

# Women in mining: from subtle barriers to open prejudice

Sabrina Silva Valadares

*PUC Minas, Belo Horizonte, Brazil*

Antonio Moreira De Carvalho Neto and Carolina Mota Mota-Santos

*Programa de Pós-Graduação em Administração, PUC Minas,  
Belo Horizonte, Brazil, and*

Daniela Martins Diniz

*Departamento de Ciências Administrativas e Contábeis/DECAC, UFSJ,  
Sao Joao del-Rei, Brazil*

## Abstract

**Purpose** – The core of this study is women in mining. The aim of this study was to analyze the perception of women, about their work environment, their career, the human resources policies and practices and the work–family balance in the context of a multinational organization in the sector.

**Design/methodology/approach** – The case study was carried through semi-structured interviews with 27 women who work in this organization.

**Findings** – Although women report that they are capable of exercising any position/function in the company, they perceive wage gap in the investigated organization; that maternity leave and the fact of having children impact their career and their rise to higher positions in the organizational hierarchy negatively; situations of prejudice and discrimination experienced at work. Sometimes subtly, sometimes not so subtly, but they still constitute barriers faced by women in mining.

**Originality/value** – Although the debate around the issue of gender inequality in organizations is not recent, little has been produced about the working condition of women in occupational fields where male domination is strong, such as mining.

**Keywords** Women, Gender, Work, Discrimination

**Paper type** Research paper

## 1. Introduction

For many centuries, women were responsible only for the house space, the care of the family and the home (Mota-Santos & Carvalho-Neto, 2017; Zauli, Rocha, & Sales, 2013). This overview only began to change at the end of the 19th century, when “the concept of patriarchy changed with the first theories on the evolution stages of human societies”, and even more strongly “again, at the end of the 20th century, with the 1970s’ second wave of feminism, in the West” (Delphy, 2009, pp. 173-178). It was the moment when we perceived a weakening of the patriarchal system, caused by several questionings and new conceptions on men and women’s roles, which affected society globally, and, therefore, the work field (Zauli *et al.*, 2013).

Since then, women have tried to prove their ability in the labor market and managed to gain spaces never before occupied (Oliveira, Cardoso, Dias, & Borges Júnior, 2018; Antunes, Carvalho-Neto, Lima-Souza, & Santos, 2018; Mota-Santos, Carvalho Neto, Oliveira, &



Andrade, 2019). However, this journey requires their constant reaffirmation in the corporate world, still under male domination, as gender discrimination in the organizational environment persists as a global phenomenon, with different degrees, depending on the country (Mota-Santos & Carvalho-Neto, 2017; Oliveira *et al.*, 2018; Mota-Santos *et al.*, 2019).

Several studies highlight significant disparities between men and women in the corporate environment, easily proven by wage differences; less prestigious positions; performing tasks considered less qualified; a triple work day, which includes dedication to home, children and work; in addition to facing the work–family conflict frequently (Cappelle, Brito, Melo, & Vasconcelos, 2007; Silva, Rocha Neto, Brito, Barreto, & Gurgel, 2016; Mota-Santos & Carvalho-Neto, 2017).

This masculine logic, still hegemonic in the labor market, considers that women cannot compete on equal terms with men, even if they are more qualified than male professionals (Cappelle *et al.*, 2007). Therefore, women would still be more oriented to activities associated with care, and functions of support and execution, unlike men, who are more often directed to management, direction and planning positions (Silva *et al.*, 2016), including the most demanded tasks in Industry 4.0 (Susskind & Susskind, 2017).

These challenges that women face at the labor market contribute to the *opt-out* phenomenon, which regards leaving their jobs, temporarily or forever, when they give birth to children (Reis, Mota-Santos, & Teixeira, 2020). Hence, if previously one of the dilemmas experienced by women was to enter the labor market, currently the issue is to continue their career after motherhood (Reis *et al.*, 2020).

