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Gender barriers in Chilean mining: a strategic management

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Abstract

Purpose – Given Chile's high projected deficit of skilled labor in its mining industry, the purpose of this paper is to explore the gender barriers present that hinder women from entering the sector. **Design/methodology/approach** – To do this, a descriptive and interpretative study was undertaken and in-depth interviews were conducted with 70 male and female workers belonging to the operating areas in the mining companies located in northern Chile. The data were transcribed and analyzed through a qualitative approach using discourse analysis by thematic categories.

Findings – The results show that gender barriers are related to: self-discrimination of workers themselves, family demands, and male dominance in the field.

Originality/value – These results are relevant for strategic planning in the mining industry. They allow us to redirect policies to incorporate women in the sector in order to counteract the aforementioned deficits. The practical implications of this study for the mining sector in general include the incorporation of, for male employees, awareness workshops focusing on the importance of the inclusion of women in mining and aspects that favor this process and, for female employees, leadership and empowerment workshops. These initiatives will help to generate a more satisfying work environment that promotes better human resource management and productivity of the sector.

Keywords Masculinity, Chile, Mining, Gender barriers

Paper type Research paper

Introduction

There are barriers that make it difficult for women to enter the labor market, especially in those productive sectors that have traditionally been dominated by men. These barriers have a central impact on developing economies such as Chile's, and even more so considering that the country has one of the lowest rates of female participation in the workforce in Latin America: around 40 percent, compared to 61 percent in Brazil, 59 percent in Peru and the 56 percent recorded in Colombia (Instituto Nacional de Estadística, 2007; UNECLAC, 2008).

This gap increases if we take into account the demographic changes that have occurred in the country over recent decades. Chilean society is going through an accelerated demographic shift, with a reduction in population growth to <1 percent since 2010, affecting the growth of per capita income, the labor market, the accumulation of human capital, and social inequality (Cerda, 2008).

Different studies have documented the gender segregation that stops women from being included in male-dominated occupations, such as those in agriculture, forestry, and mining (Salinas *et al.*, 2010; Tallichet, 1995).



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In this context, mining is a strategic industry for the country. Today, copper-producing companies produce 34 percent of this ore on a worldwide level and, since 2003, have generated 7.4 percent of GDP and 58 percent of the country's total exports (UNECLAC, 2008).

As a result, there is a 41 percent increase in the number of women who participate in this sector, equivalent to 7.4 percent of the total. However, this gap increases in the operational areas where female participation reaches only 2.3 percent (CASEN, 2006, 2009; Consejo Minero, 2009), which is much lower than the progress shown by this industry in Australia or Canada, where female participation has increased 20-30 percent (OIT, 2011).

Therefore, the most important challenge that the development of large-scale mining in Chile faces for the 2010-2020 decade is to counteract the projected deficits in the qualified labor force. This deficit is projected for the positions of mobile equipment operators and maintainers. Also, the growth of both the companies' own employees and those of contractors, for the overall sector, will face two critical periods: 2013-2015 and 2018-2019 (Fundación Chile, 2011), due to projects that are in their implementation or operating phases.

This scenario potentially opens up opportunities to reduce the industry's gender gap, including women in the sector more rapidly. According to figures from the National Women's Service (Servicio Nacional de la Mujer, 2012), women's participation in the large-scale mining sector should be increased by at least 10 percent, going from 11,760 to 25,000 by 2015. In order to do this, companies must train women in areas of risk, driving trucks and heavy machinery, working inside the mine, and logistics (Servicio Nacional de Geología y Minería, 2011).

Therefore, the central research questions that the study seeks to answer are: What are the barriers that make it difficult to include women in mining work in Chile? And with that, answer the questions: What obstacles are perceived by male and female workers in the sector? And, are there differences or similarities between the perceptions of male and female workers of the sector? This information is a fundamental input for the strategic management that addresses the projected deficit, analyzing the aspects regarding female inclusion that have not been amply analyzed in the Latin American industry in general, and in the Chilean industry in particular. This paper consists of three parts. The first is a review of the literature on the institutional theory and the dual market, the mining labor market on an international level, and a characterization of the mining labor market in Chile. The second part describes the methodology, and finally the results are presented and discussed.

