Obstacles Facing Women Working in The Jordanian Construction Industry: Women's Perspective

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ABSTRACT

This study aimed to examine the societal, managerial, and economic barriers that prevent women from working in Jordanian construction. In addition, the purpose of this study was to evaluate, from a woman's perspective, how the factors of scientific qualifications, marital status, number of weekly working days, and family health insurance connect to the low rate of women's participation in construction. A questionnaire was devised to determine which impediments were the most significant. There were 22 minor hurdles. 160 questionnaires were intentionally dispersed, resulting in 157 valid copies for statistical analysis. The significant socio-cultural barriers are conventions and traditions, organizational barriers are difficult working circumstances, and economic barriers are the high cost of living. This study suggested establishing policies and legislation that address women's challenges to promote social awareness, alter stereotypes, and increase the number of women in the construction business.

KEYWORDS: Jordan, Construction Industry, Sociocultural Obstacles, Managerial Obstacles, Economic Obstacles.

1. INTRODUCTION

1.1 Research Background and Problem Statement

Involvement in the economy is essential to promoting equality of opportunity and increasing women's capabilities. Since women's exercise of their fundamental role in all economic, social, and political aspects will play a critical role in bolstering their participation in society, women's economic participation has become a severe issue in the Jordanian labor market. Women's economic participation leads to economic empowerment and skill development (Jordan, 2020). The topic of women's empowerment in the building business has a close relationship with human growth. In Jordan, women play a vital role and are an integral part of society. In Jordan, more than half of the population consists of women. According to Jordan's Department of Statistics, women comprise more than half of the population. Men and women must create a balance between their professional and domestic obligations, as women continue to do the majority of these chores. This is because female and male human resources are equally valued (Koburtay, Syed, & Haloub, 2020).

The Jordanian labor market includes numerous industries in which women are employed, including construction. The construction business is one of Jordan's most rapidly expanding industries, contributing almost 10% to the country's gross domestic product (Al-Abbadi & Agyekum-Mensah, 2022). This industry, like many others, faces numerous

issues. One of the most significant issues is the perception of this business, which discourages both men and women from working (Hausmann et al., 2019). The necessity for physical strength, the associated working conditions, inclement weather, and the low verbal level of certain construction employees are all obstacles facing this business (Deeb, Tvedt, & Yelgezekova, 2020).

Women in the construction business confront significant barriers, such as choosing between a job and family. Women who choose to remain at home will have less professional experience, but their family life will not be negatively affected. Moore (2006) asserts that working women struggle to balance their personal and professional objectives. According to Golesorkhi (2020), most working women have more problems between work and family responsibilities than males, which negatively impacts their relationships. Similarly, Razzaz and Selwaness (2022) noted a contradiction between work and family, as it is impossible for women with career aspirations to meet the demands of work and family concurrently.

In addition, women in the construction business are required to work long hours, which prohibits them from fulfilling some of their obligations, engaging in other activities, and enjoying their lives (Amaratunga et al., 2006). Construction projects require a large number of technical professionals, and the presence of women in construction is still limited due to the nature of the work and the surrounding conditions (Razzaz & Selwaness, 2022).

Traditionally, construction is viewed as a male-dominated business, and women who work in construction have various options, including quitting their jobs and pursuing non-construction careers or dealing primarily with construction workers. They also have the choice of lowering their aspirations and accepting secondary employment. Some males underestimate the significance of women's contributions to male-dominated higher-level employment (Dainty, Neale, & Bagilhole, 2000).

Due to the significance of the construction industry in increasing national income, eliminating unemployment, and alleviating poverty, Jordan has placed a specific emphasis on women working in this area. As a result, it was determined that women face several difficulties in the construction industry, decreasing their participation. This research effectively identifies the various societal, managerial, and economic barriers women encounter in the Jordanian construction business.

1.2 Research Rationale and Justification

Numerous studies (Afolabi, Akinbo, & Akinola, 2019; Rosa et al., 2017) discuss the barriers women face in the Western construction business. Nonetheless, at the level of the Arab world as a whole and Jordan in particular, this type of research is quite restricted. Consequently, research is needed to shed light on women's societal, managerial, and economic challenges in Jordan's construction business.

