CHAPTER I

INTRODUCTION

1.1 Background

The mining industry has been long seen as a masculine-based industry with only 5% of total participation in 2005 (Mayes & Pini, 2010). This situation is slowly changing with more women joining the workforce with an accumulated 15% of participation by 2024 globally (Harris, Schwartz, & Rahman, 2024). However, the industry's deeply rooted traditions and culture still reflect its past. Despite this influx of women, they continue to be pioneers navigating a historically male-dominated environment.

Even as the industry is slowly gaining a gender perspective with more female practitioners, what surfaces along this way remains steeped in challenges. For instance, the physical demands of most roles, especially in field operations such as in surveying and mining, dictate that such roles have traditionally favored candidates that are male. The male-dominated culture is such that, even in such roles as geology and mining engineering, many women feel they have to prove themselves in an otherwise unwelcoming environment. It is very well echoed in the leadership hierarchy, which more often than not is a male predominant segment.

In regards to the increase in women's participation in the mining industry, according to M.Z, a mining engineer with 30 years of experience internationally

and currently working as a general manager in the PT. X (a mining company in Indonesia), there may be women senior managers in HR and External Relations (historically) in PT. X,. Though, overall, leadership is male-dominated, including the CEO.

In the field works, M.Z mentioned that;

"Geologists, metallurgists, and engineers have started to develop in terms of the number of women participating, but in other fields such as surveyors, drilling teams, and processing it is dominated by men".

This information illustrates the disparities in terms of the female participation in the mining industry, as the field consists of dominantly the male gender.

Within the context of participation of women in the mining industry, He also explains that;

"There are a lot of divisions in PT. X such as Human Resources, External Relations, Finance, Safety and Environment are male dominated and indeed historically the leaders of these divisions are men, but we had several women who are leading such as in the Human Resources and External Relations divisions. However, PT. X has never had a female CEO before".

While M.Z. noted a growing presence of women in geology, metallurgy, and engineering within the mining industry, he observed that fields like surveying, drilling, and processing remain male-dominated. Within Company X, despite women holding leadership positions in departments like Human Resources and External Relations, the company has historically lacked female representation in executive roles, particularly the CEO position.

The issue of women participation is evident according to Informant A's experience in the mining industry. Despite the increase in women's participation, in PT. X, we could see that the leading positions in the mining industry is dominantly the male gender.

In regards with that information, this research will be participated by experienced women in the mining industry from PT. X and PT. Y. The issue of leadership participation is evident in PT. X, with 100% of the board positions are positioned by male (PT. X, 2023) and this poses the concern for up and coming women that desire to be a mining engineer. And in PT. Y, the boards are positioned by both male and female gender equally at 50% (PT. Y, 2023).

The issue of the lack of women participation in the mining industry, including the management and leadership position (as explained above) is evident in the top 5 mining companies in Indonesia, the majority of the Board of Directors and Board of Commissioners in top mining companies in Indonesia (determined by their production capacity and market capitalization) are of male gender (InvestinAsia Team, 2023).

1. **PT. Bayan Resources**

According to figure 1.1, it is foreseeable that the board composition at Pt. Bayan Resources reveals a gender disparity. Dato' Dr. Low Tuck Kwong, the President Director, is male, and both members of the board of commissioners (5) and other board of directors (8) are composed entirely of

men with the exception of three female board directors. This suggests a board with a masculine skew. A total of 83.3% of the board members are male (PT Bayan Resources, 2024).

Figure 1.1 PT Bayan Resources Company's Structure.

2. **PT. Adaro Energy**

Figure 1.2 Adaro Energy Company's Structure.

In figure 1.2, it is foreseeable that PT. Bayan Resources board has a gender imbalance. Out of all the board members, including their president director, Garibaldi Thohir, only one is female, which means the vast majority (90.9%) are male. This imbalance is seen at all levels of the board, including the president director, board of commissioners (4), and other board of directors (6) (PT Adaro Energy, 2024).
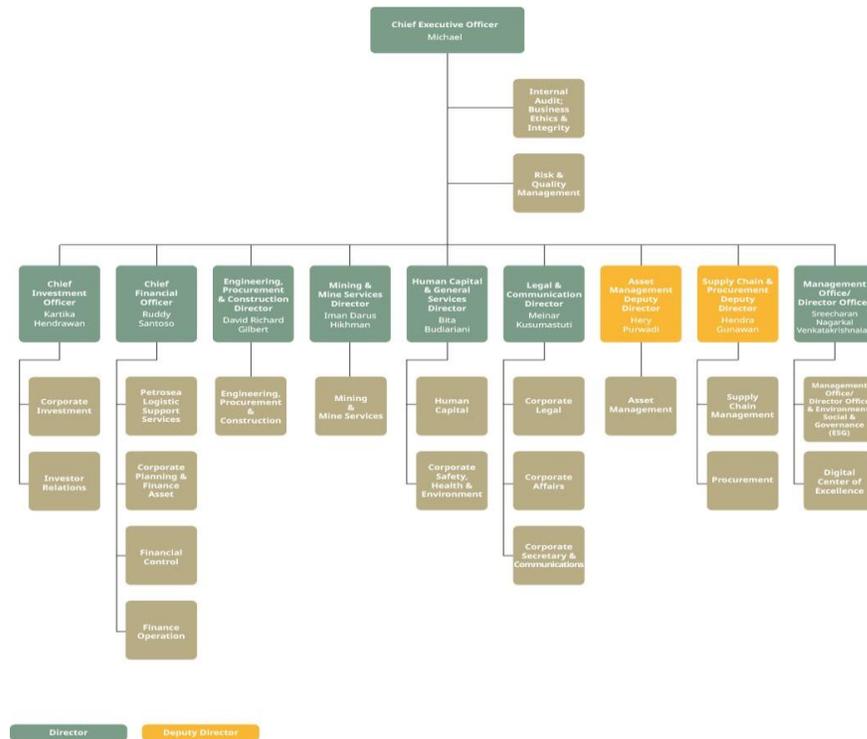
3. **Petrosea**

Figure 1.3 Petrosea Company's Structure.

According to figure 1.3, similar to PT. Bayan Resources, PT. Petrosea's leadership structure suffers from a stark lack of female representation. Just like at Bayan, a single woman occupies a position on the board amongst a sea of men. This translates to a disparity, with a whopping 90.91% of board members being male. This imbalance permeates every level of the company's governance, from the highest position, the President Director currently held by Michael, down to both the Board of Commissioners, composed of six members, and the Board of Directors, which has four members that are of male gender. (Petrosea, 2023).

4. PT. Bumi Resources TBK

Figure 1.4 PT Bumi Resources tbk Company's Structure.

It is foreseeable that in figure 1.4, similar to Pt. Bayan Resources, PT. Bumi Resources TBK's board structure also suffers from a severe lack of females. Just like the aforementioned companies, only 1 woman holds a position on the board, translating to a staggering gender imbalance. A whopping 95.83% of board members are male.

This imbalance pervades every tier of the company's governance. Excluding, Adika Nuraga Bakrie currently serves as the President Director. The Board of Commissioners has 9 members, while the others within the Board of Directors has 13 members, all of whom are male. (PT Bumi Resources tbk, 2022).

5. PT. Freeport Indonesia

DEWAN KOMISARIS	
Richard C. Adkerson	Presiden Komisaris
Hendi Prio Santoso	Wakil Presiden Komisaris
Adrianto Machribie	Komisaris
A.M. Fachir	Komisaris
Hinsa Siburian	Komisaris
Kathleen Lynne Quirk	Komisaris

DEWAN DIREKSI	
Clayton Allen Wenas	Presiden Direktur
Jenpino Ngabdi	Wakil Presiden Direktur
Claus Wamafma	Direktur
Clementino Lamury	Direktur
Mark Jerome Johnson	Direktur
Robert Charles Schroeder	Direktur

Figure 1.5; Figure 1.6 PT. Freeport Indonesia Board Members.