Review of the literature

Institutional theory and the dual market

Institutional theorists propose that the supply and demand labor laws are insufficient for understanding the phenomena of inequality of participation or salaries between men and women and, therefore, they believe it is indispensable to analyze the regulatory or institutional context. In the labor market, two realities coexist: on one hand, a primary job market with expectations of stability, high incomes, and potential for development for its members. On the other, there is a secondary market where jobs are precarious in terms of their schedule, incomes are lower, and there are limited possibilities for professional development and growth (Castaño, 1999).

The primary market is also subdivided into upper and lower levels. The former groups people who are in the high level organizational, professional, or technical



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hierarchies. And the latter is where other jobs are found that offer stability, high incomes, and development. In this scenario, women would have more fragile contractual conditions, lower incomes and less investment in their own development, more often participating in precarious sectors (secondary markets). Women are marginalized from the primary markets due to their own condition; that is, the role they play in the family and the fewer number of years of education or training for employment (Brunet and Alarcón, 2005). This is reflected in the mining industry and in the inclusion of women in the sector.

Despite these disadvantages that have been analyzed from the perspectives of various theories, women have experienced a significant increase in the rate of participation and in years of working life, acquiring more autonomy and achieving a strengthening of gender identities. Research on the participation of this sector in the labor market has had a clear economic bias. Recently, in the 1990s, studies were initiated from a gender perspective, seeking to analyze the symbolic and subjective aspects of female employment (Guadarrama and Torres, 2007). Also addressed are aspects such as how gender relations shape the production processes in society (Burin and Meler, 2009; Lamas, 2002; León, 2000).

Feminism as a focus of the paradigm of gender has criticized the institutions that determine the subordination and exploitation of female work in the family, in the distribution of jobs in companies according to gender, and in wage discrimination, among others (Cárdenas de Santamaría, 2007; Clancy, 2007; Godio, 2003; Rothstein, 2012). Also, the studies that associate the labor market and gender (Avendaño, 2008; Godoy, 2008; Kirkwood and Tootell, 2008; Shabbir and Di Gregorio, 1996; Thompson *et al.*, 2009; Valenzuela *et al.*, 2006) have sought to understand the impact of the adjustment processes and the transformations in the organization of production, in the sexual division of work and the economic and social relationships system between men and women. They question the quality of female employment, the lower remunerations, non-salary benefits, regularity, and status, confirming that even when women contribute the main or only household income, the female workforce is constructed in the social imaginary as "secondary" (Avendaño, 2008; Uribe-Echeverría, 2008).

Furthermore, these studies have incorporated economic motives other than the individual maximization of profits, attributing importance to subjective and objective factors in women's occupational positions and, therefore, in the asymmetries existing in relation to men. From a subjective standpoint, men and women give different weight to paid work compared to their family life. In practice, career interruptions due to pregnancies and raising children imply restrictions on work and professional development (Espino, 2012). Similarly, the relationship between success and total commitment to work, with a proportional reduction of the time that men and women can dedicate to their families and their personal lives is a price that many women are not willing to pay (Clancy, 2007).

These studies constitute an important base for understanding the asymmetries in masculinized labor markets such as mining in countries around the world.

Barriers to inclusion and the mining labor market at an international level International level research reports relevant data regarding the barriers women face in the industry. In Australia, mining constitutes the most masculinized industry of all, where women have not been benefited as much by the development of this activity. Difficulties are reported based on gender differences, power relations and community development (Gier and Mercier, 2006). Tallichet (1995, 2000), in studies undertaken on



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coal mining companies in the USA, points out that both sexualization and the workplace reinforce the hypothesis that men and women are intrinsically different in their physical and mechanical capabilities, and that the acceptance of these differences as something natural favors gender segregation at work, beyond the control of the organization. At the same time, women share a common feeling of being subordinates in a world of men, above all when they are incorporated into occupations stereotyped as masculine, such as mining. Lozeva and Marinova (2010) coincide in stating that mining not only has negative impacts for the community in terms of lifestyle, the physical environment, and overall sustainability, but also deeply and specifically affects women. This involves an expression of the domination of patriarchal values. where problems associated with gender discrepancy and bargaining power have traditionally marginalized women, according to evidence from the industry in Western Australia.

