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Belonging: The Next Metric For Corporate Governance

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Unrealized Growth In Mining: Upgrading The Future To Include Human Capital & Belonging.
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TABLE OF CONTENTS

Executive Summary

Belonging has been regarded as the bridge between reaching business goals and inspiring human capital engagement. To produce such results however, metrics and governance are required. This whitepaper prompts new methodology and key indicators to account for human capital while providing the potential for stabilizing talent in a destabilized industry.

The main objectives for the research study were to:

1
Identify the key indicators of Belonging.

2
Create a metric to measure belonging within the workplace.

3
Explore the perception and predictors of belonging within the workplace.

4
Understand belonging predictors within organizational culture.

5
Explore belonging within the workplace as it intersects with business strategy, organizational design, and leadership.

5 main objectives

Figure 1: The 5 Objectives Of Belonging Research In The Mining Industry

The primary research was obtained via a Belonging-First Equity, Diversity and Inclusion survey that was created by the author/researcher and distributed to thirteen (13) Toronto Stock Exchange (TSX) listed mining companies.

The Belonging-First Survey Included 7 Sections:

1. Demographics such as; type of mining company, years in the industry, career level, gender identification, and ethnicity identification were itemized.

2. Comfort items measured; specifically the ability to feel at ease with the people you work with, the environment you work in, and the job you perform.

3. Contribution items measured; the ability to be recognized and valued for the work you contribute, without having to alter personality.

4. Connection items measured; the ability to connect personal values to organizational values.

5. Psychological Safety items measured; an individuals' perception about the consequences of interpersonal risks in the work environment.

6. Wellbeing items measured; an individual's protective factor risk required to manage stress, pressure and other behavioral issues.

7. Mining Specific Questions Relevant To Engagement In The Industry & Importance of EDI such as;

- Importance of EDI to employer/employee,
- Fairness of signage,
- Personal Protective Equipment (PPE),
- Accessible bathrooms,
- Being the "only",
- Pressure to prove self,
- Being respected due to title,
- Suggestion box being read, and
- Job postings and recruitment practices are fair to everyone.

Figure 2: The 7 Sections Of The Belonging-First Survey

Results indicate that belonging is predicted by gender, ethnicity, and career level. Years in mining indicated a trend in belonging and recognized those who experience belonging versus those who do not. The intersections of identity were significant factors that resulted in clear data contextualizing the impact of corporate culture and socialized norms. Belonging metrics and governance methodology provides critical insights required by leadership for talent risk mitigation and positive human capital progression.

Why This Research Is Crucial & Different

1. It is the first of its kind to measure the intersections of identity as one variable rather than individually.

2. Using intersections of identity the results produced a very different result marginalized voices were recognized and understood without being overshadowed by the majority.

3. It is the first of its kind to accurately measure belonging within an organization (with statistical reliability and internal consistency).

4. It is the first metric to measure key indicators of belonging. This creates actionable methodology, measurement tools, and interventions to impact belonging within organizational culture.

5. Creating a Belonging-First culture is crucial for stabilizing and mitigating talent risk while creating competitive advantage and growth.

Chapter 1:

The Employee-Organization Relationship Risk

Environmental pressures and their effect on talent have become top of mind for organizations across the globe. Equity, Diversity, and Inclusion (EDI), Corporate Social Responsibility (CSR), and Environmental Social Governance (ESG) are the most researched and highly sought-after resources within competitive industries. **Yet, few solutions effectively mitigate the significant risk that lurks behind a destabilized corporate culture that is often driven by the undervaluation of human capital.** When human capital lacks equitable, meaningful metrics and governance, the impact reverberates beyond the confines of an individual company, rumbling into public latitudes that converge with social justice and jurisprudence. While many organizations grapple with terminology, necessity, and accepting baseline data pertaining to the gravity and perilousness of equity, diversity and inclusion, a time of awakening is here.

North America stands in the face of a paradigm shift as talent risk moves into a top-five risk category faced by organizations of any size or industry.[1] Mercer Marsh Benefits (2021), indicate this discrepancy by highlighting **the number two risk factors are talent attraction, retention and engagement.** Of significance, Equity, Diversity and Inclusion, categorized as Environmental and Social, remains in the top 10 people risks for Human Resources, however are missing from business strategy risk.[2] Protiviti and Poole College of Management (2021) supports this notion with their research by clearly identifying that both the placement of talent risk and the risk of EDIB are not being seen as critically important, yet exist from 2022 into 2031. Particularly, they contend that **EDIB is a top 10 people risks that exists due to, "Shifts in expectations about social issues, specifically Equity, Diversity and Inclusion outpacing an organization's response".** [3]

Figure 3. Top 10 People Risks Based On Risk Rating Score

	All Respondents	HR	Risk
1	Cybersecurity	Cybersecurity	Succession and key person risk
2	Talent attraction, retention and engagement	Talent attraction, retention and engagement	Deteriorating mental health
3	Succession and key person risk	Workforce exhaustion	Cybersecurity
4	Data privacy	Data privacy	Increasing health, risk protection and well-being benefit costs
5	Workforce exhaustion	Succession and key person risk	Talent attraction, retention and engagement
6	Deteriorating mental health	Deteriorating mental health	Data privacy
7	Communicate health conditions	Communicate health conditions	Non-communicate health conditions
8	Changing nature of work	Changing nature of work	Skills obsolescence
9	Increasing health, risk protection and well-being benefit costs	Labor and employee relations	Conduct and culture
10	Labor and employee relations	Diversity, equity and inclusion	Workforce exhaustion

●●● Health and safety
●●● Talent practices
●●● Governance & financial
●●● Environment & social
●●● Accelerated digitisation

[1] Gartner. (2022, Feb 3). *Gartner Survey Shows Poor Talent Strategy is the Top Emerging Risk Worrying Organizations.* Retrieved from https://www.gartner.com/en/newsroom/press-releases/2022-02-03-gartner-survey-shows-poor-talent-strategy-is-the-top-emerging-risk-worrying-organizations
[2] Mercer Marsh Benefits. (2021). The Five Pillars of People Risk. Retrieved from https://www.mercer.ca/content/dam/mercer/attachments/north-america/canada/ca-2022-the-five-pillars-of-people-risk.pdf
[3] Protiviti & NC State Poole College of Management. (2021). 2021 & 2030 Executive Perspectives on Top Risks. Retrieved from https://erm.ncsu.edu/az/erm/i/chan/library/2021-executives-top-risks-report.pdf

To that notion, as employees demand change, and the environmental pressure that support their claims continue to increase, current research demonstrates the criticality for belonging metrics, competencies and performance indicators.[4] Moreover, the ability for organizations to communicate authentic belonging actions augments employee perception of EDIB, CSR, and ESG, particularly as they factor in business goals[5], accounting for an organization's competitive advantage within the talent sector.

Research from a global survey with 128,000 participants over the 2021 – 2022 time frame shows that 94% want to work for an employer that makes the space for everyone to belong. 91% of survey respondents wanted employers to foster environments for learning and growth to support leaders and managers with behaviours of Belonging. 90% of survey participants feel that recent decisions on Equity, Diversity, Inclusion and Belonging (EDIB) are being made through assumptions and instead want leaders to make data-driven decisions that include diverse populations' perspectives, with transparency driving the dialogue.[6]

It is essential to understand that EDIB is not just about race and gender. EDIB, at its core, is about recognizing, accepting and valuing the many identities and intersections of identities that employees bring to the workplace and allowing those intersections to provide value of equal worth. Consider that the focus of attracting, recruiting, developing and promoting employees is based on the perceived knowledge, skills and abilities, level of education and experience employees bring to an organization. This viewpoint has been the concept leaders have used to measure and increase the value of their human capital to date. Yet, few leaders have understood the impact of how employees become "ideal candidates" and end up in a position to be seen for the opportunity. **Moreover, the employee-organization relationship has primarily been modelled through a "fit-in or risk being excluded model" rather than valuing the importance that diverse perspectives contribute to organizational growth. Vital research ascertains that belonging exists "because of and in connection with the systems in which we reside"[7] and is both facilitated and hindered by the predominant social and environmental contexts that a culture adheres to.[8]**

Figure 4. Belonging, The Bridge That Binds Talent, Strategy & Leadership.
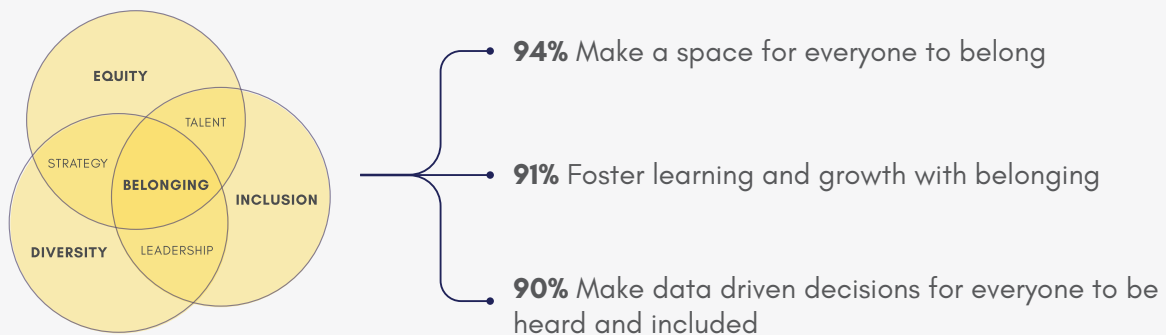
- **94%** Make a space for everyone to belong
- **91%** Foster learning and growth with belonging
- **90%** Make data driven decisions for everyone to be heard and included

Until the COVID-19 pandemic hit, considerations of how employees perceive their level of belonging within an organization, a community, or the greater population were never considered an item of risk. As the pandemic presses on, the global economy is obliged to re-evaluate the importance of human capital and the significance of the employee-organization relationship. While years of academic research continue to pile up, demonstrating the correlation between employee engagement and CSR practices[9], employee engagement and EDIB practices[10], and employee engagement and ESG practices[11], the signals could not be more pronounced. To mitigate risk and attempt to restabilize the industry, tools for measurement, indicators and governance for employee and leadership behaviours are necessary.

[4] Lyman, B., Parchment, J., & George, K.C. (2021). Diversity, Equity, Inclusion: Crucial for Organizational Learning & Healthy Equity. *Leadership*. Retrieved from https://doi.org/10.1016/j.mnl.2021.10.012;
[5] Kern et al. (2020). Systems informed positive psychology. Journal of Positive Psychology, 15(4), 705–715. https://doi.org/10.1080/174397
[6] Metinyurt, et al. "Interventions to address workplace bias, equity, diversity and inclusion." *Elsevier Ltd.*, 2021.
[7] Kern, M.I., Williams, P., Spong, C., Colla, R., Sharma, K., Downie, A., Taylor, J.Q., Sharp, S., Siokou, C., & Oades, L.G. (2020). Systems informed positive psychology. *Journal of Positive Psychology, 15(4)*, p. 705. https://doi.org/10.1080/174397
[8] Allen, K.A. (2020). *Psychology of belonging*. Routledge.

1.1

The Research in Context

"Belonging exists because of and in connection with the systems in which we reside.

Belonging is both facilitated and hindered by the predominant social and environmental contexts that a culture normalizes."

- Andrea Carter

Equity, Diversity, and Inclusion studies have shown vast benefits within organizational growth and development. Unfortunately, recent research shows that without belonging, many will not be able to maximize the benefits that both Inclusion and Diversity bring.[12] Benefits such as:

1. Innovation and creative problem-solving,
2. Identification of potential risks or challenges for error reduction,
3. Conflict resolution and cost-cutting, and
4. Talent attraction, recruitment, development and succession planning will remain largely out of reach due to an illusion of knowledge that embodies EDI.

To that notation, it is important to acknowledge that while the study of belonging has been in existence since the beginning of the 20th century[13], and the importance of belonging was identified as the single motive that fosters and maintains interpersonal relationships, job satisfaction and engagement[14], belongingness within the workplace has largely been overlooked.[15] Even in the Diversity and Inclusion space,

many are unaware of the often subtle yet significant words, actions, and behaviours that incite a sense of exclusion and create adverse impacts[16] that contribute to employee silence and group think behaviours. The reality is, that while EDIB is an organizational goal, many lack the strategic objectives to outline expected outcomes and guide employees' efforts to create the inherent growth and competitive advantage.

Additionally, in support of the necessity to understand belonging and its importance in the workplace, neuroscience research has also found that exclusion, lack of group membership, and workplace ostracism are experienced in the brain's same regions as physical pain.[17] As we look for answers to explain "the great resignation" and "the great reshuffle" and mitigate the risk of turnover and disengagement, the author/researcher considered this an essential factor in understanding corporate culture and the difference between "fitting in" versus "belonging". **Interestingly, when an individual is excluded, does not have membership, and is not seen, valued or heard for the intrinsic benefits they bring to an organization, it threatens the fundamental human need for belonging[18] diminishing self-esteem, wellbeing, and the perceived right to fairness, dignity and respect.**[19]

For those reasons, the author/researcher desired to research two elements through this body of work:

1. What are the key indicators of belonging that can be put through academic rigor to provide organizations with a statistically significant tool to measure, track and govern belonging within the workplace,

2. Upon using the measurement tool, what predictors would belonging metrics provide to support greater equity, diversity and inclusion and thereby lead to an increase in organizational culture, competitive advantage, and employee engagement.

The author/researcher initially sought an existing measurement tool that would allow organizations to measure belonging as a means for governance and data-driven decisions. When a formal academic literary search exposed a gap in belonging measurement tools within the workplace, the author/researcher sought to create and effectively measure belonging within

[9] Gupta, N., & Sharma, V. (2016). The relationship between corporate social responsibility and employee engagement and its linkage to organizational performance: a conceptual model. *IUP Journal of Organizational Behavior, 15(3).*

[10] Yeunjae Lee, Jo-Yun Li. (2021) Discriminated against but engaged: The role of communicative actions of racial minority employees. *Communication Monographs* 0:0, pages 1–25.

[11] Kotsantonis, S., & Serafeim, G. (2020). Human Capital and the Future of Work: implications for investors and ESG integration. *Journal of Financial Transformation*, 51, 115–130.

[12] Shah, J.Y. & Gardner. W.L. (2007). *Handbook of Motivation Science.* Guilford Publications.

[13] Coan, R. (1987). Theoretical orientations in psychology and the traditions of Freud, Jung, and Adler. *Professional Psychology*, 18, 134–139.

the mining industry. Such a measurement tool within the mining industry would lead to a more inclusive and strategic plan for business goals to formally merge with EDIB, CSR, and ESG initiatives.

Specifically, the research sought to create benchmarking and baseline data for belonging that enables a meaningful connection, through both language and behaviour, to initiate effective change management within the EDIB sector, starting within the mining industry. The lens by which the research was conducted was through grounded theory, understanding that the mining industry needed tools to identify indicators of belonging backed by statistical analysis to provide key areas of focus and metrics for governance and change. **With the recognition that subtle yet significant acts of racism, discrimination, and systems of oppression are on the rise[20], the researcher was interested in understanding who currently experiences belonging within the mining industry and what forms of measurement can effectively create key indicators to measure and change the experience of belonging within the workplace.** The methodology of research and literary review are discussed in Appendix A as an excerpt from the final thesis paper.

To mitigate talent risk and attempt to restabilize the industry, belonging tools for measurement, transparency and governance for both employees and leadership are necessary.

[14] Baumeister & Leary. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497–529.

[15] Kwong Kwan et al. (2021). The need to belong: how to reduce workplace ostracism. *The Service Industries Journal*.

[16] Lawrence, T. (2021). Conceptualizing professionalism for African Americans: Transcending the detrimental implications of white supremacy culture and anti-black sentiments in the workplace. *Merrimack ScholarWorks*.

[17] Pichon, S., de Gelder, B., Grèzes, J. (2012). Threat prompts defensive brain responses independently of attentional control. Cerebral Cortex, 22, p. 274-285; MacDonald, G. & Leary, M.R., (2005). Why does social exclusion hurt? The relationship between social and physical pain. Psychological Bulletin, 131(2), pp. 202-223.

[18] Sommer, K. L., Leone, J., & Williams, K. D. (2020). Ostracism and Motivation in Groups. *Individual Motivation within Groups*, pp. 331–357.

[19] Wiltgren, L.K. (2020). Polite exclusion: high-performing immigrant students experience of peer exclusion. Race Ethnicity and Education, pp. 1–17.

[20] Deitch, E.A. et al. (2003). Subtle yet significant: The existence and impact of everyday racial discrimination in the workplace. *Human Relations*, 56 (111): 1299-1324.

1.2

The Importance of Human Capital

The importance of human capital has been demonstrated for decades. Yet, due to the fact that human capital is relatively immeasurable, and not cited on balance sheets (unless characterized as goodwill), it has largely been undervalued. In the first whitepaper researching belonging within the mining industry, "Unrealized Growth In Mining: Upgrading the future to include human capital and belonging," the paper outlined the importance of human capital, noting that while human capital is an intangible asset, intangible assets now account for nearly 85% of corporate enterprise value.[21]

Shortly after its publication Matousek & Tzeremes (2021) re-examined the effect of human capital on countries' economic growth paths. With a sample of 100 countries, over the period of 1970 to 2014, using indexes for both skilled and unskilled workers, empirical findings revealed the effect of human capital on countries' economic growth levels to be both positive and statistically significant. Of importance, how both skilled and unskilled workers identified with the organization and their personal intersections of identity created unequivocal asymmetrical patterns of growth. Moreover, post-pandemic research all points to human capital playing one of the leading roles in ensuring economic growth. Special attention is now being paid to the development of emotional intelligence, emotional competence, and belonging as pre-requisites for successful management of human capital post-pandemic.[22] Yet, fundamentally, human capital has yet to be fully actualized due to the lack of equity and equality in the makeup of its populus. Until those with marginalized identities have equal opportunity to be seen, valued and heard for the monetary and face value they bring to an organization, human capital will continue to go unrealized.

The lack of understanding that surrounds the intersections of identity, combined with the lack of acknowledgement for the levels of oppression, are what make racism, sexism, classism, ableism, heterosexism and all other forms of oppression the issues of an interlocking system that denies the true value of human capital. In order to fully appreciate and leverage the potential of human capital within an organization, one must first create organizational culture where all employees feel they belong and have equal opportunity to thrive. Further, the importance of EDIB must intersect with business goals and metrics for measurable improvement. It is time that organizations stop looking at EDIB as "themes", which enable levels of oppression to continue, and instead create metrics for governance that can measure belonging through key performance indicators.

Figure 5. An Example of Intersectionality
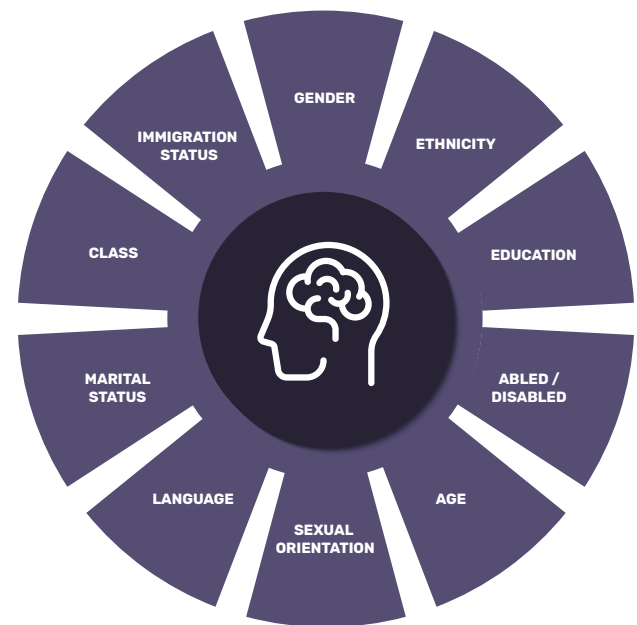
Intersectionality is an inter-locking system of co-existing identities that exist within each person.

