Unrealized Growth In Mining: Upgrading The Future to Include Human Capital and Belonging

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WITH ADLER UNIVERSITY & WOMEN MINING IN CANADA
This publication contains general information on belonging only. The research within this whitepaper reflects peer-reviewed literature and publications that have provided the initial basis for thesis research.

**Declaration of Conflicting Interests**
The author declared no potential conflict of interest with respect to the research, authorship, and/or publication of the paper.

**Funding**
The author disclosed no receipt of financial support for the research, authorship, and/or publication of this paper.

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Issues of human capital and organizational culture impact our local and global communities and the business world. The corporate world is changing its approach to human capital, and with this change, the importance of equity, diversity, and inclusion requires leaders to look past differences. Going beyond the basics is where the opportunity for the most significant growth and potential lies.

Belonging, a key component for organizational culture, calls for equity, diversity, and inclusion; however, its meaning currently lacks proper understanding. While these terms are being welcomed into organizations quickly, their meaning, impact, and use will affect how diverse talent perceives corporate fairness, their engagement with the organization, and their tenure.

For this paper, belonging will demonstrate how it is the factor that allows equity, diversity, and inclusion to motivate and engage human capital to thrive.

Many examples for varying industries demonstrate that diverse teams produce more substantial performance results and competitive advantage, specifically in their ability to attract, retain, and satisfy employees, increase shareholder returns and improve collaborative outcomes. To produce diverse teams that operate in this fashion takes more than just hiring diverse talent. One also needs to have the appropriate context to support organizational design, talent development, and recognition.

The idea for this whitepaper arose from my passion for this work and the necessity to create a deliverable for my social justice practicum, supervised by Women In Mining Canada, for Adler University’s Master of
Industrial & Organizational Psychology course requirements. I wanted to introduce how belonging provides the context, understanding, and framework many organizations miss for their equity, diversity, and inclusion initiatives to provide a return on investment.

Behavioral neuroscience and its application within industrial and organizational psychology greatly influence my research and philosophy to drive change. Readers will notice within this whitepaper how the influence of behavioral neuroscience enhances the understanding for appropriate strategy and development of human capital. This whitepaper precedes my thesis and research, preparing the industry and mining companies with baseline context, language, and information.

I hope that leaders, talent, and those evaluating equity, diversity, and inclusion will have an open mind when reading this report so that they can see the many influences that affect diverse talent.

Before releasing my thesis, where the data will provide further insights and direction, consider where your organization is on its human capital journey. **Consider the work you may need to become a leader for equity, diversity, and inclusion.** Perform analysis to identify your areas of strength, weakness, opportunity, and threats that exist. **The mining industry is counting on you to develop the next generation of workers and leaders, ensuring one of Canada’s most essential industries continues to grow.** I hope you will accept the challenge by opening your mind to its potential.

For more information on Andrea Carter please see About the Author. For more information on Women In Mining Canada and their involvement in this whitepaper please see Advisory Panel.
Executive Summary

Demographic and pandemic recovery trends will increase the need for leaders to understand how to motivate and engage human capital and the talent pipeline. In preparation for the release of The Mining Industry Belonging-First Study, this white paper provides terminology, context, and key indicators to support industry growth in the interim. Executive leaders face both significant opportunities by implementing strategies to enhance human capital, as well as daunting risks in terms of retaining diverse talent and stakeholders. So, how should executive leaders in the mining industry prepare to build the next generation of workers and leadership?

Key Points

• To shift from high-level generalized terminology, behavioral neuroscience reveals key components that fundamentally change the way people think about human capital, the importance of belonging, and the impacts on wellbeing.
• Creating a Belonging-First culture is instrumental for attracting, retaining, and developing quality diverse talent.
• Structural racism and oppression are driving corporate social justice into new areas of awareness. As social issues become more prevalent, leaders must account for diversity blindness due to the cost associated with unfairness and inequality.
• Interrupting patterns of inequity will require critical understanding, key indicators, and insight into whose voice is being heard and driving decisions.
• Corporate impact will be driven by positive collective intentionality, shared mission, vision and goals, and improved wellbeing for betterment.
• Employee impact, performance, engagement, and retention will be directly connected with intersections of identity, career advancement, and belonging metrics.
• There are five key indicators that create baseline belonging metrics. Indicators are: comfort, connection, contribution, psychological safety, and wellbeing.
Ask any executive team the question, “What is an effective way for you to address equity, diversity, and inclusion within your ESG strategy” and answers will range between dead silence and a strategic plan to hire diverse talent. If the group is advanced, you’ll likely hear varying definitions, citations of human capital, and a mission and vision statement that rolls off the tongue like rocks in someone’s mouth. Although complex and currently intangible, organizations are working hard to get it right as social pressure rises.

In January, when Blackrock’s CEO & Chairman, Larry Fink, released its annual letter to CEOs, with it came a call for disclosure. For years Fink’s letter has addressed business leaders providing valuable insights and setting the tone for public companies, market participants, and other stakeholders to better understand Blackrock’s priorities and investor outlook. However, this year brought a call for disclosure of how business models will become compatible with environmental, social, and governance indexes. Fink warned, “Companies ignore stakeholders at their peril - companies that do not earn trust will find it harder and harder to attract customers and talent, especially as young people increasingly expect companies to reflect their values.” The increasingly influential player and the world’s largest investment manager made the call to action for companies to explore their ESG measures and disclose them for valuation.