Nevertheless, other more recent studies are directing the changes needed in the sector. Mayes and Pini (2010), in a research on media reports on women in the mining management sector in Australia, identified the predominance of a discourse that suggests that a change of gender dominance has been produced in the sector and in its management through the removal of entry barriers, resulting in a significant number of women entering these traditionally masculinized fields. Furthermore, the Rio Tinto mining group, represented in Australia and North America, with operations in South America, Asia, Europe, and Africa, points out the importance of incorporating the gender perspective in order to improve the capacity for obtaining and maintaining a social license to operate, increase the quality of life and the socioeconomic conditions of men and women, and minimize the negative impacts of mining operations (Kemp and Keenan, 2009). Also, Women in Mining Canada (2010) as a national leader for women and mining, concludes in its final report the importance of increasing female participation in the sector if the industry is to succeed. The report states that the benefits of such participation include solving the problem of the reduced availability of qualified workers, accessing a greater diversity of talents, increased innovation, greater market development, better financial performance, and better leadership in the industry. These advances in including women at international level are a reference for Latin American countries that are beginning this process.

In Latin America, the presence of women in the mining industry has not been amply studied, despite the central importance of this line of business. Some records on the experience in Bolivia, Peru and Colombia report women's precarious experiences in small-scale mining, due to the low wages they receive, the deficiencies in terms of safety, and the scarce recognition of the value of their work (Alianza por la Minería Responsable, 2012). At the end of the 1990s, the Mexican mining industry included women in its production processes for the first time. The entry of women is evaluated as highly beneficial for their greater sense of loyalty, less absenteeism, greater responsibility and more careful work, which allows for a higher yield of the machinery. Agnico Eagle is the first mining company in Mexico to be recognized as a Great Place to Work[®]. Along with Aurico Gold, the company was certified in the Gender Equality Model by the National Women's Institute (Cámara Minera de México, 2012, p. 23).

In Chile, the situation is not so different. It is only in the last decade that a concern has arisen to analyze the status of women in the industry. In 2001, there were 1,523 women working in different areas of mining companies. By 2009, there were 2,149, representing a 41 percent increase over the course of eight years. The implementation

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of new technologies, as well as antidiscrimination policies, promoted the hiring of women, now not just in administrative positions but also in technical and operating jobs (Consejo Minero, 2009).

Characteristics of the mining labor market in Chile

At national level, from 1990 to 2008, mining represented 8 percent of GDP and 49 percent of Chile's exports. In total, 80 percent of that percentage corresponded to copper exploitation. In total, 40 percent of all copper mines are concentrated in the Region of Antofagasta, with 14 deposits in its territory, followed by the Region of Atacama with nine, Valparaíso with four, Tarapacá with three, the regions of Coquimbo and O'Higgins with two, and the Metropolitan Region with one extractive worksite (Consejo Minero, 2009). Insofar as the labor force, this sector provided direct jobs for 93,390 people (for the December 2008- February 2009 period), which represents only 1.4 percent of the country's work force. However, in regions with a high level of mining activity, such as Antofagasta or Atacama, this figure rises to close to 10 percent. Furthermore, the figures for indirect jobs multiply this percentage several times over, above all in some cities in northern Chile such as Iquique, Calama, Antofagasta, and Copiapó, which owe a large part of their income to mining (Consejo Minero, 2009).

This is a capital-intensive industry with a high level of mechanization and productivity. It is the principal source of the country's exports and provides the most foreign currency. It is also important as part of fiscal resources. In 2008, the profits that the sector contributed generated by CODELCO reached nearly US\$4,968 million (Consejo Minero, 2009).

The large-scale mining labor market has special features that distinguish it from the average national situation. These are mainly related to higher average salaries, the percentage of full-time jobs and the benefits, whereby large-scale mining offers its male and female workers conditions that are significantly more favorable than the national averages (Fundación Chile, 2011).

Another important characteristic of the sector is the 24-hour shift system, meaning that production does not stop. The work schedule is distributed in 4×3 , 4×4 , 5×2 , 7×7 or 9×5 shifts, which means that the male and/or female worker is on site for four days and has three days off in the city, or four days on site and four days off, and so on successively. The shifts are defined according to the nature of the position and according to the distance of the deposit from the city.