In traditionally male sectors, women face even more barriers, which can put them at a disadvantage regarding the freedom for professional choices (Fraga & Oliveira, 2020). Studies within the mining sector, although scarce than in others, show forms of discrimination against women even more visible (Castilhos, Lima & Castro, 2006; Quirino, 2011; Gutiérrez & Sánchez, 2017). Mining is socially recognized as a sector more “suitable” for men, because it includes activities that require physical strength (Quirino, 2011; Gutiérrez & Sánchez, 2017).

Sector statistics prove that women are a minority in the Brazilian mining workforce, according to a report from Women in Mining Brazil (WIM Brazil, 2021). Data indicate that women occupied only 15% of the total number of workers employed in mining, in 2021. In management positions, the situation was even more critical: women represented just 11% of executive board members.

In the literature, despite the growing interest for research on women in the labor market (Vieira & Amaral, 2013; Henderson, Ferreira, & Dutra, 2016; Mota-Santos *et al.*, 2019), there are still few studies in Brazil regarding their performance in certain segments, particularly in those where male presence prevails, as is the case of mining (Fraga & Oliveira, 2020).

A mapping of the national literature showed a very limited number of publications focusing on women in mining or even in other sectors with strong male domination. In a query on the Scientific Periodicals Electronic Library [SciELO], of the National Association of Graduate Studies and Research in Administration [ANPAD], considering as keywords “woman in mining”, we found 25 articles, and only one related to gender study in the segment (Macedo, Boava, Cappelle, & Oliveira, 2012), which indicates the relevance of our paper.

The importance of understanding the role of women in some specific sectors was strengthened by contemporary studies that investigate women’s trajectory at the workplace (Fraga & Oliveira, 2020; Fraga, Gallon, & Vaz, 2021). In addition, as Fraga and Oliveira (2020, p. 766) mention, “*considering that careers always take place in certain contexts, it is essential to understand the elements that mark the space where they occur*”. Therefore, the organizational environment helps to produce and value certain styles of masculinity that become prevalent, to the detriment of others (Eccel & Grisci, 2011).

This study is an attempt to contribute to the scarce debate on the condition of women in male work environments. Therefore, we sought to analyze, from women's perspective, their condition at the workplace and the practices oriented towards them in a multinational company of the mining sector. To this end, we investigated issues related to the work environment, career, situations of prejudice and discrimination, people management practices oriented to women, in addition to the possibility of reconciling work, family and motherhood.

## 2. Women's work in mining: from the symbolism of bad luck to the evident exploitation in mines

Mining is an economic sector that encompasses activities of research, exploration, extraction and production of ores (iron, gold and nickel, among others), from a source of non-renewable natural resources. In the country, the development and livelihood of several cities result from the presence of mining companies, either by paying taxes to the municipality or by creating jobs and improving local services and trade, although it also brings negative impacts to the environment and communities in the regions where they operate (Quirino, 2011; Carrilho, 2016).

Marked by a historical and social perception of an archaic activity, heavy work, which requires physical strength and endurance, activities in the mining sector match the stereotype of masculinity, historically referring to the characteristics of a male environment (Castilhos & Castro, 2006; Falholm & Norberg, 2017; Pimpa, Moore, Phouxay, Douangphachanh, & Sanesathid, 2016; Pimpa, 2019).

Industrial capitalism was one of the drivers for inserting women in mines, influenced by the preference for exploiting this type of labor, due to very low wages (Carola, 2006). In other economic sectors, women's wages are also lower than those of men, even when they have equivalent levels of education and hierarchical positions (Rocha-Coutinho & Coutinho, 2011; Silva *et al.*, 2016; Reis *et al.*, 2018).

Through movements around the world, between the 18th and 20th centuries, this pressure resulted in sensitizing legislators, giving rise to laws that forbade women's work in underground mines (Carola, 2006). In Brazil, the prohibition of women's work in underground mines occurred in 1938, but there are few records on law enforcement, as evidence shows that women were a significant workforce in the mines, in the 1940s and 1950s (Carrilho, 2016).

