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# The Factors Affecting Participation of Married Women in The Labor Force of Lahore, Pakistan 

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#### Abstract

The study investigates the various social economic factors that affect the decision of married women to participate in the labor force. This study is based on primary data collected from Lahore through self-administered questionnaires and field interviews. The sample of the study was 350 ever-married women from Lahore, Pakistan. The logit model was used to estimate results. The results showed that women's education, age, education of husband, family size, and family support are significantly related to the participation of married women in the labor force. As a woman's education and age increase by one year, it increases the probability of her participation in the labor force by 0.0221 and 0.0119 respectively. The husband's education and household size are negatively related to her decision to do paid work. An increase in household members decreases the probability of a married woman's participation in the labor force by 0.0619 ; similarly, an increase in a husband's education by one year decreases the probability of a married woman's labor force participation (MLFP) by 0.0262 . The presence of Family support shows significant results that increase the probability of MLFP by 0.3555 . Thus, education and family support play an important role. Education empowers women and increases their role in decision-making. It is recommended more education opportunities and awareness campaigns should be held about gender discrimination and patriarchy that prevails in our society, more job opportunities should be provided both part-time as well as full-time to facilitate women's labor force.


## 1.Introduction

In the past few decades, many structural changes have taken place in developing countries which led to changes in labor force patterns. These days, more and better opportunities are available

[^0]for women in the labor market. There are many economic reasons why women should actively participate in the labor force.
More women participation means more taxpayers, productivity, and economic growth. Female employment also helps in reducing gender inequality.

20th century experienced a sudden and unusual increase in the female labor force especially in industrialized countries, the same increase is true even for married women in rich countries despite all the obstacles. By the start of the 21st century, however, the same participation growth rate seemed to be slowing down in rich countries like the United States (Klasen, 2019).

It is important that men and women both participate in the labor force for economic development. Higher participation of married women in the labor force not only increases household income but contributes to economic growth as well. Economies like Pakistan are really in need of higher female labor force participation. This study aims to identify socioeconomic determinants of the participation of married women in the labor force in Pakistan. This study will contribute to the previous findings and investigate whether education, size of the household, family support, and other factors impact female labor force participation.

Labor force participation means to be economically active whereas women are mostly involved in activities that are not paid. The International Labor Organization does not consider women doing unpaid services or production of goods within the household as part of the labor force. Thus, women working at home and in informal sectors are excluded from the labor force. Moreover,


Source: International Labour Organization (via World Bank)
Figure1: Female Employment to Population Ration
women's participation in the labor force is also highly dispersed in developing and developed countries.

Figure 1 above clearly shows the difference between developed and developing countries in terms of female participation in the labor force. FLFP is less than half in Pakistan and India as compared to Germany and the United States. Despite the increase in female workforce participation in recent years, it is still less than the participation rate of men. Global workforce participation for women is $49 \%$. The rate seems to decrease further as young women are engaging themselves in formal education and are delaying their entry into the labor force (Klesen, 2019). Developing countries with the same rate of development, population, or income experience different rates of FLFP. The rapid increase in Latin America, a gradual increase in the Middle East while it fell in South Asia. These unusual trends greatly depend on the economic condition of their household, the demand, and supply of educated women with appropriate jobs, and how strong occupational barriers exist (Klasen, 2019).

Despite economic development, a decrease in fertility rate, an increase in educational attainment, and other favorable conditions, female labor force participation has not increased at the same pace as that of men.

Female participation in the labor force is an important economic driver however in developing countries the low rate is the result of economic shocks and reflects poverty. Women earn less than men and thus are engaged in informal, unprotected, and unrecognized jobs.

Developing countries are experiencing an increase in Household consumption. Therefore, many middle-income households are adopting a dual-income lifestyle which is why it is important that men and women both take part in economic activity to satisfy their needs and wants. The contribution of married women has avoided the money squeeze but has resulted in a time squeeze. It is hard for married women to manage time between family and professional life (Ali, Habiba \& Ullah, 2018). This also hampers her productivity. Household responsibilities are constraints for women to go ahead in professional life and result in wage gaps. Unfortunately, as labor participation increases for women, their household responsibilities are not being shared or squeezed. This gives them dual pressure and creates work-family conflict.

In South Asian countries especially in Pakistan woman has many identities and roles; daughters, wives, daughters-in-law, mothers, etc. They have to face the high expectations of families (Cheema, Firdous \& Ahmad, 2021).