Considering only their extraction, processing and maintenance operations, large-scale mining companies and contractors overall will need to increase their staffing by 53 percent from 2012 to 2020. This situation is particularly critical in operations jobs (Fundación Chile, 2011). This is challenging if we also consider the current situation of relative scarcity of qualified manpower, as has been evidenced in recent years, where the sustained increases in the levels of remunerations and the growing difficulties in filling the vacancies that are offered within the scheduled time periods are a constant in the industry. Large-scale mining is now facing a point of inflection in this area. If current trends continue, the graduates from the existing educational and training system will not be enough to meet the demand, which makes it necessary for the principal actors in this industry to take proactive and very rapid action. Among other aspects, this implies reversing women's generalized perception regarding the area in which they operate, both in Chile and in other countries. For them, mining is a hostile sector where there is a stereotyped image of women that negatively influences the female workers' adaptation process (OIT, 2011).



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In 2010, the National Women's Service implemented the Sello Iguala (Equality Seal), a certification that seeks to reconcile the working, family and personal life of men and women in the company. In the case of mining, by 2012, six companies have achieved this certification, which is significant, but undoubtedly still insufficient.

Consequently, the data reported by the industry on an international level regarding the inclusion of women in the different areas of the productive chain is a reference for the Latin American and especially the Chilean industries. As part of this study, it is important to analyze the barriers and obstacles to the inclusion of women in mining from the perspective of the male and female workers, as well as to identify the differences and/or similarities that exist between them. This information will provide the background to develop better strategic management in the industry.

Methodology

The study is of a descriptive nature, with a qualitative focus, where the instrument for collecting information has been an in-depth interview based on three focusses: problems associated with working on a mine site, family and work, and adaptation to the work structure. The interviews were held between the months of October 2011 and May 2012. They were applied sequentially, such that once the first interview was held, it was transcribed and a preliminary analysis was made; then, the second interview included the observations, and so on, successively. For each interview, authorization was requested from the interviewee through an informed consent form, to ensure acceptance, confidentiality, and the safeguarding their anonymity. Each interview lasted from 60 to 90 minutes and all were recorded with prior consent and were textually transcribed.

Four interviewers participated in transcribing and coding the interviews, under the continuous supervision of the researcher responsible for the project. This enabled the constant review of the data collection and analysis process.

Description of the sample

In taking the sample, male and female workers who met the following criteria were considered: work in operating areas of the mining industry, work on shifts, and have at least two years' work experience in the area. With these requirements, 70 workers were interviewed, of whom 30 were men and 40 women. The average age of the men was 41 years and of the women, 35 years. In the men's group 17 were married, ten were single, and three divorced; while among the women, 21 were single and the rest divorced (19). Thus, married men predominated in the men's group, but single women among the females. With regard to the number of children, nearly a third of the male workers had three, whereas, among the women, more than half had one or no children. In terms of the level of education, all the interviewees had completed high school, in some cases with technical and/or university education. They worked as heavy machinery operators, risk prevention experts, plant operators, mine operators, mechanics, geologists, and engineers, among others. Both male and female workers worked on the different mine sites located in the northern part of the country (Minera Esperanza, Escondida, Codelco, Michilla, Zaldívar, SQM, and Gaby, among others). Regarding the shift system, half of the women workers had 7×7 or 4×4 shifts. Nearly two-thirds of the men had 4×4 shifts and almost a third worked 7×7 .



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Information analysis

The information collected was analyzed through the discourse analysis technique according to the focus of the interviews. The analysis process contemplated:

- textual transcription of the interviews undertaken with both men and women (discourses);
- analysis of the sample by sex;
- analysis of the discourses by sex according to the three focal points: problems associated with working on a mine site, family and work, and adaptation to the work structure;
- identification of subcategories associated with the discourses of the male and female workers; and
- based on the analysis of the categories, the barriers are identified (see Figure 1).

Presentation of the results

The analysis of discourse according to the three focal points enabled us to identify ten thematic categories that gave rise to three groups of barriers to the inclusion of women in mining. The categories identified are presented below.