In several countries, such as Japan and the United States, symbolic violence was even greater in this sector. Historically, the presence of women in mines was seen as bad luck, a belief that could explain the occurrence of serious events like accidents, deaths and even ore depletion (Castilhos & Castro, 2006). All these prejudices, together with a strongly embedded patriarchal culture (Oliveira *et al.*, 2018), led to the concept that work in mines should be done by men, a view reinforced by harsh working conditions, where only men would have the physical endurance to face it (Carola, 2006; Gutiérrez & Sánchez, 2017).

Already in a disadvantaged position, women, simply because of their gender, and working in a world of such masculine meanings, face challenges regarding their own performance and questioning about their ability to undertake an activity that, apparently, would not match the female group (Gutiérrez & Sánchez, 2017).

In the 20th century, as legislation changed, discriminatory acts prohibiting women to work underground were revoked, and it became legal for them to work in mining (Magutu, 2010). Yet, data reveal that in 2018, women represented 22% of the workforce in the mining and petroleum sectors (Catalyst, 2020). This shows underrepresentation, defined by Norberg and Falholm (2018) as a process of exclusion resulting from men's fear of losing power, and undermines the male image rooted in mining.

Women are not acknowledged as an integral part of the mining environment and, for this reason, are targets of discrimination and harassment much more than observed in other segments (Castilhos, Lima, Castro, & Orgs, 2006; Quirino, 2011; Fuentealba & Gutiérrez, 2018). This condition of inferiority also excludes them from certain jobs, and their work is concentrated in activities classified as complementary (Norberg & Falthlom, 2018).

The role of women in mining was historically built as a mirror of their domestic responsibilities, of carrying water, providing food and supporting men, which shows that they were not included in this segment effectively. The assignment of women to administer and support activities, with less value than the actual mining roles, reflects this situation of exclusion in this sector (Buss *et al.*, 2019; Pimpa *et al.*, 2016; Norberg & Falthlom, 2018).

In addition, mining companies adopt a model of continuous production, with long and intense working hours, which in itself makes it difficult for women with children to reconcile work and personal life (Doubell & Struwig, 2014; Fuentealba & Gutiérrez, 2018). Thus, motherhood and children become a huge obstacle in mining (Fuentealba & Gutiérrez, 2018; Gutiérrez & Sánchez, 2017), even greater than in other sectors, as shown by studies that report women's triple work day (Cappelle & Melo, 2010; Carvalho Neto, Tanure, & Andrade, 2010; Mota-Santos *et al.*, 2019).

Another critical factor is that women continue to be targets of sexual harassment and exposed to various risks in mining. Men often ignore, harass and exclude them as if it was a test to prove their real ability to work in such a masculine environment (Botha, 2016; Norberg & Falthlom, 2018).

Research on women in mining displays their fear of low job safety, less opportunity for promotion, greater difficulty of balancing work with household responsibilities, questioning of their competence and exposure to sexist comments. Discrimination is often subtle, as prejudice is rooted in the organizational culture and social values of this masculine environment (Rubin, Subasic, Giacomini, & Paolini, 2017).

Therefore, in traditionally male sectors, women face even considerable challenges (Fraga & Oliveira, 2020). A recent study by Fraga *et al.* (2021) analyzes the trajectories of Brazilian women who were transferred to multinationals abroad. The findings indicate that, despite their high level of qualification, they experienced situations of prejudice and harassment for being women or for being Brazilian, especially in working areas with low female representation, as is the case of mining.

Accordingly, a study by Oliveira *et al.* (2018, p; 92) strengthens the existence of these masculine environments, given that organizations "(...) were created mostly by men and for men; organizational systems, work practices, structures, and norms tend to reflect the male experience". Thus, the "normal" at work highlights aspects socially favorable to men, while neglecting the values and profiles commonly associated with women.

