

Exploring Gender Inclusion





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Executive Summary

The Mining Industry Human Resources Council (MiHR) has undertaken three diversity studies to identify employment barriers and strategies to increase workforce engagement of women, Aboriginal peoples and immigrants. Building on the findings of previous research on women in the sector, this study examined gendered barriers as understood and experienced by both men and women.

Today, women represent 17 per cent of the Canadian mining workforce, a marginal increase from the 14 per cent representation that was seen a decade ago - but still below that in other resource-based industries. Despite increased industry awareness and specific initiatives geared at engaging more women into the sector, the gender gap remains.

Attracting and retaining more women in the mining industry will require a combination of collaborative solutions—from encouraging young girls to pursue math and science studies, to building a gender-inclusive awareness of the industry, to appointing more women to senior leadership and board positions. To better engage women in the sector, this research explored how workplace culture impacts men and women in mining, and the gendered aspects of career development and trajectories.

Key Findings

This research gathered insight from previous research and proven practices, a survey and interviews with mining employees, and consultations with industry stakeholders. The following summarizes key research findings from the survey and interview data analysis, as reported by the research participants¹.

Mining workplaces are perceived and experienced differently by men and women.

In general, mining workers described their workplaces as having a respectful and teamoriented atmosphere. However, there were telling differences in perspective between men and women. Women had less positive experiences than men—and were more likely to report seeing put-downs, a lack of a team atmosphere, and harassment. Another difference in perspective between men and women suggests that the mining workplace culture is "gendered." Women respondents were almost twice as likely as men (44 per cent vs. 23 per cent) to report some difficulty in adapting to mining workplace culture. The women survey respondents gave lower ratings than the men respondents to questions about how comfortable they feel in their workplace, i.e. how good a "fit" the industry is for them. The majority of all the survey respondents – men and women – report that it is "often" or "usually" harder for women to succeed in their workplace.

Work-life integration is a challenge for everyone.

The ability to integrate work with personal and family demands continues to be a challenge to women who want to work in the sector—particularly in remote



locations and FIFO assignments, the ability to meet the needs of a young family is a concern. Within and beyond the mining sector, there is growing recognition that these issues are not "women's issues" – men are taking on a larger share of the family responsibilities outside of work and Millennials have an expectation that they will have the flexibility to have fulfilling work and personal lives. Employers that want to attract and retain talent are finding ways to address these interests.

Workplace culture perceptions impact recruitment and retention.

To retain talent, employers will benefit from looking at workplace cultures and career trajectories through a "gender lens." The women in this research sample were more likely than men to expect to leave the sector within the next five years; more than one-third of the women said it was "likely" or "very likely." Additionally, survey respondents who are less comfortable in their current workplace are also more likely to expect to leave the sector within the next five years.

Perspectives about the workplace and career opportunities matter to an industry that seeks to attract and retain talent. To attract talent, it is helpful to have current workers who will be avid champions of the industry, but the research revealed some gaps in this regard. The women in the survey are positive about the industry, but not as likely to recommend it for other women. People who do not find the culture to be a "good fit" or their workplace to be welcoming and respectful are also not as likely to recommend it to people "like them" – i.e., close friends or family.

Accessing mining networks remains a barrier to greater workforce diversity.

Finding out about job openings and career opportunities in mining can also be a challenge. Having a personal network appears to be critically important – yet women highlighted that it is difficult for them to access networks in the industry.

Workplace harassment is harming mining workers.

Overall, the survey results indicated that in many workplaces, harassment incidences are infrequent - more than half of the survey respondents reported that they "never" or "almost never" see harassment, bullying or violence in their workplace. Nonetheless, one in five "see" it once a month or more, and one in eight "experience" it once a month or more. There was a significant difference in the reported experience of men and women. Almost a third of women (32 per cent) said that they have experienced harassment, bullying or violence in their workplace in the last five years; less than half as many men (16 per cent) said the same. Among the women survey respondents who work in field settings, almost one in five (18 per cent) report that they have experienced harassment, bullying or violence in their workplace(s) monthly, weekly or daily in the past five years.



Recommendations

The research findings suggest that with respect to gender inclusive workplaces, the mining industry is a sector in transition—while many barriers to the inclusion of women are gradually being lowered, progress is slow and inconsistent across the industry. Although most of the research participants report that times are changing, nonetheless many workplaces are still characterized as "macho" and an "old boys' club," and career paths remain relatively traditional with subtle dynamics that make it difficult for women to advance.

Based on these research findings, and consistent with several suggestions flowing from MiHR's previous research, the following evidence-based recommendations are proposed.

✓ Enhancing workplace culture

- Equip managers and employees with the skills required to create inclusive workplaces.
- Design industry-specific strategies to support work-life integration.
- Accelerate the momentum toward greater gender inclusion by changing the industry narrative.

✓ Building successful career paths

- Develop information materials as well as partnerships with educational institutions and other stakeholders to provide job seekers with powerful information regarding opportunities.
- Create alternative career paths that can build broad skill sets while accommodating individual differences
- Address critical turnover risk for women working in the sector.
- Seize the opportunity presented by the introduction of "comply or explain" disclosure regulations regarding women's representation at senior levels of publicly traded companies.

The employers in Canada's mining and minerals sector are not standing still on these challenges. Just under half of the survey respondents reported that their employer "often" or "always" takes action to encourage more women in the workplace. Industry initiatives led by MiHR and other organizations are underway, drawing upon approaches consistent with the findings of this research. Examples of positive actions occurring at the local level can be found in this research project's compendium of case studies and related learnings – *Strengthening Mining's Talent Alloy: Practices in Inclusion*.





Background and Introduction

The Mining Industry Human Resources Council (MiHR) undertakes initiatives to help the sector address talent gaps and skills shortages.

In support of these efforts, a suite of three related diversity studies has been developed to provide insight into the current employment barriers that specific labour supply groups face within the mining sector – namely, women, immigrants and Aboriginal peoples – and to generate industry-specific strategies for greater engagement.

Building on the findings of MiHR's previous body of research, *Strengthening Mining's Talent Alloy – Exploring Gender Inclusion* investigates gendered barriers, opportunities and experiences found in the mining sector, as understood and experienced by both men and women. Its purpose is to support industry stakeholders' increased labour market understanding, specifically of the impacts of gender on inclusion in mining.

Women in Mining

Today, women comprise only 17 per cent of the total national mining workforce (MiHR, 2015, p.36).

Women in the Mining Workforce

In MiHR's 2015 *National Employer LMI Survey*, employers indicated that women were a priority recruitment group to meet their overall hiring needs (MiHR, 2015, p. 33). Despite this, women continue to be underrepresented in the mining workforce. Today, women comprise only 17 per cent of the total national mining workforce (MiHR, 2015, p.36). This is a marginal increase from the 14 per cent representation that was seen a decade earlier (MITAC, 2005, p. 46), it is still below that in other resource-based industries and well below the 48 per cent seen in the total workforce. See figure 1. (Statistics Canada, 2014)²

In some occupational categories, women represent less than 5 per cent of mining workers (MiHR, 2015, p. 36). Trades and production occupations have the lowest representation of women, at 4 per cent, while women represent over half of the workforce in "support workers" and "human resources and financial" occupations (MiHR, 2015 p. 36). Importantly, the mining sector still lags behind some of the other resource sectors, suggesting that there is an opportunity to increase women's representation in the industry.

60 50 40 30 20 10 Utilities National Mining, extraction, Forestry Fishing. Oil and gas support services, and hunting, labour force and mineral logging and trapping production

Figure 1: Representation of women in natural resource industries, 2012 (percentages of workforce)

Source: Mining Industry Human Resources Council, 2013; Statistics Canada, 2012

Why so few women?

Within the Industry, there is a growing interest in uncovering the reasons for the persistent lower representation of women within the mining workforce. Previous industry and academic efforts have identified industry-specific workforce barriers that impact women's engagement. In summary, the research has indicated that workforce barriers experienced by women are generally comprised of the following:

- A lack of career awareness or negative perceptions about careers in mining
- A lack of supply of qualified women
- Inflexible workplace practices (e.g. scheduling, remote work, FIFO)
- A lack of women in senior leadership positions, resulting in fewer role models and mentors
- Problematic workplace culture
- · A lack of opportunity for career advancement

(MiHR, 2013; WIM and MiHR, 2010; Hughes, 2012).

Attracting and retaining more women in the mining industry will require a combination of solutions to mitigate these barriers—from encouraging young girls to pursue math and science studies, to building a gender-inclusive awareness of the industry, to appointing more qualified women to senior leadership and board positions. The industry recognizes that to increase the presence of women in their workforce, employers must tap into the talents of women and create places where they can do their best work.

In support of this effort, this study focuses on identifying how mining workplace cultures either support or create further barriers to greater gender diversity. Secondly, this research looks at how workforce barriers manifest at different stages along career pathways, taking a deeper look at how careers are shaped in the industry and how mining workplace culture impacts gender diversity.