According to figure 1.5 and 1.6, reflecting a similar trend to other companies, the board demonstrates a gender disparity. Just like those mentioned before, only 1 woman holds a seat on the board, resulting in a stark imbalance. A substantial 91.66% of board members are male.

This imbalance exists in every level of the company's leadership. Clayton Allen Wenas serves as the President Director. The Board of Commissioners consists of 6 members, with only 1 woman among them. The Board of Directors further reinforces this imbalance, with all 6 members being male (PT Freeport Indonesia, 2024).

Indonesia's top 5 mining companies have zero female CEOs and only 6 board of director members and 1 board of commissioners members who are female. An accumulated percentage of 90.12% of board members are male.

From the explanation above, it is foreseeable that the participation of women in leadership position is very minimal, and the lack of experienced people to guide women through the mining industry's traditional norms and unconscious biases, combined with a deeply entrenched masculine culture that perpetuates these biases and leads to harassment, creates hurdles that hinder women's advancement, reflecting historical biases and discrimination that favor men in leadership roles and ultimately preventing the industry from fully benefiting from the diverse talent, skills, and perspectives women can bring to executive positions, making it crucial to address this disparity to promote a more inclusive and equitable sector that leverages the full potential of its workforce (Marinelli, Lord, & D.B., 2014).

Apart from the information discussed above, globally, only 14% of the total executives in over 2000 recorded in mining companies are women, thus leaving the other 86% of the executives being male and just 46% of the 500 biggest mining companies only have one woman on oil their board (Kuykendall & Duquiatan, 2023). This issue is the result of the gender norms that have been established in history, no gender diversity initiatives and unconscious bias from companies to think that male candidates would do better. This disparity limits women's career choices based on gender and not qualifications, this in turn would lead to the loss

of the diverse perspectives and new and innovative ideas. This complication is important as it blocks the industry from reaping the benefits of a variety of skills and experiences needed for innovation and growth (Abrahamsson & Johansson, 2021).

The entrenched masculine culture in mining creates an environment where unconscious bias thrives, assuming physical work is inherently male-dominated and leading to women being seen as outsiders. Over time, this bias creates a breeding ground for harassment. Pertaining to such lack of mentorship and biases, the upward and downward communication between women with their peers and management could be made a challenge due to the hierarchy of male dominance. Women face unwelcome comments, advances, or threats simply for existing in a traditionally male space. C.Z., a 29-year-old at a Mining Company's site in Bakan, is a victim of harassment in the mining industry. She explained that;

> *"Tangan saya pernah dipegang sama crew"*
> *"My hand was once held without permission by the crew".*

To add to that she also received verbal abuse regarding physical attributes, as she mentioned that;

> *"Saya pernah di bilang badan saya bagus tapi dengan nada melecehkan"*
> *"I experienced people commenting on my body with a harassing tone"*

In regards to the barriers of career advancement for women in the mining industry, A.T., a 43-year-old engineer at Bumi Suksesindo in Banyuwangi, explains that;

"Terkadang wanita tidak bisa menjadi diri nya sendiri, mereka dipaksa untuk menjadi maskulin"
"Sometimes women cannot be themselves, they are forced to be masculine".

This shows how the masculine culture within the mining industry forces women to be indulged within the culture and are forced to not be themselves. She felt pressured early in her career to be more masculine to be accepted and faced disrespect for her perceived lack of competence. Despite progress in gender equality at her company, this issue persists, especially for women starting their careers in mining.

To add to that, A.T. also has experienced underestimation as she mentioned;

"Di awal karir, saya pernah diremehkan karena saya wanita"
"In the beginning of my career, I have experienced underestimation due to my gender".

She managed to change herself to fit in the working culture and thus found her own abilities and capabilities to overcome the biases.

The experience that C.Z. and A.T. received could make a woman feel unsafe, underestimated, and isolated while working in the industry and eventually hinders their career advancement. A research conducted by Doret Botha in 2017 highlights that such problems hinders career advancement as women in the mining industry face barriers to career advancement stemming from prevailing gender stereotypes and biases. A masculine workplace culture often undermines women's capabilities, leading to underestimation and discrimination and the feeling of isolation for women in the industry (Botha, 2017). This particular culture enforces one gender domination, thus perpetuating the notion of unconscious bias Despite the declining

trend for women experienced in mining, this is an issue that is foreseeable for women that are starting their careers in the mining industry.

To add to that, the experiences of harassment, biases, and a masculine corporate culture faced by both subjects is an issue that exists within the mining industry:

- **Biases** are another obstacle for women in the mining industry. Both conscious and unconscious gender biases can undermine gender equality. These biases often result in women being held back by gender stereotypes and company practices that favor men's traditional roles (ILO, 2021). For example, the expectation that strong performance requires availability and mobility at any time burdens women, as they are often assumed to shoulder housework and caretaking responsibilities.

- **A masculine culture** is another challenge women face in advancing their careers. In industries like mining, the hypermasculine culture contributes to the acceptance and reinforcement of harassment and biases against women. This culture often results in a work environment that is not conducive to women's advancement, as it may prioritize long hours, overwork, and intensity, creating the perception that women are unable to adjust to the prolonged working culture (ILO, 2021).

- **Harassment** is a pervasive issue in the mining industry. For example, a survey in 2017 Canada found that 47% of employees in management positions within

mining had experienced harassment (Peltier-Huntley, 2019). In the eastern Democratic Republic of the Congo, the situation is even more alarming, with 74% of women in the artisanal and small-scale mining (ASM) sector reporting sexual violence (GIZ, 2019). The hypermasculine culture in mining allows such practices to be accepted and even strengthened due to male solidarity and organizational tolerance. Another research on the issue of women in the mining industry that was conducted by Australasian Institute of Mining and Metallurgy shows that 70% of women experiences bullying in the industry, 85% experiences unjust treatment and inequalities and over 65% of them experiences sexual abuse (AusIMM, 2022).

The hindering of women's career advancement is a threat for women working in the mining industry and risks the decline in the amount of women's participation in the mining industry. A research conducted by the Intergovernmental Forum in 2022 indicates that workplace culture in the mining industry is not conducive to women's employment. The research suggests that women face challenges including gender bias, limited access to finance, inadequate role models, gender discrimination, and structural barriers to equality (IGF, 2022h). A gender pay gap persists, with men earning more across various categories.

While 21.4% of women work in exploration and 50% in mining, many feel limited by career options and the awareness of the gender pay gap is growing (42.9%), but gender-specific policies are lacking in many workplaces (53.8%) and

although more women are pursuing STEM education, they remain underrepresented in STEM careers (IGF, 2022h).

While large-scale mining sectors offer relatively high wages compared to other industries, a gender pay gap persists for different genders. In Australia, women earn 83% of men's salaries in mining, with the gap fluctuating over time as women are underrepresented in higher-paying mining roles, with a noticeable decline in their presence as earnings increase (IGF, 2022a). Similar gender pay gaps exist in Canada and South Africa, with women earning 14.8% and 50% less than men, respectively (IGF, 2022c) (IGF, 2022h). In Ghana, women in the extractive sector are paid 27.5% less than men doing the same jobs (IGF, 2022e). These findings highlight the persistent gender discrimination in the mining industry, despite the sector's potential for higher earnings. This issue is the complications of the entrenched masculine culture within the mining industry that hinders the career advancement for women.

