

An Empirical Analysis of Women Empowerment: A Case Study of Slum Areas in Islamabad

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Keywords: Women's Empowerment, Slums Areas, Islamabad, Correlates of Empowerment, Developing Nations

DOI No:

<https://doi.org/10.56976/jsom.v4i2.194>

Women's empowerment has the potential to break the cycle of poverty, reduce mortality rates, alleviate dependency burdens, and contribute to long-term environmental sustainability, particularly in developing nations like Pakistan. This study aims to analyze the empowerment of women residing in slums, focusing on four central slums in Islamabad. The research assesses the extent of women's empowerment and identifies its correlates within the slum communities. To determine the factors associated with women's empowerment, the study employs the Logit model. The selected slums for this study include Hundred Quarters, Faisal Colony, Hansa Colony, and France Colony in Islamabad. A convenience sample of 411 households, representing 2,727 individuals, including 630 married women, was collected. The study reveals that women in the slums have limited empowerment in making decisions regarding education, employment, childbirth, and child marriage. However, they exhibit higher levels of empowerment in marriage decisions, household purchases, personal and family visits, medical treatment, visits to parents, and hosting guests. Additionally, the study explores the role of various factors such as education, employment, and income in influencing women's empowerment. Furthermore, the correlates of empowerment are examined separately for spouses and daughters-in-law/daughters. The findings indicate that education, employment, and household income positively impact women's empowerment in the slums of Islamabad city.

1. Introduction

Women are vital to any country, yet they possess less power (Yount et al., 2018; Nassani et al., 2019). Without the contributions of women, a nation cannot be formed. Inequality between women and men is a common challenge. Every aspect of employment is difficult for women. Nations have attempted to advance without providing women's rights for ages (Yaya et al., 2018; Benebo et al., 2018). The position of women must be rectified for the benefit of society as a whole. Batool et al. (2021) also stated that growth and women's rights are essential for long-oriented societies. Women's empowerment is a crucial component and the primary strategy for advancement in development. Economic development in developing nations hinges mainly on women's rights. There are significant issues that require attention. Aziz et al. (2022) characterized women's empowerment as encouraging women's conceptions regarding their value, their freedom to make their own decisions (Haque et al., 2021), and their freedom to have an impact on societal transformation for themselves as well as related individuals (Wei et al., 2021).

Abera et al. (2020) reported that women's empowerment is intimately related to female emancipation, a fundamental human right essential to creating a more tranquil, wealthy society. In addition, Bonvillain (2020) stated that women's empowerment encompasses knowledge of their privileges, self-assurance, and autonomy over their lifestyles both within and beyond their homes, and the capacity to affect societal shifts. Leghorn and Parker (2022) revealed that women can modify their economic standing and the standing of society and nations. Women's economic achievements are frequently neglected, and their efforts are undervalued. In the economy, women's empowerment boosts workforce participation and reduces poverty in society; the availability of assets for women enhances productivity and allows them to support their families; and women own property and earn money from it as well (Wei et al., 2021; Enfield, S., 2019). Additionally, Nassan et al. (2019) and Cicchiello et al. (2021) reported that women make financial contributions to their respective households, communities, and nations, resulting in economic expansion.

Women's empowerment often emphasizes factors and provides them with more independence when making political and economic choices, better access to knowledge, financial and social opportunities, and other possibilities (Subba, 2022; Onebunne & Ezeaka, 2020; Andriamahery & Qamruzzaman, 2022). The accomplishment of women's rights is also flexible, multifaceted, and context-specific (Odera & Mulusa, 2020; Zaheer, 2020). Due to societal norms and a conservative society, Pakistan's economic development is correlated with women's empowerment. Several problems concurrently threaten Pakistani women's education and well-being, putting them at risk of disease, distress, and exacerbating poverty (Ogbuagu, 2021). Women's exclusion can be observed in slum communities, where many social and economic conditions limit their opportunities for empowerment. Women have typically been under-documented in the employment market, particularly those employed in slums and working in the informal sectors (Abdi et al., 2021). Even though the country's economy is strengthening, its socioeconomic situation is not improving.

According to Rana (2022), women's empowerment encompasses a wide range of concerns, including economic advancement, gender inclusion, and individual freedoms. The

objective of empowerment can only be achieved with the liberty to pursue a career and make a decent living (Zastrow & Hessenauer, 2022; Marston & Davidson, 2020). In Pakistan, women often don't reach a consensus with their spouses on various issues, including girls' education, employment status, mobility, leisure activities, and family obligations; however, these differences lead to disputes, which reduces women's life satisfaction (Mohsin & Syed, 2020; Rahman & Thompson, 2022). Most scholars (Khayyal et al., 2021; Nayak and Panigrahi, 2020) have recognized educational attainment and job position as key factors in empowering women in the available literature (Rashid & Ratten, 2020); nevertheless, women in Pakistan have limited access to sufficient opportunities for higher education and paid employment, especially in slum and rural areas (Batura et al., 2022; Ahmed et al., 2022).

