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# Challenges for the retention of women in the Chilean construction industry: a quantitative analysis

## Desafíos para la retención de mujeres en la industria de la construcción chilena: un análisis cuantitativo

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## Abstract

Globally, female participation in the construction sector has increased in recent decades; however, it remains significantly lower than that of men. Several studies have identified the barriers and challenges that women face throughout their careers in this industry. Nevertheless, in the Chilean context, academic research on this topic is limited. This study aims to address this gap by identifying the obstacles women encounter to stay within the construction industry in Chile. A quantitative analysis was conducted on responses from a survey by 111 industry professionals, including men and women. The data were analyzed using survey analysis and independence tests, focusing on five key factors: gender, age, years of experience, number of children, and marital status. The results indicated that gender is the most influential factor, followed by age and family situation, highlighting issues such as difficulty balancing personal and work life, job dissatisfaction, and long working hours. Our findings may contribute to public entities and decision-makers to formulate specific gender-oriented policies in construction. For instance, the inclusion of the concept of "woman-hour," analogous to "man-hour," in human resource budgets in construction is suggested, which would facilitate greater equity in workforce planning.

**Keywords:** Women; Construction industry; Challenges; Chile.

## Resumen

A nivel mundial, la participación femenina en el sector de la construcción ha aumentado en las últimas décadas; sin embargo, sigue siendo significativamente más baja que la de los hombres. Varios estudios han identificado las barreras y desafíos que enfrentan las mujeres a lo largo de sus carreras en esta industria. Sin embargo, en el contexto chileno la investigación académica sobre este tema es limitada. Este estudio pretende abordar esta brecha identificando los obstáculos que enfrentan las mujeres para permanecer dentro de la industria de la construcción en Chile. Se realizó un análisis cuantitativo de las respuestas de una encuesta respondida por 111 profesionales de la industria, incluidos hombres y mujeres. Los datos se analizaron mediante análisis de encuestas y pruebas de independencia, centrándose en cinco factores clave: género, edad, años de experiencia, número de hijos y estado civil. Los resultados indicaron que el género es el factor más influyente, seguido de la edad y la situación familiar, destacando cuestiones como la dificultad para conciliar la vida personal y laboral, la insatisfacción laboral y las largas jornadas laborales. Nuestros hallazgos pueden contribuir a que entidades públicas y tomadores de decisiones formulen políticas específicas con enfoque de género en la construcción. Por ejemplo, se sugiere la inclusión del concepto de "hora-mujer", análogo al de "hora-hombre", en los presupuestos de recursos humanos en la construcción, lo que facilitaría una mayor equidad en la planificación de la fuerza laboral.

**Palabras clave:** Mujeres; Industria de la construcción; Desafíos; Chile.

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# 1. Introduction

Construction, a predominantly male industry, is often cited as an unconventional profession for women (Zhang et al., 2021); (Chun et al., 2009). Despite advancements in women's access to non-traditional professions, certain occupations and industries, such as construction, continue to exhibit marked gender segregation (Lekchiri and Kamm, 2020). The low participation of women in the construction industry is a global phenomenon. In Australia, women represent 18.5% of the construction workforce, one of the highest percentages recorded in the sector (Oficina Australiana de Estadísticas, 2022). In the United Kingdom and Sweden, female representation in construction stands at 15.8% and 11,3% respectively (UK Office for National Statistics, 2023); (Oficina de Estadística de Suecia, 2023). Conversely, the United States and Malta show lower percentages, with 9.8% and 4.5% female representation, respectively, indicating a greater gender disparity (US Bureau of Labor Statistics 2023). However, in Latin America, the figures are even more discouraging; in Argentina, the figure reaches only 5% participation, while in Peru it does not exceed 4% (Gobierno de Argentina,2023); (MTPE, 2024).