Observations of workers in the Jordanian construction industry revealed that most construction workers are male, resulting in a low female participation rate. The researchers also observed that women are not welcome in the construction industry. Considered a significant factor in their low participation rate and reluctance to work in this profession, working women encounter numerous difficulties. Therefore, it is essential to study these barriers to comprehend why Jordan has such a low female participation rate in the construction business. Consequently, the purpose of this study is to identify these impediments.

1.3 Research Significance

As one of the few studies that focused on evaluating the challenges women experience in Jordan's construction industry, it complemented the roles of prior research. This study is a foundation for future research since women represent not just half of society. Still, the worth of women and the activation of their role in production as one of the essential parts of production are indicators of human civilization and growth.

In addition, this study highlights the most significant challenges facing women in Jordan's construction industry, which hinder their involvement. The study promotes gender diversity, expanding opportunities for equality and enhancing women's understanding of the importance of their participation in Jordan's construction industry. In addition, the findings of this study will assist decision-makers in identifying the most significant barriers to women's involvement in Jordan's construction industry.

1.4 Research Objectives

This study intends to:

- **RO1:** Identify the most significant socio-cultural obstacles women in Jordan's construction industry face.
- **RO2:** Identifying the most significant managerial obstacles women in Jordan's construction industry face.
- **RO3:** Identifying the most significant economic obstacles women in Jordan's construction industry face.
- **RO4:** Investigate the effect of the scientific qualification, marital status, number of working days per week, and health insurance of family variables on women's engagement in the Jordanian construction industry.

2. LITERATURE REVIEW

2.1 Feminist Theory

Over the years, women have encountered numerous difficulties in their professional and personal lives, and males have frequently viewed them with disdain. Most Arab and Asian nations are believed to be male-dominated, which negatively impacts women's survival worldwide. According to feminist theory, disparities between the sexes have had a negative effect on the overall performance of the associated persons (Humm, 2022). In this aspect, gender oppression is highlighted not just concerning women but also about men. However, most previous research (Zerbe Enns, Díaz, & Bryant-Davis, 2021) emphasized the equal rights of men and women by highlighting feminist theory in the context of women's daily life. This study focuses on the challenges women experience in the construction sector due to gender inequality and other associated issues.

2.2 Obstacles Faced by Women

Lekchiri and Kamm (2020) analyzed the most significant barriers women experience in the construction industry. According to this study, professional expertise, culture and work environment, family responsibilities, male-dominated training courses, and employment practices are all significant factors. This study also addressed the potential challenges women have in joining and maintaining employment in the construction industry due to these barriers.

In light of these impediments, it is felt that decreasing or eliminating the majority of these obstacles is a crucial step in attracting and maintaining more women in the construction business.

Aulin and Jingmond (2011) discuss women's obstacles in the construction business. It addressed the barriers that prohibit women from entering this industry in the 27 member states of the European Union. According to this survey, women are considered the incorrect gender for this employment since it requires physical strength and manual dexterity. Less than 10% of women are employed in this industry, with even fewer in crafts and trade. This study concluded that women's technical talents do not need to be demonstrated; instead, an identity must be created for them to match the needs of the job and conform to appropriate professional behavior.

Rosa et al. (2017) seek to research the barriers to and drivers of success for women's career advancement in the Australian construction industry and propose solutions for closing the gender gap. Stress, juggling family and work duties, and negative opinions of women in the construction business were identified as the top three concerns. The top three success traits for women in construction were dedication, tenacity, and autonomy. According to this survey, construction industry employers should offer their female employees flexible scheduling alternatives and opportunities for personal growth.

Afolabi et al. (2019) demonstrated that female workers must overcome barriers to access possible positive outcomes. This study indicates that an effective mentorship program for women encounters internal and external challenges. Some internal impediments include individual characteristics of women, inadequate representation of female mentors, improper goal-setting processes, low motivation, and an imbalance between work and family. External impediments include a lack of mentoring training, peer pressure, negative perception, a negative image of the construction industry/hostile working conditions, a heavy workload/stress, and a terrible mentoring experience. If the hurdles to women's mentoring programs are not successfully removed, mentoring experiences will be negative. According to the study, mentoring training/workshops for mentors and mentees are essential for the success of women's mentoring programs. Consequently, they would be better able to explain themselves, set goals, retain professionalism, and provide and receive feedback.

