do have umm, myself as a supervisor? And we do have some Engineering type roles? So survey and vent tech people that are female."

Victoria	Woman	"We haven't had a woman underground in ah, oh my God - a new woman underground in probably 12 years, so yeah. Like, I was hired 15 years ago. 2 girls have been hired since me." "It's been a long time since they've been girls down there and it would be nice to have more." "You're going into a man's world. You adapt. They don't adapt to you."
Art	Male	[*Addressing the question: "Have you ever had the experience of working with women in this job [in mining] specifically?"*]: "A little bit. Not too much. Not directly. But umm, we have had - some would be on the same shift as us, so we would cross paths occasionally"
Chris	Male	[*Addressing the question: "Have you worked with many women overall in your 25 years? [in mining"?]:* "Uh, not hands on. Like uh, just this last 2 years has been the most [women] I've seen [working in mining]. In the last 2 years, like you know, my whole career, like ah, you know, you know, we got a contractor working underground now. She takes care of the water sprays. She's doing a good job. Umm uh, like, the other crew's got a woman. We talk to her and you know. Uh, but over the last, like, it wasn't very common over my whole career so far."
David	Male	*[Speaking about how in his 14 years employed in the mining industry, he's worked with only one woman underground by answering the question: "Did you have women on your crew when you started [in mining] 14 years ago?"]:* "She's the first one. The first and only one."
Drew	Male	[*Speaking about the lesser number of women working in mining when in contrast to men]*: "We have 3 women on our shifts."

Mark	Male	*[Speaking about how in his 32 years of employment on and off working in the mining industry, he's worked with only two women, and indirectly by answering the question: "Have you worked with very many women in the time that you've been in the industry?"*]: "Two. Not - I worked like, with one. She was on my crew, but I didn't work directly with her." *[Speaking about those he's worked with in mining]*: "It's all men. Apart from those two [women]"
Matt	Male	[*Alluding to how few women work alongside him in the mining industry by addressing the question: "Have you had much experience working with women?"*]: "Ah, I'm trying to think here. I worked with one once when I was with _____ *[named mine company]*. And umm, right now when I go in right now, one of the supervisors is actually a woman."
Peter	Male	"It's still a male-dominated industry."
Ron	Male	*[Speaking about how seeing a woman underground can be surprising since it isn't common]*: "You know, you didn't see a woman underground." [*Speaking about how when a woman rides the cage to get underground, it can be surprising for the men who otherwise are the majority]*: "There's so few women that it's - it's like a shock overnight. You know? 'There's a woman. There's a woman on the cage!'"
Roman	Male	*[Speaking about the lesser number of women in the specific role of operators, underground, as compared to men in this role]*: "25 percent of the Operators would have been girls."
Ryder	Male	"It's surprising there aren't more women underground."

Will	Male	[*Speaking about how in his 12 years working underground in mining, he's rarely worked with women]*: "I don't have a whole lot of experience working with women." "Well I would say honestly, I'd bet you 98.5 percent of the people working at [the] mine [I work at] are men. If not more. Like, I think we only have like, 4 women that aren't working in the offices that actually work underground. Like 4. Out of 4 entire crews, millwrights, electricians, welders, miners, mine department."