Analyzing 14 female executives working in Brazilian and multinational companies, Duarte and Gallon (2021) found that they seek to adopt behaviors and profiles close to masculinity ideals, maybe to prove their ability to take over managerial positions in environments that value masculinity. On the other hand, they generally avoid attitudes considered more feminine. Hence, "(...) many of the behaviors described and women's statements could very well be attributed to men, as they reflect the masculinity valued socially and organizationally".

Therefore, seeking to contribute to the debate on women's *status* in male environments, we carried out an empirical study in a multinational company of the mining sector, as we explain in the next section.

### 3. Methodology

We chose to conduct a qualitative research based on the case study method, with female workers in a multinational company in the mining area. From semi-structured interviews, we

captured their views and behaviors inside that environment, taking into account the complex nature of the topic (Yin, 2005).

The research *locus* was a large multinational company, present in all continents, with over 100 years in the mining market. We selected six units for the study, located in three Brazilian states (see Table 1).

The qualitative research was an opportunity to explore new data, based on a previous survey (quantitative research) carried out in this organization. We made it available to all employees, with wide dissemination and voluntary answers, covering 262 respondents. Of this total, 27 women showed interest in the topic and were available for a follow-up interview, in order to provide more details about their work environment. We conducted the interviews soon after the survey application period, in October and November 2020. Table 2 shows the detailed characterization of the respondent 2.

We prepared the interview script taking as reference the aspects most often mentioned by the women that participated in the survey stage, which were career, prejudice, people management practices directed to women, work, family and maternity, and relationship with the manager. Based on these general dimensions, we designed two open questions for each dimension, reaching ten questions for the participants to answer.

Due to the coronavirus pandemic, the conversation with women was online, in October and November 2020, through Teams and WhatsApp platforms. Interviews lasted an average of 32 minutes, and we later transcribed them. More than half of the respondents (22 women) were working remotely due to COVID, using a model of home office adopted by the company; therefore, we decided to carry out the interview remotely.

To handle the qualitative data, we used the content analysis method by category (Bardin, 2016), which consists of techniques to systematize, interpret and describe the content of the information collected, in order to understand the speech and extract the relevant details.

To facilitate content analysis, Flick (2009) suggests developing categories of analysis based on the literature and reviewed in light of the research evidence. Once developed the main theoretical categories of the study, the researcher can organize data according to these constructs, allowing him/her to focus on the main variables of interest.

The categories of analysis adopted in the research, shown in Table 3, were conceived taking as reference the five dimensions most often mentioned by the women who participated in the previous survey. We took the descriptions from the literature on the subject.

#### 4. Data analysis

##### 4.1 Environment: from adaptable to “neutral”

As for the *environment* category, 15 out of 27 women perceived an adaptable and welcoming work environment for them, as well as a respectful relationship with colleagues and a feeling of security at work, according to this report: “In general, there is a lot of respect for co-workers. I have never witnessed or experienced anything regarding lack of respect” (Operational structure 4). This result can be somewhat confirmed by the company’s Inclusion and

Structures	Description	Location	No. of employees
Operational structure 1	Mining and processing	MG	1,585
Operational structure 2	Pump control station	MG	73
Operational structure 3	Ore filtration and shipping	RJ	151
Operational structure 4	Mining and processing	GO	987
Operational structure 5	Plant/processing	GO	363
Corporate structure	General and administrative support	MG	531