Women seeking professional development in the sector face a series of barriers that impact their hiring, retention, and advancement (Heydari et al., 2024); (Ghanbaripour et al., 2023). Throughout their careers, they often must contend with adverse working conditions, such as gender discrimination, lack of recognition, and sexist attitudes, which place them at a disadvantage compared to their male colleagues (Aydin and Erbil, 2022); (Barreto et al., 2017); (Lekchiri and Kamm, 2020). Research has reported that one of the main challenges faced in the industry is balancing work and personal responsibilities, a problem exacerbated by long working hours and limited flexibility in the sector (Tijani et al., 2022); (Heydari et al., 2024); (Tunji-Olayeni et al., 2018). Additionally, the lack of opportunities for advancement to leadership roles and social segregation significantly limits women's professional progress in construction (Afolabi et al., 2019). These obstacles restrict their access to managerial positions, perpetuating a culture of exclusion that reinforces gender stereotypes. The limited visibility of women in leadership roles, coupled with the lack of support networks, creates an environment that discourages career advancement (Lekchiri and Kamm, 2020). This lack of female role models in key positions makes it even more challenging for women to envision a long-term future within the sector (Gaines, 2017). Furthermore, documented instances of harassment and hostility in the workplace (Norberg and Johansson, 2021); (Çinar, 2020) not only affect their psychological well-being and job satisfaction (Lekchiri and Kamm, 2020) but also reinforce the perception that the construction industry remains a hostile space for them (Morello et al., 2018). As a result, many women choose to leave the sector.

In the Chilean context, the construction industry employs approximately 744,000 people, representing about 8.2% of the total workforce (Informe MACh 66). However, compared to other industries, the percentage of female participation in the sector remains low, reaching only 8.36% (INE,2023). Given this context, Chile has developed and implemented programs and competitions aimed at promoting women's participation in the sector, driven by organizations such as the Chilean Chamber of Construction (CChC), the Ministry of Women and Gender Equity, and the Ronda Chile Foundation. One such initiative is the "Mujer Construye" Award implemented by the CChC, which seeks to promote and encourage women's participation in the sector. Despite advancements in training and networking opportunities for women in construction, the scarcity of research in Chile regarding these challenges limits understanding of the barriers they face, as discussed by (Araya, 2021). Therefore, there is a need to identify the reasons behind the low female participation in the industry and promote greater diversity in the sector. A thorough analysis of the situation in Chilean construction is necessary, given the limited entry and retention of female professionals in the sector. Thus, the objective of this study is to conduct a quantitative analysis of the challenges women face in remaining in the industry, assessing both the frequency and severity of the obstacles previously identified in the literature and aiming to quantify how frequent and severe these challenges are for women in construction.

# 2. Literature review

Despite advances in the inclusion of women in traditionally male-dominated professions, the construction industry continues to exhibit a pronounced gender segregation, significantly limiting female participation. Therefore, it is essential to explore the challenges and barriers women face in this field. This literature review aims to analyze and synthesize existing findings regarding the difficulties that hinder women's retention in construction.

As concerns over low female representation have grown in recent years, various studies have focused on exploring the obstacles and challenges experienced by women in the construction industry (Heydari et al., 2024); (Lekchiri and Kamm, 2020); (Yan et al., 2024); (Zhang et al., 2021). One of the most significant challenges is achieving a balance between personal and professional life, especially in the construction industry, where


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this aspect impacts both job satisfaction and the overall well-being of professionals (Cao et al., 2020); (Ghanbaripour et al., 2023); (Oo et al., 2022). An analysis by (Tijani and colleagues, 2022) emphasizes the importance of this balance, not only for employees' mental health but also for fostering diversity, equity, and inclusion in the sector. Studies have identified that conflicts between work and family manifest in two dimensions: work interference with family life and vice versa, negatively affecting organizational commitment and job satisfaction (Cao et al., 2020). This challenge particularly affects women, who face greater difficulties in reconciling their family and work responsibilities (Lekchiri and Kamm, 2020). More than 50% of female workers surveyed in the United States indicated that this reconciliation is one of the most significant issues affecting their quality of life and professional development (Lekchiri and Kamm, 2020); (Cao et al., 2020). The work environment in construction, characterized by long hours and high-stress levels, exacerbates this issue, leading to burnout and making it difficult to maintain a healthy balance (Morello et al., 2018); (Ghanbaripour et al., 2023).