Workplace Culture

To understand the current representation of women in the Canadian mining industry it is critical to recognize the historical context of women's access to employment within the mining sector. Many current workers started their careers at a time when women were prohibited or excluded from mining workplaces; in fact, until 1978 the Mining Act in Ontario prohibited women from working underground, with only very limited exceptions (Keck & Powell, 2000). Although significant changes in mining workplaces have occurred, the Canadian mining industry and its culture is shaped by historical context.

What is Gender?

Gender is a broader concept than a person's biological sex. Gender includes "how one identifies as male or female, both or neither (gender identity) as well as how others perceive it."

https://www.genderspectrum.org

A gender-inclusive workplace is one where traditional definitions of "masculine" and "feminine" do not influence decision making about people, and where subtle expectations and "micro-inequities" in processes are questioned and resolved.

The umbrella research question, then, is to what extent today is the mining workplace culture equally welcoming to the full diversity of talent that the sector needs to attract? For this report, the focus is put more sharply on those characteristics of the workplace culture that might create barriers related to gender.

Many studies have found that the workplace culture/workplace climate in the mining sector is not gender inclusive. Workplace culture was found to have a significant impact on the retention of women in the mining sector and also in related professions such as engineering (Fouad & Singh, 2011; WIM and MiHR, 2010; Hughes, 2012; Minerals Council of Australia, 2005). While the general view is that blatant examples of discrimination have been reduced in this industry, it is also commonly held that more subtle influences, such as micro-inequities or unconscious biases, continue to pose challenges to creating fully inclusive workplaces (Hughes, 2012).



Employers noted "workplace culture" and "gender-friendly workplaces and equipment" as being particularly important factors to facilitate women's employment in the industry (MiHR, 2015, p. 37). In contrast, the 2010 Ramp-Up report found that most mining employers did not perceive workplace culture as a barrier to women's employment in mining (WIM and MiHR, 2010, p. 15). This indicates a potential shift in employers' awareness of workplace culture as a gender barrier to employment in the sector.

Career Pathways

Career pathways and trajectories vary greatly across industries, within organizations and over the course of time. Developing a more robust understanding of mining career path development is critical to identifying workforce diversity barriers and developing targeted solutions to reduce barriers at different career stages.

Many Canadian industries face challenges in attracting and retaining women, particularly in traditionally male-dominated fields such as skilled trades and production occupations, and professions in science, engineering, and technology. Research has found that women often leave such careers for reasons such as the following:

- The hostility of the workplace culture drives them out:
- Isolation of being the only woman on their team;
- Disconnect from the work rhythms of science and engineering careers and the behaviours that are rewarded in these careers;
- Extreme nature of the jobs with long work weeks and travel schedules; and
- The mystery of advancement—women are isolated, lack mentors and are unable to navigate the pathways to progress in their career.

(Hewlett, Luce, & Servon, 2008, p. 23 – as quoted in Hughes, 2012).



In addition, there is growing interest in the representation of women at senior levels in mining companies. For many, this is driven by the recent introduction of "comply or explain" disclosure requirements by securities regulators in seven provinces and two territories. Publicly traded companies are required to report on their gender diversity policies and the representation of women in board or senior executive positions. In May 2015, the Financial Post published a summary of the representation of women board members in the top 25 companies of the S&P/TSX Materials Index (by market capitalization)—the average representation was 17.8 per cent (Financial Post, 2015).

The current program of research has provided an opportunity to explore these career dynamics further, with a view to provide greater insight on the career paths and trajectories of workers. This insight will support employers and industry stakeholders in targeted actions to reduce engagement barriers.



Research Objectives and Methodology

To address gendered barriers and increase the representation of women in mining, this study investigated gender and mining workplace culture and the career development pathways of men and women in the sector. The findings from this work will contribute to a national industry consultation on workforce diversity and the development of industry-wide inclusion strategies.

Research Objectives

Strengthening Mining's Talent Alloy – Exploring Gender Inclusion had three primary research objectives:

- 1. Investigate Workplace Culture from the perspective of, and impacts on, both men and women, to generate increased intelligence on strategies that address non-inclusive workplace cultures for workers of any gender.
- Examination of Career Development Pathways, including an identification of entry and exit points and the differences between women's and men's occupations and levels of leadership.
- 3. Identification of *Gender Diversity Strategies* that are being deployed within the mining industry, highlighting promising inclusion practices and providing insight for employers and other industry stakeholders to develop their own strategies for greater gender inclusion³.



Methodology

This study combined both secondary and primary research elements. The secondary research included an environmental scan of industry-relevant resources and literature on gender-inclusive policies, programs and activities. The primary research included an online survey and interviews with mining workers and industry representatives. The survey investigated workplace culture and examined career development pathways using a career pathway analysis model (Hughes, 2012) to create standardized career description for each participant. The findings from the secondary and primary research were reviewed and validated by a group of industry stakeholders during an in-person validation session.

The research approach was tailored to the three key research objectives, as summarized in the following table.

Table 1: Research Topics, Methods and Participants								
Topic	Method	Research Participants						
1. Mining Workplace Culture	Online survey	Individuals who are currently or were formerly (within the past five years) employed in the Canadian mining and minerals sector (which may include sub-contractors with direct and significant experiences working in mining). The 280 respondents included 114 women and 166 men.						
	In-depth telephone interviews to explore the experiences of women and men	Nine individuals drawn from the survey respondents (five women, three men and one person who selected "other" in response to the gender question (not self-identifying as either man or woman).						
2. Career Paths and Trajectories	Online survey	As above: 280 people (114 women and 166 men) with current or recent work experience in the Canadian mining sector						
	In-depth telephone interviews to explore the experiences of women and men	Eleven individuals drawn from the survey respondents (six women and five men)						
3. Gender Inclusion	Review of secondary literature	n/a						
in Mining Practices	In-depth telephone interviews for case studies	Representatives of promising practice employers and agencies / associations that liaise closely with workers and employers in the mining sector						

Research methods⁴ and protocols were reviewed and approved through the MiHR ethics review and approval process.

Profile of Research Participants

Survey Sample

Two-hundred and eighty-one individuals provided full responses to the online survey. All survey respondents were asked to identify their gender, and the survey respondents were able to indicate man, woman or other. One individual responded "other" to the gender question,

resulting in a usable survey data set (for the purpose of statistical analysis) of 280 people. To ensure that this respondent was still included within the research sample they were contacted and agreed to participate in a telephone interview as part of the qualitative research on workplace culture.

The survey was open to people currently employed in the industry as well as those "recent leavers" who had worked in the industry within the last five years. Within the sample, 90 per cent were currently employed in the mining sector, and 10 per cent were "recent leavers."

Key demographic characteristics of the complete sample as well as breakdowns by gender are presented in the Appendix. In summary:



Gender: 59 per cent of the survey respondents were men; 41 per cent were women.

Occupation:

In their current or most recent job, survey respondents reported being mostly professionals in technical/scientific fields (21 per cent), middle or line management/supervisors (18 per cent) or production/maintenance (16 per cent). There was a clear difference between men and women. Almost half (45 per cent) of the men were working in production/maintenance positions, or in middle and line management/supervisory positions, while almost half (48 per cent) of the women respondents worked in professional roles, whether technical/scientific or in other fields such as HR, legal, finance, etc. (see Appendix).

Employer: A full two-thirds of the sample were working in large mining companies,

defined as having more than 500 employees.

Location: Respondents' work locations were drawn from eleven provinces or

territories, with BC accounting for 43 per cent of the overall sample.

Age: 75 per cent of the participants were between 25 and 54 years of age (evenly

distributed). Although over one-quarter of the men were aged 55 or over, there was an almost complete absence of women in that age category.

(See Appendix.)

Ethnic background:

Aboriginal people accounted for 12 per cent of the survey sample; slightly over 6 per cent of the respondents considered themselves to be members of a visible minority; and approximately 11 per cent of the respondents were immigrants to Canada.

Family status:

Most respondents (76 per cent) were married or in a common-law relationship. Women respondents were more likely than men to have no children; men were more likely than women to have children who did not live with them—this is thought to be due to the larger number of men over age 55, whose children have likely left home.

Education:

The survey respondents were well-educated, with two-thirds having completed college or university. There was a significant difference between the women and the men respondents. Twice as many women as men (75 per cent vs. 37 per cent) had completed a university education. Five times as many men as women (44 per cent vs. 9 per cent) reported their highest level of education was apprenticeship/trades school, high school or less.

Years in the industry:

About half of the respondents had less than ten years in the industry. Just over one-fifth of the respondents (22 per cent) reported they have been in the industry more than 25 years. Women respondents were more than twice as likely⁵ as men (42 per cent vs. 20 per cent) to have been in the industry less than five years, and men five times as likely as women to have had a career of more than 25 years (32 per cent vs. 6 per cent) (See Appendix).