Gresse et al. (2020) reported that women's empowerment is a vital tool in emerging countries such as Pakistan for uplifting multitudes of individuals out of poverty, reducing incidence and mortality, reducing dependence responsibilities, and supporting long-term sustainable global prosperity. Women's participation is critical for long-term improvements that benefit everybody, not just women (Wallace & Coles, 2020). Women and girls constitute a significant share of developing nations and are particularly vulnerable to starvation, violence, natural disasters, and climate variability. Moreover, compared to men, many women in underdeveloped nations usually have limited legal rights and basic survival requirements. Recent studies worldwide suggest that women's empowerment is critical for a country's long-term economic success (Grunseit et al., 2020). Women's empowerment is also an essential component of gender equality. Several recent global findings indicate that empowering women is crucial for a country to maintain long-term economic success (e.g., Kamberidou, 2020; Wei et al., 2021).

The main objective of this study is to analyze women's empowerment in slums. In this regard, we selected four central slums in Islamabad city. The present study aims to explain the scenario of women's empowerment in Islamabad slums and the factors that affect women's empowerment. The specific objectives of the present study are as follows:

- To measure the degree of women empowerment for women living in slums of Islamabad city
- To work out the correlates of women empowerment for the women living in slums of Islamabad city.

Women's empowerment has five elements: women's self-esteem, the right to make choices, access to opportunities, the ability to influence social development, and control over their lives (e.g., Aimua, 2021; Mamun & Hoque, 2022). Other studies (Maheshwari, 2021; Cole, 2022) have found that countries where women are well-educated and have equal rights as men progress faster. Women's empowerment can play a crucial role in a country's development. Authors (e.g., Latif et al., 2020; Afridi & Zahid, 2021) have revealed that women in Pakistan constitute about half of the population. It's not a specific number. That's why we are placing so much importance on their empowerment so that they can contribute to their country's progress. Significant research has been conducted on the empirical analysis of women's empowerment. However, few studies have focused solely on empowering women living in slums. The present

study attempts to uncover various dimensions of women's empowerment, with an emphasis on women living in slums.

2. Analytical Framework

This section explains the analytical framework of the present study and examines the variables that affect women's empowerment. The research encompasses the measurement of women's empowerment and the determinants of women's empowerment. The study included three groups of married women. The first group consists of women who head the household. The second group comprises women who are not the head of the household, and the last group consists of daughters-in-law/daughters.

The present study has dual objectives: first, to measure the degree of women's empowerment, and second, to explore the correlates of women's empowerment. The study is confined to the slums of Islamabad city. This section is further subdivided into two sections. In Section 2, we discuss the analytical framework for measuring women's empowerment and the correlates of women's empowerment presented in next Section.

Broadly speaking, there are two criteria for measuring women's empowerment: attainment and authorization. Attainment refers to what she has achieved, including her education, employment status, wealth, and so on. Authorization indicates a woman's decision-making ability, specifically how much she is involved (or consulted) in decision-making. Among these two approaches, the second one is more appropriate for measuring women's empowerment. The involvement of women in decision-making is significant. This study will consider the 'authorization' criteria to measure women's empowerment. In this regard, we have considered a few key decision-making indicators such as education, employment, marriage, childbirth, medical treatment, etc. According to our definition, an empowered woman has the right to make various household and personal decisions. After determining the level of women's empowerment, we will examine the correlates of women's empowerment. In this regard, we will consider the role of variables such as age, education, recreational expenditures, and income. A detailed discussion of these indicators is given in Section 5.4. We will focus exclusively on married women. The reason for restricting the study to married women is straightforward: they are permanent household members, whereas unmarried women join another family after marriage. Furthermore, decisions related to childbirth, child marriage, child education, and visits to the parental house are irrelevant for unmarried women. Additionally, married women can be classified into at least three categories: women themselves as household heads, women as spouses of household heads, and women as daughters-in-law/daughters of household heads.

Regarding empowerment, these three categories cannot be treated identically since their roles and positions in the household are not the same. For instance, women who are also household heads naturally make all or the majority of the decisions. Therefore, if decision-making is the criteria for measuring women's empowerment, such women will be considered empowered, as they make all decisions being household heads. Consequently, this study will examine the correlates of women's empowerment only for those who are either spouses of the head or daughters-in-law/daughters of the head.