According to the first focus related to the problems associated with working on mining sites, the analysis of the discourse of both the male and female workers enabled us to identify six thematic categories, two in the case of the men and four for the women:

- (1) Lack of confidence in their capabilities: from the men's perspective, the women do not believe in their own capabilities and competencies. This condition of women's greater insecurity is exacerbated in activities traditionally performed by men. The men feel that it is the women themselves who must believe that they are capable of working in the sector.
- (2) Environment prepared for men: from the men's perspective, mining sites are adapted for the male sex. For example, in many sites it was only very recently

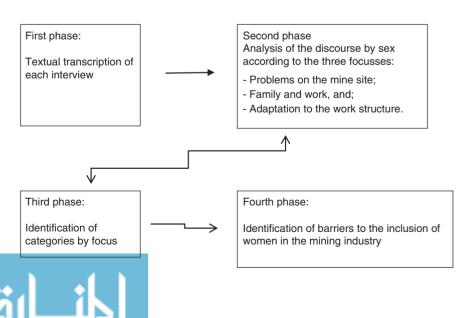


Figure 1. Model analysis

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that a toilet for women had been built, given that originally sites were designed with only men in mind. Similarly, the male workers mention that recreational areas are set up with games traditionally linked to males, such as pool tables, as are the infrastructure, the clothing, and meals, among others.

On this focus in the discourse of the female workers, the following categories are identified:

- Body and health: for the women, mining work produces physical and psychological consequences that undermine their health. The altitude, the extreme temperatures and the shift system are particular characteristics of the industry that are more critically perceived by the women. Some have undergone a hysterectomy (surgical removal of the uterus) in order to eliminate menstruation and avoid the bleeding that is caused by the altitude on site, and thereby seek to better adapt to the physical requirements of mining work. Others have interrupted breast-feeding in order to avoid the tension between family and work demands. They also reduce their visits to the toilet to a minimum during the workday, thereby reducing the control that men exercise in the mine regarding women's performance.
- The female identity: women perceive that female sensitivity is considered a sign of weakness, which is considered a disadvantage and which gives rise to a sense of ambiguity regarding how they behave on site. They experience changes, having to control their emotions and adapt to an eminently masculine organizational culture.
- Prejudices: the characteristics that are assigned to the female sex are configured in this production environment as true stereotypes regarding what women are like and how they must behave, which conditions their work performance.
- Gender neutralization: the above causes women workers to have to face hostility and resistance from the men, and therefore they strive to neutralize gender differences so that "hopefully no one will notice that we are women." They oscillate between being more or less feminine.

These categories configure a first barrier to inclusion that we have called self-discrimination, with discrimination defined as an ordering that establishes hierarchies among the subjects and a differentiation that generates a system of symbolization in the different aspects of life. The men minimize the reasons for this process, assigning responsibility to the women themselves, affirming that it is the women workers themselves who must trust in their capabilities. In contrast, the women perceive it as a more complex phenomenon, the causes of which are found in gender differentiation as the principal trigger of the physical, psychological, and social effects. This first focus is exemplified through the discourses representative of the male and female workers interviewed (see Table I).

Regarding the second focus on family and work, among the men the categories identified were:

Father provider – woman caretaker: this category is linked to taking care of the children, household work, safeguarding the home, and the distribution of roles in the family. There is evidence of coincidence between the discourses of the male and female workers: both groups place the woman as the central axis of the family. A naturalization of gender roles is evidenced, and a traditional



ARLA 27,1 100	Barriers to the inclusion of women in mining	Self-discrimination of female mine workers
	Subcategories	Lack of confidence in their own capabilities Environment prepared for men Body and health Feminine identity Prejudices Gender neutralization
	Discourses	"There are many women who self-discriminate; I think that for more women to work and be included, they just have to trust themselves, believe that they are capable and just forge ahead" "What women most have to grapple with is that the environment (mining) is prepared for men, so everything is planned around men and their needs" "Women's health is very complicated in the mining environment. In fact, menstruation is complicated, because women have hemorrhages due to the altitude. I know that of the seven of us who work in operations, three have had a surgery (hysterectomy)" "If they see you as weak, they don't consider you for jobs; they say no, this is very "scandalous". If something happens to you on an enrotional level, you have to keep it to yourself, crying means weakness; that you don't know how to behave" "The discrimination from the men; they insult you, they make you go last for everything, they don't let you work in peace. They tell me, ilsten, go home, go see your kids; your husband is cheating on you" "In mining, hopefully they won't notice that you are a woman; you have to bring out the man you have inside"
Table I. Focus on problems associated with working on a mining site	Sex	Women

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representation of the family, where women workers have a scarce margin of action and tend to assume the tensions or frustrations associated with not being able to respond to these demanding roles of women who are mothers and workers.