Those with "socialized acceptable" intersections of identity experience belonging, opportunities, and inclusion more easily.[23]

[21] Carter, A. (2021). *Unrealized growth in mining: Upgrading the future to include human capital and belonging.* Adler University.
[22] Boikivska, G., Vynnychuk, R., Povstyn, O., Yurkevich, H., & Gontar, Z. (2021). Cognitive aspects in the process of human capital management in conditions of post pandemic social constructivism. *Postmodern Openings*, 12(1).
[23] Crenshaw., K.W. (1994). Mapping the margins: Intersectionality, identity, politics and violence against women of color. In M.A. Fineman and R. Mykitiu (Eds.), The public nature of private violence (pp.93–188). New York: Routledge.

1.3

The Canadian Mining Industry - Maintaining The Sectors Global Status

According to the Government of Canada, Canada is recognized as a leading mining nation[24]. The Canadian minerals sector, which includes exploration, mining and related support activities, primary processing, and downstream product manufacturing, is a central component of the Canadian economy. Approximately 692,000 people across Canada are employed directly and indirectly by the mining sector. In fact, economic activity occurs in every region of Canada with minerals being produced in every province and territory.

Figure 6. Canadian Mining: An Essential Economic Driver For The Canadian Economy
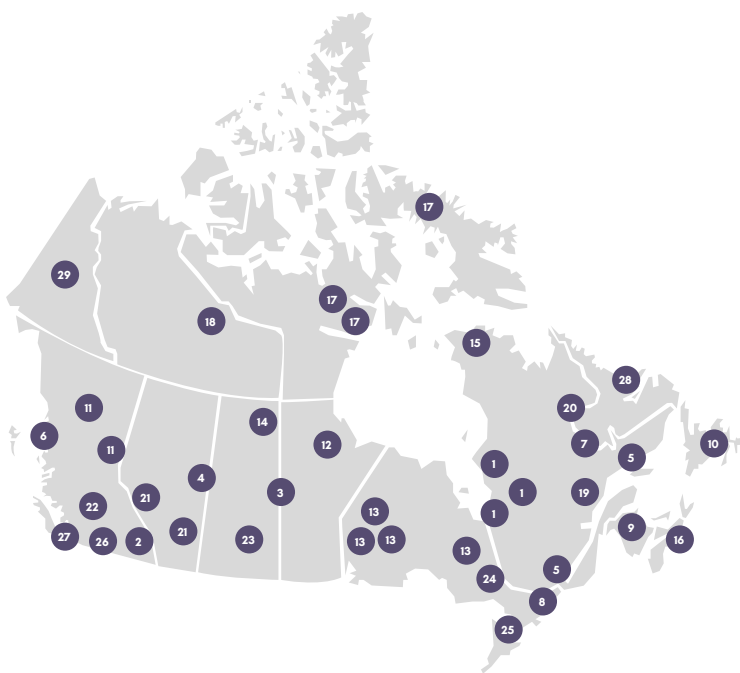
Resource: The Mining Association Of Canada. (2021). Mining.ca

1. **Abitibi and James Bay Region**
(gold, copper, zinc, dimaonds, allied industries)

2. **Elk Valley**
(metallurgical coal)

3. **Flin Flon**
(copper, zinc, gold)

4. **Fort McMurray**
(oil sands)

5. **Havre St.Pierre and Sorel-Tracy**
(titanium and scandium)

6. **Kitimat**
(aluminum)

7. **Labrador City and Fermont**
(iron)

8. **Montreal and area**
(metal refining, aluminum, exploration, allied industries)

9. **New Brunswick**
(zinc, lead, salt)

10. **Newfoundland**
(gold, nickel refining)

11. **Northern BC**
(copper, gold, molybdenum, metallurgical coal)

12. **Northern Manitoba**
(nickel, cobalt, gold)

13. **Northern Ontario**
(gold, palladium, platinum, copper, zinc)

14. **Northern Saskatchewan**
(uranium, gold)

15. **Northern Quebec**
(nickel)

16. **Nova Scotia**
(aluminum, niobium)

17. **Nunavut**
(gold, iron)

18. **NWT**
(diamonds)

19. **Saguenay Region**
(aluminum, niobium)

20. **Schefferville**
(iron)

21. **Southern Alberta**
(coal, allied industries)

22. **Southern BC**
(copper, gold, molybdenum)

23. **Southern Saskatchewan**
(potash, coal)

24. **Sudbury**
(nickel, copper, cobalt, allied industries)

25. **Toronto and Southern Ontario**
(salt, uranium, refininf, exploration, mine financing, allied industries)

26. **Trail**
(lead, zinc)

27. **Vancouver**
(exploration, mine financing, allied industries)

28. **Voisey's Bay**
(nickel)

29. **Yukon**
(copper, gold, silver)

[24] Government of Canada. (n.d.) Minerals and the economy. National Resources Canada. Retrieved on February 20th, 2022 from https://www.nrcan.gc.ca/our-natural-resources/minerals-mining/minerals-metals-facts/minerals-and-the-economy/20529

Combined with the industrials sector, which includes transport, construction, engineering and defence, it is a

C$300
billion dollar sector
with a position as the third-most valuable collection of companies listed on the Canadian stock market.

Yet, the value of the industry is declining. Canadian mineral production in 2020 was $43.9 billion, 8.1% lower than the 2019 value of $47.7 billion. Metals' value of production in 2020 also decreased slightly by 1.4% from the previous year, and non-metals and coal declined 13.4% and 29.6%, respectively in 2020.[25] While elements of the decline are attributed to the 2019 COVID-19 pandemic, and commodity price fluctuations, talent risk is a top risk factor to the mining industry recovery and stabilization.

In 2019, the Canadian Government announced a new mining policy, the Canadian Minerals and Metal Plan (CMMP) as a project aimed to tighten safety, regulatory compliance, indigenous involvement, environmental protection and organizational culture measures, in response to the negatively portrayed foreign recognition Canada has been receiving.[26] These challenges to the reputation and cultural perception of Canadian mining are considerable factors to the many barriers that exist within the industry and yet they pose an opportunity for Canada to remain competitive in their ability to secure funding. Specifically, the industry is the largest producer in the world for potash and ranks in the top five for gold, aluminum, diamonds, gemstones, platinum group metals, titanium concentrate and uranium. It is positioned for growth due to an increased demand for the minerals needed for many low carbon economy requirements. Mining provides us with the essential building blocks required to wire electric vehicles, develop medical supplies required to combat viral outbreaks, and provide the bedrock for the computers, smartphones and even buildings in which we use to work.

The Mining Association Of Canada says, "If it didn't grow, it was mined."

As the economy and talent changes, so too have the skill requirements of mining occupations. High demand for people centric skills such as; communication, out of box thinking, and the ability to work with diverse groups with an emphasis on belonging and inclusion are now seen as "essential".[27] Similar to the concept that what isn't grown is mined, when inclusion and belonging isn't grown, it must be mined. When looking at the critical risk factor that human capital and talent is under, it underscores the criticality and need for belonging metrics, governance and key performance indicators. You cannot grow what you do not measure, and you cannot measure something that is not defined. The Canadian Mining Industry is a major contributor that drives the Canadian economy. Mining accounts for $107B or 5% of GDP, $102B or 21% of total exports, 50% of rail revenue, and $7.5B or 34% of global mining financing raised in Canada.[28] Yet, only 11% of youth (15-24yrs) would probably or definitely consider working in the mining industry. Addressing the talent risk associated with the mining industry is both a great need and opportunity.

The data within this report speaks to the inequity that exists within mining's talent. While it uncovers who belongs and who does not, it also reveals the implications of not belonging. Those with belonging have opportunities, access and increased job satisfaction. Yet, belonging is not as obvious as one might expect. It is grown within the undercurrents of organizational culture and when it exists, employee satisfaction, engagement, loyalty, and growth flows.[29] However, when it only exists for certain employees and not all, those who do not belong will "mine" for something else. For that reason, in a sector with such tremendous potential for growth, it is time to value human capital. Understanding the significant talent risk that is currently exacerbated by negatively portrayed fairness and inequitable opportunities is essential. Leaders who embrace evidence for change do so with the mining industry and Canada's economy in mind.

[25] Government of Canada. (n.d.) Minerals and the economy. National Resources Canada. Retrieved on February 20th, 2022 from https://www.nrcan.gc.ca/our-natural-resources/minerals-mining/minerals-metals-facts/minerals-and-the-economy/20529

[26] Casey, J.P. (2020, April 17). Cancel Culture: is Canada turning away from mining? MiningTechnology.com Retrieved on February 6th, 2022 from https://www.mining-technology.com/features/cancel-culture-is-canada-turning-away-from-mining

[27] The Mining Association Of Canada. (2021). Mining.ca

[28] The Mining Association of Canada. (2022, March 9). Facts & Figures. Retrieved from https://mining.ca/resources/reports/facts-figures-2021/

[29] Rabl, T., del Carmen Triana, M., Byun, S.-Y., & Bosch, L. (2020). Diversity management efforts as an ethical responsibility: How employees' perceptions of an organizational integration and learning approach to diversity affect employee behavior. *Journal of Business Ethics*, 161(3), 531-550

1.4

Items On The Belonging-First EDI Survey - The Critical Indicators of Belonging

The seven sections represented on the Belonging-First EDI survey, created by author/researcher, were:

1. Demographics such as; type of mining company, years in the industry, career level, gender identification, and ethnicity identification were itemized.

2. Comfort items measured; the ability to feel at ease with the people you work with, the environment you work in, and the job you perform (including how your knowledge, skills and abilities' meet organizational expectations).

3. Contribution items measured; the ability to be recognized and valued for the work you contribute, without having to alter personality, or prove value or worthiness of recognition. Contribution also includes the ability to acknowledge, respect and value the contributions of others.

4. Connection items measured; the ability to connect personal values to organizational values and understand the shared vision and purpose as meaningful, including the connection with peers.

5. Psychological Safety items measured; an individuals' perception about the consequences of interpersonal risks in the work environment. It consists of the individual assessing any given behaviour against being shamed, embarrassed, ridiculed or punished for their actions, insights or intersections of identity.

6. Wellbeing items measured; an individual's protective factor risk required to manage stress, pressure and other behavioral issues, such as microaggressions.

7. Mining Specific Questions Relevant To Engagement In The Industry & Importance of EDI such as; importance of EDI to employer/employee, importance of belonging, fairness of signage, Personal Protective Equipment (PPE), accessible bathrooms, being the "only", Pressure to prove self, being respected due to title, suggestion box being read, and job postings and recruitment practices are fair to everyone.

1.5
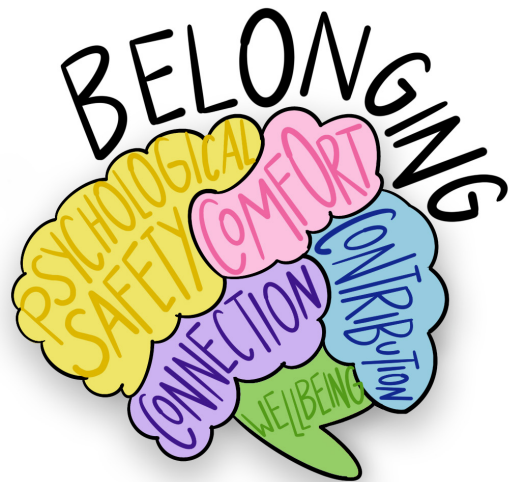
The Difference Between Engagement Surveys & Belonging-First Survey Measurement

One factor the author/researcher was highly cognizant of is the limitations that exist for engagement survey measurement. Far too often Equity, Diversity and Inclusion (EDI) items are integrated within the engagement survey measurement mechanism, rather than measured as a specific area of focus. Organizations often cite hesitation for a purely EDI based measurement, indicating survey fatigue as the main reason for not surveying employees solely for EDI. The ability to explicate organizational hegemony, intersectionality and the often silenced and unheard voices that exist in the workplace are enabled by organizational processes within engagement surveys.

These unchallenged iterative processes emerge through standardized engagement surveys and impact the process and decisions of the cultural experience within the organization.[30] In order for Equity, Diversity, and Inclusion to be appropriately measured, there is both an art and a science to survey and scale development. For example, the placement of potential scale items within the survey instrument and the relationship of survey research alongside scale building are instrumental to creating a strong conversational and statistically significant survey instrument. For that reason, the author/researcher conducted a concise review of the fundamental steps related to building and validating Equity, Diversity, and Inclusion scales through confirmatory factor analyses, reliability of a scale, and correlational and multiple regression analysis.[31] By performing this "Belonging-First" research it eliminates the assumption-based bias that all too often leads development and succession planning advancement decisions. For example, most leaders assume that when people are productive, receive good feedback on their performance by accomplishing their objectives, and are rightfully rewarded, they are usually satisfied with their jobs.[32]

Yet, based on the items and typical areas of focus that traditional engagement surveys measure, this assumption is what often leads to employee silence, high turnover and the loss of top-talent because the appropriate items and analysis have not been factored.[33] The Belonging-First survey however, has statistically and behaviourally been correlated to reveal job satisfaction[34] and therefore acts as an indicator that is highly relevant and important for EDI decisions and impact.

For that reason, the author/researcher looked to create methodology to gather data and metrics that would:

a. Statistically provide relevant perceptions of belonging from minority groups,

b. Statistically compare the data and metrics of belonging between minority groups and majority groups to reveal any significant differences affecting employee-organizational relationships,

c. Statistically compare the data and metrics of belonging from minority groups and majority groups to reveal any statistically significant gaps in data and therefore data-driven actions,

d. Reveal predictors of belonging, and

e. Statistically provide internal consistency and validity of belonging within the items of each key indicator to ensure sound metrics and methodology for future governance use.

Both the methodology for the Belonging-First survey design and the statistical analysis that demonstrates internal validity and reliability results can be reviewed in the Appendix.

[30] Holloway, E. L., & Schwartz, H. L. (2018). "Drawing from the margins: grounded theory research design and EDI studies". In Handbook of Research Methods in Diversity Management, Equality and Inclusion at Work. Cheltenham, UK: Edward Elgar Publishing. doi: https://doi.org/10.4337/9781783476084.00032

[31] Baron, C. (2018). "Surveys and scales in EDI research". In Handbook of Research Methods in Diversity Management, Equality and Inclusion at Work. Cheltenham, UK: Edward Elgar Publishing. doi: https://doi.org/10.4337/9781783476084.00024

[32] Levenson, A. (2014). Employee surveys that work: Improving design, use, and organizational impact. *Berrett-Koehler Publishers, Incorporated.*

[33] Houkamau, C. A., & Sibley, C. G. (2018). "Mixed methods and the scientific study of Maori identity: the story behind the multidimensional model of Maori identity and cultural engagement". In Handbook of Research Methods in Diversity Management, Equality and Inclusion at Work. Cheltenham, UK: Edward Elgar Publishing. doi: https://doi.org/10.4337/9781783476084.00031

[34] Carter, W.R., et al. (2018). The effects of employee engagement and self-efficacy on job performance: a longitudinal field study. *The International Journal of Human Resource Management*, 29 (17), pp. 2483-2502; Pichler, S. (2012). The social context of performance appraisal and appraisal reactions: A Meta-Analysis. *Human Resource Management*. 51(5), pp. 709-732.

1.6

Findings in a Nutshell

1.6.1

Mining Population Descriptions & Frequencies for Baseline Demographic Results

Career Level Results:

Of the 3508 participant population, the highest populations for career levels resulted in these three areas:

1. Technical or Operator (20.9%),
2. Middle Management (32.2%), and
3. Supervisor (35.0%) levels.

This data indicates that there is a ballooning effect occurring within the mid-section career level. Of importance, Entry-Level data represents only 7.4 percent of the 3508 participant population. As it stands within the mining industry, this demonstrates that the demand for new employees is not being actualized at the rate of need. As a comparison, the computer and information technology industry currently demonstrates a 13 percent growth projection for Entry-Level positions, which indicates approximately 667,600 new positions according to the U.S. Bureau of Labor Statistics.[35] Perhaps most importantly though, through Canadian Replacement by Demand Data, approximately 3.9 million positions are expected to open up due to retirement over the period of 2019 – 2028. If retirement rates reach a 2 percent rate of replacement, the current Entry-Level positions will not actualize the required stabilization to support the mining industry in its ability to maintain the sectors global status.[36]

Current Career Level
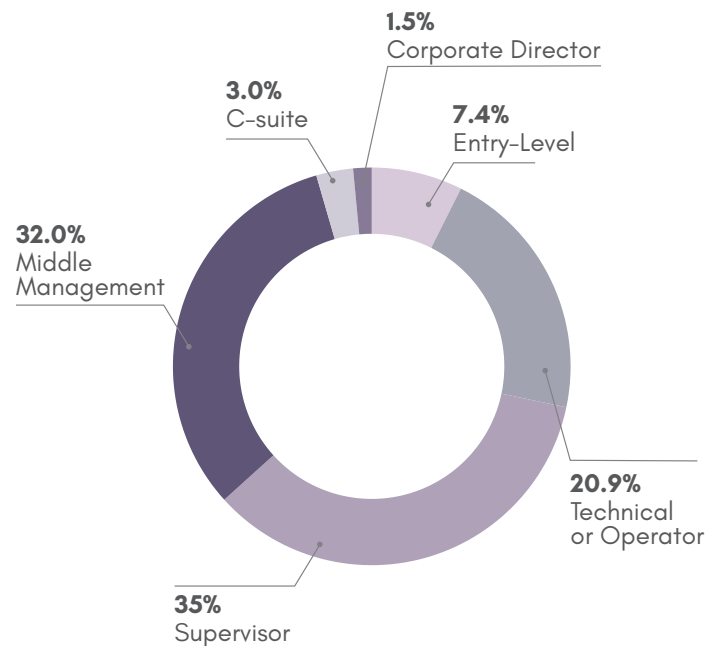
Figure 7. Career Level Demographic Results

[35] Occupational Outlook Handbook. (n.d.) US Bureau of Labor Statistics. https://www.bls.gov/ooh/computer-and-information-technology/
[36] Canadian Occupational Projection System (COPS). (n.d.) Government of Canada. https://occupations.esdc.gc.ca/

Gender Identity Results:

Of the 3508 participant population, gender identities are reported as:

75.1 percent male,
23.3 percent female,
0.8 percent non-binary/third gender and other gender expression and
0.7 percent for both those who prefer not to share how they identify.

This data is significant because it represents an industry wide demonstration of how the population identifies with a clear discrepancy between the male-female-non-binary/third gender and other gender expression ratios. It is notable to indicate that when male identification is statistically significant, such as the case here, there is a greater predictor of upholding sexism while normalizing unequal gender power dynamics within the workplace.[37] Further, when there are unequal measures of gender identification there are also greater predictors of discrimination for the LGBTQ2+ experience.[38] From a governance perspective, gender identity within the mining industry requires a more equitable design and an inclusive talent pipeline as both discrimination and inequity are products of design.[39] They need to be redesigned should leaders be committed to retaining a global status in the industry.