**Table 1.**  
Units of analysis

No.	Marital status	Age group (years)	Education	Position	Time in the company (years)	No. of children
1	Married	From 29 to 39	Graduate degree	Analyst/ Supervisor	From 4 to 7	02
2	Stable Union	From 29 to 39	Incomplete undergraduate degree	Assistant/ Technician	From 4 to 7	02
3	Married	From 29 to 39	Graduate degree	Coordinator	From 4 to 7	–
4	Single	From 29 to 39	Graduate degree	Analyst/ Supervisor	From 4 to 7	–
5	Married	From 29 to 39	Incomplete graduate degree	Assistant/ Technician	From 4 to 7	01
6	Married	Over 51	Incomplete graduate degree	Coordinator	From 4 to 7	01
7	Single	From 40 to 50	Undergraduate degree	Assistant/ Technician	From 8 to 11	01
8	Married	From 29 to 39	Graduate degree	Analyst/ Supervisor	From 8 to 11	01
9	Single	From 18 to 28	Undergraduate degree	Operator/ Auxiliary	From 4 to 7	–
10	Single	From 29 to 39	Incomplete graduate degree	Coordinator	From 8 to 11	–
11	Single	From 29 to 39	Graduate degree	Coordinator	From 4 to 7	–
12	Single	From 18 to 28	Undergraduate degree	Analyst/ Supervisor	From 4 to 7	–
13	Married	From 29 to 39	Graduate degree	Analyst/ Supervisor	From 8 to 11	–
14	Single	From 29 to 39	Undergraduate degree	Analyst/ Supervisor	From 4 to 7	–
15	Married	From 29 to 39	Undergraduate degree	Assistant/ Technician	From 4 to 7	02
16	Married	From 40 to 50	Graduate degree	Coordinator	From 0 to 3	02
17	Married	From 29 to 39	Incomplete graduate degree	Coordinator	From 12 to 15	02
18	Married	From 29 to 39	Undergraduate degree	Analyst/ Supervisor	From 4 to 7	01
19	Single	From 18 to 28	Incomplete graduate degree	Analyst/ Supervisor	From 0 to 3	–
20	Single	From 29 to 39	Undergraduate degree	Analyst/ Supervisor	From 4 to 7	–
21	Married	From 40 to 50	Undergraduate degree	Assistant/ Technician	From 4 to 7	02
22	Married	From 29 to 39	Graduate degree	Analyst/ Supervisor	From 4 to 7	01
23	Married	From 29 to 39	Graduate degree	Assistant/ Technician	From 0 to 3	–
24	Single	From 29 to 39	Incomplete graduate degree	Assistant/ Technician	From 0 to 3	01
25	Single	From 29 to 39	Elementary School	Operator/ Auxiliary	From 0 to 3	02
26	Single	From 29 to 39	Elementary School	Operator/ Auxiliary	From 0 to 3	03
27	Widow	Above 51	Elementary School	Operator/ Auxiliary	From 4 to 7	02

**Table 2.**  
Research participants

**Table 3.**

Analysis categories

Categories	Description
1) Environment	Refers to the work environment, considering the expectation of being an appropriate, respectful and safe environment for women. Refers to an environment that provides or not situations of prejudice and discrimination against women – bullying, sexual harassment and moral harassment
2) Career	Refers to the opportunity for career development, wage isonomy and prospects for growth/promotion
3) Policies and practices of people management	Refers to policies and practices of people management related to women, such as opportunities for taking part in training and qualification
4) Work, family and motherhood	Refers to the ability/possibility of conciliating work/career demands <i>versus</i> family/motherhood
5) Relationship with the manager	Refers to the perspective of women's relationship with their managers

Diversity Policy and Bullying and Harassment Policy, which highlights the organizational commitment in creating an environment of safety and mutual respect among employees.

However, we should not disregard the answers of the other 12 women, in the opposite direction. Two women were “neutral” regarding the subject, and chose not to give many details. The refusal to talk about the topic indicates that there is a problem, and this silence suggests something that bothers them in the organizational environment. Another 10 women showed disagreement when referring to a 100% safe and respectful environment. This confirms evidence from the literature (Mota-Santos *et al.*, 2019; Silva *et al.*, 2016) – although women have conquered more space in the market – challenges persist.

Although most of the respondents disagree that there is a discriminatory environment in the company, some report typical situations: “*It is important to change internally the macho culture still embedded in some professionals*” (Operational structure 2). Other reports show not only a subtle discrimination, but also a wide open: “*I have experienced or witnessed countless extremely discriminatory situations, against me or someone else. After a while, I learned to defend myself and others*” (Corporate structure).