The Canadian mining industry contributes 5% to Canada’s GDP, with 19% of total exports, and the largest industrial employer of Indigenous Peoples. Recognizing the need to respond to social demand, many mining organizations warm their feet to strategy, yet the sentiment remains loud with complexity. Plans of recruiting top diverse talent are in the making, however within the status of the
economy and changing demographics, hiring and retaining diverse talent is much more complex than most understand. Similar to unrealized gains, hiring diverse talent looks great on paper, but when belonging is absent impact wavers. As organizations open their minds to the road to recovery, currently paved in the unrealized growth that diverse talent promises to deliver, one must guard against adverse impact, stimulated by a lack of knowledge, understanding, and context.

This whitepaper is for the mining industry, a precursor to a research study that examines the effects of belonging on talent, including the exploration of how diversity and belonging intersect within the mining industry. Meant for executive leaders and their key stakeholders, it provides insights and context for equity, diversity, and inclusion from current research, social justice institutions, behavioral neuroscience, and industrial and organizational psychology, a lens that imparts perspectives for growth and stability.
In 2019 volatile markets, rapid changes, globalization, education, and digitization in our society were challenging workplaces.\(^2\) That was before the global pandemic further destabilized industries driven by lockdowns and physical distancing. While McKinsey & Company (2020) projected a resilient recovery for many, including the mining industry\(^3\), analysis did not account for the existing tight labour market or aging workforce. As many begin speculating about the long-term impacts and solutions for recovery from the coronavirus on the economy, many are basing predictions on pre-pandemic terms, an oversight that could prove costly. Carlyle Global Insights reiterates that “those who conceive of this shock as a temporary disruption akin to a seasonal fluctuation miss its enduring features and may be inclined to manage businesses and investment portfolios backwards towards a world that has ceased to exist”\(^4\). For this reason, as the mining industry looks for their road to recovery, special consideration and value for intangible assets, specifically human capital and talent management, is necessary.

One need not look further than the inception and growth of virtual and artificial intelligence solutions indicating that, in our current digitally driven economy, value results from: ideas, research and development (R&D), brands, content, data and perhaps most importantly to destabilized industries, such as mining - human capital. While tangible assets have previously been the focal point driving leadership strategies (mainly because current accounting rules do not allow intangible assets to be capitalized or recorded on balance sheets\(^5\)), intangible assets now account for nearly 85% of corporate enterprise value, even though they are not accounted for unless they are acquired and characterized as goodwill\(^6\). Furthermore, several studies already
indicate intangible assets for their hugely important effects on the pace of employment and corporate revenue recovery. Put simply, in 1975, the overall value of the S&P 500 was $715 billion, of which, 17% was intangible. By 1995, intangibles listed at 68% of $4.6 trillion. In 2018, intangibles listed 84% of $25 trillion.\(^7\)

Moving forward talent management is forecast as a larger consideration than most industries have planned for.\(^8\) Recovery, performance and growth are becoming more directly tied to human capital. As such, organizations will begin to rethink the half-day training that allows them to check off the talent, diversity, inclusion, and employee engagement box. In fact, MIHR’s Canadian Mining Labour Market 10-Year Outlook (2020), further amplifies the warning signals.\(^9\) With a vision to build an inclusive, skilled, and sustainable Canadian workforce, leaders must acknowledge (1) the tight labour market, (2) opportunities for a larger, more diverse workforce, and (3) mitigate the turnover generated from a lack of belonging with diverse talent.\(^10\)

Organizational belonging, membership, and identification transforms the relationship between employees and their workplace. When organizations lack the understanding that diverse talent needs to feel they belong and are valued, many fall short, leading to recruitment targets being met, but turnover, productivity, and performance falling short.\(^10\)

Additionally, the Mining Industry of Canada also weighed in noting that for Canada to maintain their global status in the sector, efforts will be required in more than the environment, science, and technology, areas that have secured primary focus years prior. Innovation, skills training, and global leadership are essential areas needing initiatives to address the barriers to growth that currently exist from a lack of diversity and inclusion and succession planning within the mineral exploration and mining sector.\(^11\)
Ultimately, the most poignant test existing today for all leaders looking to rebound from the pandemic, is how well they will build the next generation of workers and leadership. To support the Canadian mining industry in its recovery from the pandemic and prevent further shrinkage due to an aging population and brain drain, this paper will focus on stabilizing the workforce through culture and belonging.