Women surveyed identified several barriers, including preferential treatment of men, bias against women in mining, perceived promotion based on quotas, doubts about women's qualifications, cultural biases, and a lack of commitment to workplace equality and these women leaving their jobs due to limited career advancement opportunities (IGF, 2023). Specifically, they find fewer opportunities to progress into technical and leadership roles, leading them to seek employment elsewhere. These phenomena contribute to a hostile environment that limits women's access, retention, and promotion in the industry. As a result, 7.65%

of women working in the mining industry prefer to leave the industry due to the lack of career advancement opportunities for them and 35% of women leave the industry due to the biases and minimal opportunity growth in the mining industry (McKinsey, 2021). Women struggle to adapt to the culture of the mining industry due to the existing masculine culture and biases that they have to endure, and 44% of women from a total of 40,000 female miners feel that way (McKinsey, 2021).

As a result of the deeply seated masculine culture in the mining industry, there is a perfect environment for unconscious bias, harassment, and flat-out discrimination.

to surge in and be major career development inhibitors against women. Women like C.Z. and A.T. thus face very serious issues with respect to unwelcome advances, underestimation, harassment and pressure to become "masculine" causing a feeling of isolation and devaluation. This shows that these issues are actually very pervasive, thus proving that this type of culture entrenches gender biases, which become the obstacle to promotion opportunities.

In addition to that, it is important to put an emphasis on the role of mentors in shaping the careers of women within the mining industry. According to Nata, a 37 year old senior metallurgist, women in the mining industry sometimes require dependency towards their seniors, and from her experience, she mentioned that she was lucky to have a woman to be her mentor, others are not as lucky.

"Kalau saya sendiri sih untungnya atasan saya yang paling tinggi itu wanita ya…. Namun tidak semua orang seperti saya gitu ya karena leadership position

juga mayoritas itu pria…. Dan banyak pria yang cenderung untuk underestimate wanita…"
"I'm fortunate to have a woman as my highest-ranking supervisor. However, not everyone is as lucky as I am, as leadership positions are predominantly held by men. Unfortunately, many men tend to underestimate women."

She emphasizes that men tend to underestimate women in the mining industry, and this poses a challenge for women to progress in the mining industry. And this brings out the question on the role of mentors for women progressing in the mining industry.

Even with some improvements made in this area, inadequate gender-specific policies and the continuity of such discriminatory practices constrain women working in the mining industry, from which most of them are compelled to leave. These deeply rooted cultural issues need to be changed in the industry so that women can have equal opportunities with men for increasing their career growth up to the highest levels of leadership. With that, this research will look for the career advancement of women and how they overcome the communication barriers from when they were working on-site until their time working in the office, and whether such problems still exist in their current working circumstances.

1.2 Research Statement

Despite the increasing participation of women in the mining industry, they continue to face barriers to career advancement due to entrenched masculine culture, unconscious biases, and harassment. This research seeks to understand the

specific career advancement   processes of these women's experiences in the industry, focusing on how they hinder their ability to navigate the workplace, build professional relationships, and ultimately advance to leadership positions. This paper intends to identify specific communication barriers that women face in Indonesia's mining industry, together with the strategies they use to overcome these challenges. Drawing on the experiences of successful women who have made it in the sector, this study tries to identify those key experiences that have contributed to their career advancement and provide insights into how the industry can foster a more inclusive and equitable workplace.

One of the primary challenges faced by women in the mining industry is the prevalence of harassment. The **masculine culture** within the industry can contribute to the acceptance and reinforcement of **harassment** against women, creating a hostile work environment that is not conducive to their advancement. This can include both physical and verbal **harassment**, as well as more subtle forms of discrimination. In addition to **harassment**, **biases** can also hinder women's career advancement in the mining industry. Both conscious and unconscious gender **biases** can undermine gender equality, leading to women being held back by gender stereotypes and company practices that favor men's traditional roles. These biases can manifest in various ways, such as the expectation that women are responsible for domestic duties and caregiving, or the assumption that they are not as capable as men in certain roles.

Furthermore, the masculine culture in the mining industry can perpetuate biases and create a sense of isolation for women. The hypermasculine culture often prioritizes long hours, overwork, and intensity, creating the perception that women are unable to adjust to the prolonged working culture. This can lead to women feeling excluded and undervalued, hindering their career advancement .

Existing research has explored some of these challenges, but there remains a gap in understanding the specific phenomenon of harassment, bias, and masculine culture on women's experiences that poses challenges for the career advancement for women in the mining industry. This research aims to fill this gap by providing a deeper understanding of these experiences and their consequences, ultimately contributing to the development of targeted interventions to address them and promote gender equality in the mining industry.

Ultimately, this research seeks to contribute to a more inclusive and equitable mining industry. By understanding the specific challenges faced by women and developing strategies to address them, the industry can create a more supportive and welcoming environment for female professionals, allowing them to fully realize their potential and contribute to the industry's growth and success.

1.3 Research Objectives

1. Explore the barriers women face in male-dominated industries, focusing on biases, gendered expectations, underestimation, and harassment from early career stages to leadership roles.

2. Examine how women navigate and overcome these barriers, including strategies to address masculine culture, the role of mentors, and handling biases and harassment to achieve career advancement.

1.4 Research Significance

1.4.1 Academic

This research seeks to deepen our understanding of the glass ceiling, as conceptualized by Linda Wirth, within the context of male-dominated industries. By examining communication barriers faced by women in these environments, the study aims to illuminate the challenges hindering their career advancement. This research contributes to the broader understanding of gender dynamics in the workplace, specifically focusing on the mining industry. Ultimately, it seeks to inform the development of strategies to dismantle the glass ceiling and foster gender equality.

1.4.2 Practical

From a practical standpoint, the research provides insights into the experiences that women have and their processes to overcome communication barriers and advance their careers. The findings of this research can be used by women in the mining industry to develop the suitable communication approaches and build successful professional relationships. The study's findings can inform organizational policies and practices to

create a more inclusive and supportive environment for women, ultimately enhancing the overall performance and success of the mining industry.

1.4.3 Social

From a social standpoint, this research aims to identify and address the communication barriers that hinder women's progress in the male-dominated mining industry. By understanding these challenges, the study can contribute to creating a more inclusive environment where women can thrive professionally. And the analysis of unconscious bias, gendered expectations, and lack of representation in leadership roles can help break down societal barriers and promote a more equitable workplace culture in the mining industry.

1.5 Research Framework

1.5.1 Research Paradigm

The paradigm that will be utilized within this research is the Interpretivist Paradigm. The focus of a research will be directed towards understanding the subjective experiences of individuals or groups and interpretations that make up the social world in order to understand how people make sense of their world, focusing on individual experiences and emotions. According to the Interpetivist Paradigm, there can be multiple interpretations of the same event. Just like different friends might see the

game differently, people can have varying understandings of social situations (Newman, 2014). The goal is to achieve a deep understanding of someone else's perspective. By capturing the inner lives and experiences of everyday people, interpretivist research helps us understand and appreciate the complexity of social life (Newman, 2014)

The exploration of the experience of women in the mining industry using a phenomenological methodology is a perfect representative of interpretivism through which this study is looked at. This approach underlines comprehension of the personal attitudes of the people as well as the values they attach to them. Interpretivism is the method that shows the way how these meanings are produced by social interactions (Newman, 2014). In this situation, the industry in which men are the most dominant creates a special context in communication is very important. By employing techniques such as in-depth interviews that are derived from interpretivist practices this study will be able to truly find out the experiences of women by the communication barriers like (unconscious bias, harassment, upward and downward communication challenges, and peer communication challenges) and how they try to navigate these communication problems (Newman, 2014). This reveals the meanings that they intend to represent and explains to us their multifaceted social life and experience.