In the case of the women, the categories identified were:

(8) Make the roles of woman, mother and worker more compatible: both men and women in mining confirm the dual dimension of the family. On one hand, they assign women greater responsibility for its maintenance and care, which at the same time constitutes an obstacle. The women always feel they are lacking in the performance of their roles in this area and in their attempt to make the demands of the mining labor market compatible.

Therefore, the rigidity in the distribution of roles within the family configures a second main barrier for the inclusion of women in mining work – family responsibilities. Although it is a problem for both men and women to meet the demands of children and their partner, for women it becomes a symbolic barrier that limits them in the exercise of their role as workers. Some discourses in the following chart exemplify this (see Table II).

Regarding the third focus on adaptation to the work structure, the following was identified from the workers' discourses:

- (9) Male chauvinist culture: this category is related to the patriarchal model and its mainstreaming in production contexts dominated by males. Men and women coincide. For men, it is the women who "must adapt," because it is an activity for men and they are not going to change. Similarly, the high compensation and benefits that companies offer reinforce the male role as the main provider in the family.
- (10)Work discrimination: in terms of the above, women perceive the obstacles related to this masculine predominance, and feel like sexual objects. The women workers coincide in that the inclusion of women in a mining site does not reflect a real or cultural change on the part of the company, but rather is an attempt to comply with regulations driven by the state, in order to favor equal opportunities and the participation of women in the industry. Therefore, from the women's perspective this male predominance leads to discrimination. These are the characteristics, beliefs and functions particular to the activity that predominates on site, whether the language, the humor, the jokes among the men, the behavior in the work routine, such as the sexualization of language, represent cultural expressions rooted in male hegemony. For women workers, the difficulties in accessing decision-making positions is another factor that is conditioned by the specific aspects of gender, given that they do not have time available on weekends to go up to the mine to perform supervisory tasks. These categories configure masculine hegemony as a third barrier to the inclusion of women in the industry (see Table III).

Conclusions

The barriers to the inclusion of women in mining are related to the historical sexual distribution of the work and the elaboration of stereotypes that have legitimized labor practices typified by gender. This work, focussed on large-scale copper mining in Chile,



ARLA 27,1	Sex	Discourses	Subcategories	Barriers to the inclusion of women in mining
102	Men	"Generally women are accustomed to raising the children, being housewives; so exchanging that for a job in mining, I think that just like that, it may be the biggest obstacle they have []" "One of the tensions is the family, the children [] because mothers are very attached to their children; like any parent you can lose your concentration on the job" "It gets complicated if they have young children and they have to work shifts. Like I just said, there are 7×7 and 4×4 shifts. The shifts are very long and when they have young children I imagine it is complicated for a mother to leave them for so long. That's a male chauvinist thought because just the same, the man also goes away for many days at a time" "With the passing of the years it has been my wife who has taken on the role of head of the household since she is the one who makes the decision. I'm not home half the year so I can't give my opinion very much"	Father provider – women caretaker	Family responsibilities
Table II.	Women	"The men say that you, the women, should be knitting, preparing the meals, watching soap operas" "She has to stay home with the children. That's what society instills in you, that men work and women stay home, and for women it's also a priority to be there at home, but men don't sacrifice anything" "The shifts are tough; women have to leave everything organized – the supermarket, the doctor's appointment for the children" "Working on site and having a child and a family – it's very difficult to make those	Make the roles of woman, mother, and worker compatible	

two parts compatible"

evidences important similarities with other masculinized markets, where women are stigmatized as not suitable for "men's jobs."

Furthermore, for Chilean industry and for the other countries with similar levels of development in the sector, identifying the self-discrimination of the female workers, family responsibilities, and masculine hegemony as central barriers that need to be addressed constitutes an important finding.

Self-discrimination is perceived differently by male and female workers. For male workers, it is basically a problem associated with women's lack of confidence in believing that they are able to work on the site, whereas for women, it is based on the differences that exist between the sexes and that, in turn, become inequalities.



