Role of Education and Labor Force Participation in Influencing Women Empowerment in Pakistan: A Case Study of District Khanewal

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The present study has attempted to focus on the role of education and labor force participation in influencing women's empowerment in Pakistan. The primary data were collected from 200 female respondents from Khanewal district using the Ordinary Least Squares (OLS) technique for econometric analysis. These women working along with their family members are raising their livelihood for their household. The study concludes that the age of the respondents, labor force participation, educations of the respondent and education of the household head (husband/father) are positively influencing women empowerment. However, females living in urban areas have vast opportunities in terms of jobs, education and infrastructure facilities. The study suggests that government should pursue development expenditure on schools at the primary and secondary level, so that attainment of education can be available easily for females living in remote areas. The development of vocational training schools would enhance the skills of females to strengthen and empower them socio-economically, for their future endeavors.

Keywords: Education, Female Labor Force Participation, Women Empowerment

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Introduction

Various pieces of literature have addressed the debatable issue of achieving women's empowerment in the context of generating income opportunities [Chant 1991; World Bank 1991]. Women empowerment is one of the critical issues of the developing world. To achieve equal opportunities and status, attainment of education is essential for the nurturing and development of the human mind. Education empowers women by enhancing their decision-making abilities, self-realization, freedom of thought and awareness regarding different issues that exist in
society. It also constitutes the power to participate in decision-making regarding household affairs. Education promotes women's empowerment in the context of control and job opportunities for their better prospects. Despite numerous challenges of the gender gap, social and cultural norms, traditions, and customs, etc in the economy. The nature and intensity of these issues vary across different regions. It is very difficult for the woman living in rural areas to pursue their livelihood for their household. Women living in rural areas are usually less educated, having fewer resources and support from their family members. They remain deprived of their deserving rights and opportunities to achieve their goals and objectives. The present study has been focused to examine the role of education and labor force participation in influencing women empowerment in Khanewal district, Southern Punjab Pakistan. For this purpose, this study has analyzed the various dimensions of women empowerment in Khanewal District, Pakistan.

**Literature Review**

This section presents the review of literature on the socio-economic variables affecting women's empowerment. Different pieces of researches have been presented across the world on the socio-economic determinants of women's empowerment. In this section, firstly the review from studies at the international level and then at the national level has been presented.

Kantor (2003) studied the data collected from home-based production in the government sector in Ahmedabad, India. The author had tried to find the empowerment status of the working woman. The study also tried to find out whether women working in the home-based sectors are more empowered or women working outside their home respectively. The control over income and involvement in decision-making are the two significant influential variables related to women's empowerment. The results of the study conclude that women working in the home-based industry in urban areas of India are more empowered that can be reflected in household decision-making.

Kantor (2005) studied the role of micro-enterprises in empowering women in India. The author concluded that access to credit, training on the job, conducive environment of the enterprises and availability of the plant machinery does not necessarily contribute to women empowerment. Findings of the study also concluded that the efficient utilization of resources can contribute to women's empowerment.

Rahman (2009) examined domestic and non-domestic problems related to woman empowerment in Bangladesh. Primary data comprises more than 500 respondents i.e., married females of age cohort 50 to 49 years, using Logit regression technique for econometric analysis. The findings of the study revealed that more than 50% of women are empowered to cast vote, manage their household expenditures,
be free to go outside the home without any permission and take decisions regarding the education attainment of their son and daughter. It has been concluded from the result that females living in the urban areas, joint family system and access to media are more empowered in the household decision making.

Desai (2010) studied the issues related to woman empowerment. Results of the study revealed that over the 20 years, the trend of educational attainment at the primary and secondary level, political participation national level and wage labor force are the crucial factors that have positively influenced woman empowerment. However, the results may vary across the region or depending upon the locality i.e., rural or urban regions. However, the issues related to violence, HIV, fertility, mortality still exist in the countries but vary across the region. The gender gap is also the crucial factor that affects the income of females adversely.