As Oliveira *et al.* (2018) highlight, men created companies for them; hence, there is a prevalence of aspects socially favorable to men. This may also indicate lack of experience on the subject or lack of perception of situations that show prejudice and discrimination against women. Discrimination is often subtle, because prejudice is so deeply rooted in organizational culture and social values that, sometimes, it is not so visible, as the literature shows (Carvalho Neto *et al.*, 2010; Santos & Amâncio, 2014; Silva *et al.*, 2016; Lage & Souza, 2017; Mota-Santos *et al.*, 2019; Cardoso & Hanashiro, 2018).

In addition, some women have been the target of jokes, teasing and moral harassment at the workplace, according to the following excerpts from interviews: “I heard from peers little jokes and catcalls, and also from superiors. . . I had to keep quiet to preserve my job; unfortunately, mining is still a very sexist environment” (Corporate structure). Besides the macho environment, women still represent 22% of the global workforce in the mining and oil sectors, a space strongly marked by the male presence, thus a propitious and natural space for jokes and pranks.

“*The biggest problem today is that jokes and comments, even with all the training, were not completely solved. Men still interrupt women or crack unacceptable jokes, and, worse, sometimes they still say: ah. . ., now we cannot crack these jokes anymore, the world is getting boring*” (Corporate structure). These comments confirm studies on the obstacles for women working in mining; harassment, prejudice and discrimination are the main ones (Botha, 2016; Carrilho, 2016; Norberg & Falthlom, 2018).



#### 4.2 Career: the glass ceiling in the sector

In the career category, most of the women interviewed understand that they have the ability to hold different functions/positions and chances to grow in the organization. Although this understanding exists, this perception is not reflected in the statistics of female representation in the company, as in the entire mining segment, which remains very low, as this report shows: *“besides the difficulties of career progression due to gender, we still suffer the difficulties and prejudice because of the profession and the sector. I believe that the company can check it”* (Operational structure 1). In addition, we highlight the scenario of low representation of women in management positions in all sectors of the economy, which still are a stronghold of men (Mota-Santos *et al.*, 2019; Reis *et al.*, 2018).

Therefore, this research shows a much studied phenomenon, when it comes to barriers for women’s professional growth. It is called “Glass Ceiling”, which refers to a subtle and invisible barrier, but strong enough to prevent women from achieving the highest positions in organizations (Steil, 1997).

Regarding the perception of the wage gap based on gender, 18 women noticed wage differences between men and women, even at the same position and time in the organization. This confirms the literature, which indicates that women’s salaries are generally lower than men’s, even when both have the same level of training and similar positions (Vieira & Amaral, 2013; Silva *et al.*, 2016; Reis *et al.*, 2018). Once again, this highlights the glass ceiling phenomenon, as the barrier refers to the impossibility of growth and the lack of actions from the organization that are more egalitarian.

#### 4.3 Policies and practices of people management: the long discussion on quotas and inclusion

Regarding the *policies and practices of people management* for women, the participants see the implementation of these policies and initiatives as positive. However, most of them are against the creation of quotas for women to take over management positions. As the following comment shows, many women do not feel comfortable in being included or requesting some kind of quota, since they believe that this would be a form of devaluating their competence, of disregarding their own merit. This factor supports other research with women in different professional categories (Mota-Santos, 2012; Pereira & Hanashiro, 2010): *“I do not believe that creating quotas is an efficient mechanism, particularly for gender or race. I see this as a palliative, because the problem is not being corrected at the origin”* (Corporate structure).

Inclusion, as a potential practice of people management, refers to the perception of the value of women’s inclusion for the company’s success, as well as to the pride of their work. Most women agree with this statement, a perception reinforced by the following comments: *“I faithfully believe that the company seeks and develops projects to increasingly include women in mining, an environment dominated by men”* (Operational structure 1). *“After many of years working in the mining sector, there has been progress in the gender issue, but there is still a long way to go; first, the company has to acknowledge that the problem exists, that it is cultural, and only then will efforts change this scenario”* (Corporate structure).