Interviews

Twenty survey respondents participated in follow-up interviews, eleven were women, eight were men and one self-identified as "other." Two of the interviewees had recently left the industry. The interviewees had a range of tenure in the industry, from less than one year to more than 25 years. The men were mostly in operations roles such as equipment operators. The women had a variety of roles, including titles such as geologist, heavy equipment operator, fuel or haul truck driver, engineer and HR advisor. They were drawn from various locations across the country.

Limitations and assessment of the survey sample

This research process involved a voluntary survey, not a census. The survey sample differs in important ways from the overall workforce in Canada's mining and minerals sector. For example, three-quarters of the sample of women completed a university degree; this contrasts with data reported by MiHR showing that 30 per cent of women in the sector are university educated. Occupation categories such as skilled trades and maintenance/production are under-represented in the survey sample. Because of these differences, and the voluntary nature of the research sampling, it is important to be cautious in generalizing the results to the full mining workforce.



Findings

This research provides a glimpse into the day-to-day experiences of men and women, as they work in the mining sector. The highlighted findings explore the gender-relevant characteristics of workplace culture to support the identification of potential courses of action for fostering a more inclusive industry. Secondly, an examination of career trajectories, including exploration of entry and exit points and the factors that shape career experiences and intentions shine light on the workforce barriers experienced at different career stages.

Workplace Culture - Findings at a Glance

- Overall, the majority of survey respondents reported that their workplaces are
 characterized by a respectful atmosphere and a sense of teamwork. Although the
 majority of women respondents rated their workplace positively, their experiences
 were less positive than men. Women survey respondents were more likely than men
 to report experiencing the characteristics of an inhospitable workplace—with
 put-downs, a lack of a team atmosphere, and harassment.
- Employers and unions are generally seen as taking action to eliminate harassment and encourage respectful workplaces.
- Among the women respondents in this survey sample, almost one in three said that
 they have experienced harassment, bullying or violence in their workplace; less than
 half as many men (one in six) said the same. Among those women who were working
 in field settings, 18 per cent reported that they have these experiences about once a
 month or more.
- Interviewees reported that co-workers will sometimes hold women to a higher standard of performance; women feel the pressure to perform.
- The ability to integrate work with personal and family demands continues to be a challenge for women who want to work in the sector—particularly in remote locations, the ability to meet the needs of a young family is a concern.

- Work schedules in field locations are particularly challenging for employees who are looking for greater flexibility; almost four in ten survey respondents in field-based work locations reported that they were able to adapt their work schedule "never" or "almost never."
- The majority of respondents indicated that they were able to integrate easily into the mining sector. However, women respondents were almost twice as likely as men (44 per cent vs. 23 per cent) to report some difficulty in adapting to the mining culture.
- The women survey respondents gave lower ratings than men respondents to questions about how comfortable they feel in their workplace, i.e. how good a "fit" the industry is for them.
- Among the survey respondents, certain characteristics are related to a person's likelihood to recommend the industry to "a close friend/relative who is similar to me." First, gender matters men are more likely to recommend the industry to "a man who is similar to me," than women are to recommend it to "a woman who is similar to me." Second, people who generally feel more comfortable in their workplace are more likely to recommend the industry to someone who is similar to them. Third, individuals who characterize their workplace as respectful are also more likely to recommend the mining industry to someone who is similar to them.

Workplace Culture Findings

One of the key objectives of the current research project has been to explore the nature of mining workplace culture through a "gender lens."

Drawing upon themes identified in previous research, the current project explored workplace cultures under the following dimensions:

- Welcoming, inclusive and respectful workplaces;
- Work-life integration (balance); and
- "Fit" with the workplace culture.



Is the workplace respectful and welcoming?

An appropriate starting point for an examination of workplace cultures is the extent to which they are experienced as being "respectful and welcoming." Both the online survey and the interviews provide insights from current/recent workers in the industry.

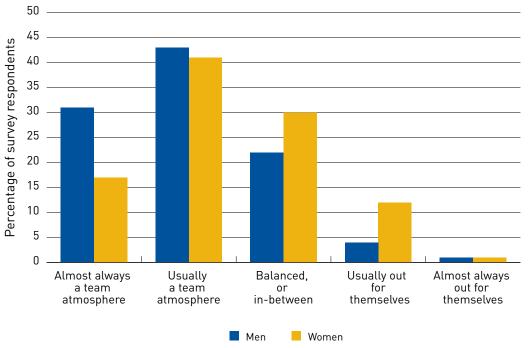
Overall, the majority of survey respondents report that their workplaces are characterized by a respectful atmosphere and a sense of teamwork—either "always" or "usually."



Teamwork

The majority of survey respondents (both men and women) – gave high marks to their workplace for its sense of teamwork. Nonetheless, there was a significant difference¹ in the perspectives of men and women. Figure 2 reveals that women were <u>less</u> likely to describe it as "almost always a team atmosphere" (31 per cent vs. 16 per cent) and were <u>more</u> likely than men to report that in their workplace "usually everyone is out for themselves" [13 per cent vs. 4 per cent); this difference was not affected by whether they were working at a field site or in a corporate office.

Figure 2: Perspectives on the workplace – teamwork



¹ Statistically significant at p<.05

Respectful workplace

As shown in Figure 3, women were more likely⁵ than men to report that they "usually" or "always" see put-downs or negative behaviours (18 per cent vs. 5 per cent). There was also a difference between field and corporate worksites; these behaviours were seen to be more common in field locations such as mine sites or camps. Whether in the field or in the office, women in the survey responded that they see disrespectful behaviours more frequently than men.

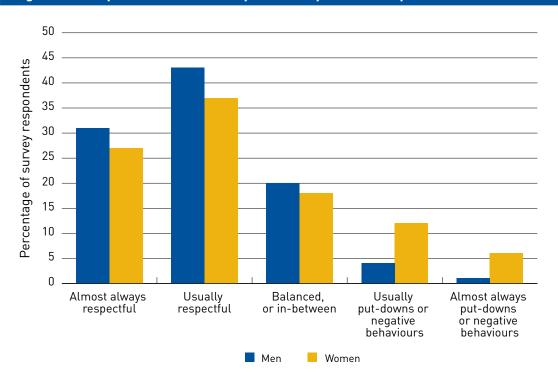


Figure 3: Perspectives on the workplace - respectful workplace

Welcoming and inclusive

According to interviewees, greater diversity in the workplace is making a difference — as the numbers of women, Aboriginal peoples and immigrants grow, people tend to see their workplaces as being more welcoming.

I find that overall, it is accepting. It varies across countries (Canada vs. Australia, for example), across company, in different mine sites. It has changed since I started—there are more women visible in various sectors—including engineering/technical fields, and out at the pit.

(Woman interviewee; technical position in the field)



When asked how often they see someone at work "go out of their way to include someone who is a little bit different," the most common survey response from both men and women was "less than once a month." Looking at gender more specifically, again men and women had a slightly different perspective—about one in five men reported seeing this welcoming behaviour "about once a week" whereas almost the same number of women report seeing it "never" or "almost never" (see Figure 4).

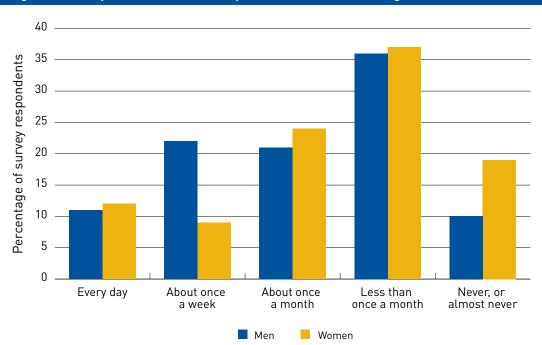


Figure 4: Perspectives on the workplace – others welcoming those who are different

This is important to organizations because being explicit and intentional about inclusion is a core difference between "tolerating" difference and "welcoming" or leveraging it. Treating everyone the same, or ignoring differences, has been found to be ineffective for achieving the benefits that are possible through having a diverse workforce. Often referred to as "The Platinum Rule," as opposed to the Golden Rule, the call to individuals working with diverse groups is to "Treat others as *they* would want to be treated."

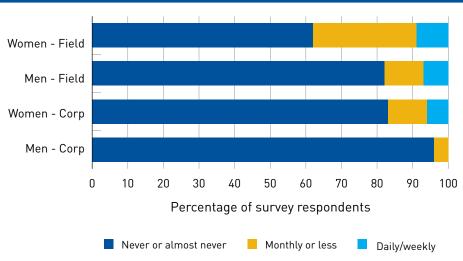
Is there harassment?

Survey respondents and interviewees were also asked about harassment, bullying and violence. The survey did not provide a definition of any of these terms, leaving it to the respondent to report their experience based on their own perspective.

Overall, the survey results indicate that in many workplaces, incidences are infrequent – more than half of the survey respondents reported that they "never" or "almost never" see harassment, bullying or violence in their workplace. Nonetheless, one in five see it

once a month or more, and one in eight *experience* it once a month or more. There was a significant difference⁵ in the reported experience of men and women. Almost a third of women (32 per cent) said that they have experienced harassment, bullying or violence in their workplace in the last five years; less than half as many men (16 per cent) said the same. Analyzing the responses separately based on whether respondents currently work in a corporate setting or in a field setting reveals an even starker contrast, as can be seen in Figure 5.