Islam et al., (2012) collected primary data from female respondents associated with the home-based poultry rearing business in Bangladesh. To identify the factors related to woman empowerment, the present study has employed the principal component analysis and regression technique for the econometric analysis. The findings of the study concluded that decision-making independently and participation in decision-making regarding family affairs are the crucial factors associated with woman empowerment in rural areas. Therefore, women working in the poultry or any other economic activities are positively associated with women empowerment. Thus, contributing and uplifting the standard of living for their household.

Assaad et al (2014) collected secondary panel data during the year 2012 in Egypt. The two important variables focused under study were decision making and female mobility. For this purpose, the authors have constructed two indexes. i.e., the mobility index and the decision-making index. The findings of the study concluded that presence of household poverty, number of children in the household, age of the women, attainment of the education by women, employment status, an adult son in the household and family background of the women’s father are the essential elements in the determination of women empowerment. Moreover, the crucial factors concerning the regional context were equally important.

Sofia (2014) collected data at the household level in Gambia. The author has focused on empowerment both at the individual and communal levels. The author has employed a Generalized Method of Moments (GMM) technique to deal with the issue of endogeneity during econometric analysis. The results of the study concluded that gender, work participation, age, marital status are the crucial factors to determine women empowerment both at the individual and the communal level.
Shanty and Murty (2019) investigated various domains related to women's empowerment in the selected districts of Andra Pradesh in India. Age, income, marital status and education attainment were focused to examine women's empowerment. The findings of the study revealed that women belonging to age cohort 18 to 50 years, either married or unmarried marital status. Women having age more than 50 years are more empowered. However, the results of the study revealed that marital status does not make any difference in woman empowerment. However, females having higher education like Ph.D. have more opportunities to earn income.

Chaudhry and Nosheen (2009) collected the primary data from Southern Punjab, to study the impact of socioeconomic indicators on women's empowerment. The author has constructed four indexes comprising domestic economic decisions, family decision making, autonomy. The authors have adopted a simple random and stratified random sampling technique, using regression analysis. The data consists of both the location involving urban and rural areas. The findings of the study concluded that education, job, social-cultural norms of the society, access to media are significantly influential variables related to women empowerment. However, it was also concluded that the females living in the urban areas have more opportunities and therefore more empowered as compared to the females living in the rural or tribal areas.

Khan (2010) has collected primary data of 550 married females comprising of age cohort between 15 to 49 years, from Rawalpindi and Faisalabad city of Punjab province. The primary research was based on a structured interview. The study concluded that factors like joint family, husband's headship, provision of facilities or amenities, paid job, dowry, property received from their parents, having more brothers, education, access to social networking and political interest are the sources of empowerment. However, females having an insecure future, observing veil and vulnerable position are not empowered. Studies have suggested that effective legislation is required for the protection of rights for women. Government should allocate funds for the development projects to facilitate and encourage education attainment for females.

Khan and BiBi (2011) examine the impact of government projects leading to women's empowerment in Pakistan. The findings of the study conclude that females participating in economic activities significantly influenced their household welfare. However, females do not have much control over their income due to cultural bindings. Less workload and access to credit do not have many contributions towards women empowerment due to the low amount and low coverage. Government should launch the development projects for the welfare of the community by involving NGOs at the local level.

Akram (2015) collected secondary data from PDHS during the year 2012 to 2013 in Pakistan. The authors have used the ordered logit regression technique for
econometric analysis. The author undergoes elementary data analysis, comprising of descriptive and correlation analysis. The sample size consisted of 13558 married females, conducted by NIPS with the funding of the US aid program. The study concluded that various indicators like education, paid job, location, presence of physical asset, media awareness, number of offspring (like daughter and son) have influenced positively on women empowerment. Results of the study also concluded that government should contribute to encouraging female education to reduce the gender gap in society. The provision of job opportunities helps in ensuring and strengthening the financial position of the woman, for better future endeavors.