1.5.2 State of the Arts

1.5.2.1 "Barriers to career advancement of women in mining: A qualitative analysis" (Doret Botha, 2017)

Utilizing the qualitative research analysis, this study delves into the persistent challenges that hinder women's career advancement in core mining roles within South Africa's mining sector. Despite global initiatives and legislative efforts promoting gender equality, women in mining face substantial barriers that obstruct their advancement. Qualitative research methods were employed across three distinct mines to gain insights into the specific challenges confronted by women in this industry. This study explores theories of women's workplace disadvantages, examines global and South African mining industry barriers for women, and proposes solutions to increase female participation.

This in-depth study (phenomenology) explored how women in core mining roles face challenges. Researchers interviewed women at diverse mines (purposive sampling) using both one-on-one and group discussions (semi-structured) to understand their experiences. By analyzing themes across interviews (thematic analysis) and using triangulation (checking results across methods), the researchers ensured the study's reliability and validity. This research aligns with theories explaining women's workplace

disadvantages. This research involves 11 individual interviews and 10 group interviews.

Utilizing the Human Capital Theory (Popenoe, Cunningham & Boult, 1998) and Feminist Theory (Lorber, 2010), this study explores the many obstacles that hinder women's advancement in mining. These include social challenges (work-life balance, acceptance), physiological challenges (physical demands), and structural/employment barriers (facilities, advancement opportunities). The research aims to understand these issues to help women in this male-dominated field.Social challenges like work-life balance and isolation are the experiences that shape the trajectory of the women's career. Physical demands and lack of proper facilities add to the difficulty. Finally, limited opportunities for advancement and gender-based issues also create barriers for women in mining.

Gender bias and sexual harassment within the mining industry are detrimental to both women's careers and the industry's overall success. The study found that discriminatory hiring practices, rooted in the misconception that mining is a male-dominated field, ly contribute to this problem. Additionally, women who do secure mining jobs often face neglect and disregard.

The **similarity** between the research by Doret Botha and this research is the social challenges that women face that includes the

"acceptance" of the female miners to the industry which is highlighted in my research as a part of the biases that occurs and surfaces as one of the communication hurdles that hinders women's career advancement. The **differentiation** lies within the complexity of this research as it highlights the communication issues that hinders women's career advancement in the mining industry and the method that this research utilizes is the IPA in which analyzes the specific occurrence of the individuals.

1.5.2.2 "Gender Bias and Sexual Harassment in the Mining Industry: Unceasing Hurdles to Females' Career Development and Work Safety" (Karen Sarah Iradukunda, Obed Nahayo, Pinky Saptandari, 2021)

This qualitative research study explored experiences of gender bias and sexual harassment in the mining industry through in-depth interviews. Researchers used a technique called snowball sampling to find 23 participants. Interviews were conducted over the phone and the information gathered was then analyzed by breaking it down into themes and key concepts.

The study underscores the detrimental hindering experiences of gender bias and sexual harassment on females' career development and work safety in the mining industry. These discriminatory practices, deeply rooted in cultural norms and historical

disadvantages, create barriers to professional growth and contribute to a hostile work environment. This research utilizes the Human Capital Theory by Gary Becker (1964) as this theory equips organizations in the mining industry to empower women's career advancement and resolve the existing obstacles that are caused by gender prejudice.

The study exposes persistent gender bias and harassment hindering women's advancement and safety in mining. To foster a more equitable and sustainable industry, targeted interventions are crucial. Raising awareness of these challenges and implementing programs to support women are essential. Eliminating the traditional gender roles within mining organizations is key to creating safer, more inclusive workplaces. Ultimately, addressing these systemic barriers unlocks the potential of a more diverse and capable workforce, leading to improved well-being for female employees and the overall success of the mining sector. An inclusive environment benefits not only women, but the entire industry, fostering a more dynamic and innovative future.

The **similarity** between the research by Karen Sarah Iradukunda, Obed Nahayo and Pinky Saptandari and this research is that the main issue highlighted is the career advancement for women and in resolving such obstacles and focuses on communication issues

that highlights gender bias and harassment which is highlighted as one of the objectives for this research. The **difference** is that this research highlights the issue of masculine culture that becomes the main issue for career advancement for women in the mining industry. To add to that, this research utilizes the IPA method in which allows the researcher to gain a very detailed understanding of the lived experiences to better understand the female that managed to break the barriers set by the masculine culture.

1.5.2.3 PEKERJA PEREMPUAN DI TAMBANG: BENTUK NEGOSIASI KESETARAAN GENDER DALAM DUNIA KERJA MASKULIN (Zulfatun Mahmudah, 2019)

This study examines the experiences of female coal mining operators at PT Kaltim Prima Coal (KPC) in East Kalimantan, Indonesia. Specifically, it focuses on how these women navigate a male-dominated industry, balance work and domestic life, and challenge gender stereotypes. Adopting a qualitative phenomenological approach, the research employs in-depth interviews with 10 female operators to understand their lived experiences. Grounded in co-cultural theory, the study emphasizes the agency of marginalized groups, such as women in mining.

The mining industry's entrenched gender stereotypes, perpetuated by societal and cultural norms, have created a male-

dominated work environment. This perception of mining as inherently masculine and physically demanding contributes to the underrepresentation of women in the industry. Women who enter this field often face challenges in navigating a male-dominated culture, with expectations of adhering to masculine work styles and communication patterns. Those unable to conform to these norms may find it difficult to thrive and might seek employment in more gender-inclusive sectors.

KPC, a major global coal mining company, employs 4,708 workers across a 90,000-hectare area. Among the 1,802 heavy equipment operators, 128 are women, most with high school education. These women are driven by a desire to prove their capabilities and secure better livelihoods. The research findings reveal that these women not only successfully perform their roles but also excel in safety, with no recorded Lost Time Injury (LTI) involving female operators since 1992.

Contrary to stereotypes, the study demonstrates that these women balance their professional and domestic lives. They challenge traditional gender roles by contributing ly to the workforce while maintaining household responsibilities. Their success underscores the potential for women to excel in traditionally male-dominated industries, reshaping gender dynamics and perceptions.

The **similarity** between both researches is the emphasis on the gender stereotypes that is entrenched from the masculine culture that relates to the underrepresentation of women in the mining industry and also the focus towards the way women navigate the industry. Both research also uses a phenomenological basis to explain the issue of women in the mining industry. The **difference** lies within the focus of this research in which highlights the issue of masculine culture, harassment, and biases that serves as the communication problems that exist within the mining industry that hinders the advancement of career for women.

1.5.2.4 "Women in Mining: An Assessment of Workplace Relations Struggles" (Doret Botha, 2016)

This research utilizes the phenomenological approach to assess the struggles that women faced in the mining industry in South Africa, where historical gender biases and discrimination have ly hindered their integration and career advancement. The research employs a combination of quantitative and qualitative methods, gathering data from three different mines to examine the obstacles women encounter in this predominantly male sector. Key issues identified include acceptance by male colleagues, inequality, discrimination, and sexual harassment, all of which impede women's professional growth and well-being as the research aims to find the

workplace issue for women and in providing the recommendations for such struggles. The scope of this research was in copper, platinum, and phosphate mining site and there were a total of 69 subjects (12 individuals and 19 group interviews) and the research utilizes the Black Feminist Theory (Bilton, 2002).