Frazier (2021) studied the literature about the construction industry's inability to benefit from a sufficient number of women in field positions. To encourage more women to enter and remain in the construction industry, this essay aims to raise awareness of their obstacles. On commercial building projects, interviews were conducted with female field workers. This paper addresses the following three major topics: A male-dominated business culture, women's talent perceptions, and harmful working circumstances

Given the most significant past research that has discussed the challenges, women encounter in the construction sector. This study differs from past research in that it is the first Jordanian study on the subject, as the researchers were unaware of any other studies examining women's challenges in the construction business.

This study completely differs from previous research in that it addresses challenges in all three sectors (socio-cultural, managerial, and economic). It varies from previous research that managed only a portion of these domains.

3. HYPOTHESES DEVELOPMENT

The current study investigates the following hypotheses**:**

3.1 First Hypothesis

H_{01-1}: There are no statistically significant differences ($\alpha = 0.05$) between the average responses of the study sample in the degree of "socio-cultural obstacles" that weaken women's participation in construction projects in Karak Governorate/ Jordan due to the scientific qualification variable (postgraduate / bachelor / intermediate diploma).
H_{01-2}: There are no statistically significant differences ($\alpha = 0.05$) between the average responses of the study sample in the degree of "Managerial obstacles" that weaken women's participation in construction projects in Karak Governorate/ Jordan due to the scientific qualification variable (postgraduate / bachelor / intermediate diploma).
H_{01-3}: There are no statistically significant differences ($\alpha = 0.05$) between the average responses of the study sample in the degree of "Economic Obstacles" that weaken women's participation in construction projects in Karak Governorate/ Jordan due to the scientific qualification variable (postgraduate / bachelor / intermediate diploma).

3.2 Second Hypothesis

H_{02-1}: There are no statistically significant differences ($\alpha = 0.05$) between the average responses of the study sample in the degree of "Socio-cultural Obstacles" that weaken women's participation in construction projects in Karak Governorate/ Jordan due to marital status variable (married/unmarried).
H_{02-2}: There are no statistically significant differences ($\alpha = 0.05$) between the average responses of the study sample in the degree of "Economic Obstacles" that weaken women's participation in construction projects in Karak Governorate/ Jordan due to marital status variable (married/unmarried).
H_{02-3}: There are no statistically significant differences ($\alpha = 0.05$) between the average responses of the study sample in the degree of "Economic Obstacles" that weaken women's participation in construction projects in Karak Governorate/ Jordan due to marital status variable (married/unmarried).

3.3 Third Hypothesis

H_{03-1}: There are no statistically significant differences ($\alpha = 0.05$) between the average responses of the study sample in the degree of "Socio-cultural Obstacles" that weaken women's participation in construction projects in Karak Governorate/ Jordan due to the number of working days per week variable (48 hours or more / (40-47) hours / 39 hours or less).
H_{03-2}: There are no statistically significant differences ($\alpha = 0.05$) between the average responses of the study sample in the degree of "Managerial Obstacles" that weaken women's participation in construction projects in Karak Governorate/ Jordan due to the number of working days per week variable (48 hours or more / (40-47) hours / 39 hours or less).
H_{03-3}: There are no statistically significant differences ($\alpha = 0.05$) between the average responses of the study sample in the degree of "Economic Obstacles" that weaken women's participation in construction projects in Karak Governorate/ Jordan due to the number of working days per week variable (48 hours or more / (40-47) hours / 39 hours or less).

3.4 Fourth Hypothesis

H_{04-1}: There are no statistically significant differences ($\alpha = 0.05$) between the average responses of the study sample in the degree of "Socio-cultural Obstacles" that weaken women's participation in construction projects in Karak Governorate/ Jordan due to health insurance for the entire family variable (yes/no).

H_{04-2}: There are no statistically significant differences ($\alpha = 0.05$) between the average responses of the study sample in the degree of "Managerial Obstacles" that weaken women's participation in construction projects in Karak Governorate/ Jordan due to health insurance for the entire family variable (yes/no).
H_{04-3}: There are no statistically significant differences ($\alpha = 0.05$) between the average responses of the study sample in the degree of "Economic Obstacles" that weaken women's participation in construction projects in Karak Governorate/ Jordan due to health insurance for the entire family variable (yes/no).