Predominantly male organizational cultures and inflexible work practices have led women to perceive a disadvantage compared to their male colleagues (Yan et al., 2024); (Morello et al., 2018). This context generates the feeling that they must work harder to earn respect in their workplaces, facing additional pressures that their male counterparts do not necessarily experience (Oo et al., 2022); (English and Hay, 2015). While direct discrimination may not always be evident, many women experience gender discrimination when being evaluated and assessed in their work performance, which affects the recognition of their contributions (Naoum et al., 2020).

The scarcity of role models is another significant challenge faced by women in the construction industry, largely due to the limited representation of women in leadership roles (Afolabi et al., 2019); (Gaines, 2017). This situation not only diminishes mentoring and guidance opportunities for those entering the sector but also contributes to an unwelcoming environment (Zhang et al., 2021); (Yan et al., 2024). Participants in various studies have emphasized the importance of establishing support networks that include mentorship from women in advanced positions, which would facilitate their professional development (Lekchiri & Kamm, 2020; Yan et al., 2024).

Harassment and benevolent sexism emerge as another entrenched barrier in the construction industry, reinforcing the perception that construction is a predominantly male field (Regis et al., 2019); (Yan et al., 2024); (Norberg and Johansson, 2021). Furthermore, workplace culture, influenced by various manifestations of masculinity, plays a crucial role in excluding female professionals, manifesting through verbal and sexual harassment (Çinar, 2020); (George and Loosemore, 2019). According to (Barreto et al., 2017), it is crucial to challenge and transform deeply rooted conceptions about gender and the nature of work in construction to achieve the retention of women in this industry.



The literature analysis has revealed a variety of factors that can affect the experiences and perceptions of the challenges faced by women in the professional construction sphere. One of the most significant factors is gender, which can hinder the professional advancement and leadership capacity of women (Tunji-Olayeni et al., 2018). According to (Opoku and Williams, 2018), perceptions may differ based on age, suggesting that younger individuals might experience the industry differently, influenced by changes in social and cultural attitudes. Another important aspect is marital status and motherhood, as noted by (Morello et al., 2018) and (Rosa et al., 2017), who highlight concerns related to the high demands and pressures typically faced by women aspiring to start a family.

Presenting one or more of these obstacles negatively impacts job satisfaction for women in the construction sector (Gurjao, 2011); (Lekchiri and Kamm, 2020), generating a sense of discouragement that can lead to disinterest in the industry. Despite the advances in the inclusion of women in construction and initiatives in Chile to promote their participation, there is currently limited research in Chile that quantitatively explores the frequency and severity of these obstacles (Araya, 2021), as well as their relationship with factors such as gender, age, marital status, and motherhood. This lack of studies limits our understanding of the barriers affecting women's retention and professional development in the Chilean construction industry.

## 3. Methodology

This section details the procedures and methodological approaches used to carry out the research. (Figure 1) illustrates the stages of the methodological process, from data collection to results analysis. The techniques used will be described in detail, including the survey design and the methods applied for data collection.

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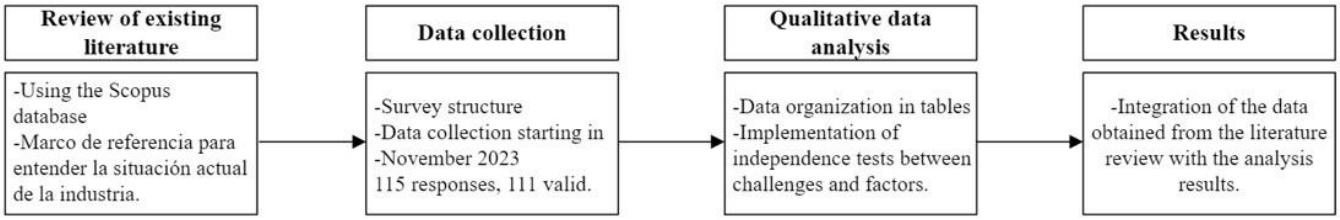