HUMAN CAPITAL REQUIRES EQUITY, DIVERSITY & INCLUSION

Goldin (2014) refers to human capital as, “the stock of skills that the labour force possesses.” A year ago, the stock of skills changed almost overnight, as workers and leaders had to pivot to avoid catastrophic loss, brought on by the pandemic. The flow of skills is not, nor has it ever been, stagnant. Skills and education are responsive, aligned in many ways with innovations that create competitive advantage and spark growth in dying industries. As industries diversify, the talent who hold the required knowledge and skill, also changes. Historically, human capital has focused on two major components; education and training. Those who had the means to acquire education and training prospered, those who did not were left behind. Yet, the pandemic unequivocally revealed that skills and knowledge are not solely tied to formal education, but more importantly tied to resilience, determination, and capability. In fact, one might argue that the more important third component of human capital (that was historically omitted yet now must be acknowledged) is health, both physical and mental health. While many will nod their heads and agree to these components, and the importance of human capital for recovery and growth, readers may be questioning how the definition of human capital intersects with the requirement for equity, diversity, and inclusion. To bring this together, let us turn to neuroscience.

Neuroscience reveals two components that will fundamentally change the way people think about belonging and wellbeing. While many are now conscious of the importance of including employees, one must not mistake
Belonging is the missing fundamental factor, the cog if you will, in the projections that convert equity, diversity, and inclusion into usable organizational development methodology that produces returns on investment. First, behavioural neuroscience shows that belonging is a basic human need that drives performance and enhances wellbeing (physically, mentally, and emotionally). However, on the other side of belonging, neuroscience registers the pain of social exclusion, rejection, or ostracism and it is as real as stubbing one’s toe or cutting one’s finger. When talent, experiences exclusion, rejection, or ostracism, it triggers a lack of psychological safety and ignites the nervous system into survival mode. The concept of belonging from a neuroscience perspective thereby substantiates the initiatives for equity, diversity and inclusion allowing culture to become a positive driving force. Instead of asking, “Is belonging real?”, the better question is, “How does belonging become real?” Organizations need to consider that the psychological pain associated with exclusion, rejection and ostracism is experienced the same way as physical pain in the brain. Racism discrimination has also been linked to poor health studies in both the United States and United Kingdom. Recognizing these correlations as they pertain to the wellbeing of talent are important as they could have a significant impact on the future of work. These findings also further establish the urgency for developing a belonging-first culture.

Secondly, behavioural neuroscience reveals that in order for a framework to become substantially understood and utilized, collective intentionality must exist. Collective intentionality demonstrates that a group of people agree that a concept exists and a word transcends into having mental inference and meaning. Currently, equity, diversity, and inclusion are seen as important, however, their mental inference and meaning have yet to be adequately defined for strategic advancement and organizational application. For human capital to fully be realized in our “new normal” and for leaders to truly build the next generation of workers and succession plan effectively, equity,
diversity, and inclusion is imperative and so is the framework that provides mental inference and meaning. Feldman Barrett (2017) provides the example that, one can look at a hammer or ice pick and categorize them as “tools” and then shift perspective to categorize them as “murder weapons”. Imposing functions, thereby inventing reality, is possible because of language. Figure 1. Collective Intentionality provides a visual depiction of this. Language provides context and mental concepts, always backed by collective intentionality.¹¹ Herein lies the problem. Collective intentionality to date has labeled equity, diversity, and inclusion a human resource problem that requires “attention”. More importantly though, the collective has addressed equity, diversity, and inclusion passively, seeing it as a public relations element and recording it by simply acknowledging existence. Collective intentionality has yet to adopt the notion that equity, diversity, and inclusion is a requirement for actualizing human capital and capitalizing on its intangible assets. In fact, research shows that human capital will fall short of its potential without the inclusion of diverse thought, occurring through principles of belonging.²² While there are many reasons the majority have yet to become acquainted with its potential, at the core lies the disconnection of its impact on health; both physical and mental. Recall that in an earlier paragraph there was a nod to health as the third component of human capital. The workforce, generated by human capital, has been socialized to dress, act, think, and communicate in manners deemed appropriate by their predecessors. Moreover, differences are historically labeled as “bad”. Diversity, and the acceptance of differences, have yet to cross the threshold into collective intentionality as good, needed, and supporting of health and wellbeing, components that maximize human capital. Neuroscience shows however, that they are directly correlated, and when belonging is felt, wellbeing increases.²³

Similar to when occupational safety measures became basic regulations, requiring education and training to reduce risk and the frequency of occurrence²⁴, diversity sits on the threshold now, lacking true internal data and real incentives for optimization simply because collective intentionality has yet to realize its importance. While many scramble to perform diversity audits, many have not considered what follows. Yet, because leaders want to build confidence about the future, the commitment to discovering a new path to growth is ripe, one focused on creating value through people and organization. What happened in the past with the regulation of occupational safety is what lies ahead for equity, diversity, and inclusion. Those who lived through the transformation of occupational safety regulations will recall the years of initial resistance.²⁵ However, many will also remember that those who leveraged the incentive and put strategic planning in place reaped gains and advantages that allowed certain organizations to pull ahead of their competition.²⁶
COLLECTIVE INTENTIONALITY

Shared intention allows organizations to act together intentionally, creating collective goals, vision, and mission. When collective intentionality uses words without understanding their context, they lose their impact because they lack mental inference. While equity, diversity, and inclusion are seen as important, their mental inference and meaning have yet to be adequately defined for strategic advancement and organizational application.