The study also assessed the perception of women on opportunities being equal, regardless of gender, which we found in the research results. This supports Doubell and Struwig’s study (2014), which mentions that training opportunities for women are one practice, among others, that can help them advance in the mining career just like men.

#### 4.4 Work, family and motherhood: the great challenges

The next dimension brings the perception on the impacts of *motherhood* for women in organizations. Women perceive that maternity leave and having children can negatively affect their career and rise to higher positions, according to the report: *“I have also heard managers say that they don’t hire women because they get pregnant”* (Corporate structure).



If motherhood is still a dilemma for women who also choose a professional life (Reis *et al.*, 2020), in a more masculine environment like mining, prejudices seem even worse and more evident, as suggests one interviewee who shows her outrage at these attitudes, especially when they come from other women. *"I have heard phrases like: we are going to postpone so-and-so's promotion because she is on maternity leave. I have heard, from women who are not mothers, that to occupy other positions we have to think about the dedication to the company, due to the fact of being a mother"* (Corporate structure). Women who have this macho view show how long is the path to equality.

Sentences like these reveal how several factors related to prejudice and lack of respect still permeate the daily lives of women in mining, and confirm other studies in the same area (Gutiérrez & Sánchez, 2017; Rubin *et al.*, 2017; Fuentealba & Gutiérrez, 2018).

Most women do not notice flexibility regarding their schedules and other work obligations due to having children. The literature, in turn, widely supports this perception also in other professional categories, by showing that motherhood is still a challenge for women and is a strong moment of tension between personal and professional life (Cappelle & Melo, 2010; Gutiérrez & Sánchez, 2017; Reis *et al.*, 2018; Mota-Santos *et al.*, 2019).

We proposed the indicator 'work and family', expecting to capture women's perception on the possibility of conciliating the demands of work *versus* family. In this respect, most women have not considered the chance of leaving the company due to the difficulty of reconciling work and personal aspects, although recognizing that it is not an easy task. As literature shows, the responsibility for the care of the home and children remains with them, who most experience the conflict between personal and professional life (Carvalho Neto *et al.*, 2010; Mota-Santos & Carvalho-Neto, 2017; Reis *et al.*, 2018; Fuentealba & Gutiérrez, 2018).

About feeling comfortable in refusing a meeting or work demands due to personal, family commitments, most women do not use this argument and feel uncomfortable to use it. Given their insertion in the workplace, and the continuous exercise to assert themselves at the job, women have developed a high level of self-exigence, which results in a high level of dedication and often brings difficulties to refuse work requirements (Mota-Santos, 2012; Lima, Lucas, & Fischer, 2011). *"I am very happy in the company, but of course, the challenges for women are always greater, either by the need to prove ourselves all the time or by reconciling professional and family expectations. The search for this balance is our biggest challenge"* (Corporate structure).

This often happens in mining, where studies show that women have to demonstrate twice as much effort and competence as their male peers, in order to achieve the same progression and recognition. Carrilho (2016), in her research on feminization in this segment, found that women employed in the administrative and support areas reported an easier work, due to the lack of travel requirements, fixed schedules and extended shifts. Conversely, employees in exploration and research activities claimed greater difficulty, even to the point of thinking of quitting the mining company, due to long working hours and other demands.

Data highlight how much women need to show their competence in the corporate environment, and work much harder than their male peers. A reality that can be even worse if it takes place in an environment where there is still prejudice against motherhood, making difficulties and barriers more intense, as reported: *"I have many facilities in my personal life that make some challenges not applicable to my reality. However, I can imagine the difficulties for women with children, and how this can affect the opportunities in the organization"* (Corporate structure).

#### 4.5 Manager: a dimension that is still not very evident

In the category *relationship with the manager*, the questions sought to capture women's opinion on whether there was respect and trust in that relationship. The findings indicate that, in general, a good relationship with the manager prevails. Moreover, women highlight that they have no preference as to manager's gender; it makes no difference to be led by a man or a

woman. However, some comments in the opposite direction show that it may not be quite like that: *“The company values equality and respect between genders. But, unfortunately, in practice there are leaders who do not act according to these values”* (Corporate structure). *“We work in a company that strives for inclusion, where men and women should be treated/recognized equally, but our own colleagues and leaders still have archaic thoughts”* (Corporate structure).