4. RESEARCH METHOD

4.1 Study Approach

A study's methodology is essential because it significantly influences achieving its stated aims. Thus, the study methodology is chosen based on the established objectives. Following the purposes of the present study, a descriptive-analytic approach to the sample was used. This quantitative study adhered to the positivist research theory.

4.2 Study Tool

In Jordan's Karak Governorate, a questionnaire was developed to evaluate women's most significant difficulties in the construction business. It was presented to a number of statistics and women's studies experts, and their feedback regarding the questionnaire's specific questions was considered.

4.3 Study Population

The study population consisted of women employed in the construction sector in Karak Governorate, Jordan, where the researchers conducted field visits and telephone interviews with governmental and private construction industry agencies. Approximately 250 women were discovered to be employed in this industry.

4.4 The Study Sample

The study sample comprised 157 female construction sector workers. Referring to the statistical formulae that determined the study sample size of 152 persons, this amount is deemed adequate. This sample was distributed to women employed in the construction industry in Karak Governorate, Jordan. It included government agencies such as the Ministry of Local Administration, Greater Karak Municipality, the Ministry of Public Works and Housing, and the Karak Occupancy Directorate, as well as private sectors, including the Jordanian Engineers Association and private contracting companies.

4.5 Data Analysis

Statistical analysis was performed for this investigation. Descriptive statistics reliability analysis was performed for this aim, and the ANOVA test, Leven test, and Robust test t-test were employed to assess the hypotheses made for this study.

5. RESULTS

160 copies of the study instrument were delivered to a random member of the study population, and they were all repaired. Three recovered documents were invalid for statistical analysis and were omitted. Therefore the number of valid copies equals 157 of the sample size for the study.

5.1 Validity of the Study

160 copies of the study instrument were sent to a random member of the study population, and all were repaired. Three recovered copies were deemed ineligible for statistical analysis and omitted. Therefore the number of valid copies equals 157 of the study's sample size.

5.2 Reliability of the Study

By definition, reliability is consistency (Huck, 2012). Due to its adaptability to continuous variables, Cronbach's alpha was utilized to determine the instrument's internal consistency dependability (Huck, 2012). As demonstrated in Table 1, the coefficient alpha cutoffs of 0.70 were reached and exceeded by all three scales utilized in this investigation.

Table 1. Test for Reliability

Items	Variable	No. of Items	Cronbach's Alpha
Q1 – Q8	Sociocultural Obstacles (OBS_1)	8	0.701
Q9- Q17	Managerial Obstacles (OBS_2)	9	0.707
Q18- Q22	Economic Obstacles (OBS_3)	5	0.838

5.3 Descriptive Statistics

Table 2. Descriptive Statistics of the items of the study tool

No.	Variable	Mean	SD	RII	Rank	Agreement
	Sociocultural Obstacles					
Q1	Low societal awareness of women's participation in the construction industry	3.586	1.044	0.448	2	Moderate
Q2	The culture of the conservative society	3.338	1.238	0.417	5	Moderate
Q3	Customs and traditions	3.943	1.134	0.493	1	High
Q4	The prevailing masculine culture in society	3.439	0.908	0.43	3	Moderate
Q5	Difficulty balancing family, work, and social life	3.344	0.875	0.418	4	Moderate
Q6	The physiological structure of women's nature and femininity	2.599	0.98	0.325	8	Moderate
Q7	The concept of intolerance against women	2.847	0.893	0.356	7	Moderate
Q8	Aggressive behaviors of males against women working in the construction industry	3.312	0.946	0.414	6	Moderate
	Managerial Obstacles					
Q9	The general perception that women lack the skills and competencies	2.662	1.107	0.296	9	Moderate
Q10	Fear of women's inability to take responsibility for working in the construction industry	3.166	0.953	0.352	2	Moderate
Q11	Conviction of the capabilities of men by employers in the construction industry	2.688	1.109	0.299	8	Moderate
Q12	The hardship of work conditions	3.962	1.3	0.44	1	High
Q13	Unfair discrimination of training needs between men and women	3.032	1.04	0.337	4	Moderate
Q14	Long working hours in the construction industry	2.79	0.913	0.31	6	Moderate
Q15	The nature of the construction industry work	3.013	1.044	0.335	5	Moderate
Q16	Lack of estimation for the capabilities of women working in the construction industry	3.166	1.055	0.352	2	Moderate
Q17	The isolation of the work sites of some construction projects	2.707	0.803	0.301	7	Moderate
	Economic Obstacles					
Q18	The absence of development and economical plans that enhance the role of women working in the construction industry	3	1.038	0.6	2	Moderate
Q19	The high cost of living	3.159	1.053	0.632	1	Moderate
Q20	The weakness of the Jordanian Labor Law legislation related to women's work	2.535	1.101	0.507	4	Moderate
Q21	The weakness of the Jordanian Social Security Law legislation related to women's work	2.287	1.098	0.457	5	Low
Q22	The effect of the Covid-19 pandemic on the economic life	2.777	0.978	0.555	3	Moderate