Bushra and Wajiha (2015) collected the primary data from Lahore Pakistan. The authors collected a sample of 200 female respondents, based on a survey using an Ordered Logit regression technique. Various factors were examined to study women's empowerment for econometric analysis. However, having a bank account, credit opportunities are the distinctive variables along with the other socioeconomic variables of the study. The findings of the study revealed that status, training, education are significantly influencing women's empowerment. However various other variables like work participation and economic opportunity have shown a positive significant relationship with women empowerment. It is very difficult for a woman to make their own decision independently, in a male-dominated society like Pakistan. Females have to remain dependent on the male members of their household.

Batool et al (2020) collected data to identify the six different dimensions of women empowerment in rural and urban areas of Southern Punjab. The author has employed a multistage cluster sampling technique and constructed an index to analyze the effect of various variables on women's empowerment. The index was constructed by using the Polychoric principal component analysis. Unfortunately, women are facing difficulties in getting support from the male members of their families. As they forbid them to participate in the labor force and keep them deprived of their inheritance right. The result of this study concludes that the provision of medical facilities, access to legal rights, participation in social gatherings shows a positive influence on women's empowerment in Southern Punjab. It has been concluded that unpaid domestic work, location of the residents and violence of fear show a negative relationship with woman empowerment in Southern Punjab.

Wahid et al (2020) collected our primary data based on the survey having a sample size of 350 respondents from Khurram Agency FATA. The various indicators related to women's empowerment have been analyzed for econometric analysis. The results of the study concluded that education, assets, economic opportunities and power to make decisions are positively influencing women's empowerment. Poverty is found to be negatively related to women's empowerment. Females have fewer opportunities regarding education and work participation in a male-dominated
society. The provision of education can play a vital role in eliminating poverty in society.

Soharwardi and Ahmad (2020) constructed the women empowerment index to analyze a different set of variables at the household level. The authors have collected data from a DHS survey of 38 developing countries. The respondents were the ever-married women of age cohort 15 to 49 years, using multiple regression analysis. The five dimensions under the investigation were work status, awareness, decision making, self-esteem and self-confidence of the respondents. The results of the study concluded that variables like higher education attainment, health, higher education of the husband, husband job, status and family wealth significantly influence women empowerment. Moreover, women producing more children in the household ensure more women’s empowerment in the household. However, age, gender and locality of the household head have a huge impact on women’s empowerment in developing countries

**Material and Methods**

To analyze the role of education and labor force participation in influencing women empowerment in Pakistan data is collected from 200 respondents from Khanewal district. Khanewal district consists of four tehsils such as Khanewal city, Kabirwala, Mian Chanu, and Jahanian. The data of 50 respondents are collected from each tehsil by using a convenient sampling technique. To estimate the results Ordinary Least Square method (OLS) has been applied to data.

| Table 1 | Description of Variables |
|---------|--------------------------|
| **Variables** | **Description of Variables** |
| **Dependent Variables** | |
| WEMI | Women Empowerment Index | Average of women economic, social and familial empowerment |
| WECE | Women Economic Empowerment | Economic Average of the response of statements such as control over spending, own bank account, independence in making expenditures, any kind of assets owned |
| WSOE | Women Social Empowerment | Average of the response of statements such as allow to visit in markets, access of social media, freedom to express views |
| WFME | Women Familial Empowerment | Familial Average of the response of statements such as decision about child and own healthcare, the |
Independent Variables

AOR  
Area of Residence  
=1 if respondent living in the rural area.  
= 0 if respondent living in the urban area.

FS  
Family Setup  
=1 if joint family system  
= 0 otherwise

AGE  
Age of Women  
Age of women in years

MS  
Marital Status of Women  
= 1 if married  
= 0 if unmarried

WEDU  
Education of Women  
Education of women in years

FLFP  
Female Labor Force Participation  
= 1 if participating in labor force  
= 0 if not

HHEDU  
Household Head Education  
Household head education in years

HHY  
Natural Log of Household Income  
Monthly income in Rupees

NER  
Number of Earners in a Household  
Absolute

HHS  
Household Size  
Number of members in a household

Model Specification

The following models are constructed to attain the objectives of the study:

Model 1: Investigates the Impact of Education and Labor Force Participation on Economic Empowerment of Women

\[
WECE_i = \beta_0 + \beta_1 AOR_i + \beta_2 FS_i + \beta_3 AGE_i + \beta_4 MS_i + \beta_5 WEDU_i + \beta_6 FLFP_i + \beta_7 HHEDU_i + \beta_8 HHY_i + \beta_9 NER_i + \beta_{10} HHS_i + u_i
\]

Model 2: Investigates the Impact of Education and Labor Force Participation on Social Empowerment of Women

\[
WSOE_i = \beta_0 + \beta_1 AOR_i + \beta_2 FS_i + \beta_3 AGE_i + \beta_4 MS_i + \beta_5 WEDU_i + \beta_6 FLFP_i + \beta_7 HHEDU_i + \beta_8 HHY_i + \beta_9 NER_i + \beta_{10} HHS_i + u_i
\]

Model 3: Investigates the Impact of Education and Labor Force Participation on Familial Empowerment of Women
WFME\(_i\) = \(\beta_0 + \beta_1AOR_i + \beta_2FS_i + \beta_3AGE_i + \beta_4MS_i + \beta_5WEDU_i + \beta_6FLFP_i + \beta_7HHEDU_i + \beta_8HHY_i + \beta_9NER_i + \beta_{10}HHS_i + u_i\)

**Model 4: Investigates the Impact of Education and Labor Force Participation on Women Empowerment Index**

WEMI\(_i\) = \(\beta_0 + \beta_1AOR_i + \beta_2FS_i + \beta_3AGE_i + \beta_4MS_i + \beta_5WEDU_i + \beta_6FLFP_i + \beta_7HHEDU_i + \beta_8HHY_i + \beta_9NER_i + \beta_{10}HHS_i + u_i\)

**Results and Discussion**

**Table 2**

| Variables                                | Mean  | S.D.  |
|------------------------------------------|-------|-------|
| Women Empowerment Index                  | 0.668 | 0.206 |
| Women Economic Empowerment               | 0.639 | 0.213 |
| Women Social Empowerment                 | 0.692 | 0.230 |
| Women Familial Empowerment               | 0.673 | 0.240 |
| Family Setup                             | 0.385 | 0.488 |
| Age of the Respondent                    | 31.240| 7.942 |
| Area of Residence                        | 0.515 | 0.501 |
| Marital Status                           | 0.612 | 0.321 |
| Women’s Education                        | 11.250| 3.846 |
| Female Labor Force Participation         | 0.635 | 0.483 |
| Household Head’s Education               | 10.775| 4.388 |
| Household income                         | 10.854| 0.633 |
| Number of Earners                        | 1.985 | 1.136 |
| Household Size                           | 6.415 | 2.477 |

**Table 3**

| Variables | WECE       | WSOE       | WFME       | WEMI       |
|-----------|------------|------------|------------|------------|
| C         | -0.2493    | 0.1079     | -0.2268    | -0.1227    |
|           | (-1.0211)  | (0.4349)   | (-0.8509)  | (-0.5636)  |
| AOR       | -0.0279    | -0.1402*   | -0.0228    | -0.0303    |
|           | (-1.0153)  | (-5.0113)  | (-0.7581)  | (-1.2351)  |
| FS        | 0.0675**   | 0.0346     | 0.0215     | 0.0209     |
|           | (2.1434)   | (1.0823)   | (0.6255)   | (0.7461)   |
| AGE       | 0.0195*    | 0.0134*    | 0.0307*    | 0.0180*    |
|           | (3.2085)   | (5.0822)   | (3.2573)   | (7.7357)   |
Table 3 presents the estimates of Ordinary Least Squares (OLS) regression of the role of education and labor force participation in influencing women’s empowerment in Khanewal district. The second column of Table 3 presents the first model, the dependent variable is Women's economic empowerment. The coefficient of the family setup shows a positive relationship with Women’s economic empowerment, significant statistically at 5 percent. The econometric results depict that if the respondent lives in the joint family system, the Women's economic empowerment increase by 0.0675 units. Females living in a joint family system are generally considered more empowered as compared to the females living in the nuclear family system [Rahman (2009); Khan (2010)]. The coefficient of the women’s age shows a positive relationship with the Women economic empowerment index, significant statistically at 1 percent. The econometric results depict that if the age of the respondent increase by one year, the Women's economic empowerment increase by 0.0195 units. Females living in a joint family system are generally considered more empowered as compared to the females living in the nuclear family system. Women gain more experienced and trust in their household, with time [Assaad et al (2014)] Females over 50 years of age are considered to be more empowered socio-economically. The coefficient of women’s education shows a positive relationship with Women's economic empowerment, significant statistically. The econometric