The female labor force participation rate has increased from $41 \%$ in 1990 to $44 \%$ in 2021in Pakistan (Labor Force Survey, 2021). Despite this increase in workforce participation, it is still less than that of other South Asian countries. FLFP is very important for socio-economic development. It provides households with dual incomes and reduces poverty. Women's financial empowerment is important for the quality lifestyle of children and this plays a very important role in shaping society in the long term (Hafeez \& Ahmad, 2002).

Factors determining female workforce participation in Pakistan are very complex. Gender discrimination, family responsibilities, and social and cultural restrictions are some of the factors that determine FLFP. Multiple roles of married women in the household, child-rearing, fertility rate, number of elder family members, family structure (nuclear or joint), the financial status of the family, and education level of a woman are other determinants of the level of employment of married women (Faridi, et al., 2009). The following study aims to identify the socioeconomic factors that constrain married women of Pakistan from participating in the active labor force and put
forward some suggestions on how we as a society can encourage women to be part of the labor force while maintaining cultural values.

There are many studies conducted in developing and developed countries to investigate the factors that lead to a low female labor force. However, not too many studies have been conducted in Pakistan. Many questions need to be answered, despite being educated about why women are not participating in the labor force, what is the impact of society on their decision? This study will consider the viewpoints of both working and non-working women. It is important to know what, where, and how the problem can be eliminated. Therefore, this study will try to identify the factors that have positive and negative effects on female labor force participation.

The objectives of the study are:

- To investigate the determinants of labor force participation of married women.
- To investigate the extent to which labor force participation of married women is affected by their household size.
- To identify how the demographic characteristics of the husband; his education and income impact married women's labor force participation.
- To what extent married woman's labor force is sensitive to their age and education?

The following hypotheses will be tested to achieve the above objectives
$\mathbf{H}_{1}$ : Women's age has a significant effect on the labor force participation of married women.
$\mathbf{H}_{2}$ : Women's education has a significant effect on the labor force participation of married women.
H3: $_{3}$ Household Size has a significant effect on labor force participation of married women.
H4: Husband's Education has a significant effect on the labor force participation of married women.
H5: Husband's Income has a significant effect on the labor force participation of married women.
H6: Family Support has a significant effect on the labor force participation of married women.

## 2. Literature Review

Studies done in the past showed different trends of FLFP of married women in developed and developing countries. Factors that impact FLFP vary from region to region because of different economic and social conditions and mindsets.

Ali, Dhillon, and Mishra (2023) investigated the relationship between family composition participation in domestic work and the labor force participation of women in India. They concluded that participation in domestic work is high in women with middle or less than that level of education. The presence of elderly women in the family encourages women to participate in the labor force. Higher education level among women reduces family care burden and leads to a higher participation rate.

Elouardighi and Oubejja (2023) analyzed the relationship between digital financial inclusion and women's labor force participation in 29 African countries. The Probit model results revealed that financial inclusion via the digital channel is positively associated with women's labor force
participation more than the traditional channel. The study concludes that women face many obstacles in accessing financial services through traditional channels but these obstacles tend to decrease as women's income increases.

Ibourk and Elouaourti (2023) analyzed the impact of household structure, family support, satisfaction and self-esteem, and trust in institutions and politicians on labor market participation with a special focus on gender differences. They used primary data from 7860 individuals from North Africa. They employed the Probit model. Results showed that gender has a significant impact on labor force participation. The gender norms of society prevent females from participating in the labor force.

Akhtar, et al. (2020) identified the factors that affect the employment rate of women and the socio-demographic characteristics of respondents in Selangor, Malaysia. Primary data was collected through questionnaires from 350 households in Selangor, Malaysia. The analysis was done using the logit model. Results showed that education, household income, family background, family size, and financial condition of the household play a considerable role in female participation in the workforce. Educated women belonging to the joint family are likely to participate in the labor force more with the medium financial status of households.

Tumsarp \& Pholphirul (2020) used labor force data from Thailand to evaluate different socioeconomic factors of the participation of women in the labor force. Binary Probit regression showed the additional year of education and age increases the probability of women participating in the labor force by 0.85 and 0.17 respectively. Women who are household heads have 2.25 more probability to participate. Married Thai women have a 15.9 percent higher probability of participating than unmarried Thai women. These married women are also those with fewer family members, less education, and younger.