- i. Correlates of Women Empowerment if she is the spouse of the head
- ii. Correlates of Women Empowerment if she is daughter-in-law/daughter of the head.

This was a brief overview of the analytical framework. In the next section, we will explain the data, variables, and methodology used to determine the degree of women's empowerment and the correlates of women's empowerment.

3. Data

In Pakistan, slums have been a feature of urban settings. Almost all slum sites exist across the boundaries of cities, but in Islamabad, slums exist in the middle of the city and are mostly settled on the banks of the riverine nullah. Most slums are approved by the Capital Development Authority and have well-defined boundaries. We will focus on four central slums of Islamabad city. Apart from convenience, the main reason for restricting these slums is that the dynamics of slums in Islamabad are quite different from those in other parts of the country.

These slums are located in the city center and are approved by the government. The residents of these slums have access to basic facilities such as hospitals, schools, and markets, and they also have more employment opportunities. The present study has considered the following four slums of Islamabad city:

- i) Hundred Quarters in F6/2
- ii) Faisal Colony in G-7/2
- iii) Hansa Colony in G-8/1
- iv) France Colony in F-7/4

We conducted convenience sampling, and Table 1 reports the sample size drawn from each colony.

Table No 1: Sample Size

Area	Household	Individual	Married women
100 Quarters	100	610	144
Faisal Colony	111	771	175
Hansa Colony	100	654	138
France Colony	100	692	173
Total	411	2727	630

Source: Author's survey

We collected a sample of 411 households, which included 2,727 individuals, with 630 married women. Therefore, the net sample size for the present study is 63. The further distribution of the 630 married women is as follows:

- Household Head: 31
- Spouse: 362

- Daughter-in-law/daughter 237

The questionnaire used in the present study has two sections. The first section contains information about individuals, including age, education, height, employment status, and health status. The second section contains information at the household level, such as housing and transport. Each section is further subdivided into subsections. The details are given below:

Section 1, Part A: This section covers the basic information of all individuals, such as gender, age, marital status, relation with the head, education, employment, occupation, and earnings.

Section 1, Part B: This section covers the individual's health status information, including questions on height, weight, chronic diseases, disability, smoking habits, health insurance, and exercise/walking.

Section 1, Part C: This section contains information on the decision-making authority of married women. The information extracted from this section measures the degree of women's empowerment. The following eleven specific questions are asked of married women:

- a) Who in your household decided about your education?
- b) Who in your household decided about your employment?
- c) Who in your household decided about your marriage?
- d) Who makes the decisions about household purchases?
- e) Who in your household decides on the personal and family visit?
- f) Who in your household makes decisions about childbirth?
- g) Who in your household makes decisions about your medical treatment?
- h) Who in your household decides about your visit to your parents' home?
- i) Who in your household decides to invite guests?
- j) Who in your household decides on children's education?
- k) Who in your household decides on the children's marriage?

To reply to each question following options were given:

- I took the decision.
- I am consulted in decision making.
- Someone else takes the decision, and I am not consulted.

Section 2, Part A: This section contains information about the asset holdings of households. We considered the following items: radio, television, fridge/refrigerator, mobile phone, washing machine, electric iron, air cooler, and air conditioner.

Section 2, Part B: This section asks questions related to transportation. Specifically, we asked about the ownership of bikes/cars. Furthermore, we inquired about the use of public transport.

Section 2, Part C: This section provides housing information for slum dwellers. It includes details about house ownership, house size, source of drinking water, availability of a separate kitchen, and access to electricity and gas.

Section 2, Part D: In this section, we asked about household expenditure. Each household was asked about monthly expenditures on food, education, health, transportation, and recreational activities.

4. Construction of Variables

4.1. Measurement of Women's Empowerment

This section contains information about the decision-making authority of married women. The information extracted from this section is used to measure the degree of women's empowerment.

4.2. Correlates of Women's Empowerment

After measuring the extent of women's empowerment, we will explore the role of various factors such as education, employment, and income. As discussed in the previous section, we will examine the correlates of empowerment separately for spouses and daughters-in-law/daughters.

4.2.1. Correlates of Women Empowerment for Spouse of the Head

In this regard, we shall explore the role of women's education, employment status, husbands' education, head's employment status, and household income. A brief description of these variables is given below:

Education of Women: Education is the main component of awareness. That's why we use this variable to estimate the degree of empowerment. Educated women are likely to be more empowered because they have more awareness of their rights. Education is measured as the number of completed years of schooling.