Table 2 depicts the arithmetic means, standard deviations, and relative relevance of all factors about the dependent variable hurdles that impede women's participation in building projects. Q3 ranks highest for Sociocultural Obstacles Variable with a high degree of agreement, arithmetic mean of 3.943, and standard deviation of 1.134 (RII=0.493). Q6 ranks last with a moderate degree of agreement, an arithmetic mean of 2.599, and a standard deviation of 0.98 (RII=0.325).

Regarding the Managerial Obstacles Variable, Q12 has a high degree of agreement, an arithmetic average of 3.962, and a standard deviation of 1.300 (RII=0.440), while Q9 has a moderate degree of agreement, an arithmetic average of 2.662, and a standard deviation of 1.107 (RII=0.296).

For Economic Obstacles Variable. Q19 ranks top with a moderate degree of agreement, an arithmetic mean of 3.159, and a standard deviation of 1.053 (RII=0.632), while Q21 ranks last with a low degree of agreement, an arithmetic mean of 2.287, and a standard deviation of 1.098 (RII=0.457).

Table 3. Descriptive Statistics related to the dependent variable

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Sociocultural Obstacles	157	3.1900	0.65052	0.145	0.194	-0.111	0.385
Managerial Obstacles	157	3.1632	0.63528	-0.117	0.194	-0.346	0.385
Economic Obstacles	157	2.8016	0.77162	0.173	0.194	-0.616	0.385
Valid N (listwise)	157						

The socio-cultural obstacles variable has a mean of 3.190 with a standard deviation of 0.65052 and a moderate degree of agreement, the managerial obstacles variable has a mean of 3.1632 with a standard deviation of 0.63528 and a moderate degree of agreement, and the Economic obstacles variable has a mean of 2.8016 with a standard deviation of 0.77164 and a moderate degree of agreement.

We must examine the kurtosis and skewness numbers to determine whether the score distribution is normal. Skewness and kurtosis values between -2 and +2 are deemed adequate for demonstrating normal univariate distribution (George & Mallery, 2010). It is evident from table 3 that the values of the three variables evaluated in the study fall within this range; hence, their distribution is considered normal.

5.4 Hypothesis Testing

5.4.1 First Hypothesis

Table 4a. Levene Test of Homogeneity of Variances for the First Hypothesis

	Levene Statistic	df1	df2	Sig.
Sociocultural Obstacles	0.877	2	154	0.418
Managerial Obstacles	8.621	2	154	0.000
Economic Obstacles	0.176	2	154	0.839

Table 4b. Robust Tests of Equality of Means for the First Hypothesis

		Statistic[a]	df1	df2	Sig.
Sociocultural Obstacles	Brown-Forsythe	2.889	2	112.364	.060
Managerial Obstacles	Brown-Forsythe	2.260	2	83.501	.111
Economic Obstacles	Brown-Forsythe	2.751	2	100.192	.069

a. Asymptotically F distributed.