Gender Identities

0.7%
Prefer Not To Say

23.32%
Female

0.8%
Non-binary /
Third Gender &
Other Gender
Expressio

75.18%
Male
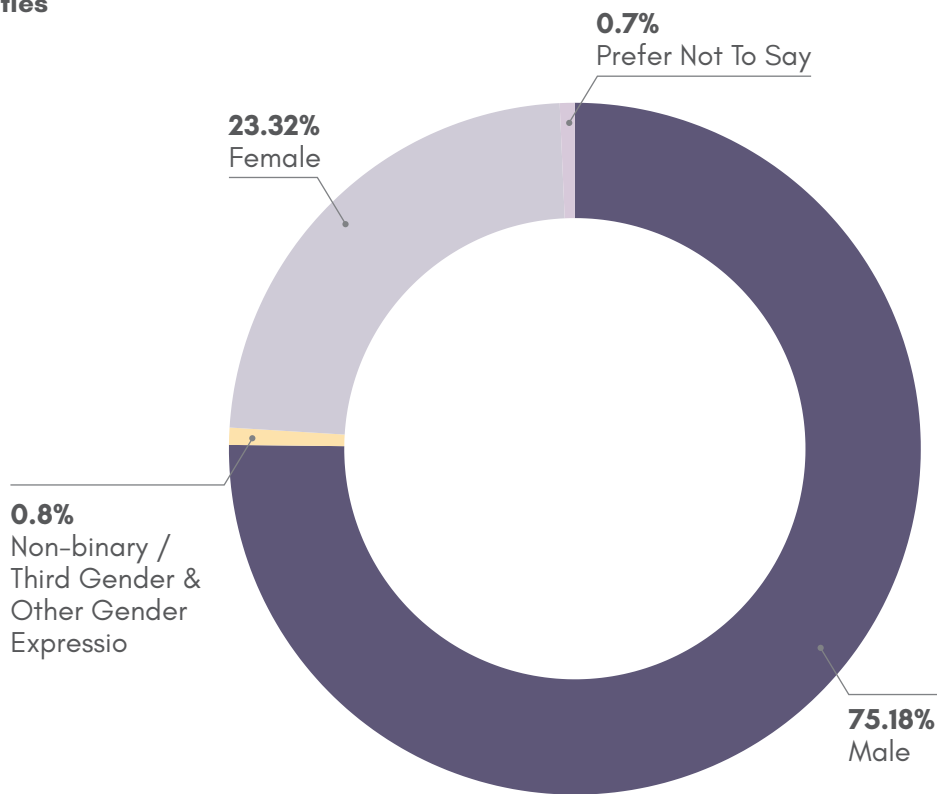
Figure 8. Gender Identity Results

[37] Weaver, K. S., & Vescio, T. K. (2015). The justification of social inequality in response to masculinity threats. *Sex Roles, 72(11),* 521–535.
[38] McKinsey and Co. (2020, June 25). LGBTQ+ voices: Learning from lived experiences. https://www.mckinsey.com/business-functions/people-and-organizational-performance/our-insights/lgbtq-plus-voices-learning-from-lived-experiences
[39] Ortiz Guzman, C.M. (2017) EquityxDesign: Leveraging identity development in the creation of anti-racist equitable design thinking process. Doctoral Dissertation, Harvard Graduate School of Education. https://nrs.harvard.edu/urn-3.HUL.InstRepos:3377459

Ethnicity Identification Results:

Of the 3508 participant population, the following ethnicity identities are reported from highest to lowest results:

- **White or Caucasian (40.5%),**
- **Black or African American (29.7%),**
- **Latin American (9.4%),**
- **Prefer To Self Describe (8.7%),**
- **Prefer Not To Disclose (3.4%),**
- **Indigenous Peoples (2.4%),**
- **Chinese & Japanese (1.2%),**
- **Arab (1.3%),**
- **Filipino (1%),**
- **South Asian (.9%),**
- **Metis & Inuit (0.7%),**
- **Southeast Asian (0.3%),**
- **Korean (0.2%), and**
- **West Asian (0.2%).**

Figure 9. Ethnicity Identification Results

It is important to note that both, "prefer to self describe" and "prefer not to disclose" were ranked in the fourth and fifth highest identifications. High ratings of these descriptors can indicate a lack of perceived trust or psychological safety. Moreover, while the participant population results indicate considerable ethnic diversity, the degrees of ethnic diversity are unimpressive.

Of equal importance, certain ethnic identities within this study were combined to account for the anonymity and confidentiality of groups that had less than 6 participants. This application is performed in accordance with academic standards and Social & Behavioral Research 2021 certification requirements. Furthermore, limitations of 16 items on the survey software restricted the selection of full identities of ethnicity. However, due to the low results, added ethnic identities would not have been compliant for publication. That said, the author/research wants to specifically acknowledge the listing of Indigenous Peoples and the options made available at the time of the survey. Because the survey also included Australia, Africa, and Latin American regions, which then also added the need to include the identities of Indigenous Peoples from those regions outside of Canada, the author/researchers used the global index for reporting Indigenous Peoples as the guide. In future and when investigating Canadian companies operating in the

regions of Canada, the appropriate selection should include Indigenous Peoples, First Nations Peoples, Metis and Inuit. Of equal importance, Harrison and McLean (2017) highlight that for Indigenous Peoples, "others" and "place" are synonymous, inextricably entwined, where country and land provides a deep sense of belonging and identity.[40]

Finally, due to the fact that 3 companies have operations in Africa and Latin American regions, it should be noted that Black and Latin American ethnicities are skewed. When these three companies are removed from the data, the ethnic identities representing Black and Latin American participants are significantly less.

[40] Harrison, A.W., & McLean, R. (2017). Getting yourself out of the way: Aboriginal people listening and belonging in the city. *Geographical Research, 55(4)*, 359-368. https://doi.org/10.1111/1745-5871.12238

Types of Mining Companies:

The following types of mining companies are reported with the highest being:

**Mine Services (35.8%),
Producer (35.8%),
Other (11.9%)
Explorer (1.8%),
Developer (1.3%), and
Consulting (1.1%)**

1.8% Explorer

1.8% Developer

11.9% Other

1.1% Consulting

35.8% Producer

48.1% Mine Services
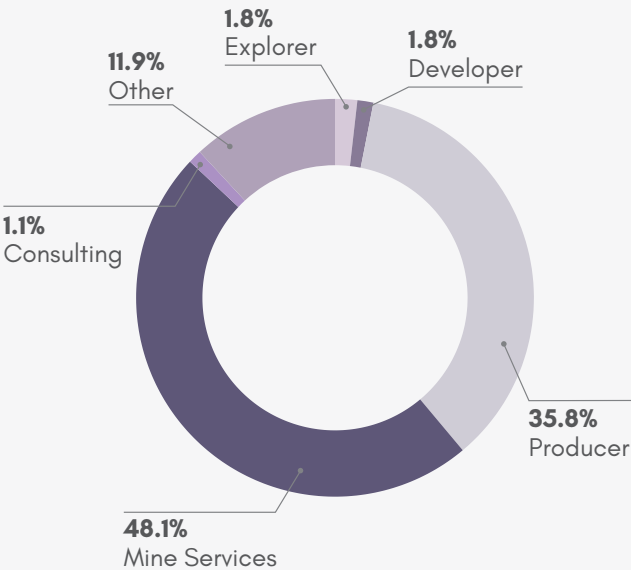
Figure 10. Types of Mining Companies

Years In The Mining Industry:

Respectively, the highest results of years in the mining industry by participants were:

**10-14 years (24.4%),
5-9 years (21.7%), and
20+ years (19.9%).**

The lowest results of years in the mining industry indicated:

**0-4 years (17.6%) and
15-19 years (16.4%).**

While these results may have varying degrees of relevance, they are statistically significant as they relate to belonging and the key indicators of belonging. These results will be discussed in depth within Chapter 2.

19.9% 20+ years

17.6% 0-4 years

21.7% 5-9 years

16.4% 15-19 years

24.4% 10-14 years
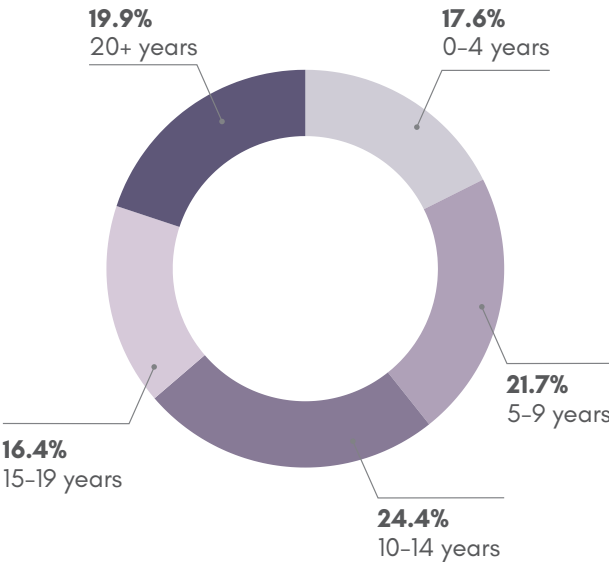
Figure 11. Years In The Mining Industry

Demographics Through the Belonging, Diversity & Inclusion Lens:

As noted in Section 1.5, **"The Difference Between Engagement Survey Measurement & Belonging-First Survey Measurement"**, while baseline demographics help to identify the majority views within the mining industry, the author/researcher argues the need to look deeper to accurately provide a voice for those who are marginalized. As such, the author/researcher also analyzed careel level by gender and ethnicity after noting a significant relationship between those intersections of identity and belonging.

Results indicated that those who identify as male (approximately 75 percent of the participant population) hold between 71-84 percent of career-level positions, with the exception of Entry-Level positions. The top positions, such as Middle Management (36.2%), C-Suite (63.2%), and Corporate Directors (62%) show that White males are the majority demographic. Of magnitude, those who held the intersection of identifying as both male and White had the highest scores of belonging. While this is likely not shocking information, it is significant as it is the first time it has been validated through statistical analysis.

For those who identify as female, results indicated statistically significant lower positions and ethnic representation within career levels, as compared to those who identify as male. The area where women reported the highest population was in the Entry-Level position (62%).

Of magnitude, those who held the intersection of identifying as both male and White had the highest scores of belonging.

Female Entry-Level Positions, Ethnicity Results Revealed:

White (37.5%),
Black (8.5%),
Prefer Not To Say (6%),
Prefer To Self Describe (3%),
Latin American (3%),
Filipino (2%),
Asian (0.3%), and
Indigenous Peoples (0.2%).

Please see the following demographic charts for full comparisons and analysis. Within the career level, female and ethnicity intersections of identity, they produced the lowest results of belonging.

Furthermore, those who identify as non-binary, third gender and other gender expressions, as well as those who prefer not to identify, held placements in each career level category, including Corporate Director. However, their representation was extremely low, as were their belonging scores. Ethnic identities were represented as Black, Latin American, Indigenous Peoples, and White within the gender expressions for those who identify as non-binary, third gender and other gender expressions, as well as those who preferred not to identify. Specific numerical values are not permitted to be released due to anonymity and confidentiality regulations, however; the overall distribution of career level by both gender and ethnicity, demonstrates a statistical significance ($p > .001$) and predicted a lack of belonging.

Career Level Metrics By Gender Expressions

Career Level Metrics By Gender Expressions

Total Belonging Score (y-axis): 0, 20, 40, 60, 80

Intersection of Career Level & Gender Identity

Categories: Entry-Level, Technical/Operations, Supervisor, Middle Management, C-Suite, Corporate Director

Legend:
- Male
- Female
- Non-Binary and Other Gender Identities
- Prefer Not To Say
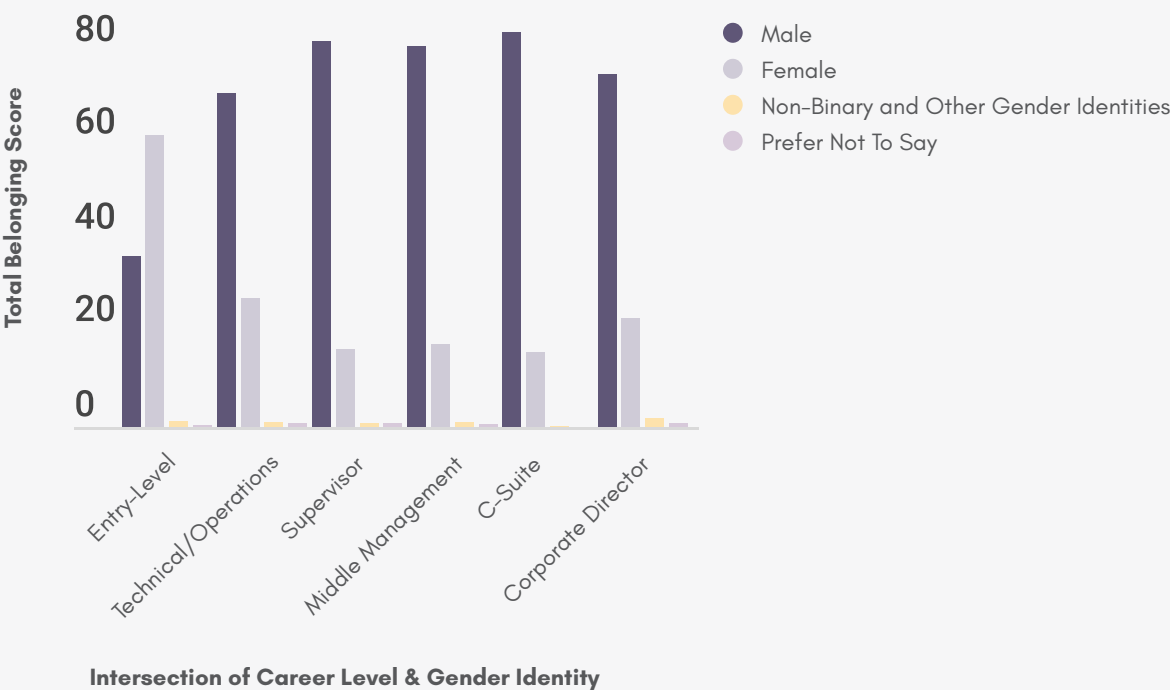
Figure 12. Career Level Metrics By Gender Identity

Entry-Level Positions By Gender and Ethnicity

Total Belonging Score (y-axis): 0, 10, 20, 30, 40

Entry-Level Intersected With Gender and Ethnicity

Categories: Arab, Asian, Black, Caucasian, Filipino, Indigenous Peoples, Latin American, Prefer Not To Say/Prefer To Self Describe

Legend:
- Male
- Female

Non-Binary and Other Gender Identities results were too small to represent on this graph, however, in depth representation is expressed in section 2.3
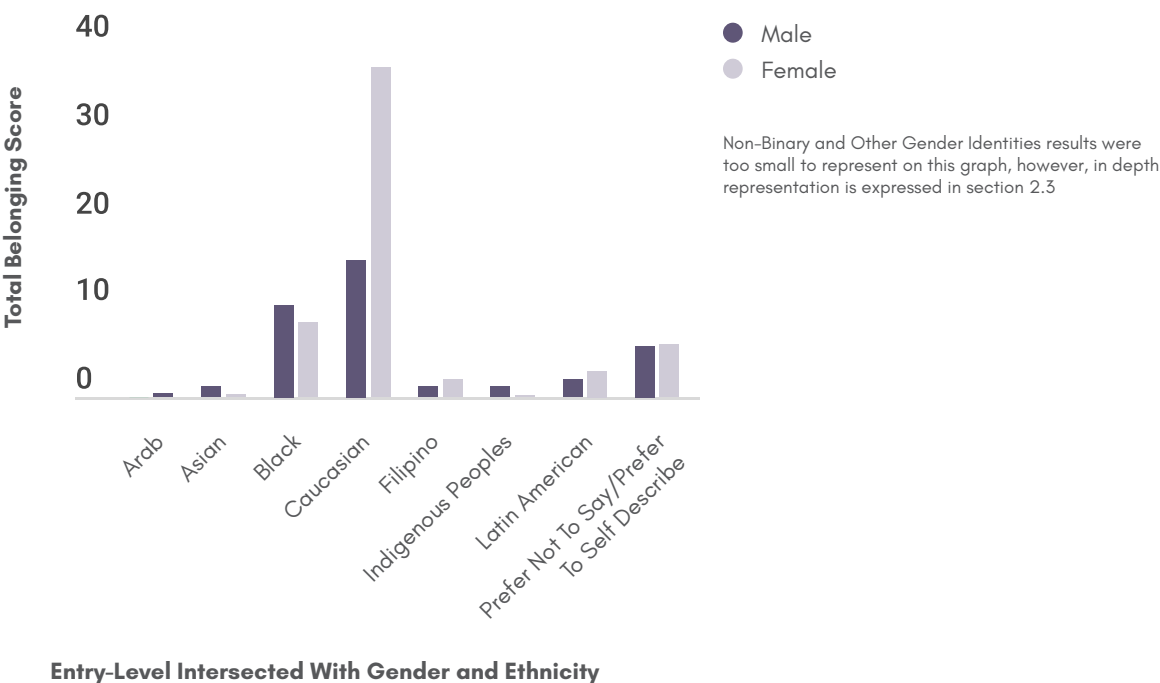
Figure 13. Entry-Level Positions By Gender Identity and Ethnicity

Technical / Operator Position by Gender and Ethnicity

Non-Binary and Other Gender Identities results were too small to represent on this graph, however, in depth representation is expressed in section 2.3
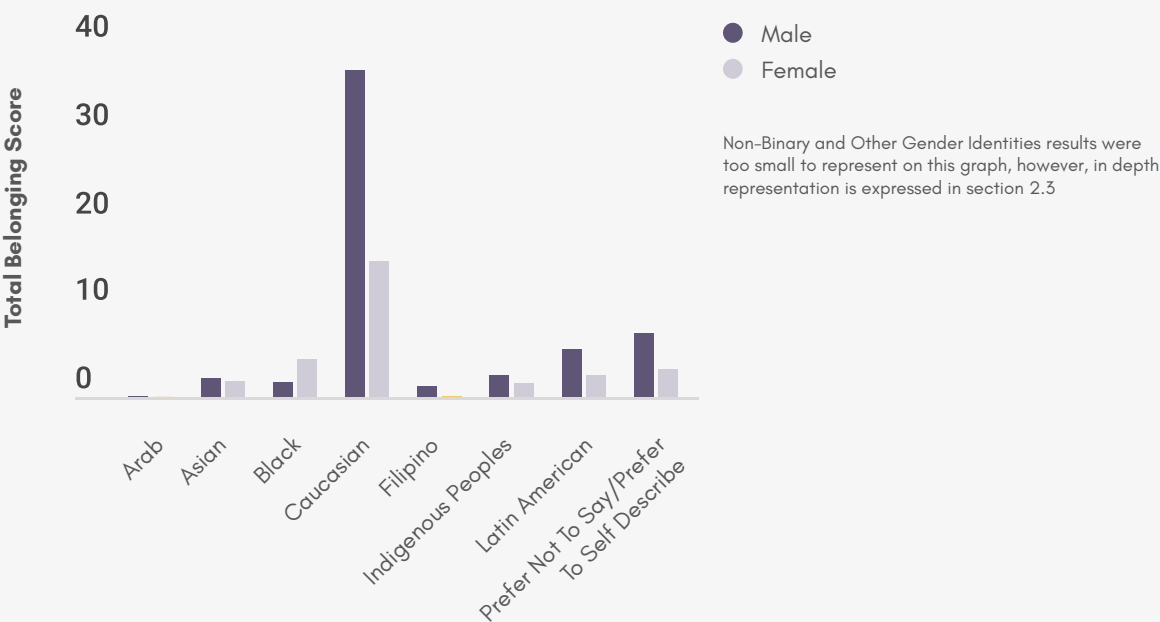
Technical / Operator Intersected With Gender and Ethnicity