**Figure 1.** Summary of the methodology used.

To begin, a literature review was conducted in the Scopus database, searching for documents that addressed the challenges and difficulties faced by women in their professional careers within the construction industry. The search included keywords such as “construction industry”, “women”, and “challenges”. Inclusion criteria considered only scientific articles in English, published from 2015 onward, and related to the field of engineering. Documents that did not meet these criteria or were not available for free public access were excluded. Subsequently, articles that were not relevant to the study's objectives were discarded. Through this review, seven of the most recurrent challenges faced by women in the retention stage within the construction industry were identified and selected based on findings from 23 studies, which served as the basis for formulating the questionnaire in the next stage of the research.

## 4. Survey design

The questionnaire designed for this research was structured into three main phases. The first part aims to generate a characterization of the respondents, including factors such as gender, profession, and years of experience, among others. In the second phase, respondents are asked to assess the frequency of occurrence of certain challenges previously identified from the literature review, which are presented in a table. In the third phase, respondents are asked to rate the severity of those same challenges. Both assessments are conducted using a 5-point Likert scale, allowing for the collection of quantitative data suitable for statistical analysis. To measure the frequency of occurrence, a scale ranging from "always" to "never" is used (Osinski and Bruno, 1998), while severity is rated on a scale from "very high" to "very low" (Quintero and ICS, 2005); (Arrivillaga et al., 2003). This methodology ensures a consistent measurement of each of the challenges studied.

## 5. Data collection

For data collection, a research design using a survey was adopted to obtain a detailed overview of the general characteristics of the study population. The sampling method employed was purposive sampling, focusing on male and female professionals in the construction industry, both currently working and those who had worked in the industry.

This approach allowed for the strategic selection of respondents who met the established criteria for the study. The questionnaire underwent a preliminary review with five respondents, who evaluated the clarity of the questions and the spelling accuracy. This internal review allowed for the identification and correction of potential errors before data collection and was part of the final validation process of the survey design.

Data collection took place between November 2023 and February 2024, yielding a total of 115 responses, of which 111 were valid for analysis. Four respondents did not accept the informed consent, so they were excluded from the study. To ensure the representativeness of the sample, the (Formula 1) proposed by (Gallego, 2004) was used to calculate the minimum required number of responses, considering a confidence level of 90%, it was assumed a standard deviation (s) of 0.5, which is a conservative value for the estimation to be adopted, and a margin of error (ME) of 10% (See (Equation 1)). Where the Z value is 1.645 which is associated with a 90% confidence level, s is 0.5, and ME is 0.1. According to this calculation, at least 68 valid responses were needed, a threshold that was exceeded by the collected sample.

$$Number\ of\ observations = \frac{(Z)^2 \cdot s \cdot (1-s)}{ME^2} \quad (1)$$



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The questionnaire was distributed online, allowing for coverage across various geographical locations in the country. The survey was disseminated via email to various companies in the industry, as well as through social media platforms. (Table 1) presents descriptive statistics of the sample, detailing the profile of respondents based on variables such as gender, marital status, number of children, and years of experience.

**Table 1.** Characteristics of respondents.

| Surveyed Profile | Absolute Frequency | Relative Frequency |
|---|---|---|
| **Gender** | | |
| Female | 45 | 40,5% |
| Male | 65 | 58,6% |
| Other | 1 | 0,9 % |
| **Number of children** | | |
| 0 | 39 | 35% |
| 1 | 23 | 21% |
| 2 | 30 | 27% |
| 3 | 19 | 17% |
| **Marital Status** | | |
| Married | 48 | 43% |
| Divorced | 9 | 8% |
| Single | 54 | 49% |
| **Age (years)** | | |
| [20 to 30] | 15 | 13,5% |
| [31 to 40] | 46 | 41,5% |
| [41 to 50] | 38 | 34,2% |
| [51 to 60] | 9 | 8,1% |
| [61 to 70] | 3 | 2,7% |
| Average | 37 | - |
| **Experience (years)** | | |
| [0 to 15] | 73 | 65% |
| [16 to 30] | 33 | 30% |
| [31 to 45] | 5 | 5% |
| Average | 12 | - |