The research of Serrano et. al. (2019) of Latin America is centralized upon the hypothesis that the high economic growth of the early 2000s is one of the main factors of the deceleration of FLFP especially for married women. Fixed effect estimation for panel data was used to estimate the relation between FLFP and the cyclical component of GDP. FLFP and per capita GDP were positively related while it was negatively related to the cyclical component of GDP. The study concluded that when women are held away from the market their productivity lessens, making social stigmas and gender roles stronger. Leaving a negative impact on the social position of women.

Despite Economic growth and structural changes in India FLFP is very low. One of the major reasons noted during the research process was that considering women only responsible for domestic chores decreases the chances of women stepping into the labor force. The research by Deshpande and Kabeer (2019) addressed the issue of demand side for women laborers. One of the reasons can be education, as the literacy rate for females in India is very low therefore uneducated go for unskilled labor. Whereas the household's economic condition and childcare responsibilities are the factors determining the supply of female labor and other socio-economic factors. Primary data from seven districts of West Bengal revealed that women were primarily responsible for domestic tasks along with other factors like age, location, level of education, and care responsibilities lowering their probability of entering the labor force. Cultural and religious practices were noted as insignificant factors.

Faridi and Rashid (2014) emphasized how different levels of education, presence of assets, family setup, location, and education of immediate relatives impact female workforce participation. In developing economies, there is a huge gender gap in the fields of education, health, and
employment which hampers economic growth, as these three are the investments in human capital. In Pakistan literacy rate is very low for females. The researcher conducted a field survey in the district of Bahawalpur (an underdeveloped district of Punjab) for 164 females. An econometric analysis of data made using a logistic regressing model showed that all levels of education were significant; Parent's education is somehow insignificant while the spouse's educational status is significant and had a positive impact on FLFP.

Lee, Jang, and Sarkar (2008) aim to investigate the nature and extent of the effect of the marriage of female workers and demand-supply factors that increase the number of married women in the Korean labor market. The opportunity cost for married women to work in the formal sector increases as their roles, and responsibilities increase. Lower fertility rate, child care services, household technologies, and access to part-time jobs leads to increased labor force participation of married women in developed countries. On the demand side lower demand for married women from employers and the supply side high opportunity costs for market work due to household responsibilities create gender gaps in the markets. As the age of women increases these constraints tend to decrease. Probit estimation results for a sample of women residing in 66 cities show that the probability of married women participating in the workforce is about $60 \%$ less than that of unmarried women. Age has a positive relation which could suggest that constraints (social, cultural) for a married woman decrease with age. Market condition for different cities like unemployment suggest positive relation for married women as they contribute to family income and easily settle for lower wages while their husband faces unemployment. Child care services are now an important point considered in policy formation as the presence of children under age six decreases the chances of workforce participation. For young married women husbands' education and employment status plays an important role in their decision to work.

Hafeez and Ahmad (2002) conducted a field survey in the district of Mandi Bahaudin. Stratified sampling and snowball technique were used to analyze various demographic and socioeconomic factors that determine female labor force participation. A total of 210 married educated women were interviewed. In the sample, $50 \%$ were involved in the labor force while the remaining were involved in household activities. The most significant factors that appeared in the regression analysis were level of education, number of other working members, household income, structure and size, and age. The present study identifies socio-economic factors that lead to decreased participation of married women in the labor force in Pakistan.

## 3. Methodology

This study used cross-sectional data of ever-married women of Lahore to investigate the determinants of Participation in the Labor force of Married Women.

The target population for this study is married women of Pakistan; working and nonworking. The sampling technique is purposive sampling. A self-administered questionnaire was given to the respondents belonging to different locations in Lahore. The questionnaire consisted of both open and close-ended questions. Initially questionnaire was distributed to a sample of 50 married women to carry out a pilot study. Results of the pilot study were used to check the reliability of the questionnaire. After the questionnaire turned out to be reliable it was distributed to the sample. Questionnaires were distributed in different towns of Lahore. Where needed face to face-toface interviews were also conducted with the respondents. A total of 350 questionnaires were used for analysis after editing for omissions and errors.

The econometric model used for the study is as follows

## $\mathrm{MLFP}=\beta_{0}+\beta_{1} \mathrm{EDU}+\beta_{2} \mathrm{AGE}+\beta_{3} \mathrm{HHSIZE}+\beta_{4} \mathrm{HINCOME}+\beta_{5} \mathrm{FAMSUPPORT}+\beta_{6} \mathrm{HEDUCATION}+\epsilon_{i}$

MLFP is the dependent variable that represents the labor force participation of married women. EDU and AGE are respondents' education and age. HHSIZE is the size of the household, HINCOME is the income of the husband, FAMSUPPORT is family support and HEDUCATION is the husband's education. These all are independent variables.