Figure 1.

These blindfolded individuals try to describe an elephant without context, understanding, and mental inference. As ESG strategies are developed to tackle equity, diversity, and inclusion, a similar occurrence is happening due to a lack of real understanding and grounded mental inference.
Based on Diversity Best Practices (2019), initiatives can improve the quality of an organization’s workforce and be the catalyst for a better return on investment (ROI) in human capital. The Sodexo Corporation is an example noting that for every $1 it has invested in mentoring, belonging, and succession planning it has seen a return of $19, according to Dr. Rohini Anand, the company’s senior vice president and global chief diversity officer. While many are still looking to create a solid strategy that delivers ROI, what is certain is that equity, diversity, and inclusion are gaining momentum and are being forced further due to environmental demands. Directives are at the precipice of collective intentionality, and once achieved, the industry will find remarkable things begin to happen.

**BELONGING: THE BINDING FACTOR FOR EQUITY, DIVERSITY & INCLUSION**

Adlerian expert specializing in Democratic Leadership and Organizational Health, Karen John (2020) wrote, “There is pure genius in the comprehension of our human need to belong, and, through contribution and cooperation within communities of social equals, to find significance in our belonging.” While many will hear the term “belonging” and snicker at its ability to produce meaningful productivity, motivation, and action oriented behaviour, its principles and capabilities are 110 years old. In fact, belonging is one of the founding principles put forth by one of psychology’s founding fathers, Alfred Adler, it simply has not been prioritized until now because the world was focused on industrialistic principles. While most people have never heard of Adler or Dreikurs, their theories have infiltrated industrial & organizational psychology, organizational consultants, leadership consultants, organizational health, and leadership management practices for the better part of the last century. Early writings of Adler (1910/1956) substantiate that responsible leadership needs to be autonomous and inclusive. Moreover, responsible leadership requires an awareness of one’s power within roles and relationships while fostering an interdependence that creates a shared understanding of vision, mission, and values. When belonging becomes part of an organization’s culture, it not only improves retention, talent management, and succession planning, it also improves the industry. Belonging is a basic human need that motivates and causes individuals to perform optimally. It does not mean though that everyone is the same or that groups should strive to be the same. In fact, Adler stressed that diversity and differences are important for groups to thrive and when people with differences feel equally valued and respected, regardless of where they are within the hierarchical structure, engagement and motivation for betterment ensues.
When examining equity, diversity, and inclusion initiatives through the lens of belonging it takes on a whole new dynamic. Rather than amplifying unconscious bias training, which data consistently shows is ineffective and costly, and leads to an increase in the propensity for microaggressions, social exclusion and ostracism in the workplace, creating a belonging-first culture provides the binding factor linking equity, diversity, and inclusion.

The reason a belonging-first culture is so powerful is that it operates by recognizing diverse people and including them with full membership. From a talent perspective, this holds importance because in typical workplace behaviour when a new hire is onboarded, an employee changes teams, or a leader advances, they are treated as an outsider until they prove they belong. This does not mean that individual competition has fallen to the wayward, it uses different guiding factors, built into the concepts of belonging to thrive. Belonging, as it is predicted today, is as bound to the advancement of equity, diversity, and inclusion as it is to the continuation of occupational safety, and the survival of the industry.

**BELONGING & DIVERSITY BLINDNESS**

The brain and our current behavioural neuroscience help explain why structural racism and oppression continue to be perpetuated and upheld. While we cannot remove the personalization or greater responsibility at hand, in order to progress forward one must be able to separate the shame of the past from the potential of the future. As we discuss diversity blindness, I encourage you to adopt Maya Angelou’s impactful quote, “Forgive yourself for not knowing what you didn’t know before you learned it.”

As a greater society, Canadians uphold that it is important not to be prejudiced or racist. In fact, the National identity upholds that Canadians are multicultural and inclusive. Educational institutions teach the importance of acceptance and inclusion, leading to a prevailing belief that prejudice and racism are bad and do not occur within our country. The undercurrent of this false belief is registered
within the brain of many, and ultimately societal behaviour, is then given permission to deny its existence. Racism and prejudices are global problems, Canada is not exempt.

The global pandemic was not the only factor to significantly change how the world is thinking, perceiving, and reacting to fairness and equality. Each country shares its own contextual elements that shape understanding and action (or inaction) towards change. For example, globally the pandemic provided a fury of disproportionate hardships for marginalized women. Social distancing amplified the awareness of inequality bringing world events into living rooms and dinner tables, forcing families across the globe to abruptly pay attention to prejudice and racism. While outrage ensued, the lack of awareness and understanding of oppression and structural racism, brought a sense of shame, that further amplified the privilege of silence. People watched in horror, but their lack of context so avidly baked into the cycles of socialization kept the majority from action and urgency. These are the environmental pressures organizations are now being called to understand and take action upon. Many recognize that diversity is what separates us from meaningful action and incredible advancement, however, the recognition of past behavior, thoughts, and language directed towards diverse and marginalized people are also what prevent much needed change. To further contextualize diversity, I turn back to neuroscience.