|       |          |          |          |          |
|-------|----------|----------|----------|----------|
| MS    | 0.0541   | 0.0134   | 0.0927** | 0.0534   |
|       | (1.2827) | (0.3128) | (2.0139) | (1.4197) |
| WEDU  | 0.0248*  | 0.0306*  | 0.0281*  | 0.0279*  |
|       | (5.6454) | (6.8573) | (5.8562) | (7.1019) |
| FLFP  | 0.0802** | 0.1326*  | 0.0853** | 0.0996*  |
|       | (2.2717) | (3.6963) | (2.2131) | (3.1650) |
| HHEDU | 0.0135*  | 0.0154*  | 0.0059***| 0.0033   |
|       | (4.2335) | (4.7461) | (1.7110) | (1.1801) |
| HHY   | 0.0605** | 0.0712** | 0.0657** | 0.0478** |
|       | (2.5686) | (2.9730) | (2.5527) | (2.2724) |
| NER   | 0.0850*  | 0.0204   | 0.0349** | 0.0156   |
|       | (5.9408) | (1.4073) | (2.2394) | (1.2259) |
| HHS   | 0.0110   | 0.0165** | 0.0273*  | 0.0183*  |
|       | (1.5679) | (2.3111) | (3.5523) | (2.9125) |
| R²    | 0.3306   | 0.4094   | 0.3719   | 0.4336   |
| Adjusted R² | 0.2952 | 0.3781 | 0.3386 | 0.4036 |
| F-statistic | 9.3369 | 13.1013 | 11.1910 | 14.4708 |
| Prob(F-statistic) | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

*1 percent level of Significance, **5 percent level of Significance, ***10 percent level of Significance,
results of women's education show that if the number of years of education by the respondent increase by one year, the Women's economic empowerment increase by 0.0248 units. Education attainment is very important for females, as it helps them to empower them socio-economically [Rahman (2009); Desai (2010)]. This further enables them to achieve more job opportunities thus ensuring a better standard of living for their households Assaad et al (2014). The variables of female labor force participation show a positive relationship with Women's economic empowerment, significant statistically at 5 percent. The results of the econometric analysis show that if the respondent participates in the economic activities, the Women's economic empowerment increase by 0.0802 units. Females' participation in economic activities is financially empowered and independent to take their own decision in different domains. Females working in the labor force are more empowered and help in supporting and taking care of their families [Islam et al (2012); Kantor (2003); Assaad et al (2014); Akram (2015)]. The coefficient of the household head (father or husband) education shows a positive relationship with Women's economic empowerment, significant statistically. The econometric results of the household head education show that if the number of years of household head education increase by one year, the Women's economic empowerment increase by 0.0135 units. Education of the household head along with more experience and skills enable them to achieve job opportunities to increase their per capita income [Assaad et al (2014); Soharwardi and Ahmad (2020)]. The variables of household income show a positive relationship with Women's economic empowerment, significant statistically at 5 percent. The results of the econometric analysis show that an increase in household income will increase Women's economic empowerment by 0.0605 units. Females with a stable financial family background are empowered as compared to females having unstable financial family backgrounds [Shanty and Murty (2019); Soharwardi and Ahmad (2020)]. The number of earners in the household shows a positive relationship with Women's economic empowerment statistically significant at 1 percent. The results of the econometric analysis show that if the number of earners in the household increases by one person, Women's economic empowerment increase by 0.0850 units.