The binary logistic model is used for estimation. MLFP can take only two-digit values in binary form 0 and 1 .

The generalized form of Logit regression is:
$\mathrm{L}=\ln \left(\frac{P}{1-P i}\right)=\beta_{\mathrm{o}}+\beta_{\mathrm{i}} \mathrm{X}_{\mathrm{i}}+\mu_{\mathrm{i}}$
Where L is the dependent variable $\beta_{o}$ is the intercept term, $\beta_{\mathrm{i}} X_{\mathrm{i}}$ coefficients and explanatory variables and $\mu \mathrm{i}$ is the error term.

Stata Software is used to run binary logistic and other tests.

### 3.1 Theoretical Framework

The theoretical framework links the dependent and independent variables of the study. LFP of married women is the dependent variable of the model. There are six independent variables. The operationalization of these variables is given in the appendix.


Figure 2: Theoretical Framework

## 4. Results

Following are the results of logit regression used to investigate the impact of socio-economic factors on the participation of married women in the labor force in Lahore, Pakistan:
4.1 Logit Regression Analysis

## Table 2: Regression Results

| Linear regression | number of obs $=350$ |
| :--- | :--- |
| $\mathrm{~F}(6,343)=21.96$ | Prob $>\mathrm{F}=0.0000$ |
| R-Squares $=0.2108$ | Root $\mathrm{MSE}=0.44858$ |

Robust

| Current job | Coef. | Std. Err. |  | t | $\mathrm{P}>\|\mathrm{t}\|$ | [95\% conf. Interval] |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Age | .0119 | .0025 | 4.69 | 0.000 | .0069 | .0169 |
| Year of Edu. | .0221 | .0098 | 2.23 | 0.026 | .0026 | .0415 |
| Members | -.0619 | .0142 | -4.41 | 0.000 | -.0894 | .0343 |
| Hus. Edu. | -.0261 | .0086 | -3.04 | 0.003 | -.0431 | .0092 |
| Hus. Inc. | $-3.59^{\mathrm{e}}-07$ | $3.26^{\mathrm{e}-07}$ | -1.10 | 0.271 | $-1.00^{\mathrm{e}-06}$ | $2.82^{\mathrm{e}}-07$ |
| Fam. Sup. | .3554 | .0482 | 7.37 | 0.000 | .2606 | .4503 |
| Constant | .2989 | .1756 | 1.70 | 0.090 | -.046 | .6442 |

## Interpretations Of Logit Regression

Results of logit regression from Table 2 show that there is a positive relation between age and labor force participation of the respondents. As age increases by one year probability of female labor force participation increases by 0.0119 keeping all other explanatory variables constant

The coefficient of the respondent's education is 0.0221 which shows a positive relation between female labor force participation and her completed years of education. An increase in education by one year increases the probability of female labor force participation by .0221 keeping all other variables constant.

The coefficient of the number of total household members suggests a negative and inverse relation. An increase in the number of household members by one person decreases the probability of labor force participation of married women by -0.0619 keeping other explanatory variables constant.

The coefficient of the Husband's Income is $-3.59 \mathrm{e}-07$ which shows a negative relation. If the husband's level of income increases by one unit probability of labor force participation of women decreases by $-3.59 \mathrm{e}-07$.

The coefficient of the Husband's education is -0.0262 which shows negative relation. An increase in the husband's education by one year decreases the probability of labor force participation of married women by -0.0262 keeping other factors constant.

The coefficient of family support is 0.3555 which shows a positive relation. If a woman is supported by her family, her probability of participating in the labor force is 0.3555 more than a woman not supported by her family, keeping all other variables constant. All coefficients except the husband's income are statistically significant at a 5 percent level of significance.

### 4.2 Post Estimation Test

Correlation analysis was used as a post-estimation test.
Table 3: Correlation Matrix

|  | Age <br> of Education | Year | Members <br> Education |  | Hus. <br> Income | Hus. <br> Support |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | 1 |  |  |  | Fam. |  |
| Year of Edu. | .1171 | 1 |  |  |  |  |
| Members | 0.1524 | -0.0143 | 1 |  |  |  |
| Hus. Edu. | 0.0247 | 0.3697 | -0.0355 | 1 |  |  |
| Hus. Inc. | -0.0331 | 0.1834 | -0.1036 | 0.2942 | 1 |  |
| Fam. Sup. | 0.0450 | 0.0782 | 0.0462 | 0.1658 | 0.0413 | 1 |

Table 3 shows that none of the independent variables are significantly correlated with each other. Thus, multicollinearity does not exist in the model

## 5. Discussion

The main aim of this research was to identify the factors that influence the decision of women to participate in the labor force. Findings reveal that the age of the respondent, education level of the respondent, and family support have a positive and significant effect on the labor force participation of married women. Husband's Education level, number of total household members, and husband's income level have a negative influence on the FLFP.