Focus of family and work

Male chauvinist culture oneself [...] a man will never give in to a woman, she has to adapt to Male chauvinism manifests itself even in the way of expressing iving in a male chauvinist environment"

Barriers to the inclusion

of women in mining

Subcategories

Discourses

Masculine hegemony

"Women must have the temperament and the ability to be able to accept the jokes and realize that they are just another miner up there (at the site), because they are not female miners, they are miners[...]" "Culturally yes, the Chilean male chauvinist is stupidly chauvinist. They brag, they go out with ten different girls, they talk about it. I'm more macho than the others, I don't do the laundry at home, and I don't cook at home. They don't tell me what to do, I give the orders. If they try to impose themselves, ah no; I'm a miner and that is not women's

work"

"The experience of male miners is very different from that of female miners; decision making always falls on the men, and compensation is different even when they perform the same job"

Work discrimination

"The discrimination from the men; they insult you, they make you go last for everything, they don't let you work in peace. They tell me, listen, go home, go see your kids, your husband is cheating on you; they didn't let me do the tests; they made me throw them away." A female heavy machinery operator said "they don't look at you as a person who can work; they look at you as a sexual object." A female operator stated "in mining there is a lot of talk that there are 'so many women', and there aren't that many women, they don't give you a chance, and if they do, it is because of a government

commitment, not because they want to." "There are no women in superintendent positions or in management, because of the children; a woman gives priority to the family. Superintendents can go up to the site on weekends, but if a woman was superintendent she couldn't; mothers can't [...] It's so unfair"

Table III. Focus of adaptation to the work structure

Women



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In this sense, extreme measures such as the cases reported in this study of women workers who have undergone a hysterectomy or have suspended breast-feeding in order to adapt to the requirements of the industry evidence the weaknesses of human resource management in the sector and how these aspects affect the self-esteem and security of the women workers.

At the same time, there are similarities in the men's and women's perceptions of the tensions caused by family responsibilities and the weight of masculine hegemony in the industry.

The predominance of the representations associated with the roles of mother-woman and family have not undergone modifications, despite the modernizing of the industry and Chilean societal transformations. On the contrary, the similarity in the perception of men and women is an example of the tension that the women in the sector experience when faced with family demands.

The real and symbolic power of this gender order is a fundamental barrier to the inclusion of women in labor markets such as construction, fishing and mining. In the latter, the shift system, due to the long distances between the mine sites and the urban zones, accentuates the tension between family and work requirements. Also, the fact that the majority of the women interviewed were separated or single reinforces the major difficulties they have in making work compatible with family.

Highlighted in the results is the intensity of the mining culture and the centrality of masculine identity as what shapes this productive context. This culture acts as an organizer of the social and work structure of the mining industry and conditions gender relations, the sexual distribution of the work, stereotypes, activities, and the permanence of women in this sector.

Culturally, mining, more than a territory, is a symbolic space defined in the imaginary that acts as a determinant in the construction of the self-image of the male and female workers. Furthermore, the masculine hegemony of the mining site favors discriminatory practices. The differences between women and men are underestimated, and this justifies a social order that functions as an immense symbolic machine that tends to ratify the male domination by supporting the sexual distribution of the work.

In terms of proposals, it is hoped that this information can lead to the elaboration of a strategic planning model to increase the inclusion of women in the industry and reduce the high deficit of workers in the sector by 2015. It is also hoped that it will generate more favorable gender negotiating conditions, with a more representative number from the sector. Along the same line, and given that this is an interactional problematic, it is proposed that plans to be designed address the gender dimension in integral terms throughout the human resources management process; that is, in recruitment, training, and maintaining, both for men and women.

Also, for women workers to share their concerns and tensions more collectively in the labor field would strengthen the initiatives that are forged, either from the companies themselves, the government, or the male and female workers.

It is necessary to redirect the representations related to female presence in these masculine labor market spaces. The expansion of work opportunities for women, of course, implies progress for society in general. It also involves appropriate planning for training in the mining sector, the expanding of education through the development of competencies and abilities in more hostile productive environments, and the mitigating of the high individual, family and social costs that this study reports. Women need to be empowered and to improve their self-esteem. Training, in this sense,



would contribute to them being more confident of their potential and operate naturally in this mining environment that is stigmatized through the predominance of men.

Similarly, it is a challenge for researchers to develop comprehensive models to analyze this problem, its complexity and the tensions associated with the perception that both men and women have of the place they occupy and their positions at work.

Finally, with regard to the projections of the study, we hope that future research addresses the perceptions of other central actors from the industry, such as union leaders and directors. Furthermore, it may be useful for other studies to compare the experiences in Chile with other countries.

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