Within this survey sample, women who work in field settings were significantly more likely¹ to report having experienced harassment, bullying or violence. Almost four in ten report having had these experiences in their workplace, with almost one in five (18 per cent) reporting that they have these experiences about once a month or more in their workplace(s) in the last five years.

To explore these issues further, interviewees were asked to provide their insights. There was a difference of opinion with regard to how often these behaviours are meant as good-natured teasing that happens to cross the line, or are intentionally demeaning toward women or others.

Between miners, there is lots of teasing—sometimes it can become too much and you have to draw the line. Some get offended with what you say—e.g. you're not a good operator. This can be viewed as harassment or bullying. Most people don't do it to that effect—it is mostly teasing.

(Man interviewee; technical position in the field)

There is definitely a lot of sexual discrimination towards women, but I don't think that is specific to the mining industry. I believe it is still a flaw in our society in all non-traditional female occupations.

(Woman interviewee; technical position in the field)

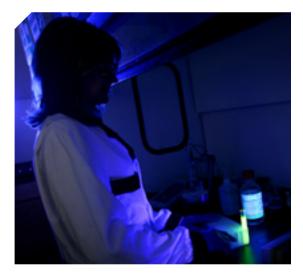
Employers and unions are making efforts in this regard. Seventy per cent of the survey respondents reported that they "often" or "always" see their employer taking action to encourage a respectful, welcoming workplace.

Not all workplaces have effective systems in place to address harassment or bullying. Women, in particular, revealed that they chose to "suck it up" or not raise the issue, because they feared being labelled a complainer, or as someone who couldn't take it. Some commented that the close-knit nature of the mining industry made them particularly cautious about

maintaining a good reputation. One woman's story portrays the impact:

I left my previous organization (after seven years) because of bullying. I was a star employee. A new guy came in and he undermined me. Everyone saw what was going on, but there were no proper systems in place. When I left, they asked me to sign something promising not to sue them. I dropped the whole issue because I wanted to protect my reputation.

(Woman interviewee; technical role)



In summary, the overall trends from the survey responses and the interviews suggest that many people find the culture of mining workplaces to be generally inclusive. However, there remains a significant gender gap, with the sector still seen as a strongly male-dominated culture, and the workplace being seen as less inclusive towards women.

Work-Life Integration

A widely acknowledged barrier for women in many workplaces is the set of challenges that are characterized as "work-life balance" or often "work-life integration." National research continues to show that Canadian women carry a greater degree of responsibility than do their male spouses for child care, elder care and other family responsibilities (Marshall, 2011).

Not surprisingly, survey respondents reported that it is much easier in corporate workplaces (vs. field worksites) to adjust their work schedule to better meet their own needs, or those of their family/community, as shown in Figure 6.

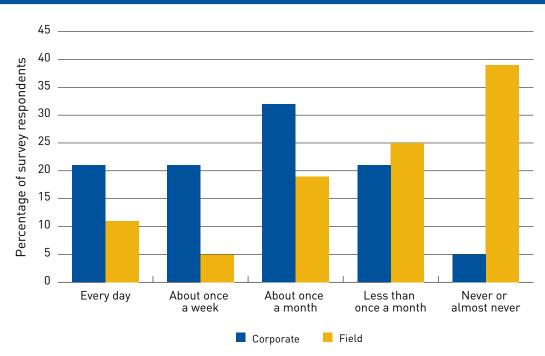


Figure 6: Ability to adjust work schedule, in corporate vs. field work settings

Time away from home, lack of support in rural or remote locations, inadequate access to daycare, and similar practical issues were mentioned by both men and women interviewees. Some interviewees also highlighted the different family demands on women and men.

When you're farther from civilization, there is more travel. With young families, it is almost impossible for women. That is still easier for a man, even though it shouldn't be.

(Man interviewee; technical position in the field)

Many women in mining are married to men in the sector—for some families, the woman wants to work, but can't find daycare.

(Woman interviewee; technical position in the field)

I graduated in a class with five women—two of them are not currently working in mining because of having children—one was at a FIFO site, very talented, progressing in her career prior to having children.

(Woman interviewee; technical position in the field)

The mining work schedules in field locations are particularly challenging for employees who are looking for greater flexibility; almost four in ten survey respondents in field-based work locations reported that they were able to adapt their work schedule "never" or "almost never." Work-life integration is increasingly being recognized as an issue that is relevant to both women and men, particularly with the entrance of the "Millennial generation" into the workplace.

I can see subtle shifts in other workplaces—they're being more sensitive to family needs, but not in mining.

(Woman interviewee; technical position in the field)

Many employers in other sectors have addressed this challenge through strategies such as: providing a number of paid "personal leave" days, supporting employees in working from home when feasible, offering flexible hours to accommodate personal commitments, providing access to emergency caregivers or other supports, and creating a culture where men are also seen as active parents. In summary, the results of this research confirm that the ability to integrate work with personal and family demands continues to be a challenge for women who want to work in the sector.



Do you have to be tough?

Just over half (53 per cent) of the survey respondents agreed or strongly agreed with the statement "you've got to be tough to work in mining." While such a workplace can pose an exciting challenge to some career seekers, it will discourage others. Importantly, Laplonge (2014) has emphasized that the gendered nature of the Australian mining industry has impacts far beyond the representation of women in the sector's workforce; he has highlighted that it also affects production, morale and safety.

Is the culture a good "fit"?

Several survey questions were used to explore workers' sense of whether the mining workplace culture was a good "fit" for them individually. In addition to a direct question about their current workplace being a good fit for them, respondents were asked whether it was difficult for them to adapt to the mining work culture, the extent to which they feel they can "be themselves" at work, how well they understand what it takes to succeed and whether they can approach their supervisor with issues. In addition, the survey included two questions about recommending the sector to others—first, in general, and then, to a close friend/relative "similar to you." Taking the difference between the two recommendations can give an estimate of the extent to which the individual feels the mining sector is a "fit" for people like them.

The majority of respondents indicated that they were able to integrate easily into the mining sector—"Needing to adapt to the mining work culture" had created little or no impact or difficulty. However, again there was a gender difference⁵: women were almost twice as likely as men (44 per cent vs. 23 per cent) to report some impact or difficulty (3 or more on a 5-point scale; see Figure 7), and half as likely as men (21 per cent vs. 41 per cent) to report they had no difficulty adapting.

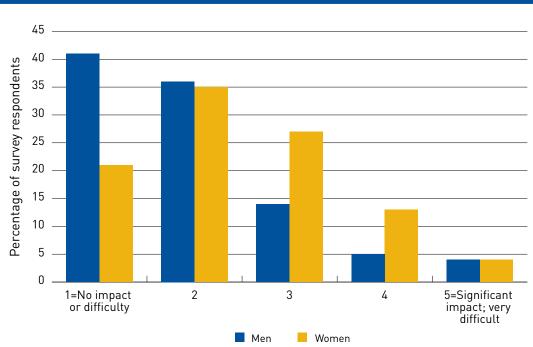


Figure 7: Impact of needing to adapt to the mining work culture

Gender inclusion is a broader concept than the representation of females or males—it addresses the extent to which traditional "masculine" or "feminine" patterns of behaviour are expected in the workplace. When asked to comment on differences for men and women and whether the mining workplace culture was a better fit for certain types of people, the answer from interviewees was mostly "yes." They mentioned a range of factors, from work experience to personality characteristics to gender:

I see it as an equal opportunities workplace: as long as you are strongwilled, you can move ahead.

(Man interviewee; technical position in the field)

Where I work, the company does a good job of including people—there are no cultural differences in opportunities given. However, extroverts do have an easier time than introverts.

(Woman interviewee; technical position in the field)

In smaller mines, the mindset is "it's a man's world, not safe for women." In larger mines, they got used to women 10-15 years ago, but it's just happening now in smaller mines. This idea of safety being an issue for women is a carryover from years ago.

(Man interviewee; technical position)

For gender in particular, the differences most commonly mentioned were related to some of the workplace barriers that women often face in other industries i.e. the ability to break into the "guys networks" and the challenge of balancing family with work, given that many women are the main caregivers in the family. The nature of the work, specifically camp jobs and heavy labour, were also mentioned as examples of why it is a better fit for some versus others.

A series of survey questions⁷ assessed how "comfortable" the survey respondents feel in their current workplace. On this dimension there was a significant difference⁵ between men and women, with



women scoring significantly lower—and this difference was maintained even when the effects of career tenure, work location (corporate vs. field) and type of occupation were statistically controlled. In other words, the discomfort that women report feeling in their mining workplace cannot be explained by their length of time in the industry, or the type of work they do.

What is the impact?