Employment Status of Women: Employment is another crucial factor in determining women's empowerment. Women who are employed are likely to be more empowered. Employment status is represented as a dummy variable, with one indicating employed women and zero indicating unemployed women.

Education of Husband: The education of the husband is likely to be an essential factor correlated with women's empowerment. The wife of an educated person is likely to be more empowered, as education increases awareness and promotes a more liberal and moderate mindset. The education of the husband is measured by the number of years of successful schooling.

Employment Status of Husband: The employment status of the husband can also be crucial in determining women's empowerment. The impact can be positive or even negative. An employed person may not allow his spouse to work for financial reasons, but at the same time, he may become more liberal.

Per Capita Income of the Household: Per capita income serves as a proxy for the household's economic position. The purpose is to explore the effect of financial position on women's empowerment.

4.2.2. Correlates of Women Empowerment for Daughter In

Law / Daughter of The Head: In this regard, we shall explore the role of women's education, employment status, whether she uses public transport, recreational expenditures, and household income. A brief description of these variables is given below:

Education of Women: Education is the main component of awareness. That's why we use this variable to estimate the degree of empowerment. Educated women are likely to be more empowered because they have more awareness about their rights. Education is measured as the number of completed years of schooling.

Employment Status of Women: Employment is another crucial factor in determining women's empowerment. Women who are employed are likely to be more empowered. Employment status is represented as a dummy variable, with one indicating employed women and zero indicating unemployed women.

Means of Transport: A woman allowed to travel alone on public transport may be more empowered, as traveling through public transport means she has permission to move alone. This variable is taken as a dummy variable, with one if she is allowed to travel alone through public transport and zero otherwise.

Recreational Expenditures: Recreational expenditures are taken as a proxy for how much a household is inclined towards entertainment. In general, households that spend more on recreational activities are likely to care more for their family members, and women in such households are likely to be more empowered.

Per capita Income: Per capita income is a proxy for the household's economic position. The purpose is to explore the effect of the financial position on women's empowerment.

5. Methodology and Econometric Models

5.1. Women's Empowerment

Since we have considered eleven indicators to measure women's empowerment, for each indicator, there could be three replies (1 = myself alone, 2 = included in the consultation process, 3 = someone else takes the decision). A woman is said to be fully empowered if the reply is '1', partially empowered if the reply is '2', and not empowered if the reply is '3'. For each indicator, we considered women as empowered if she is fully or partially empowered. Finally, a woman is categorized as empowered if she is empowered in at least seven out of eleven indicators.

5.2. Econometric Model for Correlates of Women Empowerment.

i. For Women who are Spouse of the Head

$$W_i = \alpha_0(Edu_i) + \alpha_1(Emp_i) + \alpha_2(H.Edu_i) + \alpha_3(H.Emp_i) + \alpha_4(PCI_i) + \mu_i$$

Where,

W_i = Woman is empowered or not (0, 1)

Edu_i = Woman's education, measured in years of successful schooling

Emp_i = Employment Status of Woman (0,1)

$H.Edu_i$ = Husbands education, measured in years of successful schooling

$H.Emp_i$ = Employment Status of Husband (0,1)

PCI_i = Per Capita Income of Household.

i. For women who are Daughter-in-law / Daughter of the Head

$$W_i = \alpha_0(Edu_i) + \alpha_1(Emp_i) + \alpha_2(Tran_i) + \alpha_3(Rec_i) + \alpha_4(PCI_i) + \mu_i$$

Where,

W_i = Woman is empowered or not (0, 1)

Edu_i = Woman's education, measured in years of successful schooling

Emp_i = Employment Status of Woman (0,1)

$Tran_i$ = Women travels through public transport (0,1) Rec_i = Per Capita Recreational Expenditures of Household.

PCI_i = Per Capita Income of Household.

5.3. Estimation Technique

In order to analyze the relationship of women's empowerment, our dependent variable is binary. Binary dependent variables can be estimated through different techniques, such as the Probit model and the Logit model. The choice between the Probit and Logit models is not difficult. Breen (1996) demonstrated that there is no difference between the results when using these techniques. Therefore, we will focus on the Logit model. A brief description of the Logit model is worth discussing. David Cox was the first statistician to use this technique in 195. The Logit model is used for dependent dichotomous variables, such as agree or disagree, yes or no. The objective of the Logit model is to explain the relationship of the dichotomous variable with explanatory variables.

$$\begin{aligned} \text{Logit}(p) &= \ln\left(\frac{p}{1-p}\right) \\ &= \frac{\text{probability of presence of characteristics}}{\text{probability of absence of characteristics}} \end{aligned}$$

P-value varies from 0 to 1, L value varies from $-\infty$ to $+\infty$.