The study found inequality in the mining industry, with women facing lower bonuses, fewer promotions, and limited development opportunities. Women also reported racism, quota appointments, and a lack of support. These challenges, including discrimination, sexual harassment, and underestimation by colleagues, prevent women from reaching leadership positions. In order to address these issues, the study suggests implementing mentoring programs, diversity training, and robust support systems tailored to women's needs. Fostering harmonious relations in the workplace is also important to ensure women's well-being and professional development. By rectifying these systemic challenges, the mining industry can create a more equitable and empowering environment for all its members. Overall, the study highlights the need for changes to improve the experiences of women in the mining industry.

The similarity of both research lies within the contextualization of the research, which discusses both biases and

discrimination. The differentiation lies within the objective of this research in which the research made by Doret Botha aims to highlight promotional issues and lack of support and eventually aim to give a solution in the form of programs and training for employees. This research aims to understand the specific communication experience and how these women could break the barriers set for them within the mining industry to eventually understand how to navigate through such issues.

1.5.2.5 "Can new technology challenge macho-masculinities? The case of the mining industry" (Lena Abrahamsson and Jan Johansson, 2020)

This qualitative research study examines how advancements in technology might reshape the traditionally masculine culture of mining. The researchers interviewed miners and managers to understand the potential hindering experiences of these changes on established ideas of masculinity within the industry. The research suggests that new technology could disrupt the industry's current emphasis on a particular type of masculinity. It explores scenarios where either the lines between genders become more rigid or the concept of masculinity itself fades from mining altogether. The most likely outcome likely lies somewhere in between these extremes. Joan Acker (1992), argued that organizations aren't neutral spaces,

but often built with a built-in bias towards masculinity. This perspective resonates with the work of Kathleen Ely and Robin Meyerson in 2000. They delved into how everyday interactions and social norms within companies can create situations where women feel pressure to conform to traditional gender expectations. This research was conducted in an Ore Mine in Northern Sweden and includes 25 semi-structured interviews, over 100 informal dialogues, interactive focus groups, workshops, and seminars with senior and middle management.

Technological advancements, particularly automation, have shifted the skills needed for mining jobs. Technical knowledge and expertise are now more valued. However, some miners, especially men, resist these changes - many women felt forced to leave mining due to a hostile work environment filled with sexism, harassment, and discrimination. They may perceive certain tasks associated with new technology as "feminine" and defend traditional forms of masculinity within the workplace. The mining industry is actively seeking to create a more welcoming and inclusive environment for a broader range of workers, including women. Despite these efforts, traditional gender roles and resistance to equality remain challenges. The study highlights examples of women leaving mining due to

sexism and safety concerns. While signs of progress exist, overcoming these obstacles is essential for the industry's future.

The research reveals that the implementation of advanced technologies like automation and remote control in the mining industry, especially at Mountain Ltd. in Sweden, is disrupting traditional masculine identities and gender roles. This shift is creating a complex dynamic of resistance and adaptation among workers, offering opportunities for increased female participation and greater gender equality. However, substantial cultural and attitudinal barriers remain.

The **similarity** between both research is that there is an emphasis on the masculine culture of the mining industry that poses issues for women working in the industry. Both research also emphasizes the issue of discrimination and harassment. The **differentiation** lies within the aim of the research, as in the research done by Lena Abrahamsson and Jan Johansson highlights the technological advancements as a tool for creating a more equitable environment for these women to face and eventually highlights that such issues become the reason for women leaving the industry. On the other hand, this research, due to the interpretive nature, aims to understand the lived experience in order to paint a picture of the

existing barriers for women in the industry and how to break those

barriers for women that desire to be a mining engineer.

1.6 Research Gap

This research addresses a critical gap in the existing literature on women's

career advancement in the mining industry. Unlike previous studies that primarily

focus on communication issues and technological advancements to assess gender

disparities, this research emphasizes the existing communication problems that

entails "masculine culture," "unconscious bias," and "harassment" through the lens

of individual experiences as a barrier to women's progress. By employing

Interpretive Phenomenological Analysis (IPA), the study aims to gain a deep

understanding of the lived experiences of women who have successfully navigated

this challenging environment.

While some research has highlighted technological advancements as a

potential solution, this study focuses on understanding the personal experiences of

women to identify specific barriers and strategies for overcoming them. It

underscores the importance of addressing communication problems stemming

from masculine culture, harassment, and biases, which are often overlooked in

other studies. And through in-depth interviews and triangulation methods, the

research ensures the credibility and transferability of its findings, providing a

comprehensive understanding of the multifaceted challenges women face in this male-dominated field.

1.7 Theoretical Framework

1.7.1 Glass Ceiling Theory

In a generalized notion, the concept of "Glass Ceiling" refers to the social construction or the barriers that "limits" women to reach a high-level position in their workplace or workfield (Wirth, 2001). These barriers set a limit for women despite their ability and skills to exceed in their industry - glass ceiling highlights the existing communal idea of "women are incapable of leading" and favoring the entrenched masculine culture that also limits women from succeeding into the higher position in their career. This is the essence of the glass ceiling, a complex web of reasons that limit upward availability for women in the workplace.

According to Linda Wirth (2001), there are two particular reasons that women may experience such limitations;

- Institutional roadblocks: These encompass unconscious biases within organizations, such as promotion practices that favor typically "masculine" leadership styles, or a lack of mentorship programs specifically designed to support women.

- Societal preconceptions: Deeply ingrained ideas about gender roles can play a role. Studies have shown that women are sometimes perceived as less suited for leadership positions due to stereotypes about their capabilities or commitment, limiting access to crucial resources and opportunities.

Here, women are disproportionately concentrated in lower and middle management roles, while leadership positions remain dominated by men. Women's advancement in management roles reflects a meaningful shift, driven by evolving societal attitudes and supportive legislation (Wirth, 2001). strides have been made, particularly in industries like finance and public service, where more women are stepping into leadership positions. However, challenges such as horizontal and vertical segregation remain, limiting women's access to higher-level roles and perpetuating inequalities. To address these barriers, strategies like enacting equality laws, offering family care assistance, and fostering mentorship programs are essential. These initiatives not only support women in overcoming systemic obstacles but also create an environment where they can thrive professionally and contribute fully to organizational leadership (Wirth 2001).

Wirth further emphasized gender bias in recruitment and promotion, as it remains a challenge, often shaped by subjective perceptions of leadership qualities that favor traditionally masculine traits, perpetuating

stereotypes and disadvantaged women (Wirth, 2001). Occupational segregation further exacerbates this issue, with hiring practices frequently favoring one gender over another, limiting women's access to senior roles despite their qualifications. To address these biases, many organizations are adopting proactive measures, such as implementing equity policies, gender-sensitive training for managers, and objective performance assessments. Increasing women's representation in decision-making bodies underscores the importance of mentorship and diversity training in advancing women's careers. Additionally, management development programs play a crucial role by identifying career paths for women, setting long-term goals, and fostering inclusive growth (Wirth, 2001). These efforts not only combat bias but also contribute to creating fair and equitable workplaces that empower women to thrive professionally.

The Glass Ceiling Theory will be utilized to understand the phenomenon of the "limitations" that are set for women in the mining industry as Linda Wirth explained that the "cultural barriers" within organizations ly hinder women's career advancement. From this, the male-dominated corporate cultures often perpetuate stereotypes and preconceptions about women's abilities, leading to their exclusion from key leadership positions, creating a less conducive environment for women to progress (Linda Wirth, 2001).