## 6. Quantitative analysis

The quantitative analysis is based on the information collected through the survey, which provided data on the frequency with which respondents rated the occurrence and severity of the challenges presented, using a 5-point Likert scale for each measurement. The results of this classification are detailed in (Table 2), which was created by grouping frequencies according to the scale used in each case. To facilitate data visualization, abbreviations were used for the levels of each scale: for the frequency of occurrence, the following designations were applied: A (Always), AA (Almost Always), O (Occasionally), AN (Almost Never), and N (Never). Similarly, for severity, the abbreviations are: VH (Very High), H (High), M (Moderate), L (Low), and VL (Very Low).

To assess the presence of statistical associations between the challenges and the factors analyzed, chi-square independence tests were conducted. The seven challenges considered in this study include work-life balance, working hours, gender discrimination, the wage gap, job satisfaction, the lack of role models, and harassment. The five factors evaluated are gender, age, years of experience, marital status, and number of children.

For the chi-square independence test, positive and null values were defined on the Likert measurement scale. In the case of the frequency of occurrence, the positive values include "always," "almost always," "occasionally," and "almost never," while the null value corresponds to "never." For severity, the positive values are "very high," "high," and "moderate," while the null values are "low" and "very low." Following the approach proposed by (McHugh, 2013), the marginal values of the columns and rows were calculated, followed by the expected values for each challenge, assuming they were not influenced by the factors analyzed.

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Based on the results obtained, the chi-square value was calculated using (Formula 2) (Fernández and Díaz, 2004) for each challenge, as well as the corresponding p-value, which measures the level of independence for the five factors mentioned. For there to be statistical dependence or association between the variables analyzed, the p-value must be less than 0.05 ($p < 0.05$); otherwise, no statistical relationship is considered to exist (McHugh, 2013); (Mendivelso and Rodríguez, 2018); (Fernández and Díaz, 2004).

*Likert scale; Frequency of occurrence: Y: always/A: almost always/O: occasionally/CN: almost never/N: never (Osinski and Bruno, 1998); Severity: MA: very high/A: high/R: regular/B: low/MB: very low (Quintero and ICS, 2005).

$$X^2 = \sum_{i=1}^{r}\sum_{j=1}^{k}\frac{(O_{ij} - E_{ij})^2}{E_{ij}} \quad (2)$$

Where $Oij$ denotes the observed frequencies. It is the number of observed cases classified in row i of column j. $Eij$ denotes the expected or theoretical frequencies. It is the number of cases corresponding to each row and column. It can be defined as the frequency that would be observed if both variables were independent.

## 7. Limitations

First, the limitations of this study include the sample size, which was n=111. Although this number may be considered small, it is important to highlight that other studies in construction engineering and management have used comparable sample sizes; for example, (Oo et al., 2020) with n=29 and (Naoum et al., 2020) with n=107. Secondly, another limitation lies in the geographical focus of the study, which is restricted to the construction industry in Chile. This may affect the generalizability of the results to other regions.

## 8. Results

Concerning the respondents' characteristics, the results indicate that 58.6% of the respondents identified as male, 40.5% as female, and 0.9% as another gender. Regarding marital status, the highest frequency corresponds to single individuals, representing 49% of the sample. In terms of the number of children, a range of 0 to 3 was observed, with no children being the most common, at 35%. The average age of participants was 37 years, with the most frequent age range being 31 to 40 years, representing 41.4%. Additionally, the average experience in the industry was 12 years.

With respect to the challenges, the ones with the highest frequency of occurrence were the wage gap, job satisfaction, and work-life balance (see (Table 2)). For severity measurement, the challenges with the highest frequency were work-life balance, working hours, and the wage gap (see (Table 2)).