Table 4c. ANOVA Test for the First Hypothesis

		Sum of Squares	df	Mean Square	F	Sig.
Sociocultural Obstacles	Between Groups	2.311	2	1.155	2.793	0.064
	Within Groups	63.704	154	0.414		
	Total	66.015	156			
Managerial Obstacles	Between Groups	2.173	2	1.086	2.771	0.066
	Within Groups	60.363	154	0.392		
	Total	62.535	156			
Economic Obstacles	Between Groups	5.902	2	2.951	5.225	0.006
	Within Groups	86.980	154	0.565		
	Total	92.882	156			

The results of the Levene test for the first hypothesis, shown in table 4a, indicate that the sig. The value for socio-cultural and economic barriers is more significant than 0.05, indicating that homogeneity of variances among these variables can be assumed—however, sig. The value for administrative hurdles is less than 0.05. To ensure this outcome, the Brown-Forsythe test was done in table 4b. As demonstrated by this test, the sig. Value for all three variables is more significant than 0.05; hence, the homogeneity of variances among these variables is assumed for management difficulties. Table 4c shows an ANOVA test conducted based on this result.

Table 4c illustrates the ANOVA Test for the first hypothesis; it is noticed that Sig. Value is more significant than 0.05 for the "Socio-cultural Obstacles" variable and the "Economic Obstacles" variable, meaning that the researchers accepted **H_{O1-1}** & **H_{O1-2}**. Accordingly, the first null hypothesis is accepted, and the second null hypothesis is accepted. The Sig. value for the "Economic Obstacles" variable is less than 0.05. Henceforth, the null hypothesis **H_{01-3}** is rejected, and the alternative hypothesis is accepted.

Consequently, economic constraints are conceptualized uniformly across all groups of the independent variable (scientific qualifications). According to the Tukey test displayed in table 4d, people with a Diploma degree differ considerably from those with a Bachelor's degree or a higher studies degree. On this basis, it may be inferred that there is no statistically significant difference between individuals with diploma degrees and those with bachelor's and postgraduate degrees in their perception of socio-cultural and managerial difficulties. These results could be explained by the fact that this group's income is lower than that of the other two groups, causing them to take economic hurdles more seriously and that women with higher levels of education are more likely to participate in decision-making and fight the obstacles.

Table 4d. Tukey HSD Test for Economic Obstacles

Scientific Qualification		N	Subset for alpha = 0.05	
			1	2
Tukey B[a]	Bachelor	83	2.6605	
	Higher Studies	34	2.7647	
	Diploma	40		3.1257

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 45.140.

5.4.2 Second Hypothesis

Table 5a. Levene Test of Homogeneity of Variance for the Second Hypothesis

	Levene Statistic	df1	df2	Sig.
Sociocultural Obstacles	0.610	1	155	0.436
Managerial Obstacles	1.851	1	155	0.176
Economic Obstacles	0.985	1	155	0.322

Table 5b. t-test for independent samples for the second hypothesis

		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Sociocultural Obstacles	Equal variances assumed	-0.089	155	0.929	-0.0097	0.10873	-0.2245	0.20506
	Equal variances not assumed	-.090	115.601	0.929	-0.0097	0.10811	-0.224	0.20441
Managerial Obstacles	Equal variances assumed	0.481	155	0.631	0.05091	0.10575	-0.158	0.25980
	Equal variances not assumed	0.469	104.928	0.640	0.05091	0.10866	-0.164	0.26636
Economic Obstacles	Equal variances assumed	1.845	155	0.067	0.23537	0.12758	-0.016	0.48738
	Equal variances not assumed	1.809	107.312	0.073	0.23537	0.13010	-0.022	0.49326

The results of the Levene test illustrated in table 5a demonstrated the Sig. value of all three variables is more significant than 0.05, so equal variances among the variables could be assumed. Based on this result, a t-test for the independent sample was performed, as shown in table 5b, illustrating the Sig. value for all three variables is more significant than 0.05, meaning others failed to reject null hypotheses. Then the second hypothesis is accepted in its null form **$H_{O2\text{-}1}$**, **$H_{02\text{-}2}$**, and **$H_{O2\text{-}3}$**. Based on this result, it is concluded that there is no difference between married and unmarried women in perceiving obstacles to working in the construction industry in Jordan.