One of the highlighted issues in this research, the experiences of biases and other biases against women in the workplace can manifest in various ways. One bias is the perception of traditional gender roles, which can hinder hiring decisions and lead to unfair treatment of women thus overlooking the quality of women (Linda Wirth, 2001).

Where women are expected to prove their competence before being hired, while men may be offered jobs based on perceived potential (Linda Wirth, 2001). This makes it difficult for women to access high-level positions, such as line management and executive roles. Furthermore, recruitment and selection processes may be biased towards male-centric views of managerial qualities, which can disadvantage women during assessments. These biases, both conscious and unconscious, contribute to the barriers women face in career advancement.

In regards with the hindering of women's career advancement in the mining industry, a research by Alette Van Leuer further highlights the issue within the aspect of biases:

1. **Bias:** Stereotypes lead to women being underestimated and their expertise overlooked. Although society has seen advancements in the acceptance of women in the workplace, biases still occur to women especially those working in an industry that is dominated by men. Bias here refers to the idea that there is a bias towards women that favors men, as the mining industry tends to be perceived as a male-dominated

industry - it has been an issue that exists yet challenging to identify in the industry (Leur, 2021).

This bias is rooted in deeply ingrained societal expectations that portray mining as an inherently masculine culture. These preconceived notions often depict women as physically incapable of handling the rigors of the job or lacking the assertiveness and decisiveness necessary for leadership positions within the industry. Such assumptions can manifest in a multitude of ways, from subtle microaggressions during communication to the systematic exclusion of women from crucial training programs and promotion opportunities (Leur, 2021). This systematic underestimation not only hinders the professional advancement of qualified women but also deprives the mining sector of a diverse talent pool that could contribute to its overall success. Such biases also come within the form of Confirmation Bias, in which some people tend to overlook the capability of a woman as they interpret the action or the communication of the women differently than men - favoring men. (Leur, 2021)

1.7.2 Theory of Gendered Organizations

Joan Acker's theory of Gendered Organization Theory dismantles the myth of neutrality within workplaces. It proposes that the very foundation of organizational structures is imbued with gendered biases (Acker, 1990). Acker emphasizes the pervasive perpetuates of assumptions and power

dynamics rooted in gender that sculpt the design, functioning, and ultimate results of organizations. Her theory sheds light on the previously overlooked hindering experiences of gender on organizational processes, exposing how traditional theories neglect to address the inherent gendered nature of work. This inattention, Acker argues, allows for the perpetuation of inequalities and the reinforcement of rigid gender stereotypes within the workplace (Acker, 1990).

Acker argues that gender is a fundamental organizing principle within organizations, influencing the division of labor, hierarchies, and power dynamics. Within this given context, Acker's theory helps us understand why workplaces can be unfair to women. Her ideas explain how organizations are often set up in a way that gives men more power and better jobs, while women get stuck in lower-level roles.

This is similar to what women face in the mining industry in Indonesia, which is mostly men. Acker's theory highlights the importance of power imbalances and how they can hold women back in their careers, which is exactly the kind of thing we need to consider when looking at the challenges women face in mining.

Acker's theory goes beyond just explaining power imbalances. It also looks at how the way things are done in a company, or the company culture, can reinforce the idea that certain jobs are for men and others are for women. This is especially important for understanding women in mining. In a male-

dominated industry, even subtle biases can hold women back from getting promoted or being recognized for their work. Acker's theory also acknowledges that women face different challenges depending on their race, social class, or sexual orientation. Looking at all these experiences together helps paint a more complete picture of the difficulties women in mining might experience.

Acker's theory points out that women in mining may also face harassment because of the industry's culture. By understanding how the way companies are structured and how people typically behave at work contribute to harassment, researchers can identify the obstacles that prevent women from advancing in their careers. Overall, using Acker's theory to study women in Indonesian mining can help us understand the many reasons why women might struggle, from unconscious bias to a culture that tolerates harassment.

In regards with the issue of harassment that exists for women in the mining industry that hinders their career advancement, the research done by Francine M. Deutsch (2007) and Kansake, Sakyi-Addo & Dumakor-Dupey (2021) discusses the issue further:

2. **Harassment:** Inappropriate behavior creates a hostile environment, discouraging women from speaking up. Harassment, as defined by Deutsch (2007), is a broad spectrum of unwanted sexual advances, requests for favors, and both verbal and physical conduct. These actions

can negatively hinder an employee's work experience in three key ways: by directly affecting their employment status, by interfering with their ability to perform their job duties, and by creating a hostile work environment that feels intimidating or offensive. In this sense, it is understandable that both verbal and physical conduct are viewed as harassment in general is an act that targets the victim with different kinds of intentions, but with negative hindering career advancement experiences all around.

The matter of sexual harassment is a big problem in the mining workplace. The forms of harassment and violence (47 percent of women in the Canadian mining industry reported harassment, and 74 percent in Congo's ASM communities that are mined by individuals' own method) inflicted just to mark themselves in the gendered behavior of the MGW in-pit mine areas finally to gender-based violence have become very deeply rooted in the hypermasculine culture and produce a hostile environment. Because hierarchical authority and assimilation are pursued, the subculture created within the company becomes the very cause and place of discrimination. Consistent with the biased treatment, women who want to work there usually have a lack of role models in the positions they want to reach. The holistic approach to this problem is to have stringent reporting mechanisms, the continuous advocacy of gender equality, and breaking down the country's male-cocktail that

drives this continued rape and exclusion. Studies have shown that globally, women who have been in the field have faced some form of either discrimination or abuse in their career at some point in time. And such figures point to the industry's great burden on women and their low status (Mining.com Staff, 2022).

The mining industry presents a challenging environment for women. They face a series of different harassment, including sexual abuse and violence, fueled by a hypermasculine culture. This hostile atmosphere discourages women from reporting these incidents due to fear of retaliation. Women also encounter challenges such as lower salaries compared to men, gender-based discrimination, sexual harassment, and inappropriate demands during recruitment. The discussion underscores how historical biases and social norms have contributed to the marginalization of women in mining, with technological advancements further exacerbating these disparities (Kansake, Sakyi-Addo & Dupey, 2021).

1.7.3 Self-presentation / Impression Management Theory

Impression management is about how we control how others see us. The theory discusses the way we quote-on-quote "portray" one-self in different situations and circumstances. We choose how we act, what we say, and even how we dress to create a certain impression on different people. The main purpose of this theorem is to create a good impression that helps

us achieve what we want, like getting approval or building trust (Goffman, 1959). People might use different tactics to do this, like bragging about ourselves (self-promotion) or being extra nice (ingratiation). It all depends on who we're talking to and what we want them to think. Impression management is important everywhere, from work to parties. By understanding how it works, we can communicate better, build stronger relationships, and navigate tricky social situations (Goffman, 1959).

We strategically control the information we reveal about ourselves to get the outcome we want, such as gaining approval, building trust, or influencing someone's behavior. This information control can be through our words, body language, clothing choices, and overall behavior (Goffman, 1959). The key is to adapt our approach based on the situation and the people we're interacting with. By managing the impression we make, we are enabled to change how others perceive and treat us, ultimately shaping the course of our social interactions and relationships.

The knowledge of the theory allows us to become more aware of how others might be trying to shape our perception of them, and choose how we want to be seen ourselves. By being mindful of these strategies in our everyday interactions, we can communicate better, build stronger connections, and ultimately achieve our communication goals.

This can be helpful, especially for women in mining. Mining is a field often dominated by men, and women may face unconscious bias or even

harassment. To navigate these challenges, women can use impression management tactics. By understanding impression management, women in mining can control how they're perceived, challenge stereotypes, and ultimately succeed in this industry. In this research, this theory will serve as a purpose to analyze the phenomenological experience of "masculine culture", "unconscious bias", "harassment" for women working in the industry and to better navigate through it.