The "fit" that an individual feels within their workplace has a significant impact⁵ on their view of the industry overall and on their willingness to recommend it to others. Women in this research sample were less likely than the men respondents to recommend mining to other people "like me." Second, people who generally feel more comfortable in their workplace are also more likely to recommend it. Third, individuals who characterize their workplace as very respectful are also more likely to recommend it to "a close friend/relative who is similar to me." ⁸

This analysis reveals that women and other people who don't feel it's a good fit for them might be good ambassadors for the industry overall, but are unlikely to reach out to others like them to encourage them to enter the mining sector. Several of the interviewees demonstrated their appreciation of the challenges and dynamics of attracting new talent to the sector.

Definitely need more women—I wish I could grab some from outside and tell them they'd be happy there. Many women are not aware of the opportunities yet, but we're getting there. Sexism has to die out first, and will eventually.

(Woman interviewee; technical position in the field)

This would factor into my next job—the more women I would see in senior roles, the better I would think the fit would be for me.

(Woman interviewee; technical position in the field)

The industry evidently has an opportunity to leverage the experience and goodwill of current employees in its efforts to attract qualified new entrants. Positive experiences and inclusive workplace cultures will help employers to capitalize on these opportunities.

Career Pathways - Findings at a Glance

- Women career seekers do not generally see the mining sector as one that offers
 them interesting career opportunities. The women who participated in this research,
 and have chosen a career in mining, often had personal networks, family connections
 or other access to industry information that attracted them to the industry and its
 opportunities.
- Work experience as a co-op or summer student was mentioned as a positive entry point to the sector.
- Having a personal network appears to be a critical support for finding out about job openings and career opportunities within the industry. Women highlighted that it is difficult for them to access networks in the industry.
- Of the survey respondents who had upgraded their training or education during their career, 90 per cent believed it had a positive impact.
- Within this survey sample, men were more likely to have changed employers within mining. Three-quarters of the people who had done so reported that it had a positive impact on their career.
- Of the individuals who had taken parental leave, 70 per cent felt it had no impact on their career and 25 per cent reported that this had a somewhat negative impact.
- In this research sample, women were more likely than men to expect to leave the sector within the next five years; more than one-third said it was "likely" or "very likely."
- The survey respondents who are less comfortable in their current workplace also are more likely to expect to leave the sector within the next five years.
- Overall, 58 per cent of all respondents indicated that it was "often" or "usually" harder for women to succeed in their workplace. Women were significantly more likely than men to say that it was harder for women.
- Just under half of the survey respondents say their employer "often" or "always" takes action to encourage more women in the workplace.

Career Pathway Findings

The second research objective of this project was to examine *Career Development Pathways* within the sector, including an identification of entry and exit points and the differences between women's and men's occupations and levels of leadership. This was examined through an analysis of survey respondents' career pathway descriptions and additional context provided by the research interviews, and an analysis of career perceptions captured from a survey of job seekers.

Mining as a Career Choice

Recent MiHR research gathered the perspectives of 2000 job seekers interested in joining the mining sector. The results demonstrated key differences between men and women, with women being less likely to see the industry as a viable or attractive choice for them. Among other insights, the responses of over 1500 hundred women showed that:

- There is a lack of knowledge about mining as a sector that provides interesting and varied career options.
- Women career seekers do not have a positive perception of mining being a place that is inclusive of women.

As shown in Figure 8, the majority of the women job seeker respondents indicated that they strongly disagreed or disagreed with the statements the mining industry "employs people like me," and the mining industry "offers jobs that interest me."

"Mining is a career that..." Includes a wide variety of careers Offers jobs that interest me Offers advancement opportunities Values diversity in the workplace Employs people like me 0 10 20 30 40 50 60 70 80 90 100 Percentage of women survey respondents Disagree or strongly disagree Neutral Agree or strongly agree

Figure 8: Responses to MiHR survey of career seekers

For this specific study, interviewees were asked about their experience in trying to enter the industry, most interviewees commented that what helped them most was their family connections, their work experience as a co-op or summer student, or just having the right skills at the right time. One woman's experience demonstrates the stiff competition for some of the jobs and the importance of having a network:

I went through the Women Building Futures (WBF) trade school program. I got one of 16 spots on the ten-week course on heavy equipment for a specific oil employer—250 applied. It's generally very difficult to get into the sector—helps to have friends and family connections—they can pass on your résumé/application to the foreman and vouch for you; helps getting to the interview stage. It's very competitive.

(Woman interviewee; technical position)

The following example portrays one woman's experience of why she entered mining and how she found out about career opportunities in the mining sector. It is a good example of the role stakeholders such as schools, universities, and associations can play in facilitating the entry of more women into the mining sector.

I knew I wanted to be an engineer—and there was a strong push to get women into those occupations when I was applying for school. I spoke with several engineers and geologists as part of the Women in Science and Engineering (WISE) Program, which visited my school. Family and friends told me about jobs at the local mine. I worked two summers as a co-op student—that really helped me get to know who to talk to about opportunities.





This direct access to industry "insiders" with experience likely offers a strong counterbalance to the negative perceptions and/or lack of awareness seen in the general career seeker population. Recent labour market data released by MiHR shows that the mining labour market is much tighter than other sectors. For every job vacancy in mining, there are less than three potential job seekers across Canada, compared to the average of six job seekers per vacancy for all other industries (MiHR, 2015). To attract new talent, it might be possible for the industry to "simulate" those valuable personal connections through strengthening practices such as mentoring, outreach presentations and visits, site tours, student networks, temporary work placements and so on.

Career Development Stages

Understanding how careers progress in the sector and how people become aware of opportunities will help employers to attract, develop and retain the talent they need.

Entry points

Access to "industry insider" knowledge – through family and friends, or networking, was highlighted as being most helpful in finding specific entry points into the industry. Online sources of information were also cited—including CareerMine, social media such as LinkedIn, and professional associations.

Impact of Education

Having postsecondary education in a mining-related field had an impact on an individual's entry point into the sector. Among the survey sample, 65 individuals reported having completed, at some point, a mining-related education. Of those, approximately half entered directly into a professional (technical/scientific) position, one-quarter had entered the industry through labourer, production/maintenance or skilled trades positions, and one-tenth entered the industry as a student. Only one individual who had, at some point, completed a mining-related postsecondary education had started his or her mining career in an occupation such as administration, HR, legal or finance. Based on this limited sample, it appears there is very little cross-over between technical and non-technical career streams within mining and this is further explored below.

Significant career events

Survey respondents reported on significant events within their career and, if relevant, what impact the event had on their career (see Table 2). There were two significant differences¹ between men and women. Men in this sample were more likely to have changed employers—within, or outside, the industry; women were more likely to have taken parental leave.

Getting training or education was seen to have the most positive impact, receiving an average rating of 4.6 on a 5-point scale; approximately 90 per cent of those who had done it felt it had a positive impact on their career. Gender experts point out that upgrading training/education while working can often be more difficult for women than for men. Although at face value it appears to be a gender-neutral strategy, the added burden that it can place on personal time can make it more difficult for women who might be carrying greater responsibilities for child care, housework, elder care and so on. Employers should be alert to this possibility and develop strategies to make such upgrading accessible and manageable for both women and men while maintaining a viable work-life balance.

As illustrated in Table 2, parental leave ranks at the bottom of the list in terms of career impact; approximately 25 per cent of the people who had taken parental or maternity leave felt that it had a negative impact on their career, and 3 per cent felt it had a positive impact.

Table 2: Reported career events								
Career Event or Choice	Frequency for Men (n=166)	Frequency for Women (n=114)	Combined (n=280)	% who experienced a negative impact	% who experienced a positive impact			
Maternity/ Parental Leave	3.6%	24.6%	12.1% *	25%	3%			
Left work for training/ education	7.2%	6.1%	6.8%	0	90%			
Upgraded training/ education while working	41.6%	40.4%	41.1%	1%	89%			
Do seasonal work	3.6%	4.4%	3.9%	30%	40%			
Stopped working for personal reasons	6.0%	3.5%	5.0%	21%	7%			
Changed companies within mining	52.4%	33.3%	44.6% *	8%	76%			
Left the industry then returned	15.1%	7.0%	11.8% *	9%	55%			
Other	6.6%	16.7%	10.7% *	28%	48%			

^{*} Statistically significant difference⁵between men and women

Job Changes

The survey also asked the respondents to report on their current job, up to three previous jobs, and their first job in the mining sector.

Survey respondents were most likely to have changed positions as the result of an internal opportunity (i.e. within the same employer), accounting for 37 per cent of the 415 job transitions reported in the survey. The second most common move was for an external opportunity, accounting for 25 per cent of all job transitions. Other reasons, such as resignation, site closure, completion of contract, etc. each accounted for less than 10 per cent of the job transitions.

As shown in Table 2, men in the current sample were more likely¹ to have changed employers within the mining sector—and the people who did so generally reported that this had a positive impact on their career.