Figure 14. Technical / Operator Positions By Gender and Ethnicity

Supervisor Position by Gender and Ethnicity

Non-Binary and Other Gender Identities results were too small to represent on this graph, however, in depth representation is expressed in section 2.3
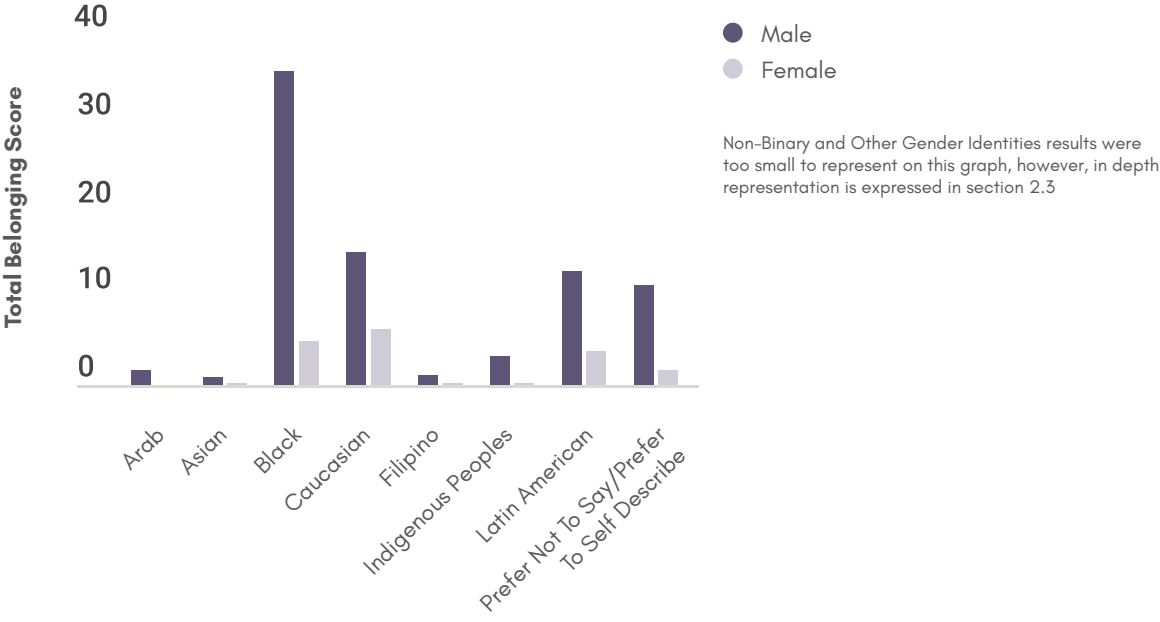
Supervisor Intersected With Gender and Ethnicity

Figure 15. Supervisor Positions By Gender and Ethnicity

Middle Manager by Gender and Ethnicity
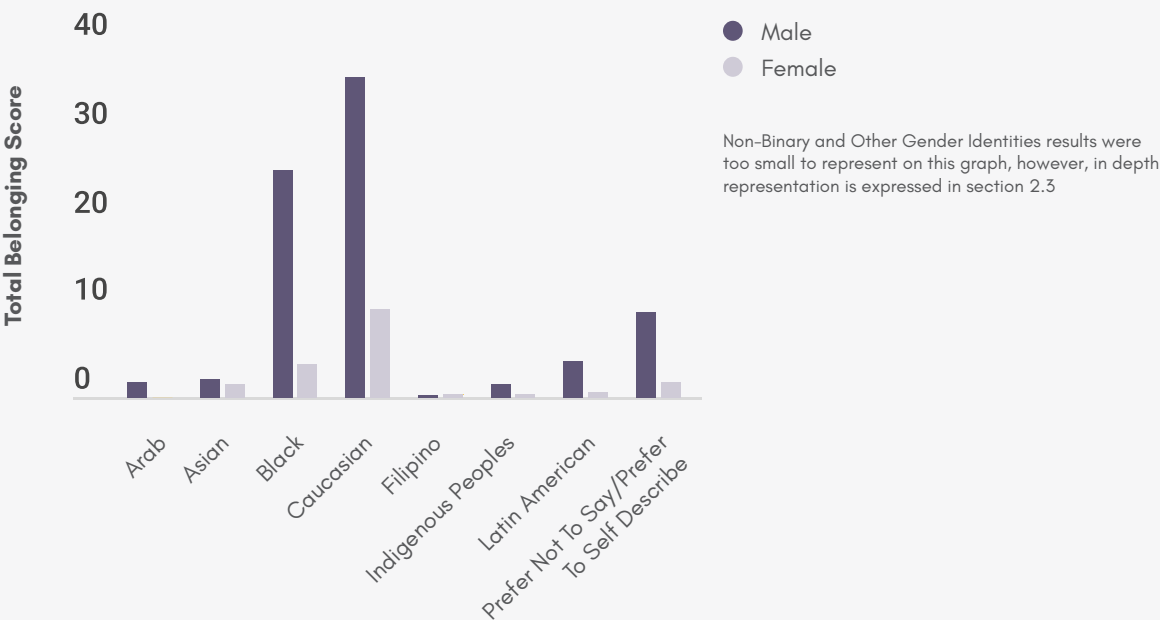
Middle Manager Intersected With Gender and Ethnicity

Figure 16. Middle Manager Positions By Gender and Ethnicity

C-Suite By Gender and Ethnicity
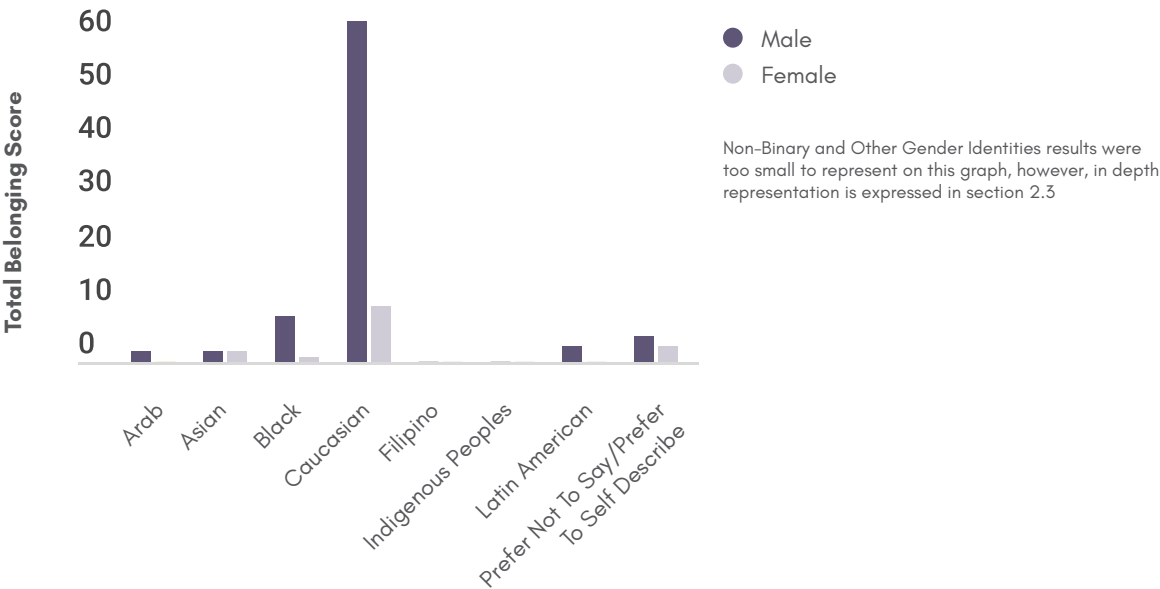
C-Suite Intersected With Gender and Ethnicity

Figure 17. C-Suite Positions By Gender and Ethnicity

Corporate Director by Gender and Ethnicity

Total Belonging Score

- ● Male
- ● Female

Non-Binary and Other Gender Identities results were too small to represent on this graph, however, in depth representation is expressed in section 2.3

X-axis categories: Arab, Asian, Black, Caucasian, Filipino, Indigenous Peoples, Latin American, Prefer Not To Say/Prefer To Self Describe
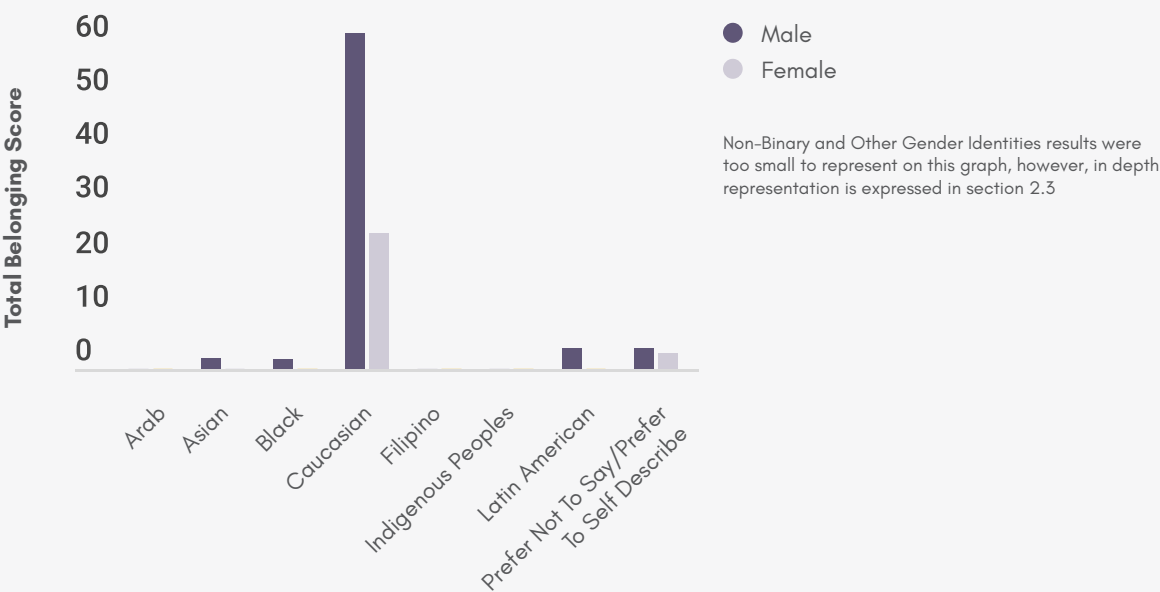
Corporate Director Intersected With Gender and Ethnicity

Figure 18. Corporate Director Positions By Gender and Ethnicity

1.6.2

Internal Validity & Reliability Results

First, to ensure internal validity and reliability, the author/researcher performed statistical analysis on each of the key indicators of belonging, the mining specific questions and all items of the survey. Cronbach's Alpha values were obtained for each indicator, mining specific questions, all items of the survey and the final total belonging score. Values above .7 are considered acceptable; however, values above .8 are preferable, and values above .9 are considered exceptional.[41] Internal validity and reliability was deemed exceptional for four of the key indicators Comfort, Contribution, Psychological Safety and Wellbeing, with individual Cronbach alpha coefficients reported of .99. Key indicator, Connection, was also deemed as exceptional, with a Cronbach alpha coefficient of .97. These scores indicate exceptional internal validity and reliability of their measurements. Total Belonging Score received a Cronbach alpha coefficient of .98 indicating that the measurement tool has exceptional internal validity and reliability. Mining specific questions also received a .99 Cronbach alpha coefficient indicating exceptional internal validity and reliability. Of notation, items listed in each key indicator of belonging are protected by proprietary primary research compliance and copyright protection. For that reason, only one item per key indicator of the Belonging-First survey is visible. Appendix B houses the Belonging-First internal validity and reliability results for those who are interested in seeing the statistical analysis results that have been verified.

[41] Pallant, J. (2020). *SPSS Survival Manual. A Step By Step Guide to Data Analysis Using IBM SPSS. (7th Ed.)*. McGraw-Hill Education. Open University Press.

1.6.3

Belonging Predictors within The Mining Industry

To understand how the demographic information interacted with the belonging indicators, multiple regression analysis was performed. For the purpose of this data, multiple regression is used to understand how well the demographic variables predict belonging. For example, the author/researcher was interested in exploring the total belonging score by those who identify as minorities versus those who identify as a majority group. Multiple regression provides information about the model as a whole and the relative contribution of each of the variables that make up the model. To test the predictive ability of the model and those variables included in the model, it is standard practice to use this statistical analysis methodology. Due to the fact that the Belonging-First EDI survey's internal consistency was exceptional, belonging predictors are also exceptionally regarded. Significance values that are less than .05 (.01, .0001 ect.) indicate that the variable is making a statistically significant unique contribution to the prediction of the variable. If the significance values are greater than .05 but less than .08, a theme of predictability may be present. Significance values greater than .08 are concluded that the variable is not statistically significant and is not able to predict belonging based on demographic variables.[42] Results indicate that predictors of belonging within the mining industry are; Gender ($p < .001$), Ethnicity ($p < .002$), Career Level ($p < .001$), and Total Mining Industry Indicators ($p < .001$). A theme of predicting belonging is also present with Years in the Mining Industry obtaining a regression significance value of ($p < .007$).

Once the analysis provided significance in predicting belonging, in gender, ethnicity, career level and years in the mining industry, the author/researcher was interested in understanding the relationships between them. A one-way between groups ANOVA with post hoc tests were performed to analyze the relationships.

Relationship Between Belonging & Gender Identity

Results demonstrated statistical significance indicating that there is an important relationship between belonging and gender ($p < .001$). When further analysis of the relationship was investigated, the relationship revealed that those who identify as male perceive belonging with meaning. Those who identify as female and those who prefer not to say how they identify, do not perceive belonging with meaning. These results indicate that identifying as male enables a greater sense of belonging and therefore an advantage in engagement and job satisfaction. Of equal importance though, when the data was further split into understanding the significance of the scores by favorability (unfavorable belonging score, neutral belonging score, favorable belonging score) the results demonstrated with significance that not all males favorably perceive belonging within their companies. This shows an area of opportunity that speaks to all identifications of gender, as well as the importance of identity intersections.

Relationship Between Belonging & Ethnicity Identity

Results demonstrated statistical significance ($p < .001$) in the relationship between belonging and those who identify as White. Those who identify as White perceive a greater relationship with belonging than those of other ethnicities. Again, the results indicate that identifying as White enables a greater sense of belonging and therefore an advantage in engagement and job satisfaction. Similar results to the relationship between belonging and gender were found in the relationship between belonging and ethnicity. Indicating a pattern that demonstrates the importance of identity intersections.

Relationship Between Belonging & Career Level

Results demonstrated a statistical significance ($p < .001$) in the relationship between belonging and career level. Specifically, those in C-Suite have the greatest perception of belonging compared to any other career level. Corporate Directors have a slightly lower sense of belonging in comparison to C-Suite. This result is likely a product of the fact that Corporate Directors are voted in and do not work together to the same degree as C-Suite. Middle Management and Supervisors scored equally in the third position for

[42] Pallant, J. (2020). *SPSS Survival Manual. A Step By Step Guide to Data Analysis Using IBM SPSS. (7th Ed.)*.McGraw-Hill Education. Open University Press.

perceived sense of belonging. Technical or Operator career levels scored the lowest in perception of belonging, with Entry-Level positions scoring second last. This indicates that belonging is relative within the mining industry and therefore leadership and those in people managing positions need to create cultures of belonging in order for engagement, job satisfaction, and retention to increase. Again, these results also indicate the importance of intersectionality.

Relationship Between Belonging & Years In Mining

Results did not demonstrate statistical significance on the relationship between belonging and years in mining. While those who have been in the mining industry for over 15 years have the highest rates of belonging, the lowest rates of belonging is perceived by those with 5-9 years of being in the mining industry. The steepest rate of decline of belonging occurs between 3-5 years in the mining industry. While this decline between 3-5 years of being in the mining industry did not create a statistical significance result, it is of high interest for employee retention and turnover rates.

Relationship Between Belonging & Specific Mining Industry Issues

The following results are important for Mining companies and their leaders to understand as they provide key insights into the perception of inclusion and belonging. For example, under the Total Mining Industry Indicators, the items such as, "I have been embarrassed by being the "only", "Personal Protective Equipment (PPE) is made to fit my body type and size", "Accessible bathrooms are always available", "Signage is safe and fair for everyone", "I have been pressured to prove myself so that I can belong", "Job postings & recruitment practices are fair to everyone" and "The suggestion box is read, shared and acted on" are all significant predictors of belonging with values of ($p < .001$). These specific questions indicate that when these elements are not perceived as important to leaders, or those in positions to impact change, sense of belonging is affected and decreases engagement and job satisfaction.

Moreover, of the specific Mining Industry questions that related to Equity, Diversity, and Inclusion, the statistically significant item with a value of ($p < .001$)

is "Diversity & Inclusion is important to my employer". The significance of this question indicates that when employees perceive that Diversity and Inclusion are not important to the employer, it predicts a lack of belonging within the organization and therefore a decrease in motivation, engagement and job satisfaction.

As organizations look forward to mitigating the employee-organization relationship risk that exists within talent management and human capital valuations, the dimensions of diversity (which harbour the most employment inequities) must be accounted for. Belonging in the workplace is one data-driven methodology for governance that can make an impact. This whitepaper research measured only a small proportion of demographic data, primarily gender, race/ethnicity, years in mining, and career level. This was done intentionally to review proportions of official statistics.[43] The findings within Chapter One align with the recent official statistics that indicate that while women's employment and under-represented ethnicities are at their highest rates ever, they remain disproportionately represented in gender-typed occupations and upper management. The next section, which articulates the methodology and governance of Belonging, provides insights into the social constructions of organizational culture and solutions for change.

[43] Kirton, G. & Greene, A. (2022). *The Dynamics of Managing Diversity and Inclusion: A Critical Approach. (5th Ed.)* New York, NY: Routledge.

75% male

25% female, non-binary/third gender and other
gender expression and those who prefer not to share
how they identify

2.1

Culture Is Enforced Through The Cycles of Socialization

There is much controversy surrounding the mechanisms of bias and defensive patterns that exist within homogenous organizations. Fundamentally, systems of oppression are upheld by social, cultural, environmental, and geographical structures providing parameters for what is deemed acceptable, right or wrong, deservable to belong or qualified to be ostracized or alienated.[44]

Homogeneity in an organization can uphold systems of oppression, act as an amplifier for bias, defensive patterns and degrading behaviour.[45] As organizations begin to consider mechanisms for governance and strategy to ensure workplaces where everyone feels they belong, an authentic dedication to impactful change comes into being. The concept of not being able to unsee, once someone holds the flashlight up to inequity, is ultimately what drives the mechanisms that support and uphold the ownership for an equitable workforce. Harro (2010) introduced the cycle of socialization stating that, "when people begin to study the phenomenon of oppression, they start with recognizing that human beings are different from each other in many ways".[46] The cycle of socialization, demonstrated in Figure 19: The Adapted Cycles of Socialization By Carter, A (2022), shows us that while no one has a choice in the situation that they are born into, the systems, mechanics, assumptions, rules, roles, and structures in place that have been functioning for millennia will shape the views, beliefs, and values we conform to. Due to the power of these cycles of socialization, their forces and influences, these cycles shape each person born, regardless of gender, race, age, sexual orientation, religion, economic class, and ability. The same is true for organizational culture because it is driven by the values, norms and behaviours of the leaders and those in positions of power within the company.