The assumptions of the binary logistic model are as follows: the dependent variable should be dichotomous, there should be no correlation between predictors, and there should be no outliers in the data.

The interpretation of the odds ratio is not straightforward. In the logit model, the odds ratio represents the constant effect of the explanatory variable. However, we are interested in measuring the specific effect of independent variables on the dependent variable. Therefore, we will estimate the marginal effect. Marginal effects can be expressed as the change in the dependent variable as a function of the change in the independent variable, while holding other variables constant.

5.4. Measurement of Women Empowerment

We have assessed women's empowerment through their involvement in the decision-making process. In this regard, we asked the following eleven questions and categorized women as empowered if they make the decisions themselves or are involved in the consultation process.

- Who in your household decided about your education?
- Who in your household decided about your employment?
- Who in your household decided about your marriage?
- Who makes the decisions about household purchases?
- Who in your household decides on a personal and family visit?
- Who in your household decides childbirth?
- Who in your household makes decisions about your medical treatment?
- Who in your household decides about your visit to your parents' home?
- Who in your household decides to invite guests?
- Who in your household decides on children's education?
- Who in your household decides on the children's marriage?

The estimates are presented in Table 1.



Table No 2: Women's Empowerment concerning Each Indicator

Decisions	100 Quarters			Faisal colony			Hansa colony			France colony		
	Herself	Involvement	No Involvement	Herself	Involvement	No Involvement	Herself	Involvement	No Involvement	Herself	Involvement	No Involvement
Own Education	33.1	4.9	61.9	15.8	00.0	84.1	27.0	4.38	68.7	15.5	16.6	67.9
Own Employment	19.7	16.2	64.0	14.6	15.8	69.5	26.2	2.1	71.5	00.0	25.8	74.1
Own Marriage	7.04	58,4	34.5	1.22	66.4	32.3	8.76	75.9	15.3	00.0	97.7	2.3
Household Purchases	7.75	85.9	6.34	3.05	93.9	3.05	8.76	86.1	5.11	00.0	99.4	0.57
Personal and Family Visit	5.63	88.0	6.34	3.05	93.2	3.66	15.3	80.2	4.38	00.0	99.4	0.57
Childbirth	00.0	42.2	57.7	00.0	39.0	60.9	0.73	35.7	63.5	00.0	41.9	58.0
Medical Treatment	7.04	91.5	1.41	2.44	94.5	3.05	17.5	80.2	2.19	00.0	100	00.0
Visit to a Parent	6.34	90.8	2.82	3.05	95.7	1.22	2.92	89.7	7.30	00.0	99.4	0.57
Invite a Guest	5.63	88.7	5.63	3.05	93.2	3.66	2.19	94.1	3.65	00.0	99.4	0.57
Child Education	0.70	58.4	40.8	1.22	51.8	46.9	00.0	72.2	27.7	00.0	68.3	31.9
Child Marriage	2.11	23.2	74.6	1.22	20.7	78.0	00.0	23.3	76.6	00.0	32.1	67.8

5.4.1. Own Education Decision

Education is essential for every person because it is the only source that can make a difference between humans and animals. However, many families in Pakistan do not prioritize the education of their females. They believe that females do not require education and should solely focus on childcare, household work, and staying at home.

In reality, women play an essential role in building society. Through education, women can discern between right and wrong and instill the correct values in their children. Unfortunately, women in slum areas are deprived of education. Table 4.1 illustrates the participation in the decision-making process regarding their education. In the first colony, 33% of women were independent in making their education decisions, while only 4% were partially involved. 38.3% of women were empowered, while 61.9% were not involved in their education decisions. On the other hand, in the second colony, only 15% of women had the opportunity to decide about their education. Overall, 22% of women were completely independent, and 6% were partially independent in making their education decisions. A staggering 70% of women did not have the option to decide on their education.

In Pakistan, women face numerous obstacles in pursuing education. The increasing population has a negative impact on women's education. Families with limited income and more children often prioritize the education of their sons over their daughters. According to UNESCO, 30% of Pakistanis live in extreme educational poverty, having received less than two years of education. In many families, men do not allow their daughters and sisters to attend school or college.