Although survey respondents and interviewees alike often commented on the insecurity of work in the mining sector, the data *from this survey sample* suggest that most of their job changes reflected new opportunities. The most common transition was between two jobs in a large employer (defined as more than 500 employees), accounting for 42 per cent of job transitions in the survey sample. Moving from one job in a small company to another accounted for 9 per cent, from small to large accounted for 8 per cent, and between jobs in companies providing services to the industry accounted for 7 per cent. The general "gravitational pull," then, is to large employers. In fact, 59 per cent of all transitions were movements into a job with a large employer, this was consistent with Hughes 2012 findings. Very seldom did anyone leave a large employer for some other type of employment relationship. It is important to highlight again that the current survey sample is not fully representative of the total sector workforce—labourer, skilled trades, and maintenance and production occupations are under-represented and a broader sample might affect the observed percentages.

Understanding these dynamics can be helpful in crafting strategies to retain women within the industry. For example, small employers who seek to attract talented women from larger companies (perhaps in other resource industries) might need to prepare a compelling offer to counteract what might be the natural career trajectories in the sector. Additionally, as some interviewees pointed out, smaller companies or smaller worksites have a reputation of being less inclusive of women, which can make larger companies a more attractive alternative.

I have heard of challenges in smaller companies—bias in who gets picked for jobs. I've worked for two large companies with robust HR departments, so I haven't really seen that.

(Woman interviewee; technical position in the field)

There was also a clear tendency within this survey sample for workers who are older to stay in their positions for a longer period of time.

Career Advancement

Many interviewees and survey respondents commented that finding advancement opportunities within the sector can be difficult—it often depends on networking. Women survey respondents were more likely to indicate that they had experienced challenges in successfully advancing within their career. Verbatim comments alluded to the industry still being an "old boys' club" and that women are excluded from the all-important networking.

We have to be able to work the network like guys. This is still really challenging to women. The upper circles are really tight. Now the industry is recruiting women who act more like men—tough as nails. Overall, ambitious white males fit well...it is difficult to manage up and network with superiors as a female because of the concern over perception of motivation—especially when all the superiors are male.

(Woman interviewee; technical position in the field)

Among the survey respondents, the people who found career advancement the most challenging were women and those who also found their workplace to be not inclusive and respectful. In other words, experiences of gendered exclusion in mining workplaces was directly related to workers' perception of ease of career advancement, which in turn is related to turnover intentions. These findings would suggest that companies and industries that can successfully address workers' concerns about inclusion can reasonably expect to see improvements in retention. In summary, increasing the representation of women across the full range of career levels will require attention to a number of systemic barriers and a set of complex dynamics. Several opportunities are suggested by the research findings and these have informed the recommendations presented below.

Factors That Shape Career Intentions

Career intentions are shaped by many influences, including an individual's assessment of their career opportunities and likelihood of success.

Women's Opportunity for Success

The survey respondents were asked if it was usually harder, or usually easier (5-point scale) for women to succeed in their workplace. Overall, 58 per cent of all respondents indicated that it was "often" or "usually" harder for women to succeed. There was a significant difference between men and women in their perspectives, with women being significantly more likely to say that it was harder for women (see Figure 9).

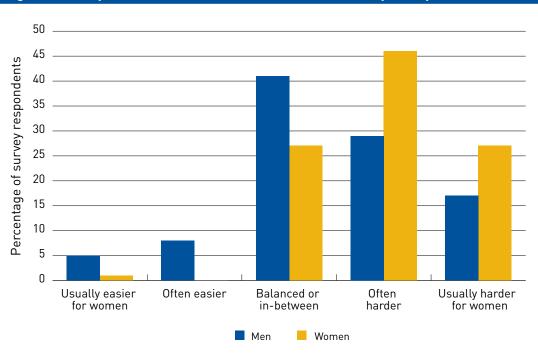


Figure 9: Perspectives on ease of women to succeed in my workplace

To explore the initial survey results, interviewees were asked to comment on the finding that many people said that succeeding in their workplace was harder for women than for men. The majority of interviewees, both men and women, agreed to some extent with this statement:

I strongly agree. There are more barriers: when my employer was trying to fill [a particular position], they didn't consider me until they ran out of options. Men get extra training and extra opportunities. You have to be proactive and let them know.

(Woman interviewee; technical position in the field)

Yes—but not all aspects—on operations side, women are disregarded too much, too often. I saw one case where the network of old boys who were in line with the foreman made a female employee more than useless. In some cases I have seen women coddled; in others, berated and demeaned—there is no balance. Life is pretty good if you're an older white male—lots of connections.

(Man interviewee; technical position in the field)



The gendered aspects of the workplace culture that were described in the earlier section have an impact on women's opportunities for advancement. For example:

I know that I could succeed. I have struggled with daycare issues—missed work due to child sickness and unreliable daycare—I feel that it plays into their perception of my dedication to my work.

(Woman interviewee; technical position in the field)

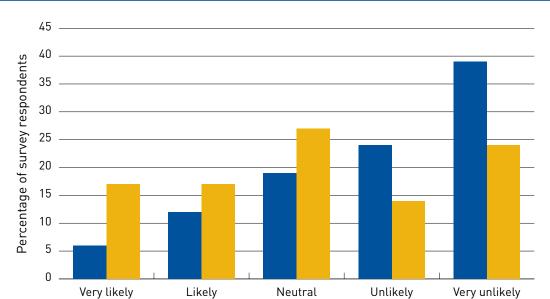
From my experience, I see a glass ceiling for women. It's easy to look at mining company websites and see how many women are on the boards or in top management positions (usually legal and accounting).

(Woman interviewee; technical manager in the field)

The other perspective that was raised by one woman interviewee, working in a technical position in the field, was the fact that women are very new to mining, many are still entry-level, so when positions come up, women are not ready to move into them. I think it will be an even playing field in 20 years.

Intentions to Leave the Sector

Survey respondents were asked how likely it was that they will look for another job outside of the Canadian mining and minerals sector, within the next five years. As Figure 10 demonstrates, women respondents were significantly more likely¹ to report intentions to leave the sector. The retention risk to the industry appears to be significant, with over one-third of women reporting that it is "likely" or "very likely" that they will leave the sector within five years. On the other hand, 38 percent of women respondents indicated that it was "unlikely" or "very unlikely" that they would leave the sector in the next five years. This was in contrast to the men respondents where 68 per cent indicated that it was "unlikely" or "very unlikely" for them to leave the sector within the next five years. As indicated in Figure 10, the distribution of responses was more heavily weighted to staying in the industry for men and showed a polarization of intentions for women respondents.



Men

Women

Figure 10: Likelihood of leaving the sector within five years

Exploring these career intentions, three predictors stand out as having a significant relationship¹—gender (women are more likely to be planning to leave), age (younger people are more likely to plan to leave) and a general factor of feeling comfortable with their current workplace (less likely to leave)¹⁰.

Verbatim comments on the survey, as well as the interview comments, confirm that the current downturn in the industry is having a significant effect on career intentions. Many of those men or women who reported they will likely leave the sector also indicated that they expect they will be forced to do so, because of a shortage of opportunities within the industry. It is unclear from this research whether the fact that young people are more likely to plan to leave is a reflection of generational differences or an indication that workers with less tenure in the industry feel their jobs are less secure. This might be an interesting avenue for further research.

Employer Commitment and Engagement Findings

Gender experts and years of research in organizations have revealed that gender inclusion does not "just happen." In most cases, an intentional and committed effort on the part of the employer is required to make progress in a reasonable timeframe.

Just less than half of the survey respondents (46 per cent) indicate that they "often" or "always" see their employer taking actions to encourage more women in their workplace. Interviews were used to explore possible courses of action, both for fostering an inclusive workplace and for creating successful career paths for women.

With regards to encouraging respectful behaviour in the workplace, interviewees emphasized the value of having policies and programs solidly in place and consistently applied, and management and unions working together, to lead to a more respectful and harassment-free workplace.

Encouraging a respectful workplace comes from policies and programs, and value statements used to guide them. It needs heavy endorsement from senior management, and a mechanism to feed back to the organization about disrespect when it happens. For cases I've heard of, an investigative process was conducted, with a mediator involved.

(Woman interviewee; technical position)

Some of the other suggestions included introducing inclusion and respectful workplace programs, creating a culture where employees can share ideas and suggestions for improvement, providing job sharing and childcare, etc.

Look at developing leadership in women—invest in leadership development even if the person is not going to advance—she will gain confidence, and contribute more with better skills.

(Woman interviewee; technical professional in the field)



To attract and retain women—have more flexibility. For example, job sharing (this idea would be "out there" for the mining industry!) More women would stay in the industry if that was available.

(Woman interviewee; technical position in the field)

Childcare—with companies operating in remote areas, this needs to be addressed. I've heard about other companies' offerings—I think our industry could learn from them. Work schedule could also be addressed.

(Woman interviewee; technical position in the field)

Beyond what has been reported here, this research initiative also explored good practices in the mining sector and in relevant comparator industries. The findings and a compendium of case studies are available as a companion report *Strengthening Mining's Talent Alloy: Practices in Inclusion*.