When reviewing Figure 19 on the next page, there are two lenses on can see it through. The first, is a personal lens, representing the human experience of being born into a family and assimilating to the specific values, beliefs and norms that family adheres to.

The second lens is the workplace or organizational lens. The initial experience a new employee has when onboarded into an organizational culture takes on the same processes as in the personal experience. The same processes of assimilation and learning, while "normalizing" the values, behaviours and norms the organization upholds. This cycle demonstrates the methodology of oppressed organizational culture until awareness and knowledge merge with metrics and governance.

[44] Allen, K.A. (2020b). Commentary: A pilot digital intervention in targeting loneliness in youth mental health. *Frontiers in Psychiatry*, 10, p. 959. https://doi.org/10.3389/fpsyt.2019.00959
[45] Offe, C. (1998). "Homogeneity" and constitutional democracy: coping with identity conflicts through group rights. *Journal of Political Philosophy*, 6(2), 113-141.
[46] Harro, B. (2010). *Cycles of Socialization. Diversity and Social Justice*. New York, NY. Routledge.

For impactful change to occur, the cycles of socialization must be understood for their contributions to human capital constraints.

Figure 19. Adapted Cycles of Socialization by Carter, A. (2022)

The Beginning

First Socialization

Born into a world where oppressive structures are already in place

While you have no consciousnes, no blame, no guilt. Your identity is shaped by the biases you live in.

Models and Reinforced Messaging
Learn on personal level by parents, relatives, teachers, people we love and trust: Shapers of expectations, norms, values, roles, rules, models for ways to be in the world, sources for what dreams & aspirations are possible.

The Core

Fear
Ignorance
Confusion
Insecurity

Institutional & Cultural Solicialization

Conscious & Unconscious
Reinforced messaging from:
Institutions: school, media, legal system, mental health, medicine, business.

Cultural: Song lyrics, patterns of thought, social media, and community.

No Actions
- Create Adverse Impact
- Point Fingers Elsewhere
- Stay Silent
- Promote Status Quo
- Do Nothing
- Performative Actions For Public Appearance Only

Results

Microaggressive actions such as; Ignoring, Interrupting, Talking Over, Silencing, Shouting, Aggression, Collusion, Lack of Consistency, Horizontal Violence, Internalization of Power, Ignorance, Ostracization, Exclusion, Dehumanization, Covert Slights and Insults. All of this leads to upholding racism, sexism, discrimination and oppressive structures of power.

Institutional & Cultural Socialization Enforcements
- Sanctioned vs. Stigmatized
- Rewarded vs. Punished
- Privilige vs. Persecution
- Empowerment vs. Discrimination

These differences uphold dated models that no longer represent the demographics or the intersections of identity within Canada.

Direction for Change
- Change
- Interrupt Patterns
- Educate
- Question
- Reframe
- Take A Stand
- Authentic Allyship & Actions with Governance, Metrics and Impact

Originally created by Harro, B (1982). The Cycles of Socialization. Referenced in Adams, et al. (1997) Teaching for Diversity and Social Justice. Readapted by Harro, B (2012).

Specifically, to change the collective oppressive socialized beliefs, values and actions we must look to inclusive and belonging behaviours that drive a new form of collective intentionality.

Stanford Encyclopedia of Philosophy explains collective intentionality as; "the power that comes from a collective group of people that jointly directs matters of fact, states of affairs, goals, or values. Collective intentionality is composed of the shared intention, joint attention, shared beliefs, collective acceptance, and collective emotion of a topic of importance."[47]

Collective intentionality explains through a scientific lens what allows micro-aggressions and acts of discrimination and racism to be upheld. Currently, collective intentionality upholds oppressive structures and systems because socialized values have gone unchecked and without governance. Collective intention is powered by the messaging within an organizational culture. Silence and "remaining neutral" are also acts of violence. **When covert, everyday exchanges that send denigrating messages to certain individuals are "allowed" it reinforces the lack of group membership for being different, and it normalizes the need to fit in and be silent to the behaviours that tear people down.** Denigrating messages such as: "You do not belong," "You are intellectually inferior," "You cannot be trusted," "You are all the same", "You are bad because you are different", are all examples of the inherent microaggressions experienced in the workplace. **These messages, directed at those who hold diverse intersections of identity are stored within the psyche of the employee and create feelings of powerlessness, invisibility, forced compliance and loss of integrity within the workplace.**[48] These microaggressions, language and normalized behaviours embedded within the current collective intentionality are the biggest threat as the talent risk rises because these norms separate and destroy motivation, engagement and job satisfaction. Moreover, for those whose intersections of identity are part of the majority, belonging is easier to obtain and therefore harder to comprehend that others do not have the same experience or opportunities. Homogeneous organizational norms, behaviours and values eventually translate for those who are different into the complacent or the engaged employee. This happens because for those who have

more intersections of how they identify, their needs and experiences differ and eventually the barriers to be seen, heard and valued become too great to uphold. While leaders look to solve for the talent risk, the culture of the organization is the place to start. The collective intention, messaging and modeling is generated from the norms and culture of the organization. Norms and culture are what continue to drive the expectation for employees. **Those who start at an organization and receive the messaging "I need to fit in or risk exclusion and ostracization" eventually become the complacent employee driven by biased and oppressive cycles of socialization.**[49] **Those who receive, "I belong, therefore I am valued" grow into your engaged employees.** The organizational culture, driven by the collective intentionality of leadership and industry, is what deploys the messaging and dictates the opportunities.

Belonging helps to counter these acts of microaggressions, racism and discriminations. Belonging is the motivation that the brain searches for in every situation a human is exposed to.[50] When the brain is able to identify that the key indicators of belonging are present, it significantly changes the employee-organization relationship. Moreover, MIT Sloan School of Management, Mary Rowe, indicates that micro-actions open doors to opportunity, inclusion and caring, and provides signals that counteract unconscious bias.[51] For this reason, the author/researcher looked to break down the key indicators of belonging, measure the experience of belonging, identifying who currently has belonging, and then create governance and micro-belonging mechanisms that integrate within the business strategy and goals for impactful change.

[47] Schweikard, D. P. & Bernhard Schmid, H. (Fall 2021 Edition). "Collective Intentionality", *The Stanford Encyclopedia of Philosophy*, Edward N. Zalta (ed.), Retrieved from https://plato.stanford.edu/archives/fall2021/entries/collective-intentionality.

[48] Sue, D. W., Capodilupo, C. M., & Holder, A. (2008). Racial microaggressions in the life experience of Black Americans. Professional psychology: Research and practice, 39(3), 329.

[49] Rai, A. & Agarwal, U.A. (2018). Workplace bullying and employee silence. A moderated mediation model of psychological contract violation and workplace friendship. *Personal Review, 47(1)*, 226–256.

[50] Iacoboni, M. (2009). Mirroring People: *The science of empathy and how we connect with others.* (1st Ed.) Picador.

[51] Rowe, M. (2008). Micro-affirmations & Micro-Inequities. *MIT Sloan School of Management.*; Rowe, M. (2021). Belonging - The feeling that we "belong" may depend on "affirmations". *MIT Sloan School of Management. Working Paper of Research.*

2.2

The Five Indicators of Belonging & What They Each Measure

Belonging in the workplace, based on the primary research the author/researcher performed, consists of five key indicators; comfort, contribution, connection, psychological safety, and wellbeing. Based on the literary research on each of these five indicators, the author/researcher has defined each of these indicators as follows;

Comfort
Comfort in the workplace is the ability to feel at ease with the people you work with, the environment you work in, and the job you perform. Comfort includes the alignment of your knowledge, skills and abilities as they have been defined by the requirements of your role and your ability to meet organizational expectations.

Contribution
Contribution in the workplace is the ability to be recognized and valued for the work you contribute, without having to alter your personality, values or beliefs. Contribution also includes your ability to acknowledge, respect and value the work of others.

Connection
Connection in the workplace is the ability to connect personal values with organizational values and understand the shared vision and purpose as meaningful.

Psychological Safety
Psychological Safety in the workplace describes your perception about the consequences of interpersonal risks in the work environment. Your individual assessment of any given behaviour against being shamed, embarrassed, ridiculed, excluded or punished for your actions. When psychological safety is high, defensive patterning and anxiety is lower. Psychological safety sets the climate for interpersonal interactions and denotes the need to protect yourself or monitor your behaviours or actions, in the presence of others/certain people.

Wellbeing
Wellbeing in the workplace results from your ability to manage interpersonal relationships, expectations, pressure, stress and tension as it applies to your job description, the organizational culture, the support you have access to, and the biases you face. Ultimately, when you perceive that you are supported and valued, wellbeing is more highly perceived and experienced.

Under those definitions, 11 survey items were composed for each key indicator to create metrics to measure a total belonging score, a total comfort score, a total contribution score, a total connection score, a total psychological safety score, and a total wellbeing score. These scores are then used for benchmarking baseline belonging data to be consistently measured over time and against other companies and industries. The data that is benchmarked enables organizations and leaders to:

1. Gain an independent perspective about how well you perform compared to other companies and industries,
2. Drill down into performance gaps to identify areas for improvement and opportunities for growth,
3. Develop a standardized set of processes and metrics for governance and transparency,
4. Enable a Belonging-First mindset and culture of continuous improvement, and
5. Identify the intersections of identity and their belonging experience to ensure both majority and minority demographics are recognized and valued.

2.3

## Belonging-First Benchmarking Results By Mining Company

The enclosed benchmarking results are broken down by mining companies, gender, ethnicity, and role. These metrics were selected based on the mining industry predictors of belonging and in compliance with the focus of the research. While the mining companies who participated in the research will not be named, they are accounted for only numerically. It must also be stated that the companies who participated in this study did so based on their own interest in equity, diversity, and inclusion, their authentic desire for growth, and a genuine intention to facilitate impactful actions for change. While the data may vary by company, the courage to discover their baseline data provides them with competitive advantage and insights that will lead to the ability to align company goals with strategic processes and standards for governance and transparency. While it takes courage to speak out against the tide of opinion, it takes just as much courage to go first and think outside the box for the benefit of the organization and industry.

Benchmarking By Company:
To obtain benchmarking results per company, each key indicator score was initially scored based on a 5 point Likert Scale. The total score for belonging is composed of each item summed within the five key indicators of belonging out of a total score of 285. **Key indicators; Comfort, Contribution, Connection and Psychological Safety** were scored based on eleven items, with the highest potential score being 55 and the lowest potential score being 11. Key indicator Wellbeing was scored based on thirteen items, with the highest potential score being 65 and the lowest potential score being 13.

Figure 20. Total Belonging Score For Each TSX Listed Participating Company

Total Belonging Score For Each TSX Listed Participating Company
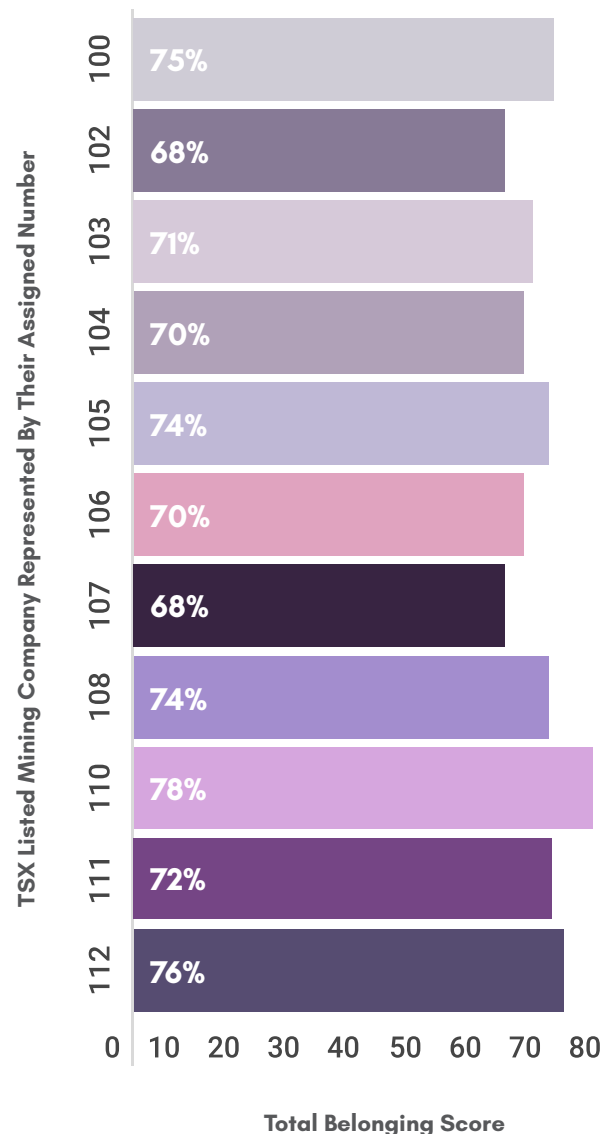
When initially assessing the overall belonging score of a company, it is important to understand that while benchmarking is an important factor for baseline data, the most effective means for using the information is internally and repetitively over time. Repeating the survey at a later date enables companies to interpret their employees Belonging-First perception and its growth. Furthermore, once initial benchmarking is in place, the data should be measured against business growth in the initial year the Belonging-First Survey is conducted.

Next, when benchmarking individual key indicator scores, refer to the definitions of each key indicator to understand the strengths and opportunities. These indicators provide organizations the capability to then determine which belonging behaviours are most needed and which can be leveraged for quick wins and gaining momentum. Figure 21 demonstrates the results for comfort, contribution and connection. Of notation, all mining companies who participated in the research scored above the mean for all industries in total connection. The author/researcher considered that due to the intricate skills, knowledge, and abilities that are currently perceived to be required to work in the mining industry, that could explain the high level results for connection. When individuals work in a culture of specific expectations and norms could it be possible that the connection to the organizations purpose, vision and mission become a component of identity? Considering that many of the individuals who identify as White and Male also might define themselves as Executive or Management within the mining industry, the author/researcher considered this a potential area of investigation in her next area of research. Moreover, a correlation currently exists through the high percentage of employees who have been in the mining industry for more than 8 years. In comparison, total comfort consistently scored the lowest amongst all mining companies, indicating an area of opportunity within the talent pipeline.

Figure 22. Benchmarking for Total Psychological Safety and Wellbeing amongst all participating TSX listed mining companies, also produced interesting results. Psychological Safety produced higher than expected data consistently throughout all TSX listed mining companies.The author/researcher considered whether groupthink and employee silence could be part of the reason and felt that further investigation into both

majority and minority experiences would be important to understand the perception of Psychological Safety through this lens. Total Wellbeing produced consistent results amongst all TSX listed participating mining companies.

Figure 21. Benchmarking for Total Comfort, Contribution & Connection amongst all participating TSX listed mining companies.
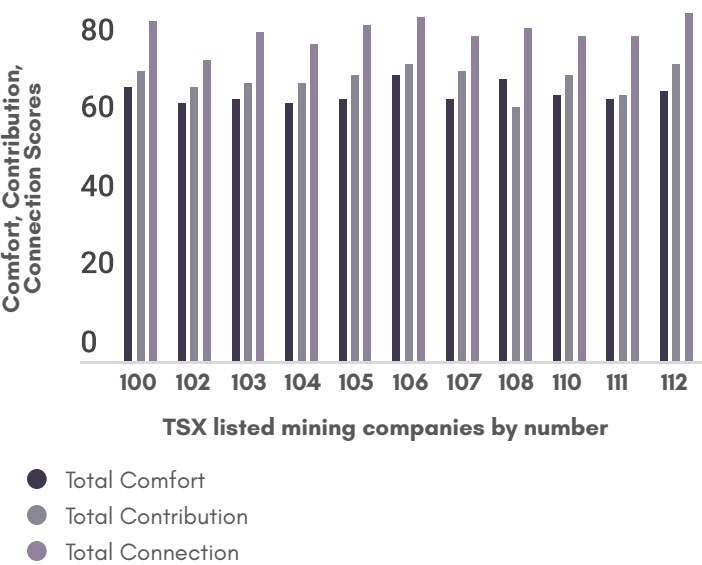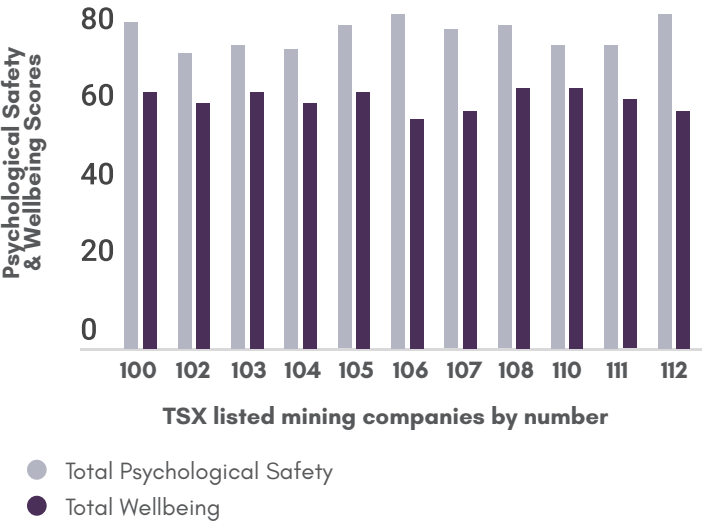

Figure 22. Benchmarking for Total Psychological Safety and Wellbeing amongst all participating TSX listed mining companies.

2.4

Belonging-First Benchmarking Results By Intersections of Identity

BELONGING RESULTS
Entry-Level

Figure 23.

Entry-Level Belonging Scores
Intersected with those who
Identify as Asian Ethnicity

Unfavorable Belonging Score ≤ 59%, Neutral Belonging
Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people
who identify in this benchmark. While it is compliant to
share a percentage, the frequency must be protected to
uphold confidentiality and anonymity.

Unfavourable

| **Neutral** | 50% | 58% |
| **Favourable** | 50% | 42% |

- Asian Males (N = n/a)
- Asian Females (N = 12)
- Asian Non-Binary/Third Gender & Other Gender Identities
- Asian Ethnicity Who Prefer Not To Identify Their Gender

Figure 24.

Entry-Level Belonging Scores
Intersected with those who
Identify As Arabic Ethnicity

Unfavorable Belonging Score ≤ 59%, Neutral Belonging
Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people
who identify in this benchmark. While it is compliant to
share a percentage, the frequency must be protected to
uphold confidentiality and anonymity.

Unfavourable

Neutral

Favourable

*There are no arabic identities in Entry-Level positions*

- Arabic Males
- Arabic Females
- Arabic Non-Binary/Third Gender and Other Gender Identities
- Arabic Ethnicity Who Prefer Not To Identify Their Gender

Figure 25.