The brain, when looking at a rainbow, relies on mental concepts to see the discrete stripes of color that do not actually exist in nature. Why does the brain register stripes if they do not exist? Because of categorical perception. Categorical perception is the process whereby the brain will downplay variations of colour, magnifying the differences between colour categories and causing the perception of bands of colour. The same process occurs with language. Speech is a continual stream of sound, yet the brain picks out discrete words for relevance and meaning. The words someone hears, the colours seen, the smells that produce memories and transport the imagination to another time, are all represented by concepts in the brain. Without learned concepts, (provided through experience and learning, and filed for context), one would be experientially blind. While the world is not experientially blind, many have diversity blindness.

Diversity blindness is the inability to see, hear, recognize, or contextualize differences and their value due to a lack of language, wording, and experience. Diversity blindness enables a continual downplaying of the significance and importance of another person’s distinctive experience and perspective. Diversity blindness helps explain why equity, inclusion, and belonging, are so elusive to many. Figure 2. depicts this
Diversity blindness upholds collective intentionality. To break diversity blindness, organizations can turn to belonging. Belonging through five elements; comfort, connection, contribution, psychological safety, and wellbeing shifts collective intentionality into seeing and including diversity. Belonging allows diversity blindness to dissipate by providing the brain with context, language, words, and perspectives. It is this process that allows diverse perspectives to be valued, appreciated, and recognized that they belong by others.
BELONGING & INTERSECTIONALITY

Everything is about relationships. What people think about, how they learn, what motivates them, how they stay engaged, how they perform, what they give up, and what they stand for can all be related back to interpersonal relationships, how a person was socialized, and whose voice is the most acknowledged within a given relationship. How a person makes another person feel is based on intentionality and forms the basis for belonging.

Understanding racism and other systems of inequality are critical for the workplace to function optimally, especially post-pandemic. In a survey of 2,000 employees, almost half (43%) said they are looking for a new job, and corporate culture was the main reason. When probed further about corporate culture being the main reason, participants indicated that a lack of corporate equity and fairness accounted for more than three quarters (77%) of their reasoning. Furthermore, 92% of employees said they would be more likely to stay with their job if their bosses would show more empathy. Finally, engaged employees are 59% less likely to seek out a new job or career in the next 12 months. The problem for most organizations is that they cannot change what they do not know and have not sought to understand. When employees seek more empathy, their identities and experiences are also on the forefront. Empathy ultimately leads to a greater sense of wellbeing due to feeling included, acknowledged, and valued. However, empathy cannot be felt if the person who it needs to come from does not understand or acknowledge how a person’s identities and experiences are affecting the situation.

Intersectionality is a term introduced by Kimberlé Crenshaw in 1989 to describe how race, class, gender, and other salient identities “intersect” with one another and overlap. Figure 3. An Example of Intersectionality shows how the multiple identities intersect.

Figure 3. An Example of Intersectionality

These intersections of personal identities create discrepancies and inequity in legal
rulings as well as within the talent pipeline. Crenshaw indicates that intersectionality is an analytic that helps people think about identities in a holistic perspective, as well as who has the power in a given situation. From the context of interpersonal relationships, intersectionality helps explain systemic oppression because it demonstrates how the cycles of socialization have upheld who is deemed of higher importance. Simply put, it indicates whose voice is most listened to and valued, in any given relationship. The person who’s voice is most listened to and “valued”, is the person who holds the power, and ultimately makes the decisions and controls the outcomes for those within the relationship, regardless of whether it is fair or empathetic. This lens allows people to see that inequality is not simply individual bias or behaviour, but a consequence of deeply embedded practices, collective intentionality, diversity blindness, organizational hierarchies, and systemic oppression. For leaders to become more empathetic, emotionally intelligent, and create a belonging-first culture, intersectionality must be understood and applied.

The following questions are important for organizational leaders and organizational members to ask while re-imagining a new normal:

1. What are the historical, social, economic, and political realities that are affecting this person in this situation?

2. What toll have these factors had on people’s bodies, mental health, and cognitive capabilities?
3. How are larger societal forces affecting people’s experiences, perceptions, and behaviours?
4. What societal forces are affecting perceptions of equity, diversity inclusion, and belonging?
5. Who has the opportunity, access to resources, and embedded belonging without having to prove value, skill, or capability?

While this list of questions is simply an introduction to generate initial insights, the intentionality of learning, understanding, and furthering them supports leaders in their ability to start building the next generation of workers and leadership. At the heart of a leader’s legacy lies their ability to perform a systemic analysis fostering the required systemic changes.