Recommended Industry-Wide Strategies

The research findings suggest that with respect to gender inclusive workplaces, the mining industry is a sector in transition—while many barriers to the inclusion of women in mining workplaces are gradually being lowered, progress is slow and inconsistent across the industry. Although most of the research participants report that times are changing, many workplaces are still characterized as "macho" and an "old boys' club," and career paths remain relatively traditional with subtle dynamics that make it difficult for women to advance.

Systemic change toward a more gender-inclusive workplace can be achieved through a combination of strategies. Employers clearly have an important responsibility to create sustainable change within their own workplaces. For pragmatic support to employers, the MiHR compendium of case studies and related learnings that has been developed in the current research project *Strengthening Mining's Talent Alloy: Practices in Inclusion* can inspire positive actions at the local level.

Based on the research findings, and consistent with several suggestions flowing from previous MiHR work, the following evidence-based recommendations are proposed.

✓ Enhancing workplace culture

The findings of this research project suggest the following evidence-based industry-wide strategies for fostering gender-inclusive workplace cultures:

Recommendation 1: Equip managers and employees with the skills required to create inclusive workplaces.

As indicated in the research, many mining workplaces are seen as taking steps towards building respectful workplaces; however, not all workplaces have effective systems in place to manage incidents of harassment. Creating inclusive workplaces starts with addressing workplace harassment through policy, training, enforcement and accountability – in order to create workplaces that are safe for everyone.

More implicitly, it can be difficult for people, even well-intentioned people, to notice and redress the assumptions, accepted practices and subtle actions, often called "micro-inequities" that can have a powerful cumulative effect of excluding others. This can be particularly true for those in the majority group, which might explain this project's finding that women report seeing more put-downs and negative behaviours than men do.

There are many good tools and resources available that can be used effectively within the mining sector. In some cases, they are directly applicable; in others, best practices from other industries can easily be adapted and customized to the particular characteristics of mining workplaces.¹¹

Strategies to help build the required capabilities could include:

- a) Awareness-focused informational materials, webinars, online resources, presentations, and workshops
- b) Skill-building workshops and resources.
- c) Pragmatic tools such as job aids, best practice guides, sample policies and organizational culture assessments (or self-audits).

Recommendation 2: Design industry-specific strategies to support work-life integration.

Employees who cannot effectively balance their personal responsibilities with their work responsibilities are at greater risk for turnover, absenteeism, stress, and less than full engagement in their work. Increasingly in today's labour market, such employees will choose to work in those organizations that recognize their desire to be fulfilled in multiple aspects of their lives. For operational career paths in particular, employers need access to good practices that allow employees to better manage work-life integration without missing out on critical formative experiences. Helpful resources for employers and unions could include:



- a) Documented best practices from within the mining industry, or drawn from comparator sectors.
- b) A clear articulation of the business case for greater work-life balance.
- c) Tools that can be customized to individual workplaces, such as sample policies and programs.

Recommendation 3: Accelerate the momentum toward greater gender-inclusion by changing the industry narrative.

There are several indications that many mining workplaces are inclusive, respectful and welcoming to women and other under-represented and under-utilized talent pools. Modernized equipment technology and stronger safety culture are improving the working environment within the sector and many employers have strong practices to eliminate harassment. Possible strategies to leverage the positive changes that are occurring and then cultivate a new narrative could include:

- a) A purposeful branding of the industry, the reality of organizational life, the sector's opportunities and its workforce, for audiences that are both internal (current workers, recruiters, hiring managers, industry spokespersons) and external (job seekers, educational institutions, other stakeholders).
- b) An intentional effort to capture and share new stories throughout the industry—leadership storytelling, industry media coverage, awards programs, identified opinion leaders, mentors and role models.
- c) Development and implementation of appropriate metrics to benchmark and document the progress made toward more gender-inclusive workplaces and to endorse the new narrative.

✓ Building successful career paths

Recommendation 1: Develop information materials as well as partnerships with educational institutions and other stakeholders to provide job seekers with powerful information regarding opportunities.

Universities, colleges and trades training programs are a primary source of talent for entry into the sector. Targeted information and outreach will help to raise the visibility of the industry, for both women and men. The experiences of the participants in the current research study point to the importance of having direct contact with knowledgeable industry insiders. Many mentioned having family connections, personal networks, co-op work placements and so on. The industry would be well served to find a way to provide others with similar direct access to industry insiders and work experience. Successful practices are in



place in particular workplaces or locations across the industry. Building on these, broader strategies could include:

- a) Broadly accessible information materials that highlight the breadth of career opportunities available as well as the industry's openness to talent from under-represented groups, including women.
- b) Targeted mentoring program (building on current models) connecting selected job seekers with alumni networks and current industry workers, including role models and those approaching retirement.

- c) Partnerships and other support for meaningful work placements and connections, even during industry downturns.
- d) Creating more opportunities for regular site visits.
- e) Industry support for professional networks for students and alumni in miningrelated fields, and/or for those who are seeking or beginning a career in mining.
- f) Exploration of opportunities to attract women spouses, friends, and relatives of current or retired mining workers.

Recommendation 2: Create alternative career paths that can build broad skill sets while accommodating individual differences.

Taking a sectoral (rather than organizational) view of retention and career development, it is easy to see how the Canadian mining industry can benefit from the knowledge and experience gained from FIFO work assignments, cross-functional career paths, educational upgrading, and career moves across companies. Each of these routes to development has longstanding gender-related challenges embedded within it and it can be difficult for individual companies to create novel solutions. Both women and men in today's and tomorrow's workforce expect to be able to meet their individual career goals while also having a family and achieving other personal goals. Their expectations are for more flexible and adaptive career paths, with off- and on-ramps and continuous learning opportunities.

Industry initiatives to help address this would include:

- a) An industry-wide collaborative search for innovative approaches to the challenges of remote work assignments.
- b) Exploration and prototyping of alternative career paths, including the development of supporting tools and resources for employers and workers.
- c) Creation of information resources to help employers apply a "gender lens" to career development practices.

Recommendation 3: Address critical turnover risk for women working in the sector.

Women respondents have signaled that their workplaces are not sufficiently respectful and inclusive, that they see barriers to advancement and that it is difficult for them to succeed. Consequently, the respondents have indicated that women respondents were more likely than men to indicate a likelihood of leaving the Canadian mining sector within the next five years. Strategies to consider for addressing this situation could include:

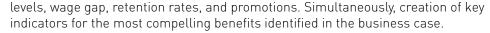
- a) Follow-up research study exploring in greater depth the experiences and attitudes of mid-career women and the factors that affect their retention in the industry. Targeted engagement and retention strategies across the industry, such as networking, mentorship, sponsorship, reverse mentoring (mid-career women mentor men senior executives), learning and development opportunities, involvement in outreach to young women career seekers and so on.
- b) Best practices for career development and leadership development for women, accompanied by industry-tailored tools and resources and possibly identifying available sources of funding and support.

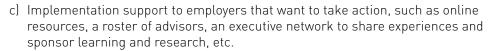
Recommendation 4: Seize the opportunity presented by the introduction of "comply or explain" disclosure regulations regarding women's representation at senior levels of publicly traded companies.

The recent introduction (by seven provinces and two territories) requiring publicly traded companies to report on gender diversity initiatives and women's representation on their boards and senior executive teams will do much to shine a light on the issue of women's career advancement in corporate Canada. This presents interested employers and sectors with an opportunity for enhanced executive commitment to gender diversity.

Strategies to leverage this momentum could include:

- a) Support for senior leaders to become champions for gender diversity within their company and across the mining industry (in progress with MiHR's upcoming Gender Equity in Mining (GEM) project). Tools for organizations to review their programs and practices through a "gender lens," subsequently taking action on identified systemic barriers (in progress through the GEM project).
- b) Creation of key benchmarks, metrics and indicators for the participation of women in the industry or particular organizations, such as "new hires," representation levels across occupational groups and









Literature Review

The literature review was documented using a standard capture template. Findings were analyzed thematically to address the primary research topics as well as secondary themes identified in previous MiHR research studies.

Survey

The online survey was hosted on the FluidSurveys platform from January to March 2015. The survey was available in both English and French. Alternative methods for survey completion, (printed copy, or telephone interview) were made available upon request.

In order to respond to the survey, individuals were required to meet the following criteria:

- Currently or recently (within the last five years) working in Canada's mining and minerals industry, including those working as an independent contractor, and those who worked with a company providing services to the sector.
- Willing to provide confirmation of informed consent, through providing a response to a consent confirmation at the start of the survey. Detailed information was available online for the respondent to review prior to completing the survey.

An incentive was provided to respondents—if they consented, their name was entered into a draw for one of ten \$50 VISA gift cards; they were not required to complete the survey in order to enter the draw.