5.4.3 Third Hypothesis

Table 6a. Levene Test of Homogeneity of Variance for the third hypothesis

	Levene Statistic	df1	df2	Sig.
Sociocultural Obstacles	0.869	2	154	0.422
Managerial Obstacles	5.560	2	154	0.005
Economic Obstacles	0.794	2	154	0.454

Table 6b. Brown-Forsythe for the Third Hypothesis

	Statistic[a]	df1	df2	Sig.
Sociocultural Obstacles	0.075	2	28.945	0.928
Managerial Obstacles	1.322	2	109.969	0.271
Economic Obstacles	0.173	2	35.331	0.842

Table 6c. ANOVA Test for the Third Hypothesis

		Sum of Squares	df	Mean Square	F	Sig.
Sociocultural Obstacles	Between Groups	0.082	2	0.041	0.095	0.909
	Within Groups	65.933	154	0.428		
	Total	66.015	156			
Managerial Obstacles	Between Groups	0.792	2	0.396	0.987	0.375
	Within Groups	61.744	154	0.401		
	Total	62.535	156			
Economic Obstacles	Between Groups	0.233	2	0.116	0.193	0.824
	Within Groups	92.649	154	0.602		
	Total	92.882	156			

According to the Levene test shown in table 6a, the sig. value for Socio-cultural Obstacles and Economic Obstacles is more significant than 0.05, so homogeneity of variances among these variables could be assumed, but not for Managerial obstacles since sig. is less than 0.05. Brown-Forsythe was performed to ensure this finding, as shown in table 6b, from which the sig. value for Managerial obstacles is 0.271 > 0.05, so the result Levene sig. value is to be neglected, and managerial obstacle meets the homogeneity of variances requirement. The ANOVA Test could be performed precisely, as shown in table 6c. The sig. value for each dimension of the dependent variable in the NOVA test for the third hypothesis shown in table 6c is greater than the 0.05 variable, which means that the researchers failed to reject the null hypotheses **$H_{O3\text{-}1}$**, **H_{03_2}**, and **$H_{O3\text{-}3}$**. Based on this result, it is concluded that there are no differences between different independent variable groups (weekly working hours) in perceiving the obstacles for women working in the construction industry in Jordan.

5.4.4 Fourth Hypothesis

Table 7a. Levene Test of Homogeneity of Variance for the Fourth Hypothesis

	Levene Statistic	df1	df2	Sig.
Sociocultural Obstacles	3.440	1	155	0.066
Managerial Obstacles	6.896	1	155	0.010
Economic Obstacles	0.017	1	155	0.895

Table 7b. t-test for Equality of Means for the Fourth Hypothesis

		T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Sociocultural Obstacles	Equal variances assumed	-2.258	155	0.025	-0.2339	0.10361	-0.4386	-0.0293
	Equal variances not assumed	-2.189	124.17	0.030	-0.2339	0.10685	-0.4454	-0.0225
Managerial Obstacles	Equal variances assumed	-0.808	155	0.420	-0.0826	0.10228	-0.2846	0.1194
	Equal variances not assumed	-0.774	116.96	0.440	-0.0826	0.10669	-0.2939	0.1289
Economic Obstacles	Equal variances assumed	-1.785	155	0.076	-0.2207	0.12364	-0.4649	0.0235
	Equal variances not assumed	-1.782	141.48	0.077	-0.2207	0.12385	-0.4655	0.0241

The results of the Levene test shown in table 7a illustrate the Sig. value for "Socio-cultural Obstacles" variables and "Economic" are more significant than 0.05, so equal variances among these two variables could be assumed. On the other hand, Sig. value for "Managerial Obstacles" equals 0.010, which is less than 0.05, which means that equal variances could not be assumed for this variable and the Sig. value, when equal variances are not assumed, should be considered in the t-test for independent samples illustrated in table 7b for this dimension.

Table 7c. Descriptive Statistics for the Fourth Hypothesis

	Health Insurance	N	Mean	Std. Deviation	Std. Error Mean
Sociocultural Obstacles	Yes	67	3.0559	0.71706	0.08760
	No	90	3.2898	0.58036	0.06118
Managerial Obstacles	Yes	67	3.1160	0.73475	0.08976
	No	90	3.1986	0.54713	0.05767
Economic Obstacles	Yes	67	2.6751	0.77115	0.09421
	No	90	2.8958	0.76263	0.08039

Based on this result, the t-test for the independent sample was performed, as shown in table 7b. It appears that the sig. value for the "socio-cultural obstacles" variable when equal variances are assumed equal to 0.025 and less than 0.05, which means that the null hypothesis $\mathbf{H_{04\text{-}1}}$ is rejected. It is evident from table 7c that those who claimed that the health insurance for the entire family response to socio-cultural obstacles (3.0559) is less than those who did not have the health insurance for the whole of the family (3.2898). The Sig. value for managerial obstacles when equal variances are not assumed equals 0.420, so the researchers could not reject the null sub-hypothesis $\mathbf{H_{04\text{-}2}}$. As well as the Sig. The "Economic Obstacles" value equals 0.076, which is greater than 0.05. Henceforth, the researchers failed to reject the null hypothesis $\mathbf{H_{04\text{-}3}}$.