Results show that with an increase in years of age, the chances of married women participating in the labor force also increase. These results can be supported by the theory that as age increases woman gets more mature and are capable of making their own decisions regardless of societal restrictions. Higher wages are offered at a mature age as they have more experience and
awareness. This can also be supported by the explanation that in older ages most women have less burden of household chores but their financial needs increase Lu (2015).

Married women with higher levels of education have a higher opportunity cost of working at home (Hafeez \& Ahmad, 2002). More educated women have the ability to adapt to changing market trends easily and it also indicates that women with a higher educational qualification belong to wealthy or decent households since their families allow them to study (Hamid and Al-Jalali, 1991).

The total number of household members or household size has a negative relation with FLFP. This relation can be explained by two statements, one that as household size increases workload divides, or as household size increases there are more mouths to feed, also more individuals to earn so financial pressures also divide (Tanaka \& Muzones, 2016). Women residing in larger households known as joint families are more likely to participate in the labor force (Akhtar, Masud, and Rana, 2020). Many women have the potential and will to participate in the labor market but one of the major reasons they are not able to is restrictions to their mobility. Other related factors that restrict their mobility outside the house are several cultural, social, and religious norms, crime, and availability of transport (Azid, Khan, and Alamasi, 2010).

On the assumption that women mostly participate in the labor force for financial reasons, as the husband's income level increases women's chances to do paid work decreases (Albanesi \& Praos, 2022). Therefore, the labor force participation of married women is strongly and inversely influenced by the husband's or household head's income level (Hafeez \& Ahmad, 2002; Aboohamidi \& Chidmi, 2013).

In a society like Pakistan, men are the breadwinners and act as household heads. Therefore, all decisions and decisions of participation in the labor force are greatly influenced by their attitude. Our findings and previous research also reveal that the husband's education level and labor force participation of married women are inversely related (Azid, et al., 2010; Akhtar, et al., 2020).

Family support has a positive and significant relationship with the workforce participation of married women. If the woman is supported and helped with her household chores and child care then she will participate in paid work (Fatima \& Sultana, 2009). The government can also provide them with childcare and other facilities that make working conditions suitable for married women and increase their participation (Faridi, Malik \& Basit, 2009).

## 6. Conclusion and Policy Implications

Low female participation in the labor force hinders economic development and their status in society. Education is very important in order to empower females. An increase in the participation of married women in the labor force is important for the growth of Pakistan's economy. Men and women can equally contribute to the economic growth of Pakistan and can speed up the process of economic development. Awareness is necessary to change the patriarchal system of Pakistan and fix gender roles that prevail in society. Participating in the labor force is not only necessary for economic development but also for the development of human capital, character development, and the long-term betterment of the generations.

Institutes should create more employment opportunities and internships so that young women and fresh graduates can also participate in the labor force. Awareness campaigns should be carried out to educate both men and women about gender discrimination and patriarchy that prevails in our society
and creates income inequality in the market. More scholarships and educational opportunities should be provided to women who are unable to afford education. More job opportunities should be created for both full-time and part-time. Larger households and domestic workloads restrict many women from participating in the labor force, therefore institutes should educate the public about family planning. Affordable childcare services and household help can help women balance work and family life and increase female labor force participation.

## 7. Limitations and Future Directions

The study used data from married women from the city of Lahore only. In the future researchers can use data from different cities to make results more generalized.

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## Appendix

## Operationalization of Variables

| Variables | Measures |
| :--- | :--- |
| Dependent Variable |  |
| Married women's Labor force <br> participation (MLFP) | MLFP=1 if participating in economic <br> activity <br> MLFP=0 if otherwise |
| Independent Variables | Completed years of education |
| Woman's education- EDU | Respondent's age in years |
| Woman's age- AGE | Total number of household members |
| Household size-HSIZE | Total monthly income <br> (PKR) |
| Husband's/ Head's income-INCOME | Completed years of Education |
| Husband's Education | $1=$ If family supports <br> $0=$ If the family does not support |
| Family Support |  |


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