5.4.2. Own Employment Decision

Employment is a source of empowerment for women. However, employment can only empower women when they spend their income on themselves. Financial freedom is a crucial factor that impacts women's quality of life. By achieving financial independence, women can support their families and provide a better future for their children. When women are financially strong, they can cover their expenses without relying on their husbands for money. In Pakistan, female labor force participation is low. According to a labor force survey (1999; 2000), only 14% of women were employed (Amir et al., 2018; Sarwar and Abbasi, 2013). However, in slum areas, female labor force participation is higher. Statistics regarding decision-making in employment show that 19.7% of women are fully independent, and 16% are partially involved. In the first colony, 35% of women were given the right to decide their employment. In the fourth colony, women were not the decision-makers but were involved in their employment decision-making. Only 25% of women have partial involvement in their employment decision, while 74% have yet to be given any decision-making rights. Overall, 29% of women are empowered to decide their employment, while 70% are not involved in any decisions regarding their job. In the slum area, only a few women have decision-making power.

5.4.3. Own Marriage Decision

Women need to have a comprehensive understanding of the marriage process because it shapes the life of the next generation and reflects the continuity of family life. The data indicates that in the first colony, 7% of women made their own decisions regarding marriage, and 58% were involved in the decision-making process. However, 34% of women had no say in deciding about their own marriage. In the second colony, only 1.2% of women made their own decisions, while 66.4% were partially involved in the decision-making process. In the

third colony, 8.7% of women had complete independence in deciding, and 75.9% were partially included in the decision-making process. In the last colony, women did not make their own decisions about marriage but were included in the decision-making process. Overall, 79% of women are empowered to make decisions about their marriage, while only 20% of women do not have the right to participate in the decision-making process.

5.4.4. Household Purchases Decision

Statistics indicate that in the first colony, 93.6% of females actively participate in the decision-making process for purchasing food and other household items, while the remaining 6.3% of females are not involved in such decisions. In the second colony, 96.9% of women have decision-making power in household purchases, while 3% of women are excluded from domestic purchase decisions. In the third colony, 8.7% of women have complete independence in decision-making, and 86% of women are partially involved. In the fourth colony, 99% of women are empowered to make decisions regarding the purchase of household goods. Within the slum population, 96% of females have decision-making authority in household purchases. In slum areas, almost all women are involved in the decision-making process for household purchases.

5.4.5. Childbirth Decision

Men generally desire larger families compared to women, resulting in many families having five or more children. According to UNICEF (2008), the birth of a baby is a crucial moment for the mother and the overall family life. The future health and well-being of the entire family depend on the health of the mother and child during childbirth. The results reveal that in the first colony, 42.2% of females were involved in the decision-making process regarding the birth of their children, but they did not have sole authority to decide. In the second colony, 39% of women participated in decision-making, while the remaining women had no say in birth decisions. In the third colony, 36% of women are empowered to make birth-related decisions. In slum areas, 40% of women have decision-making power, while the rest are not involved in determining the birth of their children. Women should have control over their fertility in order to empower themselves. If women have the right to decide the timing, spacing, and number of children they have, they can better care for their children and actively participate in society.

5.4.6. Medical Treatment Decision

Health is an essential component among all decision-making elements. However, most women are not empowered to make decisions about their own lives. Women's health and women's empowerment are interrelated. Women can be empowered if they have access to health facilities, and if women are empowered, they can better access health services. It is crucial for every woman to have knowledge about their health issues because many women tend to overlook symptoms and fail to seek medical attention.

The results indicate that in the first colony, 98.59% of women were empowered in decision-making regarding their medical health, while only 1.41% were not involved. In the second colony, only 2.44% of women had complete empowerment, while 96% of women were partially involved in their health decisions. Overall, in slum areas, 6.16% of women make decisions about their health, and 92.22% are partially involved in their health decision-making.

5.4.7. Visit To Parents

They are measuring empowerment through women's involvement in the decision-making process regarding visits to their parents' homes. In the first colony, 6.34% of women make their own decisions, while the remaining 90% consult their husbands before going to their parents' homes. In the second colony, only 3% of women have the autonomy to make their own decisions, while 95% consult their husbands and in-laws. The remaining 1.22% still need to be consulted. In the third colony, 2.92% of women are fully independent and make their own decisions, while 89.7% are partially involved in the decision-making process. Additionally, 7% of women have not been given the right to visit their parents' houses. In the fourth colony, almost all women consult their husbands before visiting their parents' homes.

5.4.8. Invite Guests

In the first colony, only 5.63% of women were fully independent in inviting guests to their homes, while 88% were partially involved and consulted with their husbands. In the second colony, 3% of women made the decision themselves, and 93% of women were involved in the decision-making process. In the third colony, 94% of women were partially involved in the decision. In all colonies, almost all women consulted with their husbands.