The impression management theory will be utilized to analyze the way that the women in the mining industry communicate to their peers, focusing on their communication with their male co-workers for both upward and downward communication. And this aspect enables for the understanding of the way these women create an impression depending on the people that they communicate with, in terms of the way that they want to be perceived. The issue of masculine culture that creates such communication problems for women is further elaborated by the research conducted by Lena Abrahamsson and Jan Johansson (2021), as following:

3. **Masculine Culture:** Emphasis on physicality and risk-taking discourages women from expressing safety concerns or highlighting their unique skills. It is undeniable that masculinity is favored in male-dominated industries.

   Historically, the mining industry has fostered a culture heavily by stereotypical notions of masculinity. This emphasis on traits like

physical strength, toughness, and risk-taking has created a hurdle for women entering the field. Furthermore, this entrenched "macho" culture can make the work environment feel hostile or challenging for women to navigate, ultimately hindering their experiences and limiting their career opportunities within the mining sector. (Abrahamsson & Johansson, 2021)

Discussing the main topic, the interpretation of the "physical" toughness that miners have to endure affects the perception of the work itself by other people. This physical work is often the one that creates the illusion that there is a single gender supremacy and not the other and hence gives the false sense of not valuing the other gender - relating to the confirmation bias that exists throughout the entire working spectrum. The researcher sees it that the masculine culture that is in favor of men might be quite a hurdle in the development of women within the industry and therefore the requirements that are necessary to go along with the process.

1.8 Operational Concept

1.8.1 Navigating the Minefield: A Phenomenological Exploration of Workplace Communication on Career Advancement for Women in the Mining Industry in Indonesia.

The mining industry has been a male-dominated area for a long time now. However, recently, there is a advancement in the numbers of women who work in mines (Mayes & Pini, 2010). In spite of this, the female workers in this sector still deal with numerous problems. This research is set to conceptualize core words on women's experiences in the mining industry. The term conceptualizing these issues is vital for recognizing the role of women in this field and areas that are in need of change. The terms to be conceptualized into action items include masculine culture, unconscious bias, harassment, leadership representation, career advancement, communication experiences, and gender equality.

It is pointed out in this research that by using the theoretical frameworks of Impression Management Theory (Goffman, 1956), Gendered Organization Theory (Acker, 1990), and Glass Ceiling Theory (Wirth, 2001), this research aims to be able to explain it better. Women ordering materials still remains the most substantial problem faced by women in the mining industry. This research will be able to think out these terms and express the research itinerary in the most suitable way. Moreover, among research internal assignments, it is also a very important step toward deeper analysis of women's mining experiences.

1.   **Early Career Experience:**

- Why Women Enter the Mining Industry: Women enter mining driven by passion and opportunity but often face gender expectations that shape their careers, sometimes leading to exclusion.

- Starting Out and Facing Marginalization: Early on, women may feel sidelined in key activities but strive to maintain professionalism despite feeling marginalized.

2. **Living and Working in a Masculine Culture:**

- Adapting to a Male-Dominated Environment: Women adjust to the physicality and risk-taking culture of mining, balancing personal authenticity with career expectations.

- Barriers to Fitting In: Exclusion from informal networks and

- decision-making limits women's growth and integration in the workplace.

- The Pressure to Conform: Many women feel the need to adopt masculine traits to fit in, which can come at the cost of their personal identity.

3. **Overcoming Gender Bias and Expectations:**

- Being Underestimated: Women often face underestimation despite being qualified, with their contributions overlooked due to gender bias.

- Breaking Through Stereotypes: Women are frequently pigeonholed into "feminine" roles, limiting their chances for advancement.

- Working Harder to Prove Their Worth: To counter bias, women often overcompensate, working harder to prove their competence and earn equal opportunities.

4. **Dealing with Harassment and Hostile Environments:**

- Verbal and Physical Harassment: Women often experience harassment that affects their mental health and career growth.

- Fear of Speaking Up: Women hesitate to report harassment due to fear of retaliation or professional consequences, lacking support systems.

- Healing After Harassment: Women may rely on mentorship and support networks to heal and rebuild confidence after experiencing harassment.

5. **Advancing in Their Careers:**

- The Role of Mentorship: Mentorship plays a key role in helping women navigate the challenges of the mining industry and advance their careers.

- Breaking the Glass Ceiling: Despite qualifications, women face barriers to top positions due to unconscious bias and gender stereotypes.

- Navigating Career Growth: Women must be strategic, leveraging networks and overcoming institutional barriers to advance in a male-dominated field.

1.9 Research Method

Interpretative Phenomenological Analysis (IPA), as described by Jonathan A. Smith, Paul Flowers, and Michael Larkin (2009) is a qualitative research method designed to delve into the subjective experiences of individuals. IPA focuses on understanding how people make sense of their own unique realities. Researchers conducting IPA studies act as facilitators, using in depth interviews to guide participants in sharing their stories in detail.

Smith, Flowers, and Larkin (2009) emphasis on the importance of both the participant's perspective and the researcher's interpretation in IPA. By carefully analyzing the collected data, the identification of the recurring themes and patterns that illuminate the lived experiences of the participants is made possible, as this analysis is a meticulous process that involves going back and forth between the data and the emerging interpretations (Smith, Flowers, and Larkin, 2009). The ultimate goal is to present the participants' experiences in the clearest sense possible, making the research findings accessible to a broad audience and fostering a deeper understanding of the human experience.

This research delves into the subjective experiences of women in the mining industry, perfectly aligning with IPA's core focus on understanding the world from the participant's perspective (Smith, Flowers, and Larkin, 2009). The study not only captures their experiences but also aims to interpret them, analyzing how their career advancement process. This aligns with IPA's dual focus on both the participant's voice and the researcher's interpretation to uncover meaningful themes and patterns (Smith, Flowers, and Larkin, 2009).

Moreover, the research design fosters a deep understanding of the unique experiences of these women - reflecting the idiographic nature of IPA. Using semi-structured interviews allows the women to share their stories in detail and enables the researcher to further understand the lived experience and find the pattern of communication issues that exists within the mining industry for women. This analysis process aligns with IPA's emphasis on rigour - appropriateness of the sample to the research question, the quality of the interview, and the completeness of the analysis undertaken (Smith, Flowers, and Larkin, 2009) - involving a thorough

analysis of the data to identify recurring themes and patterns that illuminate the participants' lived experiences. By employing IPA, this research can shed light on the communication challenges women face in the mining industry from the start of their career and the strategies they use to navigate the issues that exist in a masculine culture based environment, ultimately promoting a more comprehensive understanding of their career advancement experiences.

Interpretative Phenomenological Analysis will be applied regarding the lived experiences of women within the mining industry. It is expected to examine their own accounts in sufficient depth through in-depth interviews, which will bring forth the way these women encounter the exact nature of the problem in communication, strategies, and dynamics they adopt to surmount the barriers and, lastly, the diverse experiences that hinders their growth. This focus on the participants' perspective and that of the researcher will, in turn, lead to an informed understanding of women's experiences from a male-dominated industry and eventually provide information useful for creating a more inclusive workplace.