**Table 2.** Measurement of frequency of occurrence and severity (Likert).

| Challenges | Frecuency of occurrence* | | | | | Severity* | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | A | AA | O | R | N | MA | B | R | G | VG |
| Personal and work-life balance | 18 | 35 | 29 | 22 | 7 | 20 | 29 | 37 | 16 | 9 |
| Working hours | 16 | 32 | 34 | 20 | 9 | 19 | 31 | 35 | 14 | 15 |
| Gender discrimination | 8 | 21 | 28 | 31 | 23 | 10 | 24 | 24 | 21 | 31 |
| Workplace harassment | 5 | 17 | 24 | 29 | 36 | 8 | 17 | 23 | 29 | 34 |
| Wage gap | 21 | 30 | 24 | 19 | 17 | 16 | 22 | 37 | 16 | 20 |
| Job satisfaction | 20 | 28 | 32 | 20 | 11 | 14 | 28 | 41 | 16 | 12 |
| Lack of role models | 15 | 30 | 26 | 24 | 16 | 15 | 23 | 36 | 17 | 20 |



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Based on the results of the independence tests using (Equation 2), (Table 3) was constructed, presenting the findings related to the association between the studied challenges and the five factors mentioned, both for the frequency of occurrence and severity. (i.e., frequency (severity)). The data indicate that gender is the factor that most influence the challenges, affecting both the frequency and severity of challenges related to work-life balance, working hours, and gender discrimination (see (Table 3)). In the case of the wage gap, gender only has a significant impact on severity.

Regarding age, this factor only affects job satisfaction, impacting both the frequency and severity of this challenge. As for marital status, it was determined that this factor influences only the severity of the lack of role models during professional development in the construction industry. Lastly, the number of children affects the frequency of challenges related to work-life balance and working hours.

**Table 3.** Results of the independence test between (frequency/severity) of challenges and the factors of gender, age, experience, marital status, and number of children.

| Challenges | Gender | Age | Experience | Marital Status | Number of children |
|---|---|---|---|---|---|
| Personal and work-life balance | 0,024*/0,017* | 0,365/0,735 | 0,251/0,463 | 0,642/0,941 | 0,037*/0,918 |
| Working hours | 0,009*/0,011* | 0,151/0,748 | 0,310/0,692 | 0,259/0,874 | 0,038*/0,684 |
| Gender discrimination | 0,011*/0,018* | 0,521/0,324 | 0,852/0,928 | 0,929/0,209 | 0,346/0,914 |
| Workplace harassment | 0,283/0,076 | 0,123/0,810 | 0,380/0,641 | 0,307/0,075 | 0,317/0,728 |
| Wage gap | 0,120/0,020* | 0,379/0,749 | 0,453/0,947 | 0,886/0,539 | 0,094/0,566 |
| Job satisfaction | 0,111/0,295 | 0,011*/0,042* | 0,028*/0,090 | 0,680/0,251 | 0,155/0,940 |
| Lack of role models | 0,413/0,100 | 0,081/0,787 | 0,615/0,893 | 0,671/0,043* | 0,435/1 |

Note: * P < 0,05 (Mendivelso & Rodríguez, 2018)

## 9. Discussion

The results obtained indicate that gender significantly influences work-life balance and the length of working hours in the construction industry in Chile, similar to what is discussed in the literature by (Lekchiri and Kamm, 2020). Specifically, our findings reveal that being a woman in construction is associated with both a higher frequency of work-life balance difficulties and greater severity of these difficulties compared to male colleagues (Cao et al., 2020); (Ghanbaripour et al., 2023). Additionally, it is interesting to note that having children increases the frequency with which long working hours are perceived as a challenge. This observation aligns with the analysis by (Tunji-Olayeni et al., 2018), who argue that women face greater difficulties in managing daily tasks related to child-rearing while simultaneously seeking to advance their professional development in the construction sector. This situation may reflect the inherent tensions of motherhood and the need for effective reconciliation between family and work responsibilities (Cao et al., 2020).