5.4.9. Child Marriage Decision

In the first colony, 25.35% of women were involved in the decision-making process for their children's marriage, while the remaining 74.65% of women had yet to be given the right to participate in the decision-making process. In the second colony, 21% of women were given the right to decide their children's marriages, and 78% were not involved. In the third colony, women did not decide but were involved in deciding their children's marriage. Only 20% of women were partially included in the decisions of their children's marriage, and 76% had not been given any right to make decisions. Overall, 25% of women were empowered to decide about their children's life partner, while 74% were not involved in any decision regarding their children's marriages.

5.4.10. Child Education

In the first colony, 59.15% of women were involved in deciding their children's education, while the remaining 40.85% of women had not been given the right to participate in the decision-making process. In the second colony, 53.05% of women were given the right to decide their children's education, and 46.95% were not involved. In the third colony, women did not decide but were involved in deciding their children's education. 72.26% of women were partially included in children's education decisions, and 27.7% had no right to make decisions. Overall, 63% of women were empowered to decide about their children's education, while 36% were not involved in any decision regarding their children's marriages.

5.5. Women Empowerment

This study categorizes women as empowered based on two categories: fully empowered and partially empowered. A woman will be considered empowered if she meets the criteria in at least 7 out of the 11 parameters. The estimates of women's empowerment can be found in Table 3.

**Table No 3:** Distribution of Women Concerning Empowerment

Indicators	100 Quarters	Faisal Colony	Hansa Colony	France Colony	Total
0 out of 11	0.7%	0%	1.4%	0%	0.48%
1 out of 11	1.4%	1.1%	0%	0%	0.63%
2 out of 11	0%	0%	1.4%	0%	0.32%
3 out of 11	0%	0%	0.7%	0.6%	0.32%
4 out of 11	0.7%	1.7%	9.4%	0%	2.70%
5 out of 11	6.3%	2.3%	8.0%	0.5%	3.81%
6 out of 11	12.5%	19.4%	18.1%	6.9%	14.14%
7 out of 11	26.4%	33.7%	41.3%	24.9%	31.27%
8 out of 11	26.4%	30.9%	18.1% 1.4%	37.6%	28.89%
9 out of 11	19.4%	10.3%	0%	26.0%	14.76%
10 out of 11	5.6%	0.6%	0%	4.0%	2.54%
11 out of 11	0.7%	0%		0%	0.16%

We have divided empowerment into two groups: empowerment and non-empowerment. There was a perception that women living in slums might lack decision-making rights, but our results show that more than 75% of women are empowered in decision-making.

5.6 Correlates of Women Empowerment

In this section, we will discuss the correlates of women's empowerment. The section is divided into four parts. Following the introduction, we will discuss the correlates of empowerment for women who are spouses of the head. In Section 6.3, we will examine the correlates of empowerment for women who are either daughters-in-law or daughters of the head. Finally, the discussion will be summarized in Section 6.4.

5.6.1 Correlates of Empowerment for Women who are Spouse

The estimates are presented in Table 4.

Table No 4: Correlates of Empowerment for Spouse

Variables	Coefficient	p-value
Education	0.0099	0.076
Employment	0.111	0.079
Husband Education	0.015	0.008
Husband Employment	0.349	0.000
Per capita income	-0.0014	0.033

In this model, all the estimators are significant. All these variables, including education, employment, husband's education, husband's employment, and per capita income, have a significant impact on women's empowerment.

5.6.2 Women's Education

The results show that each additional year of schooling increases the probability of empowerment by 0.9. This indicates that education has a positive and significant impact on women's empowerment. Education serves as the primary tool to break the cycle of exploitation and poverty.

5.6.3 Women's Employment Status

The coefficient of the marginal effect of employment status is 0.11, indicating that an increase in employment status leads to an 11% increase in the probability of being empowered. Through employment, women can effectively contribute to domestic expenses and support their husbands.

5.6.4 Husband Education

The coefficient of husband education is 0.015, indicating a 1.5% higher probability of empowerment. The results demonstrate a positive and significant impact on women's empowerment. An educated individual possesses better awareness of their duties and rights compared to an uneducated individual. Hence, it can be expected that a woman married to an educated individual is more likely to be empowered.

5.6.5 Husband's Employment Status

The coefficient of husband employment status is 0.349, suggesting a positive relationship between husband's employment status and empowerment. The results indicate that the probability of a woman being empowered increases by 0.349 if her husband is employed.