Entry-Level Belonging Scores Intersected with those who **Identify as Black Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

Unfavourable	8%	24%
Neutral	52%	48%	100%
Favourable	40%	28%
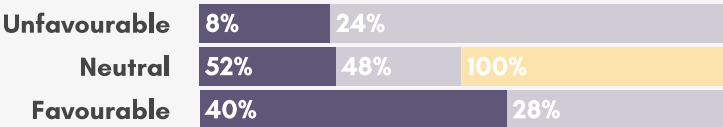
● Black Males (N = 25)
● Black Females (N = 21)
● Black Non-Binary/Third Gender and Other Gender Identities (N=n/a)
● Black Ethnicity Who Prefer Not To Identify Their Gender

Figure 26.

Entry-Level Belonging Scores Intersected with those who **Identify As White Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

Unfavourable	16%	9%
Neutral	57%	65%
Favourable	27%	26%

● White Males (N = 37)
● White Females (N = 86)
● White Non-Binary/Third Gender and Other Gender Identities
● White Ethnicity Who Prefer Not To Identify Their Gender

Figure 27.

Entry-Level Belonging Scores Intersected with those who **Identify as Latin American Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.
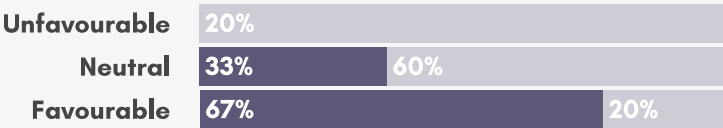
Unfavourable	20	11
Neutral	40	78
Favourable	40	11
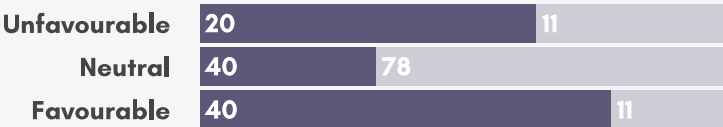
● Latin American Males (N = n/a)
● Latin American Females (N = 9)
● Latin American Non-Binary/Third Gender & Other Gender Identities
● Latin American Ethnicity Who Prefer Not To Identify Their Gender

Figure 28.

Entry-Level Belonging Scores Intersected with those who **Identify as Indigenous Peoples Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

Unfavourable	20%	
Neutral	33%	60%
Favourable	67%	20%

- Indigenous Peoples Males (N = n/a)
- Indigenous Peoples Females (N = n/a)
- Indigenous Peoples Non-Binary/Third Gender and Other Gender Identities
- Indigenous Peoples Ethnicity Who Prefer Not To Identify Their Gender

Figure 29.

Entry-Level Belonging Scores Intersected with those who **Identify As Self Described or Mixed Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

Unfavourable	20%	
Neutral	75%	63%
Favourable	25%	17%

- Self Described or Mixed Ethnicity Males (N = n/a)
- Self Described or Mixed Ethnicity Females (N = n/a)
- Self Described or Mixed Ethnicity Non-Binary/Third Gender and Other Gender Identities
- Self Described or Mixed Ethnicity Who Prefer Not To Identify Their Gender

BELONGING RESULTS
Technical or Operator

Figure 30.

Technical or Operator Belonging Scores Intersected with those who **Identify As Asian Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

Unfavourable	19	8
Neutral	52	69
Favourable	29	23

- Asian Males (N = 21)
- Asian Females (N = 13)
- Asian Non–Binary/Third Gender & Other Gender Identities
- Asian Ethnicity Who Prefer Not To Identify Their Gender

Figure 31.

Technical or Operator Belonging Scores Intersected with those who **Identify As Arabic Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.


Unfavourable	
Neutral	100
Favourable	

- Arabic Males (N = n/a)
- Arabic Females
- Arabic Non–Binary/Third Gender and Other Gender Identities
- Arabic Ethnicity Who Prefer Not To Identify Their Gender

Figure 32.

Technical or Operator Scores Intersected with those who **Identify as Black Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

Unfavourable	9%	11%	100%
Neutral	58%	45%	100%
Favourable	33%	44%	
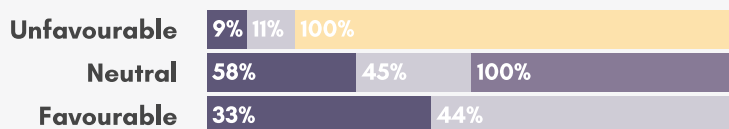
● Black Males (N = 109)
● Black Females (N=27)
● Black Non-Binary/Third Gender and Other Gender Identities (N=n/a)
● Black Ethnicity Who Prefer Not To Identify Their Gender

Figure 33.

Technical or Operator Belonging Scores Intersected with those who **Identify As White Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

Unfavourable	24%	17%	
Neutral	23%	50%	100%
Favourable	53%	33%	
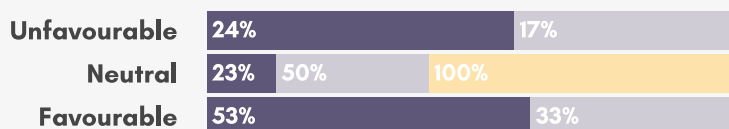
● White Males (N = 240)
● White Females (N = 100)
● White Non-Binary/Third Gender and Other Gender Identities
● White Ethnicity Who Prefer Not To Identify Their Gender

Figure 34.

Technical or Operator Belonging Scores Intersected with those who **Identify as Latin American Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

Unfavourable	14%	6%	
Neutral	47%	35%	100%
Favourable	39%	59%	
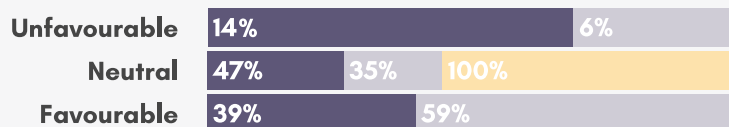
● Latin American Males (N = 36)
● Latin American Females (N = 17)
● Latin American Non-Binary/Third Gender & Other Gender Identities (N = n/a)
● Latin American Ethnicity Who Prefer Not To Identify Their Gender

Figure 35.

Technical or Operator Belonging Scores Intersected with those who **Identify as Indigenous Peoples Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.
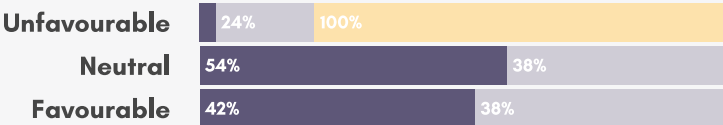
Unfavourable	11% 40% 100%	
Neutral	56% 50%	
Favourable	33% 10%	
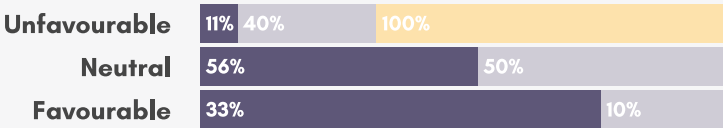
● Indigenous Peoples Males (N = 18)
● Indigenous Peoples Females (N = 10)
● Indigenous Peoples Non–Binary/Third Gender and Other Gender Identities
● Indigenous Peoples Ethnicity Who Prefer Not To Identify Their Gender

Figure 36.

Technical or Operator Belonging Scores Intersected with those who **Identify As Self Described or Mixed Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

Unfavourable	24% 100%	
Neutral	54% 38%	
Favourable	42% 38%	

● Self Described or Mixed Ethnicity Males (N = 26)
● Self Described or Mixed Ethnicity Females (N = n/a)
● Self Described or Mixed Ethnicity Non–Binary/Third Gender and Other Gender Identities (N = n/a)
● Self Described or Mixed Ethnicity Who Prefer Not To Identify Their Gender

BELONGING RESULTS
Supervisor

Figure 37.

Supervisor Belonging Scores Intersected with those who **Identify as Asian Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

Unfavourable	8%
Neutral	38%	60%
Favourable	54%	40%

- ● Asian Males (N = 24)
- ● Asian Females (N = n/a)
- ● Asian Non–Binary/Third Gender & Other Gender Identities
- ● Asian Ethnicity Who Prefer Not To Identify Their Gender

Figure 38.

Supervisor Belonging Scores Intersected with those who **Identify As Arabic Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

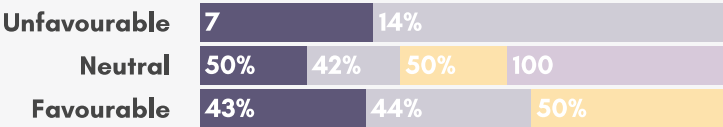|	
Unfavourable	
Neutral	22%
Favourable	78%

- ● Asian Males (N = 18)
- ● Arabic Females
- ● Arabic Non–Binary/Third Gender and Other Gender Identities
- ● Arabic Ethnicity Who Prefer Not To Identify Their Gender

Figure 39.

Supervisor Scores Intersected with those who **Identify as Black Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.
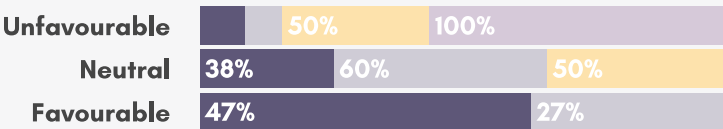
	Black Males	Black Females	Black Non-Binary	Black Prefer Not
Unfavourable	7	14%		
Neutral	50%	42%	50%	100
Favourable	43%	44%	50%	

● Black Males (N = 414)
● Black Females (N = 59)
● Black Non-Binary/Third Gender and Other Gender Identities (N=n/a)
● Black Ethnicity Who Prefer Not To Identify Their Gender

Figure 40.

Supervisor Belonging Scores Intersected with those who **Identify As White Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.
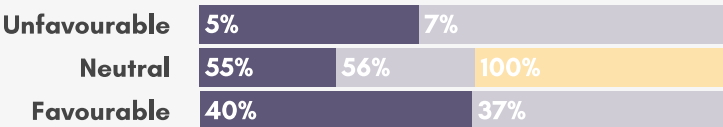
	White Males	White Females	White Non-Binary	White Prefer Not
Unfavourable			50%	100%
Neutral	38%	60%		50%
Favourable	47%	27%		

● White Males (N = 175)
● White Females (N = 75)
● White Non-Binary/Third Gender and Other Gender Identities (N= n/a)
● White Ethnicity Who Prefer Not To Identify Their Gender (N = n/a)

Figure 41.

Supervisor Belonging Scores Intersected with those who **Identify as Latin American Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

	Latin American Males	Latin American Females	Latin American Non-Binary	Latin American Prefer Not
Unfavourable	5%	7%		
Neutral	55%	56%	100%	
Favourable	40%	37%		

● Latin American Males (N = 146)
● Latin American Females (N = 45)
● Latin American Non-Binary/Third Gender and Other Gender Identities (N = n/a)
● Latin American Ethnicity Who Prefer Not To Identify Their Gender

Figure 42.

Supervisor Belonging Scores
Intersected with those who
**Identify as Indigenous Peoples
Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging
Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people
who identify in this benchmark. While it is compliant to
share a percentage, the frequency must be protected to
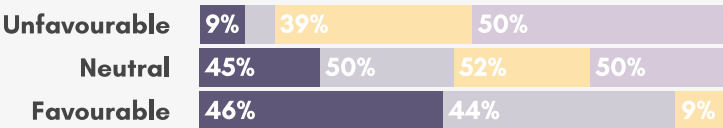uphold confidentiality and anonymity.

Unfavourable	100%	
Neutral	65%	50%
Favourable	27%	50%
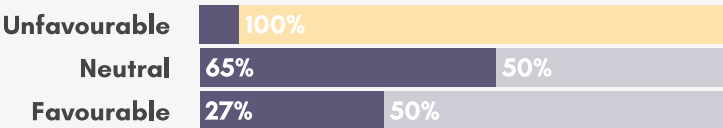
● Indigenous Peoples Males (N = 40)
● Indigenous Peoples Females (N = n/a)
● Indigenous Peoples Non–Binary/Third Gender and Other Gender Identities
● Indigenous Peoples Ethnicity Who Prefer Not To Identify Their Gender

---

Figure 43.

Supervisor Belonging Scores
Intersected with those who
**Identify As Self Described or
Mixed Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging
Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people
who identify in this benchmark. While it is compliant to
share a percentage, the frequency must be protected to
uphold confidentiality and anonymity.

Unfavourable	9%	39%	50%	
Neutral	45%	50%	52%	50%
Favourable	46%	44%		9%

● Self Described or Mixed Ethnicity Males (N = 26)
● Self Described or Mixed Ethnicity Females (N = n/a)
● Self Described or Mixed Ethnicity Non–Binary/
Third Gender and Other Gender Identities (N = n/a)
● Self Described or Mixed Ethnicity Who Prefer Not To Identify Their Gender
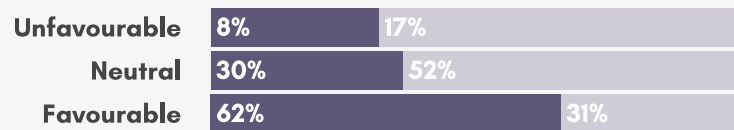
Middle Management

Figure 44.

Middle Management Belonging Scores Intersected with those who **Identify as Asian Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

Unfavourable	8%	17%
Neutral	30%	52%
Favourable	62%	31%

- ● Asian Males (N = 23)
- ● Asian Females (N = 23)
- ● Asian Non-Binary/Third Gender & Other Gender Identities
- ● Asian Ethnicity Who Prefer Not To Identify Their Gender

Figure 45.

Middle Management Belonging Scores Intersected with those who **Identify As Arabic Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

Unfavourable	
Neutral	21%
Favourable	59%

- ● Arabic Males (N = 17)
- ● Arabic Females
- ● Arabic Non-Binary/Third Gender and Other Gender Identities
- ● Arabic Ethnicity Who Prefer Not To Identify Their Gender

Figure 46.

Middle Management Scores Intersected with those who **Identify as Black Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

Unfavourable	100%	
Neutral	51%	56%
Favourable	41%	43%
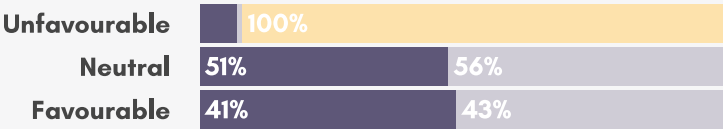
- ● Black Males (N = 271)
- ● Black Females (N = 40)
- ● Black Non–Binary/Third Gender and Other Gender Identities (N=n/a)
- ● Black Ethnicity Who Prefer Not To Identify Their Gender

Figure 47.

Middle Management Belonging Scores Intersected with those who **Identify As White Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

Unfavourable	6%	20%	20%
Neutral	46%	45%	80%
Favourable	48%	35%	100%
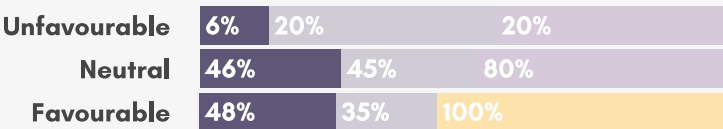
- ● White Males (N = 387)
- ● White Females (N = 108)
- ● White Non–Binary/Third Gender and Other Gender Identities (N= n/a)
- ● White Ethnicity Who Prefer Not To Identify Their Gender (N = n/a)

Figure 48.

Middle Management Belonging Scores Intersected with those who **Identify as Latin American Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.
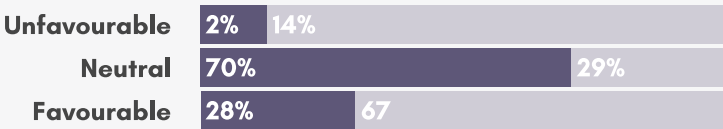
Unfavourable	2%	14%
Neutral	70%	29%
Favourable	28%	67

- ● Latin American Males (N = 44)
- ● Latin American Females (N = 7)
- ● Latin American Non–Binary/Third Gender & Other Gender Identities (N = n/a)
- ● Latin American Ethnicity Who Prefer Not To Identify Their Gender

Figure 49.

Middle Management Belonging
Scores Intersected with those who
**Identify as Indigenous Peoples
Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging
Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people
who identify in this benchmark. While it is compliant to
share a percentage, the frequency must be protected to
uphold confidentiality and anonymity.

Unfavourable	6%	
Neutral	59%	80%
Favourable	35%	20%

● Indigenous Peoples Males (N = 17)
● Indigenous Peoples Females (N = n/a)
● Indigenous Peoples Non–Binary/Third Gender and Other Gender Identities
● Indigenous Peoples Ethnicity Who Prefer Not To Identify Their Gender

Figure 50.

Middle Management Belonging
Scores Intersected with those who
**Identify As Self Described or
Mixed Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging
Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people
who identify in this benchmark. While it is compliant to
share a percentage, the frequency must be protected to
uphold confidentiality and anonymity.

Unfavourable	14%	100%	
Neutral	39%	57%	35%
Favourable	51%	29%	65%
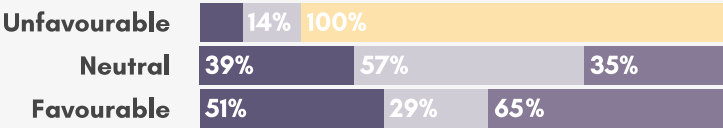
● Self Described or Mixed Ethnicity Males (N = 77)
● Self Described or Mixed Ethnicity Females (N = 14)
● Self Described or Mixed Ethnicity Non–Binary/Third Gender and
Other Gender Identities (N = n/a)
● Self Described or Mixed Ethnicity Who Prefer Not To Identify Their Gender

BELONGING RESULTS
C-Suite

Figure 51.

C-Suite Belonging Scores
Intersected with those who
Identify as Asian Ethnicity

Unfavorable Belonging Score ≤ 59%, Neutral Belonging
Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people
who identify in this benchmark. While it is compliant to
share a percentage, the frequency must be protected to
uphold confidentiality and anonymity.

Unfavourable

Neutral 100%

Favourable 100%

- Asian Males (n = n/a)
- Asian Females (n = n/a)
- Asian Non-Binary/Third Gender & Other Gender Identities
- Asian Ethnicity Who Prefer Not To Identify Their Gender

Figure 52.

C-Suite Belonging Scores
Intersected with those who
Identify As Arabic Ethnicity

Unfavorable Belonging Score ≤ 59%, Neutral Belonging
Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people
who identify in this benchmark. While it is compliant to
share a percentage, the frequency must be protected to
uphold confidentiality and anonymity.

**Unfavourable**

Neutral

Favourable 100%

- Arabic Males (N = n/a)
- Arabic Females
- Arabic Non-Binary/Third Gender and Other Gender Identities
- Arabic Ethnicity Who Prefer Not To Identify Their Gender

Figure 53.

C–Suite Belonging Scores Intersected with those who **Identify as Black Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

Unfavourable	12%
Neutral	63%
Favourable	25% 100%
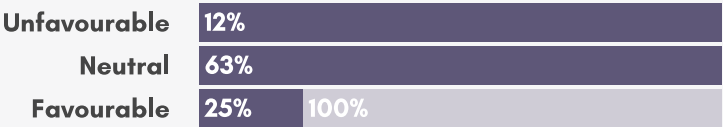
- Black Males (N = 8)
- Black Females (N = n/a)
- Black Non–Binary/Third Gender and Other Gender Identities (N=n/a)
- Black Ethnicity Who Prefer Not To Identify Their Gender

Figure 54.

C–Suite Belonging Scores Intersected with those who **Identify As White Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.
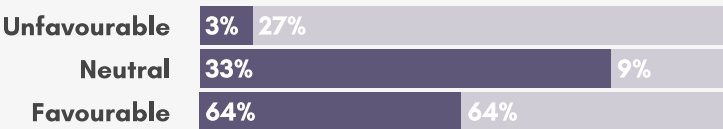
Unfavourable	3% 27%
Neutral	33% 9%
Favourable	64% 64%

- White Males (N = 64)
- White Females (N = 11)
- White Non–Binary/Third Gender and Other Gender Identities (N= n/a)
- White Ethnicity Who Prefer Not To Identify Their Gender (N = n/a)

Figure 55.