Male domination persists in society’s values, and specifically for a managerial position, there are still remains of a patriarchal society, which links women to the home space, and men to the public space. There is still remnants of a perspective in which the man’s profile is often seen as “ideal”, for his position of authority and ability to command, among other aspects. Women continue to face barriers to consolidate themselves in management positions, the most common being prejudice and discrimination against their lack of management skills, in addition to the work–family conflict (Carvalho Neto *et al.*, 2010; Mota-Santos, 2012; Lima *et al.*, 2011).

The company has a global target of having 33% of women in management positions by 2023. Until July 2020, the percentage was 16%. According to institutional documents, the company is developing actions to achieve this goal but has not yet defined specific policies or the creation of quotas.

## 5. Final remarks

This study aimed to analyze the *status* of women in the mining work environment and practices of people management oriented towards them, in a multinational company. Empirical research showed their struggle for a place in mining, confirming previous studies that dealt with barriers to women’s career in this sector.

Although reporting their capacity to take over any position/function in the company, evidence shows that they perceive a wage difference. They also notice that maternity leave and having children affect negatively their careers and their progress to higher positions in mining; they also report situations of prejudice and discrimination experienced at the work environment. Sometimes subtly, sometimes explicitly, but these are still barriers faced by women in that company.

The findings also indicate that most of them see as positive the implementation of policies and initiatives directed at women in the organizational environment; at the same time, they are against the creation of quotas for taking over managerial positions, by understanding that such an initiative would depreciate their competence and merit. This negative reaction of women themselves to the quota policy, already shown in a few articles, deserves new studies.

Nevertheless, if male predominance marks the mining segment, its characteristics merge with the “natural” attributes of men. If there is a strong, traditional and historical social male representation, how can women stand out? Would this be possible without policies and initiatives of people management to support their presence?

It is imperative for women to prove themselves, show how capable they are and fight on the same level as men. However, how can we talk about equality in an environment where male domination is very strong, including at a symbolic level, where there has never been equality and where one of the parties has always been a minority? In the 1940s, women in mining already represented bad luck related to serious events, they were already a mirror of their domestic responsibilities, and had to carry water, provide food and support men, among other complementary activities.

For this reason, there is the urgent need for organizational actions, embodied in concrete policies and practices of people management that should be developed, either through affirmative actions or a systemic change in the organization through diversity management that seeks gender equality. Therefore, our practical contribution is to show how much mining organizations need to discuss the complexity of the problem and its subtleties. Making a correlation with the concept of glass ceiling, the issue is “subtle” and at the same time “very strong”. Actions are necessary to eliminate practices that keep prejudice and discrimination in the processes of recruitment, performance evaluation and promotion.

This article showed that in the mining segment, there is still a long way to go, and it must take place in a structured and proactive way, through women-oriented actions, policies and people management practices. The multinational company launched two years ago a global inclusion program to support diversity and fostered actions in the countries where it operates, with responsible teams, including in Brazil. Even so, the research showed a significant resistance to these initiatives.

Another contribution is to study the topic in other segments of the labor market where male domination is higher than in other industries. In particular, the Brazilian literature on women in mining is scarce, not only in the business area, but in other areas of knowledge. Even at the international level, where there are more publications, they are few compared to studies in other sectors.

One limitation of the study was to address only one company. Therefore, we suggest further research, in order to understand men and women's perspective in mining, to indicate paths that actually show advances in this very masculine area. Another suggestion is to carry out studies that use the categories of analysis investigated in this article as a starting point, creating statistical instruments for measuring the opinion of women and comparing them with men's view in the same environment.

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**Corresponding author**

Daniela Martins Diniz can be contacted at: [danidiniz09@yahoo.com.br](mailto:danidiniz09@yahoo.com.br)

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