1.9.1 Research Type

This research utilizes Qualitative research that explores how people view social issues. It happens in real-world settings and focuses on understanding people's experiences and viewpoints. Here, researchers don't start with a set theory, and they themselves become the main tool for collecting information. Researchers strive to obtain detailed descriptions and gain insights from the participants' viewpoints. This method is inductive, with themes and patterns developing as the data is gathered and examined, instead of beginning with a predetermined hypothesis. (Creswell, 2014)

This approach gathers descriptive data. By listening to participants' stories, researchers aim to uncover multiple realities of a situation. The research plan is flexible and can change as new information comes in. In the end, the goal is to create a rich picture of the issue by considering different

perspectives and uncovering all the experiences at play. To make sense of the findings, researchers might add their own interpretations, compare results to existing theories, and even propose new questions for future studies.

In qualitative research, the researcher will gather clues from many different witnesses (participants) to understand the situation from all angles. By listening to these diverse perspectives and interpretation of their lived experience, the identification of the many elements of experiences at understanding their shared experience is made possible. In relevance with the phenomenological approach of this research, the qualitative research method allows the researcher to gain a detailed and deep understanding of the personal experiences of women working in the mining industry to better understand the causation of the "masculine culture", "unconscious bias", and "harassment" phenomenon that may be experienced by women and eventually understand their shared problems.

1.9.2 Research Site

The data collection for this study will be conducted within the Jakarta metropolitan area of Indonesia. The specific location will be the subject's workplace situated within Equity Tower, SCBD Area in Central Jakarta. This choice of setting allows for a controlled environment where the researcher can directly access the subject and potentially observe their work practices within the context of the research.

1.9.3 Research Subject

As per the aim of this research that aims to understand the challenges women face in communication in a traditionally male-dominated industry as well as their way to navigate through such communication problems in advancing their career, this research will consist of four respondents. These respondents are women working in a high-level position in the mining industry and have experience working on-site.

This research focuses on understanding the career advancement experiences of women in the Indonesian mining industry, particularly within office-based roles. The selection of participants prioritizes women currently holding high positions within their respective companies. This strategic choice are the result of the following rationale:

1. **Female Miners:** Miners that are of female gender.

2. **Field Work Experience:** Miners that have at least 10 years of experience on site and have successfully managed to break the "barriers" for career advancement that are set from working in the start of their career.

3. **Leadership Position:** Miners that are currently working in the leadership position in their company.

4. **Experiential Knowledge:** These women have navigated the industry from its entry-level positions to their current leadership roles. Their

lived experiences provide rich insights into the challenges and opportunities women encounter throughout their careers in mining.

5. **Overcoming Obstacles:** By reaching senior positions, these participants have demonstrably overcome hurdles often faced by women in traditionally male-dominated industries. Their experiences offer valuable perspectives on the strategies and skills they employed to navigate these challenges and achieve success.

6. **Depth of Knowledge:** Holding high positions likely entails broader exposure to the industry's inner workings, including workplace dynamics, promotion processes, and gender-related communication issues. These insights can provide a more comprehensive understanding of the landscape for women in Indonesian mining.

The experiences of these women engineers will be valuable for up and coming female engineers. Understanding the communication problems they faced can provide deeper insights, allowing future generations to anticipate and navigate similar challenges better.

1.9.4 Data Type

This research will utilize primary data collection (in-depth interview) as the main research source, and will utilize secondary data collection (research paper and websites) as supporting statements and/or arguments.

1.9.5 Data Collection Method

Aligning with the IPA method, this research will utilize in-depth interviews, and will be conducted with 5 respondents through face-to-face interviews. The interview delves into the participant's real-world experiences on a specific topic. While the researcher has guiding questions, the goal is for the participant to openly share their unique perspective and stories. The researcher prepares a one-to-one interview schedule with questions according to the research objectives and allows the participants to share their personal experience in detail. (Smith, Flowers and Larkin, 2009)

And utilizing the interpretivist approaches of the interview, the researcher will foster a dialogue where participants can express themselves freely through jokes, experiences, and their natural form of expression in order to receive the best possible explanation regarding their lived experience (Neuman, 2014). Interpretivist interviews delve deeper than surface responses. Questions focus on the participant's lived experiences, prompting them to share specific examples and situations. Researchers use open-ended follow-up questions to explore emerging themes and gain a richer understanding of the participant's unique perspective. This collaborative approach prioritizes shared meaning-making, leading to valuable insights into the subjective experience of each participant (Neuman, 2014).

1.9.6 Data Analysis Technique

1. **Data Acquisition (Acquisition):**

   - Sub-process 1.1: Interviewing (Conducting interviews to access lived experiences)

2. **Transcription (Transcription):**

   - Sub-process 2.1: Audio-to-Text Conversion (Converting audio recordings into written transcripts)

3. **Analysis (Analysis):**

   - Sub-process 3.1: Language Examination (Detailed analysis of participant language)

   - Sub-process 3.2: Text Analysis

   - Sub-process 3.3: Result Discussions

4. **Essence Extraction (Extraction):**

   - Sub-process 4.1: Meaning-Making in Context (Understanding experiences within the study context)

   - Sub-process 4.2: Pattern Determination

   - Sub-process 4.4: Theoretical Underpinnings

1.9.7 Model Flow:

The data analysis process begins with data acquisition through interviews (1). The collected audio recordings are then transcribed into text

for further analysis (2). Researchers then delve into the analysis (3), where they identify statements, themes, and patterns within the transcripts. This analysis involves a close examination of the language used by participants to describe their experiences (3.1.1). Next, researchers move to essence extraction (4) by interpreting the data and understanding the meaning of the participants' experiences within the broader context of the study (4.1). Finally, the research findings are disseminated in a way that respects the participants' voices and accurately reflects the essence of their lived experiences (5) (Seidman, 2019).

1.9.8 Data Quality

According to the interpretive aspect of this qualitative research paper, the quality of the information gathered in this research will be determined by their trustworthiness/credibility and transferability (Denzin & Lincoln, 2011).

1. **Trustworthiness/Credibility:** this aspect entails the entire research process and reflects its overall strength. This aspect focuses on how accurately the researcher portrays the participants' diverse realities (Lincoln & Guba, 1985).

   The credibility aspect will be determined by conducting Member-checking. It allows for the credibility of findings in qualitative studies to be increased by looping back to participants to review and

confirm the accuracy of the researcher's interpretations of the data—usually themes, case studies, or the final report, but not the raw data themselves (Creswell, 2014). This research will utilize follow-up questions for the interview sessions to ensure the data collected is up to par. In addition, the participants will review and comment on the raw data, interpretations, and final findings of the research.

The credibility aspect will be determined by conducting Triangulation. This aspect involves the process of verification of the correctness of the information gathered. Here, the research will gather information from a variety of sources such as interviews to ensure that the findings are comprehensive and accurate. (Creswell, 2014). According to the phenomenological basis of this research, this research will utilize triangulation in the interview process with four women working in the mining industry in Indonesia.

2. **Transferability:** Taking the place of external validity, transferability deals with the applicability of the research findings to different contexts. Thick descriptions, rich in detail, allow readers to decide if the findings might be relevant to their own situations. Transferability doesn't aim for universal generalization, but rather provides enough context to understand the specific occurrence phenomenologically.

The transferability aspect will be determined by conducting Rich, Thick Description. This aspect gives a rich and engaging description of

the results. This elaborate portrayal will allow the researcher to immerse themselves into the environment to understand the experience of the subjects. The outcomes become real and deepened as qualitative researchers give detailed descriptions of the setting/occurrence from many subject's perspectives on the matter or offer different perspectives on a topic. (Creswell, 2014). This research will utilize Rich, Thick Description to describe the experience of the women in the mining industry from the transcripts of the interview that has been formed into text. The detailed description will allow the readers to understand the issue that the subjects face in the mining industry.