C–Suite Belonging Scores Intersected with those who **Identify as Latin American Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

Unfavourable	
Neutral	
Favourable	100%

- Latin American Males (N = n/a)
- Latin American Females (N = n/a)
- Latin American Non–Binary/Third Gender & Other Gender Identities (N = n/a)
- Latin American Ethnicity Who Prefer Not To Identify Their Gender

Figure 56.

C-Suite Belonging Scores for those who **Identify as Indigenous Peoples Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.
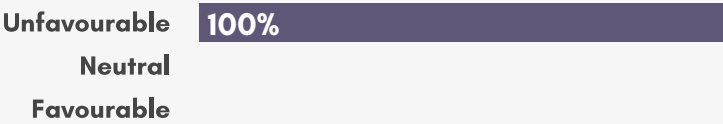

Unfavourable — 100%
Neutral
Favourable

- Indigenous Peoples Males (N=n/a)
- Indigenous Peoples Females (N=n/a)
- Indigenous Peoples Non-Binary/Third Gender and Other Gender Identities
- Indigenous Peoples Ethnicity Who Prefer Not To Identify Their Gender

Figure 57.

C-Suite Belonging Scores for those who **Identify As Self Described or Mixed Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

Unfavourable — 100%
Neutral — 67%
Favourable — 33% 100%
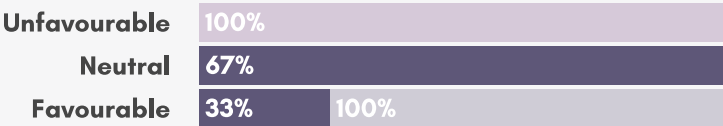
- Self Described or Mixed Ethnicity Males (N = n/a)
- Self Described or Mixed Ethnicity Females (N = n/a)
- Self Described or Mixed Ethnicity Non-Binary/Third Gender and Other Gender Identities (N = n/a)
- Self Described or Mixed Ethnicity Who Prefer Not To Identify Their Gender

Corporate Director

Figure 58.

Corporate Director Belonging Scores for those who **Identify as Asian Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

Unfavourable

Neutral

Favourable 100%

- Asian Males (n = n/a)
- Asian Females (n = n/a)
- Asian Non-Binary/Third Gender & Other Gender Identities
- Asian Ethnicity Who Prefer Not To Identify Their Gender

Figure 59.

Corporate Director Belonging Scores for those who **Identify as Black Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

Unfavourable

Neutral

Favourable 100%

- Black Males (N = n/a)
- Black Females (N = n/a)
- Black Non-Binary/Third Gender and Other Gender Identities (N=n/a)
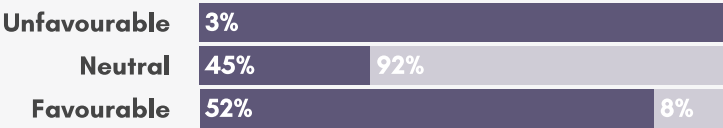- Black Ethnicity Who Prefer Not To Identify Their Gender

*Please note, there were zero participants who identified as a Corporate Director and of Arabic Ethnicity.

Figure 60.

Corporate Director Belonging Scores for those who **Identify as White Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

Unfavourable	3%
Neutral	45% 92%
Favourable	52% 8%

- ● White Males (N = 33)
- ● White Females (N =13)
- ● White Non-Binary/Third Gender and Other Gender Identities (N= n/a)
- ● White Ethnicity Who Prefer Not To Identify Their Gender (N = n/a)

Figure 61.

Corporate Director Belonging Scores for those who **Identify as Latin American Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.

Unfavourable	
Neutral	
Favourable	100%

- ● Latin American Males (N = n/a)
- ● Latin American Females (N = n/a)
- ● Latin American Non-Binary/Third Gender & Other Gender Identities (N = n/a)
- ● Latin American Ethnicity Who Prefer Not To Identify Their Gender

Figure 62.

Corporate Director Belonging Scores for those who **Identify as Self Described or Mixed Ethnicity**

Unfavorable Belonging Score ≤ 59%, Neutral Belonging Score 60%≤ ≥ 70%, Favorable Belonging Score ≥ 71%+

*Note, (N = n/a) indicates that there are six or less people who identify in this benchmark. While it is compliant to share a percentage, the frequency must be protected to uphold confidentiality and anonymity.
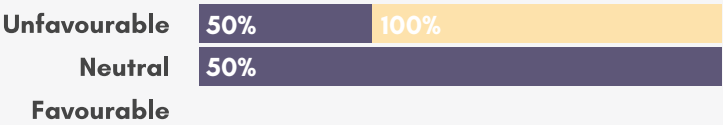
Unfavourable	50% 100%
Neutral	50%
Favourable	

- ● Self Described or Mixed Ethnicity Males (N = n/a)
- ● Self Described or Mixed Ethnicity Females (N = n/a)
- ● Self Described or Mixed Ethnicity Non-Binary/Third Gender and Other Gender Identities
- ● Self Described or Mixed Ethnicity Who Prefer Not To Identify Their Gender

2.5

What The Survey Revealed About Belonging Metrics & Employee Engagement

One of the key takeaways from this research is the vast insights that come from understanding and analyzing the intersections of identity and the impact on perceived belonging. Gender, ethnicity and career level were all predictors of belonging that produced relevant statistical results as independent variables. However, when analyzed through crosstabulation, a statistical analysis tool that allows the intersections of those specific identities to reveal how their combined results affect perception of belonging, the results were compelling.

Employee engagement has primarily been measured through engagement surveys, yet rarely are those engagement surveys analyzed for internal consistency and reliability. Moreover, while some engagement surveys include a section to analyze diversity and inclusion, they do not statistically analyze the perceptions of those who are marginalized within the organization. Furthermore, when engagement surveys allow the voices of the majority to be the data that decisions are being made from, it intensifies the need for those who are different to fall silent and/or disengage. The Belonging-First survey findings provide context to why the intersections of identity are crucial and why engagement survey data might be producing results that are insufficient in their ability to accurately measure engagement within an organization.

2.6

What the Survey Revealed About Entry-Level Roles, Belonging Metrics & Employee Engagement

Entry-Level roles are increasingly important in destabilized industries that risk great shrinkage due to high levels of retirement and low levels of attractability. Entry-Level roles revealed unfavorable belonging perceptions or neutral belonging perceptions 74% of time across all identities of gender and ethnicity.

While much opportunity lies in the growth potential for those new to the industry, if belonging perception data reveals unfavorable or neutral belonging favorability in the Entry-Level positions, how engaged will these employees remain and how does that engagement affect industry-wide growth or company turnover and the cost of said turnover? Survey results produced low results measuring Years In The Industry, with only 17.6% reporting as a participant who identifies with being in the industry for only 1-4 years. When observing belonging scores for those who identified as an Entry-Level position (Entry-Level Females, N = 145; Entry-Level Males N = 89), all scores produced low belonging. However, those who also identified as female produced a 79% result in unfavorable or neutral belonging score perceptions versus their male counterparts who produced a 65% unfavorable or neutral belonging score perception. This indicates a relevant observation for Entry-Level engagement because as previously noted, belonging produces sentiments of job satisfaction, engagement and motivation.

Moreover, perceived belonging was also impacted by how female Entry-Level participants identified their ethnicity. For example, those who identified

as both female and Asian (N = 12), reported a 58% neutral belonging favorability. Compared to those who identified as both female and Latin American (N = 9) that produced an 89% unfavorable or neutral belonging favorability score. Those who identified as both female and Indigenous Peoples (N = n/a) produced an 80% unfavorable or neutral belonging favorability score. Whereas, those who identified as both female and White or female and Black reported unfavorable or neutral belonging favorability scores in the low seventy percentiles.

These scores reveal that while belonging is predicted by both gender and career level, ethnicity also indicates relevance within perception. Consider how this data reveals the culture that Entry-Level employees experience when they first start their journey in the mining industry. If companies begin to apply key performance indicators for belonging within the organization, how might engagement and retention change? Notably, it is not just females who do not perceive belonging favorably, Entry-Level males and those who are non-binary, third gender and other gender expressions or prefer not to disclose their gender, also experienced low belonging favorability. To support attraction and retention into Entry-Level positions, belonging indicators have much to offer. Metrics and governance to support Entry-Level positions into experiencing belonging favorability can be found by understanding the scores of the key indicators. Potentially, by creating higher comfort behaviours, for example, administered through key performance indicators belonging perception can increase and support both attraction and retention within mining Entry-Level positions.

2.7

What The Survey Revealed About Belonging Metrics, Transparency & Governance

Transparency is likened to the basis for trust between a company and its investors, customers, partners and employees. Fundamentally, transparency means being honest and open when communicating with key stakeholders about business related matters. Areas that have recently been exposed for the need for transparency reside within Equity, Diversity, Inclusion and Belonging (EDIB), Corporate Social Responsibility (CSR), and Environmental Social and Governance (ESG). Transparency in these areas is meant to build trust among key stakeholders, including employees. The idea being, the greater the transparency, the greater the job satisfaction and engagement. While organizations have typically produced engagement survey, demographic, and environmental impact data for transparent elements, the Belonging-First survey revealed a need for good governance to be re-evaluated.

Governance is meant to provide principles of equity by considering opportunities for everyone to maintain and improve their growth and stability. Governance partners with transparency to provide social cohesion and is often seen as the foundation for economic growth and stability, founded on the rule of the law. When organizations and industries fail to measure data that provides accurate information regarding who has access to opportunities, a lack of governance becomes a divider. Highlighting the injustice of those who inherently belong rather than those who must behave to fit in. Specifically, in homogeneous cultures, when adequate statistical analysis has not been performed marginalized employees will not be represented accurately. Employee engagement surveys done in this

manner highlight the injustice of those who inherently belong compared to those who must "go along" with oppressive corporate culture attempting to fit in. For those who inherently belong, they believe their scores represent accurate data. For those who do not belong, the scores represent the oppressive structures that remain barriers to access and opportunity. By examining the intersections of identity, which produced critical predictors of belonging and highlighted the lack of belonging amongst marginalized demographics, it calls into question the methodology of governance and transparency. Belonging, for those in positions of power or privilege, is hard to imagine as a means for governance and transparency because the experience is being upheld by outdated collective intentionality. Yet, for those with varying degrees of identities, belonging provides an adequate metric for governance, opportunity and growth.

2.8

Belonging Limitations & Next Steps

The Limitations of the Belonging First Survey

While the Belonging-First survey produced incredibly high internal consistency and validity scores that provide high reliability for the data it produces, each key indicator or "theme" contained 11 items, producing a survey that required participants to answer 75 questions. The survey on average took participants between 15 – 20 minutes to complete, which is simply too long to expect employees to finish. The length of the Belonging-First survey that participating mining companies completed was a limitation that needed to be accounted for. As such, statistical analysis was performed to shorten the survey to five items per key indicator. Even at five items per key indicator, the new belonging survey maintains exceptionally high internal consistency and validity scores, with the lowest Cronbach Alpha score producing a .94. This result is incredibly hard to achieve. Statistical analysis methodology accounts for internal consistency scores that have less than 5 items per theme by lowering the required score from a .80 to a .60. The fact that the score remained at its initial levels speaks to its efficacy. To further increase its potency, it is undergoing academic validity analysis as part of the formalized thesis. Validation of the belonging survey provides sound metrics for governance and transparency. For this reason, items for each indicator remain confidential, however the analysis can be viewed within the Appendix.

The Limitations of the Belonging First Key Indicators

Currently, the Belonging-First survey accurately measures belonging as a whole and measures its five key indicators that produce the perception of belonging within the workplace environment (comfort,

contribution, connection, psychological safety, and wellbeing). However, the field of study is so new to the workplace that belonging behaviours and key performance indicators need to be academically researched and validated. The Belonging-First Survey methodology can therefore produce the scores for measurement and governance, but the interventions for change are what is needed next. These behaviours and interventions are therefore guiding the formal research question for the author's thesis.

One final limitation that the author/researcher has continued to consider is the weight of belonging scores within homogenous organizations. Most organizations look at their engagement scores as the driving data for decisions, yet engagement scores and Belonging-First scores are often on completely different spectrums because engagement scores do not account for intersectionality of identity or homogenous cultural norms. Both intersectionality and homogenous cultural norms produce vastly different employee experiences in equitable opportunity for growth. As such, the author/researcher looks to explore weighting the data of homogenous organizations to more evenly distribute the perceptions of marginalized employees and produce belonging-scores that provide all employees with the ability to be heard. Weighting data and results could provide equitable governance that is currently lacking in engagement surveys.

The Belonging First Next Steps

An area that the author/researcher has been working on over the past two years is understanding how the validated and proven metrics can provide clear governance and methodology for the business strategy. While the next portion of the Belonging-First research will centre on qualitative research to understand key indicators and behaviours within the mining industry, the author/researcher has already begun to investigate these elements within other industries and companies she is working with. As such, the process for governance and transparency has already been integrated within successfully launched Equity, Diversity, Inclusion and Belonging strategies. These strategies are informing and supporting EDIB committees, leaders, and HR initiatives to help create organizational cultures where everyone belongs.

2.9

Conclusion

Creating a culture where belonging comes first, allows employees the social, cultural and environmental contexts that impact relevant workplace milleus. The objective of this research was to identify metrics and measurement that would support the integration of belonging into the business growth strategy. While the lens of talent has been highlighted due to the current high-risk status and destabilized industry, governance and metrics are the foundational elements to initiate change. Without metrics to reveal the status of belonging or the intersections of identity of employees, organizations may potentially rely on assumption based data originating from engagement surveys. Additionally, when demographics are only measured through one identity, the average data hides underlying sentiments of discrimination, sexism, and racism and upholds employee silence and groupthink.

The result of this reinforces the barriers that currently exist for marginalized employees, while preventing innovation and growth. **To reveal marginalized perceptions of belonging, one must account for employees' perception and also understand the socialized norms, beliefs and values that the organizational culture has been operating from.**

Assumptions & Bias

Belonging is not a new workplace concept, but the research supports new methodology for revealing and accounting for assumptions and bias. The following assumptions or "myths" were revealed throughout the research. The belonging data clarifies and demonstrates new methodology to stabilize talent.

Figure 63. Assumptions vs. What Data Reveals About Belonging

The Assumption Is:	The Data Reveals:
High employee engagement scores indicate a high level of belonging.	Belonging is a separate metric. It must be measured independently from employee engagement. Belonging culture can be measured by five key indicators.
Belonging is a "Nice To Have" sentiment.	Belonging is an essential component of job satisfaction, engagement & fair treatment. These elements stabilize talent and support growth.
"Fitting in" is the same as Belonging.	"Fitting in" forces employees to change themselves to fit the organization's culture. It leads to high levels of groupthink, employee silence and turnover. Belonging allows employees to be themselves by valuing individual intersections of identity.
All male employees feel they belong.	The culture of an organization and the messaging from leaders dictates the perception of belonging. When employees do not fit that mold, they do not experience belonging. The intersections of identity react to the cultural mold.
Belonging predictors, (ie: gender, career level, ethnicity, region, years in the industry) are constant across organizations in the mining industry.	Belonging predictors change based on the culture and leadership of an organization. Gender and Ethnicity are the most consistent and statistically significant.
All employees have equal opportunity to grow and develop in an organization.	Those who perceive belonging favorably have greater opportunity and advantages than those who do not.

Based on this data, it is important to first recognize the part that intersections of identity play on talent stabilization. Autonomy is sought by all employees, yet independence of thought is born through the varying degrees of identity and the socialized experiences of the individual.

With the intersections of identity in mind, many will want to extract the data into a more "simple format", looking at it only through the lens of gender or ethnicity or career level. Many may also only want to look at specific parts of the data, using a more traditional lens on demographics. However, the data predictors revealed, with statistical significance, that the interaction and intersection of identities more accurately depict perception of belonging. Importantly, company culture is what those intersections react most to and determine whether or not belonging is experienced favorably or unfavorably. This is why, even within a culture that houses a majority of those who identify as male, simply identifying as a male does not guarantee a favorable perception of belonging. The value systems of that organizational culture and the socialized norms adopted by leadership will dictate the perception of belonging. **These results indicate that there is a trickle down effect of how employees perceive belonging with how the culture has been socialized to label someone's value and importance. To counter this occurrence, organizations will want to review the demographics of their employees as a starting point.** Create metrics that first identify career levels with gender and ethnicity to understand the gaps in your talent. While many look to either increase gender equity or racial/ethnicity equity, understanding which career levels have the more significant gaps is essential for creating belonging at all levels of the organization. Looking at talent through the intersectionality lens helps reverse the inefficient pretext of simply hiring more diverse talent to stabilize the industry. **While diverse talent is essential for growth, diverse talent will react to the culture differently. If companies continue to hire diverse talent but do not work on creating a culture and environment where everyone belongs, more instability will occur.**

Metrics, Governance & Belonging Indicators

To accurately measure belonging, the five key indicators (comfort, contribution, connection, psychological safety and wellbeing) provide scores that act as levers, allowing organizations to understand and strategically

map belonging as a business goal. Exceptional internal validity and reliability scores which can be reviewed in Appendix B, provide the standards needed to accurately measure and score belonging within the workplace. The ability to break down the key belonging indicators reveals the current strengths, opportunities, and demographic interactions of the organization. This information provides a clear lens to understand strategic actions the organization can implement to gain initial momentum to generate impactful change. For example, assume comfort is the highest scoring indicator and psychological safety is the lowest. The organization would initially record the baseline metrics, decide on achievable goals to attain and create governance around the indicators. To leverage the high comfort score, (which indicates that employees perceive a sense of ease with the people they work with, the environment they work in, and the job they perform), organizations would align micro-comfort behaviours, create key performance indicators and determine strategic actions aligning comfort metrics to drive momentum. Comfort behaviours might begin with; re-evaluating job descriptions and performance evaluations, establishing team charters for cross-functional teams or creating rules of engagement for team meetings. Organizations will want to consider that comfort comes from aligning ease within interpersonal relationships, environment and job expectations.

Following the initial example, we then turn to the lowest belonging indicator. If psychological safety is the lowest score (which indicates an employee's perception about interpersonal risks against being shamed, embarrassed, ridiculed or punished for their actions) the organization would look to create longer-term goals that would be focused in stages and include both leadership, management, and employee level training. Micro-psychological safety behaviours could involve training employees on the differences cultures and backgrounds play on workplace conflict. Supporting organizations with micro-behaviours to enhance openness and empathy, as well as foundations for resolving conflict management help enhance psychological safety.

With Belonging-First methodology guiding Equity, Diversity and Inclusion strategy, alongside Corporate Social Justice and Environmental, Social and Governance, reporting would then incorporate belonging data into the overall strategy and be able to speak to key stakeholders, including investors and potential employees. The findings in this research

provide a foundation for a more equitable and fair measurement methodology. By recognizing indicators for belonging and that employee identity is not one dimensional, a Belonging-First culture can emerge, stabilizing talent and positioning the organization for greater growth.