THE MINING INDUSTRY BELONGING-FIRST STUDY AT WORK: THE FIVE COMPONENTS TO CREATE A BELONGING-FIRST CULTURE

Workplace engagement requires an understanding of interpersonal dynamics. Nurtured by relational, social, and cultural
dynamics, belonging occurs in cognitive, spatial, bodily, and material means. For engagement and high performance to occur, belonging is a critical necessity because it underscores how people participate in common goals, learn through participation, grasp new ideas, shape identity through membership, and change personal investment through their place of work. The sense of belonging relates to gaining acceptance and avoiding rejection, exclusion, or ostracism. Thinking back to the concepts presented within collective intentionality and intersectionality, one can connect that differences, including diverse identities, have been seen as grounds for rejection, exclusion and ostracism. Fundamentally, social psychological literature demonstrates that prosocial behaviour and engagement decreases and can become harmful (psychologically, cognitively, and physically) when employees do not experience belonging. Moreover, individuals are more apt to identify and engage with a particular group when the group allows for belonging by recognizing differences and accepting them as valuable. This sentiment is one that is not typically found in industries with low representation of diverse identities. Homogeneous talent pools acquire belonging through groupthink mechanisms, contextual recognitions, and reoccuring socialized cycles. This in of itself makes it hard for diverse talent to be valued or experience belonging because they perceive the environment differently. While diversity audits are part of understanding metrics for advancement, one must consider how diversity demographics effect belonging within organizations.
For that reason, to preemptively prepare for the thesis that ensues and looks to provide statistical significance with belonging-first metrics, a key literature search identifying themes and gaps was performed in order to understand the key indicating factors of belonging. The research began by investigating if belonging had previously been correlated within talent management or the talent management pipeline. The search produced the initial gap within the research and therefore led to a literary search seeking to describe belonging in the context of the workplace, interpersonal relationships, intrapersonal relationships, and systematic relationships. While there were nine common themes for describing belonging, only five are consistent key indicators. Belonging key indicators are; (1) comfort, (2) connection, (3) contribution, (4) psychological safety, and (5) wellbeing. Figure 4, visually depicts the 5 key indicators.

Collective intentionality demonstrates that a group of people must agree that a concept exists for language to have meaning and mental inference. For this reason, the terminology for belonging was seen as the second gap.

Following the identification of the second gap, the next question pertained to understanding how belonging is felt and experienced within the workplace, interpersonal relationships, behaviourally, and how it ultimately affects talent management. The search looked for literature that connected belonging with exclusive talent management, perceived organizational justice, and employee engagement from the talent management perspective. The final step led to identifying literature that connected belonging, intersectionality, and exclusive talent management. These literary reviews produced the third gap, which primarily explores the lack of data collected on diverse and marginalized people within the workplace and talent pipeline.

The literary research, combined with previous neuroscience research (exploring performance and human capital), produced the question, “How can organizations measure belonging from an analytical perspective so that they can improve culture and accelerate equity, diversity, and inclusion applications?”

This is the starting place for a mining industry research study, investigating Belonging as a tool for equity, diversity, and inclusion as it pertains to talent management. A survey, reflecting the five key indicators of belonging, was prepared, using a focused literary search of peer-reviewed research. Questions were further developed based on peer-reviewed belonging research studies, within the fields of neuropsychology, behavioral neuroscience, individual psychology, and industrial and organizational psychology.
UNDERSTANDING BELONGING, THE MINING INDUSTRY DEMOGRAPHICS, AND INTERSECTIONALITY

To gauge interest, Women In Mining Canada acted as key advocates, introducing the top ten TSX-listed mining companies in Canada to the researcher and study. Ten more, randomly selected mining companies listed on the TSX, were also contacted. Upon initial conversations, awareness was brought forward regarding the fact that most organizations did not have specific demographic data pertaining to elements of intersectionality that could be researched for baseline belonging data to grow from. Considering that intersectionality is a newer concept within talent management research, intersectionality, as it pertains to belonging, was identified as a gap in research, and a need for an inclusive lens on the demographics of participants within the mining industry is needed, survey questions were developed to fill in the data and information. Specific mining-related questions regarding personal protective equipment (PPE), signage, and specific elements that were generated from the 2017 National Action Plan & Toolkit developed by Women In Mining Canada were also included.

METHODS

The research topic is to be investigated by conducting a pragmatic mixed methods research design. Using this methodology, a synergistic study effect using a mixed methods design, quantitative methods will help the qualitative method further inform the research. A sequential procedure, where a simple random quantitative survey will be utilized to investigate perceived belonging within the workplace, both in corporate offices and mine sites. Seven different sections of the survey have been identified and created (1) Demographics, (2) Comfort, (3) Connection, (4) Contribution, (5) Psychological Safety, (6) Wellbeing, and (7) Mining Industry Related Questions. Categorizing questions will then allow an overall belonging score to be calculated per participant and an overall score for participating organizations will be generated, providing participating organizations with a baseline belonging score to grow from.

Quantitative Research will include:

- Survey development
- Reverse scoring
- Data collection
- Data analysis (Descriptive statistics, ANOVA, Correlation Analysis, Post hoc & Regression Coefficients are some of the analysis implemented)
By applying data analysis to the workplace belonging survey, the statistical significance will determine the effect. By developing an overall belonging score, qualitative questions based on intersectionality will be explored as they pertain to talent management. Once a belonging score is created, the organization will then be able to work specifically with their strengths and weakness to further increase the score year after year.