5.6.7 Per Capita Income

The results reveal a negative impact of per capita income on women's empowerment. The coefficient of marginal effect is 0.0014, indicating a 0.14% decrease in the probability of empowerment with an increase in per capita income of the household.

5.7 Correlates of Empowerment for Women who have Daughters-In-Law / Daughters

The estimates are presented in Table 5.

Table No 5: Correlates of Empowerment for Daughters in Law / Daughters

Variables	Coefficient	p-value
Education	0.019	0.035
Employment	0.121	0.008
Public transport	0.265	0.057
Recreational	0.0065	0.101
Per capita income	0.001	0.042

All the estimators are significant, except for the recreational expenditures of households; even the p-value of recreational expenditure is close to 0.1. This indicates that even this variable does not explain women's empowerment.

5.7.1 Women's Education

An additional year of schooling increases the probability of empowerment by 1.9. Educated women are more courageous, knowledgeable, and well-behaved. They have better information about their rights and can face life's challenges. Roy et al. (2017) reported that education equips women with the tools, skills, and knowledge necessary to make informed choices, earn higher incomes, and improve their health. Jedi (2022) also highlighted that women's education is the foundation of women's empowerment, as it opens up numerous opportunities and employment possibilities that contribute to their earnings. Additionally, Gram et al. (2019) stated that women who pursue their goals, principles, and education can achieve the lives they desire.

5.7.2 Women's Employment Status

The coefficient of employment status is 0.121, which reflects that employment status increases the probability of being empowered by 12.1% compared to those not employed. Financial freedom is an essential factor affecting the quality of women's lives. By being financially independent, women can support their families and give a better future to their children.

5.7.3 Public Transport

The marginal effect of using public transport is 0.26, suggesting a 26.5% probability of women being empowered if they use public transport. This result indicates that women who use public transport are more empowered.

5.7.4 Recreational Expenditure

The coefficient of recreational expenditure is 0.0065, showing a positive but insignificant effect on women's empowerment. Our results reveal no significant impact of recreational expenditure on women's empowerment.

5.7.5 Per Capita Income

The per capita income of households has a minor impact on women's empowerment. The result suggests a 0.1% increase in the probability of empowerment with an increase in per capita income. As household income rises, the probability of empowerment increases, as women gain access to amenities not readily available to those in lower income groups. Similarly, Roy et al. (2017) reported that women's involvement in business activities can instantly improve their overall position and grant them more power.

6. Summary and Conclusions

Slums are densely populated and neglected parts of cities with poor living conditions and limited facilities. The residents of these slums face numerous problems, including inadequate sanitation, poor educational resources, and unsuitable housing. Typically, the household size exceeds the available accommodation. People living in slums are generally disadvantaged and lack access to basic life necessities. Many of them are engaged in low-paying jobs. Specifically, women living in slums are particularly unfortunate, overwhelmingly illiterate, and involved in low-wage employment. A significant proportion of the urban population resides in slums. According to estimates from the World Development Indicators (2017), one-third of the global urban population lives in slums. The situation is even worse in Pakistan, where 45% of the urban population resides in slums. As mentioned earlier, the population living in slums is generally deprived, but women, in particular, face disproportionate disadvantages in terms of education, health, skills, and access to basic facilities. Even employed women receive low salaries and lack formal recognition in the labor market.

Only a limited number of studies have focused exclusively on women's empowerment in slums. The present study aims to explore various dimensions of women's empowerment, with a specific emphasis on women living in slums. The findings revealed that women in slums are not empowered in making decisions related to their education, employment, childbirth, and child marriage. However, the majority of women are empowered in making decisions regarding their own marriage, household purchases, personal and family visits, medical treatment, visits to parents, and inviting guests. After assessing the extent of women's empowerment, we examined the role of various factors such as education, employment, income, etc. We analyzed the correlates of empowerment separately for spouses and daughters-

in-law/daughters. Our findings indicate that, in general, education, employment, and household income positively impact women's empowerment in the slums of Islamabad city.

The study found that over 75% of married women in slums are empowered. These findings contradict our initial expectations, as we anticipated a lower percentage of empowered women. However, employing similar criteria, Noreen (2017) reported that 92% of married women are empowered in Pakistan. The results suggest that the percentage of empowered women living in slums is lower compared to other parts of the country.

However, we determined that women in slum areas face educational deprivation. Women play a crucial role in shaping society, and through education, they can discern right from wrong and impart positive values to their children. Therefore, special attention should be given to women's education. The education level of the husband also holds significance. A wife married to an educated individual is more likely to be empowered, as education increases awareness, and fosters liberalism and moderation.

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