6. DISCUSSION

In various developing and industrialized nations, women are typically stigmatized and barred from obtaining higher positions in organizations. Even in the construction industry, gender equality presents numerous challenges for women. Thus, this quantitative research study aims to identify the various societal, economic, and managerial challenges women in Jordan's construction business encounter. Other variables were also evaluated, such as scientific qualification, marital status, number of working days, and family health insurance. To achieve this objective, a survey was performed.

This study revealed no statistically significant difference in the perception of managerial and economic difficulties between those who claimed to have health insurance for their entire family and those who claimed to have no such coverage. On the other hand, those who claim to have health insurance for the whole family see societal barriers more than those who do not. This conclusion could be supported by the societal significance of this service (health insurance). These findings were consistent with those of Nechemias (2019) and Regis et al. (2019). It has been noticed that women in the Jordanian construction business confront unique societal, economic, and managerial challenges because they are deemed less deserving than men. Women in Jordan are banned from acquiring positions of authority in several organizations (Rizkalla et al., 2020). However, the construction business is dominated by men due to the various tasks that demand strength and muscularity. In this industry, women are frequently looked down upon and have unique managerial challenges.

Similarly, investors are less willing to invest in a woman-owned construction company (Elseoud et al., 2019). This describes the financial obstacles women in the construction sector encounter. In addition, because women in Jordan are typically viewed as responsible for domestic duties, they are not treated equally with males in construction and other organizational sectors.

6.1 Research Implications

The present research study contributes to a greater understanding of the challenges experienced by women in Jordan's construction industry. This study also emphasizes the relevance of feminist theory in this context, emphasizing the importance of gender inequality. Aside from these implications, the present study will also be effective in promoting various practical consequences, such as the adoption of plans and policies that address women's issues, raise social awareness, change stereotypes, increase the presence of women in the construction industry, and view them as crucial participants in the decision-making process and the construction industry's success factors.

This study will also promote effective coordination between government and private organizations to develop flexible and convenient work schedules for women that are compatible with the woman's physical nature and family life, especially in the presence of children, allowing her to continue working in the construction industry. In addition, government incentive and encouragement measures, such as tax deductions, for firms in the construction industry that employ women can be influenced, thereby increasing awareness of the construction industry and the expertise required to meet the labor market's demands with the desired specializations in this industry.

6.2 Limitations and Future Research

There are a few drawbacks in the present research study that can be addressed in future research. Due to restricted resources, this study's small sample size is one of its flaws. Due to researcher bias, this study is also limited to quantitative analysis, which prevents a comprehensive knowledge of the various difficulties faced by women in Jordan's construction business. Due to scheduling constraints, this study was cross-sectional as well. Future studies can overcome these limitations.

Future research can use a larger sample size and a qualitative methodology to achieve the desired data and gain an in-depth understanding of the thoughts and ideas of the intended audience. Consequently, more longitudinal studies might be done to attain the desired results.

7. CONCLUSION

In light of the world's horrible economic conditions and economic problems, women, in general, and Jordanian women, face many barriers. Women continue to seek autonomy, fight the preconceptions placed upon them, and desire parity with men. This quantitative analysis revealed that society's culture, customs, and traditions are among the most significant barriers to women working in the construction sector. Moreover, society regards a woman's employment as a luxury, and the responsibility for work and family expenses falls solely on men, ignoring her desire to support her family and contribute to increasing the family's income with her husband.

To reflect women's aspirations and expectations for equal rights in all parts of life, it is necessary to revise Jordanian laws governing women's employment. The high levels of education attained by Jordanian women are viewed as an incentive to overcome and eliminate all barriers to their involvement and advancement in the construction sector.

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