A key finding of this study is that being a woman in the Chilean construction industry is associated with a higher likelihood of experiencing gender discrimination, and this discrimination tends to be more severe. This situation may be due to the prevailing perception that construction is a male-dominated field, which leads women to work harder to gain the same recognition as their male colleagues (English and Hay, 2015). Additionally, although it was initially thought that the analyzed factors might significantly influence challenges related to the work environment, the results did not show such an effect. This lack of relationship could be explained by recent advancements in the industry, including government and organizational programs aimed at promoting gender equity in construction in Chile.


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Another important point revealed by this study is the relationship between women's job satisfaction in the construction industry and factors such as age and years of experience. The results show that being under 40 is associated with both a higher frequency of job dissatisfaction and greater severity. Moreover, having 12 or fewer years of experience in the sector also influences the frequency with which dissatisfaction is reported. This could be related to what is described in the literature, which suggests that women in the construction industry tend to be underestimated compared to their male colleagues. As a result, they are often assigned administrative or office roles, positions that offer fewer opportunities for professional development and recognition compared to operational or leadership roles in the construction field (Afolabi et al., 2019). This situation is particularly noticeable among younger women or those with less experience, who, due to their age and shorter time in the industry, may face additional barriers to advancing into more challenging or visible positions. These limitations can generate frustration and, consequently, lower job satisfaction, as they are not allowed to fully realize their potential or aspire to higher-responsibility roles.

Ultimately, it is important to emphasize that our study reveals the need to continue analyzing the construction industry from a gender perspective to understand the challenges women face in the industry in Chile. Our findings indicate a statistical association between the identified challenges and gender. Therefore, it is essential to adopt measures that integrate a gender perspective into construction project management. For example, we propose the use of the "woman-hour" concept as an equivalent tool to the "man-hour" concept to measure human resources estimations in construction budgets. This simple measure could contribute to a more accurate estimation of the time spent by women workers during a construction project.

## 10. Conclusions

This research conducted a quantitative analysis of the challenges faced by professional women during their tenure in the construction industry in Chile. A survey was administered to 111 professionals who have worked or are currently working in the sector, aiming to measure both the frequency and severity of the challenges they encounter. The study revealed that gender significantly influences critical aspects such as work-life balance, the length of working hours, and gender discrimination. The findings of this study show that women not only experience a higher frequency of work-life balance difficulties but also face these challenges with greater severity compared to their male colleagues. Additionally, factors such as motherhood and family circumstances were found to exacerbate these tensions, reflecting the complexity of reconciling work and family responsibilities.

The research also reveals that being a woman in this sector is associated with a higher likelihood of experiencing discrimination and harassment, which can be attributed to the perception that construction is a male-dominated field. Despite recent advancements in the industry, the results indicate that these difficulties persist, highlighting the need for more effective policies to promote gender equity. Furthermore, the study found that women's job satisfaction is linked to factors such as age and experience, with younger women or those with fewer than 12 years in the sector tend to experience higher levels of dissatisfaction. This pattern suggests that structural barriers and limited job assignments, often related to administrative or office roles, constrain the professional development of these workers.

From a theoretical perspective, this study contributes to the existing literature on the challenges women face in a traditionally male-dominated sector such as the construction industry. By providing empirical data specific to the Chilean context, this research facilitates our understanding of how individual characteristics and working conditions interact to influence the experience of professionals in this field. From a practical perspective, it is suggested that one way to address the identified challenges would be the implementation of training programs tailored to the needs of diverse groups. Companies could develop specific initiatives, for example, targeted at young women or those with family responsibilities.

Finally, to enrich the understanding of women's situation in the Chilean construction industry, future studies could explore the challenges they face at different stages of their professional development, thereby offering a more comprehensive view of the national reality in this sector.



## 11. Acknowledgements

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## 12. Declaration of AI-Assisted Tools in Manuscript Preparation

In this study, the chatbot "ChatGPT 4.0" was utilized to enhance technical elements such as spelling, grammar, syntax, and writing style, as well as to assist with some translation tasks. It is crucial to emphasize that the tool was used exclusively for these technical improvements and had no impact on the content, analysis, interpretation of data, or conclusions. All ideas, arguments, and findings presented are the sole work of the authors.

## 13. Notes on Contributors


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