In conclusion, by understanding statistically significant belonging scores, combined with IPA methods, a baseline of belonging within the workplace is significant for the understanding of intersectionality, equity, diversity, and inclusion. And its significance to talent management in the interest of rebounding from the pandemic and preventing a shrinking industry. Perhaps of more importance though, the research will provide leaders a strategic approach to facilitating the rebuilding of next-generation workers and effective succession planning with a diverse population.

**METHODOLOGY FOR PARTICIPANTS**

The top 10 TSX listed Canadian Mining Companies were contacted via email to inquire about interest in participating in the Belonging-First: Equity, Diversity, and Inclusion Study. All organizations were connected using research methodology and guidelines:

1. An initial email introducing the researcher and the study concept was sent to Executive Leadership and Board Members.
2. A follow-up email was sent if no response was made by Executive Leadership or Board Members.
3. A final email was sent to ensure each organization had the opportunity to participate and that all Executive Leadership and Board Members were aware of the opportunity.
4. One to three conference calls were then initiated to discuss the study, the direction, data collection, and privacy of data. The level of participation Executive Leaders was able to commit to was also formalized.
5. Informal conversations about equity, diversity, and inclusion direction, goals, and baseline metrics were also discussed.
6. After completing meetings with the top 10 TSX-listed Canadian Mining Companies, 10 more mining companies on the TSX were also contacted to gauge interest using the same research methodology and connection as detailed above.
• 13 out of 20 TSX-listed Canadian Mining Companies have agreed to participate and have expressed avid interest in a Belonging-First Culture.
• 3508 participants have been included in the quantitative component of the study
• No further participants will be included at this time
• The qualitative component will be based on final quantitative data and will include existing participants
• All participating mining companies will receive an overall belonging score and benchmarking against their participating peers.
• As confidentiality clauses are in place, protecting participating mining companies, each company will only see their benchmarking relative to their rank amongst those participating.
• Due to the responsiveness to this study, it is believed that the mining companies participating are eager to discover new methods to support diverse talent, human capital, and the growth of their industry.

Further information on the concepts presented in this whitepaper will be available on the Women In Mining Canada Learning Platform and Building Better Organizations. The full thesis with statistical analysis of the mixed methods research will be presented in the spring of 2022. Further insights, descriptive statistics, and Creating A Belonging-First Culture support will continue to be released in between dates.
The benefit of the pandemic was that it provided the realization that people, their skills, training, and education are not only responsive but highly valuable. While many organizations previously based their bottom lines on tangible assets for guiding strategy forward, to recover from a destabilized industry facing a talent tight position, intangible assets such as R&D, ideas, content, data, and most importantly, human capital are the way back. As the greatest question of the pandemic calls leaders to the task of building the next generation of workers and succession planning effectively, a belonging-first culture is on the precipice of emergence and collective intentionality. Perhaps for the first time in history, leaders are acknowledging the importance of connection, contribution, comfort, psychological safety, and wellbeing as the five key indicators of belonging that will drive their recovery and growth forward. While the research has only just begun, the impact and dedication of 13 TSX Listed Canadian Mining Companies and their 3508 employees, Women in Mining Canada, and Adler University is certainly palpable. Organizational belonging-first culture is a powerful concept. It reshapes the psychology of organizational membership while inviting equity, diversity, and inclusion as upholding principles into organizational strategy and development. Belonging-first culture is an emerging field providing means to bind employees to each other, to the organization, and to themselves in ways that would not be achievable through other means, consequently enhancing their performance, engagement, and the furtherment of the mining industry.

To Access The Belonging-First: Equity, Diversity & Inclusion Essentials Course, Visit www.wimcanada.org
Throughout this whitepaper, the terms, equity, diversity, and inclusion have been used intentionally. Their importance, as they are listed on their own, as well as a collective intention, has not been shortened. The reason the terms equity, diversity, and inclusion are consistently written is to minimize the downplaying of the terminology that often occurs when concepts are challenging and different. Furthermore, readers may have noticed that equity is placed before diversity and inclusion. This too has been done with intention. As the collective begin to educate and apply context for a belonging-first culture it is equity that is leading the charge and therefore the author has made the conscious decision to write these terms in the order of effect.

Perceptions of organizational justice and belonging depend on the context in which they are upheld. The same is true for the descriptor, BIPOC, Black, Indigenous Peoples, People of Colour. While the acronym has already sprung into literature this use of language downplays the importance and value of people who identify as Black, Indigenous Peoples, and People of Colour. The act of shortening different types of people and their racial and ethnic identities into an acronym devalues their different perspectives.

Furthermore, within the past few months of writing this whitepaper, the word Black versus African American has become another important distinction deserving of our attention. The term Black is inclusive of the entire African diaspora, indicative of peoples who identify with a homeland but live outside of it. Alternatively, African American refers primarily to descendants from slavery in the United States.
Belonging:
The process of putting diversity and inclusion into action by creating an environment of valuing, respecting, inviting, and encouraging the richness of ideas, perspectives, and differences for the purpose of generating growth and opportunity for all.

Belonging-First Culture:
The incorporation of the five key indicators of belonging (1) comfort, (2) contribution, (3) connection, (4) psychological safety, and (5) wellbeing to uphold the importance and strategic methodology required for equity, diversity, and inclusion to be felt and upheld within an organization.