To achieve an acceptable response, supporting materials, including postcards with the study's information as well as a factsheet for the wider project were developed. Several methods for distributing the survey were utilized:

- News release distributed via all MiHR channels, posts on relevant MiHR social media, materials distributed at conferences: Immigrant Women in Mining, BC in November 2014, and Mineral Exploration Roundup and Northern Exposure in Jan 2015 and PDAC in March 2015.
- Online portal to sign up for the survey, in advance of it becoming available in January 2015. Individuals who had "registered" in this manner were advised by email when the survey became available.
- Three MiHR tweets daily prior to the survey's launch and while it was live;
- Specific to Aboriginal employees, NationTalk distributed a fax blast to Aboriginal communities; project consultants made targeted calls to Aboriginal associations, ASETs, Friendship Centres and communities, following up by email with materials.
- Followed up with immigrant and Aboriginal survey participants who had offered to participate in the next phase of the research, asking them to distribute the link.

Data were analyzed using SPSS, to produce descriptive and inferential statistics, as well as multivariate statistics to explore patterns in the data such as the intersections of various factors within gender (such as age, immigrant status, occupational category, etc.). Any inferential statistics in the survey findings (such as differences in average scores between groups) that are presented throughout this report are statistically significant at p<.05, unless otherwise indicated.

Open-ended responses were subjected to a qualitative analysis, to identify themes and patterns that could aid in the interpretation of the quantitative survey data. These findings were also helpful in framing the interview research questions.

A total of 357 people provided some responses to the survey; the sample that was used for analysis was the 281 respondents who completed the survey. Within this sample, there were 114 women, 166 men and 1 who self-identified as "other," yielding a final sample size of 280 for statistical analyses.

Telephone Interviews

Interview participants were selected from among those who had volunteered for follow-up interviews upon completing the survey. They were chosen to provide a sample with a range of demographic characteristics – i.e., geography, gender, age/experience, occupational category, current and former worker.

The purpose of the interviews was to explore themes emerging from the online survey, particularly focusing on two lines of inquiry: Workplace Culture and Career Paths and Trajectories. Interviews were conducted by telephone (plus one email submission) and lasted approximately 45 minutes.

Transcripts from the interviews were provided to interviewees for validation and confirmation of accuracy. They were then combined with the focus group transcripts (see below) into one qualitative data set and subsequently analyzed using the NVIVO qualitative analysis tool to identify key themes and patterns.

Validation of Findings

The final research component was an industry validation session, hosted online by MiHR, with the Project Steering Committee and other key informants. This discussion of approximately 90 minutes provided an opportunity to review the draft report findings, recommendations and promising practices findings. Its purpose was to ensure that findings are grounded in the operational realities of the industry and the talent pool, and thus is relevant and useful for industry stakeholders.

Data collection tools

Three tools were created to support the primary research in this project:

- Online survey, in English and French.
- Interview protocol and script for telephone interviews with men and women currently or recently working in the Canadian mining and minerals sector.



• Key informant interview protocol and script for documenting case studies.

Survey Data Tables

Demographics of the survey sample

	Men (n=166 or 59%)	Women (n=114 or 41%)	Total		
Age of respondent					
18–24 years old	4.8%	4.4%	4.7%		
25–34	20.0%	32.5%	25.1%		
35–44	21.8%	29.8%	25.1%		
45–54	24.8%	31.6%	27.6%		
55–64	24.8%	1.8%	15.4%		
65 or above	3.6%	0.0%	2.2%		
Family status					
Single, divorced, widowed	19.5%	28.1%	23.0%		
Married, common-law	80.5%	70.2%	76.3%		
Other	0	1.8%	0.7%		
No children	25.6%	48.2%	34.9%		
One or more children living with me	46.3%	37.7%	42.8%		
Yes, but none living with me	28.0%	12.3%	21.6%		
Other	0	1.8%	0.7%		
Reported type of community of residence					
Large city	18.2%	26.3%	21.5%		
Mid-sized city	34.5%	30.7%	33.0%		
Small town	38.8%	35.1%	37.3%		
Remote area	6.7%	4.4%	5.7%		
On reserve	1.8%	3.5%	2.5%		
Educational attainment					
Completed training/education in a mining-related field	25%	23%	24%		
High school or less	30.1%	5.4%	20.0%		
Apprenticeship / trades school	13.5%	3.5%	9.4%		
Community college	19.0%	15.9%	17.7%		
University	25.1%	50.5%	35.6%		
Graduate degree	12.2%	24.8%	17.4%		

	Men (n=166 or 59%)	Women (n=114 or 41%)	Total
No. of years in Canadian mining sector			
Less than 1	3.7%	7.1%	5.1%
1–5	16.8%	35.4%	24.5%
6–10	24.8%	28.3%	26.3%
11–15	9.3%	11.5%	10.2%
16–20	8.1%	6.2%	7.3%
21–25	5.0%	5.3%	5.1%
More than 25	32.3%	6.2%	21.5%
Current (or most recent) occupation			
Clerical and Support	1.2%	2.6%	1.8%
Labourer	5.5%	3.5%	4.7%
Production / Maintenance	23.2%	6.1%	16.2%
Technical and Skilled Trades	7.9%	4.4%	6.5%
Lead hand or Foreman	6.1%	2.6%	4.7%
Professional – Technical and Scientific	15.9%	28.1%	20.9%
Professional – Admin., HR, Legal, Finance, etc.	4.3%	20.2%	10.8%
Middle and Line Management / Supervisor	21.3%	12.3%	17.6%
Senior Management	8.5%	12.3%	10.1%
Other	6.1%	7.9%	6.8%
Current (or most recent) employer			
Self-employed, contractor, consultant	3.6%	7.9%	5.4%
Company providing services to mining	12.7%	7.9%	10.8%
Small mining / minerals company (<500)	15.2%	16.7%	15.8%
Large mining / minerals company (>500)	66.1%	64.9%	65.6%
Different industry, NOT mining or minerals	1.2%	0.9%	1.1%
Other	1.2%	1.8%	1.4%

Table 3: Entry occupations in the survey sample					
Entry point into the mining sector	Men	Women			
In school/Training	3%	5%			
Clerical and Support	0%	11%			
Labourer Position	26%	6%			
Production and Maintenance	27%	8%			
Technical and Skilled Trades	11%	5%			
Lead hand or Foreman	5%	2%			
Professional – Technical/Scientific	17%	25%			
Professional – Admin, HR, Legal, Finance etc.	4%	17%			
Middle and Line Management/Supervisor	3%	9%			
Senior Management	1%	4%			
Other	4%	8%			

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(Endnotes)

- 1 This study involved a voluntary survey and was not a census of the mining sector –caution must be used in generalizing the results of this research to the full mining workforce.
- 2 Workforce here is defined as the total number of people employed. Thus, 17 per cent of the people employed in the mining industry are women; 48 per cent of the people employed in Canada are women.
- 3 Gender Diversity Strategies are included in a case study companion report titled Strengthening Mining's Talent Alloy: Practices in Inclusion
- 4 Details on the research methods and dissemination strategy can be found in the Appendix.
- 5 Statistically significant at p<.05.
- 6 The two questions were: "In general, how likely is it that you would recommend working in the Canadian mining and minerals sector" (0-10 scale), and more specifically, "If this person was a close friend or relative who was similar to you, how likely is it that you would recommend working in the Canadian mining and minerals sector?" (0-10 scale). One indicator of "fit" was a simple calculation of the difference between the two ratings.
- 7 Based on a factor analysis that combines similar questions, a general dimension was constructed that could be labelled "I feel comfortable here;" it included questions such as I feel it is a good fit for me, I can be myself, I can raise issues with supervisor, and I understand how to succeed.
- 8 Analytical Note: Predictors of willingness to recommend the sector to "people like me"
 - The difference between the respondent's willingness to recommend the sector in general and his/her willingness to recommend it to "a close friend/relative who is similar to me" was used as the dependent variable in a multiple regression. The predictors were gender, age, line vs. staff, postsecondary mining-related education, a factor score for "how comfortable with the current workplace" and a rating of respectful workplace. The results yielded a multiple R=.39, and coefficients for gender, "comfortable with the workplace" and "respectful workplace" were significant at p<.05.
- 9 Analytical Note: Predictors of ratings of advancement challenges
 - A factor score for "Advancement challenges" was used as the dependent variable in a multiple regression; predictors were gender, age, rating of workplace inclusivity, line vs. staff, and postsecondary mining-related education. The results yielded a multiple R=.33, and coefficients for gender and workplace inclusivity were significant at p<.05.
- 10 Analytical Note: Predictors of intentions to leave the sector
 - The five-point rating response to "How likely is it that you will look for another job outside of the Canadian mining and minerals sector, within the next 5 years" was used as the dependent variable in a multiple regression. The predictors were gender, age, line vs. staff, postsecondary mining-related education, a factor score for "how comfortable with the current workplace," and a rating of workplace inclusivity. The results yielded a multiple R=.40, and coefficients of gender, age and "comfortable with the workplace" were significant at p<.05.
- 11 Current initiatives led by MiHR and by Women in Mining, as well as other industry groups, will produce several useful tools for fostering gender inclusiveness within mining workplaces.