In Table 3, the third column presents the second model of the present study, the dependent variable is Women's social empowerment. The coefficient of the area of residence shows a negative relationship with Women's social empowerment, significant statistically at 1 percent. The econometric results depict that if the respondent lives in a rural area, the Women's social empowerment decrease by 0.1402 units. Females living in rural areas are less empowered [Desai (2010); Islam et al (2012)]. The coefficient of the women's age shows a positive relationship with Women's social empowerment, significant statistically at 1 percent. The econometric results depict that if the age of the respondent increase by one year, the Women's social empowerment increase by 0.0134 units. [Assaad et al (2014)]. The coefficient of women's education shows a positive relationship with Women's social empowerment, significant statistically at 1 percent. The econometric results of women's education show that if the number of years of education by the respondent
increase by one year, the Women's social empowerment increase by 0.0306 units. [Rahman (2009); Desai (2010)]. The variables of female labor force participation show a positive relationship with Women's social empowerment, significant statistically at 1 percent. The results of the econometric analysis show that if the respondent participates in the economic activities, the Women's social empowerment increase by 0.1326 units. [Islam et al (2012); Kantor (2003); Assaad et al (2014); Akram (2015)]. The coefficient of the household head (father or husband) education shows a positive relationship with Women's social empowerment, significant statistically. The econometric results of the household head education show that if the number of years of household head education increase by one year, the Women's social empowerment increase by 0.0154 units. Assaad et al (2014); Soharwardi and Ahmad (2020). Large household size shows a positive relationship with Women's social empowerment statistically significant at 5 percent. The results of the econometric analysis show that household size increases by one person, the Women's social empowerment increase by 0.0165 units.

In Table 3, the fourth column presents the third model of the present study, the dependent variable is the Women's familial empowerment. The coefficient of the women's age shows a positive relationship with the Women's familial empowerment, significant statistically at 1 percent. The econometric results depict that if the age of the respondent increase by one year, the Women's familial empowerment increase by 0.0307 units. [Assaad et al (2014)]. The coefficient of women's education shows a positive relationship with the women's familial empowerment, significant statistically at 1 percent. The econometric results of women's education show that if the number of years of education by the respondent increase by one year, the Women's familial empowerment increase by 0.0281 units. [Desai (2010)]. The variables of female labor force participation show a positive relationship with Women's familial empowerment, significant statistically at 5 percent. The results of the econometric analysis show that if the respondent participates in the economic activities, the Women's familial empowerment increase by 0.0853 units. [Islam et al (2012); Kantor (2003); Assaad et al (2014); Akram (2015)]. The coefficient of the household head (father or husband) education shows a positive relationship with the Women's familial empowerment, significant statistically. The econometric results of the household head education show that if the number of years of household head education increase by one year, the Women's familial empowerment increase by 0.0059 units. Assaad et al (2014); Soharwardi and Ahmad (2020).

In Table 3, the fourth column presents the third model of the present study, the dependent variable is the Women's empowerment index. The coefficient of the women's age shows a positive relationship with the Women's empowerment index, significant statistically at 1 percent. The econometric results depict that if the age of the respondent increase by one year, the Women's empowerment index increase by
0.0180 units. [Assaad et al (2014)]. The coefficient of women's education shows a positive relationship with the Women empowerment index, significant statistically at 1 percent. The econometric results of women's education show that if the number of years of education by the respondent increase by one year, the Women empowerment index increase by 0.0279 units. [Desai (2010)]. The variables of female labor force participation show a positive relationship with the Women empowerment index, significant statistically at 5 percent. The results of the econometric analysis show that if the respondent participates in the economic activities, the Women empowerment index increase by 0.0996 units. [Kantor (2003)].

Conclusion and Policy Implications

The present study has attempted to analyze the role of education and labor force participation in influencing women empowerment in Pakistan. The data were collected from 200 female respondents from Khanewal district, using a convenient sampling technique. The study concludes that the age of the respondents, labor force participation, educations of the respondent and education of the household head (husband/father) are positively influencing women empowerment. However, females living in urban areas have vast opportunities in terms of jobs, education and infrastructure facilities. The study suggests that government should pursue development expenditure on schools at the primary and secondary level, so that attainment of education can be available easily for females living in remote areas.
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