Collective Intentionality:
The phenomenon of how a majority deems a word to have meaning and context. Collective intentionality has both impact and importance on how the context of a word and the meaning it is given is then applied and valued within the organizational culture. An example of Collective Intentionality: Executive leadership agrees to the importance of Equity, Diversity, and Inclusion as a principle for CSR and ESG. However, a lack of training and development, strategy and planning, devalues the importance of equity, diversity, and inclusion to the purpose of reporting or public relations.
D

Diversity blindness:
The inability to hear, see, recognize or contextualize differences and the value of differences due to a lack of language, wording, context, and experience. Downplays the significance and importance of another person’s perspective and experience. An example of diversity blindness is having a person with multiple intersections of identity present subject matter that he/she is an expert in, only to have someone who is seen as more “valuable” or “homogenous” within the company denote the importance (without having any expertise in the field) and influence the consideration of others.

Diversity of perspective:
When people with various intersections of identity experience their environment differently due to how they have been socialized or have experienced the context of a situation. An example of diversity of perspective is when a group of people experience the same situation yet attach different meanings to it due to their embedded learned biases.

Diversity as variation:
The presence of different types of people from a wide range of intersections of identity offering different perspectives and experiences.

An example of diversity as variation is an organization having a high degree of variation in gender, ethnic, and racial representation.

E

Experiential Blindness:
A sensorimotor theory describing a lack of perceptual experience despite no sensory impairment. The phenomenon dubbed “experiential blindness” is cited as evidence for a constitutive relation between sensorimotor skills and perceptual experience.

I

Inclusion:
The process of inviting different groups or individuals having different backgrounds who are culturally and socially accepted and welcomed, and equally treated. These differences could be self-evident, such as national origin, age, race and ethnicity, religion/belief, gender, marital status and socioeconomic status or they could be more inherent, such as educational background, training, sector experience, organizational tenure, even personality, such as introverts and extroverts.

Intersectionality:
Describes how the different intersections of identity, such as race, class, gender, and other salient identities such as marital status,
languages spoken, birth order, nationality intersect with one another. Intersectionality, as intended by Kimberlé Crenshaw (1989) is an analytic that helps people understand how power is influenced by intersections of identity in situations.

O

Organizational Culture:
The collective behavior, values, norms, terminology, and language of an organization’s members and the meaning attached to them.

P

Power:
The ability to change the physical, economic, psychological, social, and wellbeing of oneself and others.

Privilege:
A special advantage a person is born into or acquires during their lifetime that provides access to opportunities others do not have.

S

Social Justice:
The practice of social responsibility occurs via values-based execution of behaviors and actions that build upon global movements for social justice and equity. Social justice practitioners value the importance of self-reflection and awareness, first exploring their own connection to social problems.

Inquiry into the origins of those problems, the analysis of the systems which perpetuate them, and taking an outward step to resolve social problems collectively.

W

White dominant culture:
The norms, values, beliefs, socialized thought processes, behavior, and decision-making successively adopted by Western tradition and influenced by the monarchy. White dominant cultural norms are embedded and unintentionally reproduced through the cycles of socialization, reinforced by business culture and educational institutions.
Acknowledgments

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 an initial 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 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 an Equity, Diversity & Inclusion Educator and Learning & Development Consultant who uses the neuroscience of belonging to support human capital, leadership, and inclusion intelligence. She is the CEO & Founder of Andrea Carter Consulting & Building Better Organizations. Andrea brings over 18 years of research and practical application to her training, public speaking, and proven methods. She supports leaders, and their teams, to create a climate of belonging so they can produce good work despite high-pressure situations and imperfect conditions.

Andrea has completed a neuroscience certification with HarvardX and is currently a Masters of Industrial & Organizational Psychology candidate, with a concentration in Human Resource Management, and a specialty in social justice. This whitepaper is part of her final deliverable for Adler’s year-long social justice practicum, with her thesis to come in the Spring, 2022.

Andrea is best known for her ability to bridge the gaps by creating collaborative working environments where people feel they belong despite differences.

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From the beginning, the Social Justice Practicum team from Adler University and Women In Mining Canada recognized that this research needed to be informed by 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 our mission to Educate Elevate Empower.

In collaboration with Canadian Women in Mining Canada branches, they collectively support grassroots initiatives in the realm of personal and professional development, while providing a national voice within the global minerals and mining community.

Women In Mining Canada’s membership is composed of passionate men and women who actively support the minerals and mining industry and represent a variety of occupational trades and professions. 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.

I am immensely grateful for the advisory panel’s generous contributions in time, engagement, constructive feedback, and productive pushes driven by a shared desire for a just and equitable world and workplace.

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Catherine Gignac
Resa Furey
Marie-Hélène Turgeon

Mentors & Special Acknowledgements:
AnneMarie Ryan
Maureen Jensen
Andrew Carter
Brian Carter

Graphic Design
Veronica Fiorilli – Graphic Designer

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Endnotes

35. Angelou, M. (n.d.) Quote