Appendix

Appendix A - **Methodology**

Management guru Peter Drucker once said, "[only] what gets measured, gets managed."[52] This applies in particular to the challenges firms face in measuring EDIB, CSR & ESG while also providing transparency and internal and external marketing propositions which tie to the firm's performance. While there is substantial research on belonging and its importance within society, community, teams and groups[53], the research and metrics to measure it within the workplace exposed a clear gap. Initially, the author/researcher performed an extensive search within the accredited Adler University library database using three search items, "belongingness at work scale", "belongingness scale for the workplace", and "belonging instrument for the workplace". Unfortunately, while results on belonging were vast, terminology, language, and scales of measurement were lacking. Only three scales for belongingness were validated between 1995 – 2013[54], yet none of these scales specifically addressed belonging within the workplace. Furthermore, while employee engagement surveys did include some belonging items, these "added in questions" did not adequately follow the appropriate terms of measurement to effectively account for belongingness within the workplace. All of the surveys reviewed failed to produce an internal consistency score (measured via Cronbach's Alpha) that was statistically sound. Moreover, because they did not gather the appropriate data to ensure marginalized employees were statistically accounted for, thereby mitigating both groupthink or employee silence, the surveys with randomized belonging items were quickly dismissed for their lack of statistical reliability and consistency.

Next the author/researcher noted the terminology and language gap, whereby terms used to describe belonging within the workplace were inconsistent at best. Understanding that language and terminology create barriers and defensive patterning, the author/ researcher sought to first break down key indicators of belonging so that a measurement tool could be constructed that would meet the requirements for internal consistency and reliability. As such, the author/ researcher chose the top 15 journal results for each of the original three search results "belongingness at work scale", "belongingness scale for the workplace", and "belonging instrument for the workplace". She then added "belonging in the workplace" as a generalized search for a total of four itemized areas of search results. A journal database for workplace belonging that consisted of 60 journals dedicated to belonging within the workplace was created using this search. Next, using MAXQDA, a qualitative analysis software that allows researchers to run a lexical search on individual words, the author looked for plainly coded language with the highest repetition rates to describe belonging within the workplace. Of the 60 documents that specifically targeted belonging within the workplace, the following words were used the most frequently to indicate belonging, (1) Comfort, produced 112 hits in 33 of the 60 documents, (2) Contribution, produced 112 hits in 30 of the 60 documents, (3) Connection, produced 128 hits in 23 of the 60 documents, (4) Psychological Safety, produced 158 hits in 20 of the 60 documents, and (5) Wellbeing, produced 111 hits in 30 of the 60 documents. A significant drop in hits for other words, from from 111 down to 52 was observed as the next measurable indicator of belonging, however it was only produced in 16 of the 60 documents. Therefore, all words that dropped off after wellbeing were eliminated as potential indicators of belonging.

The next step within the process of creating a measurement tool for belonging was to itemize specific questions that directly measure each of the key indicators. The author/researcher performed another literary search on each key indicator to identify potential items of measurement. The author/ researcher determined a baseline inquiry that she then elaborated on for each key indicator and identified 11 questions per indicator to score the individual sections of belonging by key indicators with a final overall score of total belonging. A mixture of positively and negatively worded questions per indicator were selected for reliability and validity. Her team of peers then collectively evaluated each question within her Social Justice course at Adler University for clarity and relevance. All questions were then presented to her supervisory team for her Social Justice course at Adler University for applicability, clarity and relevance. The author/researcher then evaluated mining-related questions with her onsite supervisors' board members of Women In Mining Canada.

[52] Klaus, P. (2015). *The Devil is in the details – Only what gets measured gets managed.* Measuring Customer Experience. Palgrave Macmillan, London, pp. 81-101.
[53] Maslow, A.H. (1968). *Toward a psychology of being (2nd. ed.).* Princeton, NJ: Van Nostrand; Baumeister, R.F., & Leary, M.R. (1995). The need to belong; Desire for interpersonal attachments as a fundamental human motivation. Psychological Bulletin, 117, 497–529; Panksepp, J. (1998). *Affective neuroscience: The foundations of human and animal emotions.* London: Oxford University Press; Kurzban, R., & Leary, M.R. (2001). Evolutionary origins or stigmatization: The functions of social exclusion. Psychological Bulletin, 127, 187–208; Leary, M.R., Twenge, J., & Quinlivan, E. (2006). Interpersonal rejection as a determinant of anger and aggression. *Personality and Social Psychology Review*, 10, 111–132; Leary, M.R. & Cox, C.B. (2008). Belongingness Motivation: A Mainspring of Social Action. *Handbook of Motivation Science*, 27–40.
[54] Hagerty & Patusky. (1995). Sense of Belonging Instrument–Psychological (SOBI-P); Male et al., (2012). General Belongingness Scale (GBS); Leary et al. (2013). The Need To Belong Scale (NTB).

A.1 Formulation of Areas of Interest & Main Objectives of the Research

The first area of interest recognized is the need for a clear understanding, language, and terminology that describes and indicates belonging is present. The second area of interest is to understand and measure belonging as a baseline metric within an industry that is relatively new to EDI. The third area of interest is to create key performance indicators for belonging behaviour that allow procedures, policies, and practices to dovetail with business strategy and goals.

The main objectives for the research study were to:

1. Clearly identify key indicators of belonging.

2. Create a metric to use the key indicators of belonging to measure the perception of belonging within the workplace.

3. Explore how belonging is currently being experienced within the workplace, specifically within the Mining Industry.

4. Provide a means for organizations to measure belonging as an integral element of EDI within the workplace.

5. Further develop a metric and model for belonging within the workplace as it intersects with the business strategy, organizational design, and leadership development.

A.2 Methodology for Attracting Companies & Participants

A preliminary research assessment was conducted that identified the top 10 Toronto Stock Exchange (TSX) listed mining companies as of October 31, 2020, their Corporate Social Responsibility (CSR) and Equity, Diversity & Inclusion (EDI) policies (as listed on their independent websites) and Board Members and Executive Leaders (as listed on their independent websites). An additional, 10 more TSX listed Mining Companies were selected and the same research protocols were followed. A total of 20 Mining Companies were initially selected based upon EDI gap identification.

EDI gap identification consisted of reviewing the most popular citations for diversity, gender and race/ethnicity. The author/researcher acknowledges the narrow scope and limitation of this lens, yet due to the findings on public websites and CSR/ESG compliance reporting, this is currently the only consistently reported diversity information the Top 20 TSX listed mining companies have published. This limitation was therefore recognized and worked within the scope of access.

Preliminary research also reviewed the existing diversity and inclusion studies based on Global reporting between the years of 2008-2020, across all industries. Research showed a marginal decrease in gender diversity and minority group representation in 2019 and 2020[55]. In all cases while EDI was "measured", a model for EDI that dovetailed with business strategy was lacking. Due to the fact that cross-industry organizations, including the mining sector, were asking the question, "How do we hire diverse employees to fit into our corporate culture" the author/researcher considered that creating a belonging-first culture held the potential missing element for EDI to be appropriately measured, tracked and governed, and lead to real impact.

An email template and information package was created with the research design and methodology explained that followed these protocols:

1. Email the President, CEO, Independent Board Member and Executive Team (Primarily, Head of HR or Global Head of D&I or Global Head of People &/or Sustainability) inviting them to participate in a mining industry EDI study. In said email, provide the information package and invite them to a designated information meeting.

2. After seven days, follow up with a secondary email with a reminder of the invitation to participate and request a meeting time. After fourteen days, one final email is sent in an attempt to gain participation.

3. The information meeting provided additional support for leaders interested in understanding the importance of belonging as it pertained to EDI initiatives and organizational culture.

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[55] McKinsey&Company. (2018). Women In The Workplace: LeanIn. Retrieved from https://womenintheworkplace.com/Women_in_the_Workplace_mobile.pdf

4. Additional information was provided to all leaders who requested a meeting explaining the preliminary research on the indicators of belonging and their statistical significance, as well as the benefits that would be provided should their organization participate in the research.

5. Benchmarking, raw data, and clear methodology to integrate belonging practices into business strategy, specifically in regards to talent recruitment, development and performance were indicated.

Of the 20 TSX listed companies that were contacted, 13 companies and 3508 participants participated in the Belonging-First research, which measured 5 key indicators and an overall belonging score. Of the 13 companies, 11 produced valid, statistically significant data to benchmark individually and provide clear insights for impactful action. The two companies who did not produce valid, statistically significant data did not have enough internal participants to ensure anonymity and confidentiality. Therefore the author/researcher did not perform individual analysis for those three companies. The Belonging-First EDI survey produced enough statistically significant data to demonstrate internal reliability and validity.

A.3 Anonymity & Confidentiality

Participating mining companies were provided with a welcome package that included three email templates to communicate with their organization their interest in participation with the belonging EDI research study. Each email template provided an anonymous link for each company and their employees. Executive leaders were asked to send the emails to their employees, with best efforts and sampling sizes in place. Each company was assigned a numerical representation for the name of their company which was asked as a survey item question. The company and their responses were then labeled as a numerical unit to provide anonymity and confidentiality to all those participating.

Of interest, the desired number of participants to acquire reliable statistical analysis was 500. The fact that 3508 participants participated was interpreted as the desired level of interest and commitment the leaders of these mining companies have to the

betterment of the industry. Moreover, the companies who participated have remained in contact and continue to ask questions for the betterment of their human capital to ensure equity, fairness, and Inclusion with actionable key performance indicators. The author/researcher notes this as an invested interest to mitigate growth potential risk.

Appendix B – Belonging First Reliability Results

B.1 Key Indicator #1: Comfort Reliability Result (α = .990)

Item	N	Mean	Item to Total Correlation	Alpha if Item Deleted
I feel comfortable at my place of work	3508	4.86	.975	.988
I am treated equally and respected by my colleagues	3508	4.88	.975	.988
I am treated equally and respected by my managers	3508	2.49	.962	.989
I am treated equally and respected by executive leaders	3508	4.65	.974	.988
I can easily share areas of weakness to obtain support when needed	3508	4.58	.974	.988
I feel comfortable asking for help from managers and/or leaders when I need it	3508	2.50	.962	.989
I am able to bring my full authentic self to my workplace	3508	4.16	.977	.988
I am comfortable asking for help from my colleagues	3508	2.85	.975	.988
I am encouraged to share my perspectives and unique ideas	3508	5.01	.891	.991
At my workplace, different perspectives are encouraged and supported	3508	4.92	.893	.991
At my workplace, conflict is addressed fairly, morally and justly within a timely manner	3508	4.73	.892	.991

Both ANOVA with Friedman's Test and Tukey's Test for Nonadditivity were performed. Significance was expressed Within People Between items (p < .000), Significance was also determined with Residual Nonadditivity (p<.001).

B.2 Key Indicator #2: Contribution Reliability Result (α = .994)

Item	N	Mean	Item to Total Correlation	Alpha if Item Deleted
My skills, knowledge and experience are valued at my workplace	3508	5.56	.985	.993
	3508	5.56	.984	.993
	3508	5.64	.984	.993
	3508	5.64	.984	.993
	3508	5.52	.984	.993
	3508	5.42	.984	.993
	3508	5.50	.956	.994
	3508	5.70	.912	.995
	3508	3.40	.979	.994
	3508	3.65	.959	.994
	3508	4.48	.951	.994

**Both ANOVA with Friedman's Test and Tukey's Test for Nonadditivity were performed. Significance was expressed Within People Between items ($p < .000$), Significance was also determined with Residual Nonadditivity ($p<.000$).

B.3 Key Indicator #3: Connection Reliability Result (α = .970)

Item	N	Mean	Item to Total Correlation	Alpha if Item Deleted
I can identify with a defined team within my workplace	3508	6.64	.959	.965
I have a sense of community and feel connected to others at my workplace	3508	6.57	.960	.965
I clearly understand the organization's purpose, mission and values	3508	6.75	.960	.965
I feel that the organization's purpose, mission and values are meaningful	3508	6.67	.961	.965
I feel genuinely included at my organization	3508	6.25	.938	.966
There are opportunities for me to be included in upcoming special projects	3508	6.66	.975	.964
I have had meaningful conversation with some of my leaders/managers	3508	6.82	.974	.964
I am motivated by the purpose, mission and values of my organization	3508	7.92	.952	.984
I have had meaningful conversations with my colleagues	3508	4.55	.956	.965
People in my organization genuinely care about my wellbeing and achievements	3508	4.76	.963	.965
Diversity of thought promotes commitment to our shared outcomes and helps us engage in solution rich dialogue	3508	4.75	.958	.966

**Both ANOVA with Friedman's Test and Tukey's Test for Nonadditivity were performed. Significance was expressed Within People Between items ($p < .000$), Significance was also determined with Residual Nonadditivity ($p<.000$).

B.4 Key Indicator #4: Psychological Safety Reliability Result (α = .997)

Item	N	Mean	Item to Total Correlation	Alpha if Item Deleted
[illegible] I feel safe authentically sharing my experiences at work, knowing they will not be held against me	3508	7.48	.984	.998
[illegible] My views are not seen as credible when they differ from the views of my colleagues	3508	6.63	.983	.996
[illegible] No one on my team will punish or embarrass me for making a mistake	3508	7.33	.984	.996
Peer feedback is done with the intention of supporting achievement and attaining goals	3508	7.60	.985	.996
[illegible] Peer feedback is supportive in nature and helps me understand strengths while lessening my weaknesses	3508	7.64	.985	.996
[illegible] Supervisor feedback is done with the intention of supporting achievement and attaining goals	3508	8.06	.989	.996
[illegible] Supervisor feedback is supportive in nature and helps me understand strengths while lessening my weaknesses	3508	7.98	.989	.996
[illegible] Leadership behaviours reinforce organizational values of fairness, respect and psychological safety	3508	8.26	.962	.997
[illegible] I am able to trust my team and am inspired by my peers to perform to the best of my ability	3508	5.47	.988	.996
[illegible] My relationships with my colleagues on my team are strong enough to be sensitive in a constructive way	3508	5.42	.988	.996
[illegible] I am positioned to engage in productive conflict, learning from disagreements to generate new insights	3508	6.03	.961	.997

**Both ANOVA with Friedman's Test and Tukey's Test for Nonadditivity were performed. Significance was expressed Within People Between items (p < .000), Significance was also determined with Residual Nonadditivity (p<.000).

B.5 Key Indicator #5: Wellbeing Reliability Result (α = .996)

Item	N	Mean	Item to Total Correlation	Alpha if Item Deleted
I feel stress at work daily and it affects my performance and wellbeing	3508	7.46	.979	.996
	3508	7.78	.958	.996
	3508	8.08	.960	.996
	3508	8.17	.970	.996
	3508	8.20	.953	.996
	3508	8.11	.990	.996
	3508	7.72	.990	.996
	3508	7.83	.981	.996
	3508	6.67	.988	.996
	3508	6.73	.980	.996
	3508	6.87	.981	.996

**Both ANOVA with Friedman's Test and Tukey's Test for Nonadditivity were performed. Significance was expressed Within People Between items ($p < .000$), Significance was also determined with Residual Nonadditivity ($p<.000$).

B.6 Mining Industry Reliability Result (α = .990)

Item	N	Mean	Item to Total Correlation	Alpha if Item Deleted
Personal Protective Equipment (PPE) is made to fit my body type and size	3508	9.76	.922	.990
Accessible Bathrooms are always available	3508	7.27	.936	.990
I have been embarrassed by being the "only"	3508	6.93	.612	.992
I have struggled with respect due to the wording of my title	3508	9.01	.927	.990
Job postings & recruitment practices are fair to everyone	3508	9.04	.940	.990
Signage is safe and fair to everyone	3508	7.31	.971	.990
I have been pressured to prove myself so that I can belong	3508	9.93	.975	.810
The suggestion box is read, shared and acted on	3508	11.50	.975	.765

**Both ANOVA with Friedman's Test and Tukey's Test for Nonadditivity were performed. Significance was expressed Within People Between items ($p < .000$), Significance was also determined with Residual Nonadditivity ($p < .000$).

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The Mining Companies & Their Employees

While confidentiality prevents me from thanking the Mining Companies who have committed to participating in the Mining Industry study publically, I would like to offer a special thank you.

I appreciate those who made the investigation into a belonging-first culture a priority.

Your courage and dedication show your commitment to the advancement of the industry. While many were uncertain as to what their baseline of belonging would look like, their dedication to the industry, the importance of building the next generation of workers, and the significance of supporting leadership through change were moving. If all leaders within the industry continue to lead with as much curiosity, humanity, and empathy, the mining industry will remain strong for decades to come.

To the 3508 participating employees, I would also like to acknowledge you and thank you for your commitment to the furtherment of this study and the industry. The time you have already dedicated goes above and beyond and demonstrates your contribution and connection to a belonging-first culture.

At a time where many are still struggling with burnout and exhaustion from isolation and lockdowns, amongst the fallout of energy and time, I offer you my deepest gratitude. Your commitment to furthering your experience within the industry is my guiding principle for furthering the belonging-first research and will be carried forward to the best of my ability. Your psychological safety and wellbeing remain at the heart of this research and I applaud your bravery and courage in sharing your authentic self for the furtherment of your workplace.

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Andrea Carter is a Neuroscience-based Equity, Diversity, Inclusion & Belonging Senior Consultant & Strategist. As an Industrial & Organizational Psychology Master Candidate, her research has mapped the organizational structure and integrated the new employee market changes affecting human capital and performance.

Over the past two years, she has created the only validated organizational belongingness metric tool to be used for Equity, Diversity, Inclusion and Belonging strategy and governance. This tool allows organizations to score their inclusion and belongingness rates and integrate sustainable and measurable metrics into their business strategy.

Andrea is now finalizing her research that delivers practical training for each level of the organization, ensuring belonging-first behaviours that are measurable and accountable. She enables a sustainable, reliable, and valid methodology for enhancing culture and growth within organizations. In partnership with The Talent Company, Andrea has worked within Global and National organizations in the healthcare, transportation and warehousing, manufacturing, mining, finance and insurance, and global spirits industries.

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Advisory Panel

This whitepaper is the second of three whitepapers, which originated from the Social Justice Practicum course at Adler University.

The project then evolved into Andrea Carter's Master of Industrial & Organizational Psychology Thesis, whereby the Belonging-First survey and key performance indicators for belonging behaviours within the workplace were the focus for research.

While the advisory panel has evolved, Adler University, key advisors from the mining industry, and past and present board members from Women In Mining Canada are recognized.

This research was informed by those in the industry and grounded in perspectives from the field and academia.

Adler University is uniquely focused on fighting for a better world. Programs challenge you to speak for the unheard, stand for the vulnerable, and work to change systems, not just surfaces.
The integration of a Master of Industrial and Organizational Psychology dovetailed with Social Justice provides the foundational knowledge, perspectives, and tools to help organizations strategically uplevel their Human Resources and Corporate Social Responsibility.

Women in Mining Canada is a national not- for-profit organization formed in 2009 focused on advancing the interests of women in the minerals exploration and mining sector, through a mission to Educate Elevate Empower.

To facilitate a feedback loop throughout the initial stages of the social justice practicum project, Adler University required a panel of advisors including education sector diversity, equity, and inclusion experts; researchers; Adler Master and Ph.D. candidates; and organizational leaders.

Together, this group collaborated and shared knowledge, feedback, formulating key questions and hypotheses, supporting the creation and advancement of the survey, helping identify the most salient and impactful elements to support the next phase of the thesis and the emerging body of research in belonging-first cultures. The advisory panel input helped guide every aspect of the survey formation, connection with the mining industry, and the development of the study that ensues.

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