

Socioeconomic and Demographic Factors Affecting Married Women Work Participation in Southern Punjab (Pakistan)

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Abstract

The purpose of this study is to examine socioeconomic and demographic factors affecting married women work participation in Southern Punjab. Primary data from 474 married women is gathered from three divisions i.e. Bahawalpur, Multan and DG Khan through random sampling technique. The results of correlation matrix confirm that the econometric model is free from the problem of Multicollinearity. The results of Logistic regression concludes that age, education, decision to work, distance of workplace and family setup are declared as motivating factors for married women's work participation while square of age, distance of health unit, residence and husband's job are confirmed as de-motivating factors for married women's work participation in economic activities.

Keywords: Married Women Work Participation, Age, Education, Husband's Education, Children, Health Unit, Participation Ratio, Dependency Ratio

I. Introduction

Increased female participation in the labor market is one of the major gains of economic development in the developed economies. Since 1900, the participation rate has increased from the low level of 4 percent to above 70 percent in 2000 in the developed countries. Transition and Latin American economies have also experienced a steady rise in female labor force participation during the last two decades. Spillovers of the increased role of women in the labor market have contributed in uplifting the socio-economic status of the masses.

There are number of socio-economic and demographic factors that influence married women work participation and empowerment. Hancock (1986) found the relationship between AFDC and food stamp program on one side and participation in labor force on the other side. Education effects, age, English fluency, the number and ages of children and other household adults were controlled in the procedures of logistic regression. The results of multivariate analysis showed that AFDC and food stamps program both inhabited the participation in labor force for unmarried women. While there were no evidence that AFDC and food stamp programs influenced the labor force participation of married women.

Chaykowski and Powell (1999) has investigated that the wage rate has a significant and positive effect on female labor force participation rate and the income has a negative effect on it. Gallaway and Bernasek (2002) made an attempt to find the determinants of participation in labor force of urban married men and women of Indonesia. Similarly there were some other distinction factor that affect the women's decision to work in formal sector or informal sector. Finally it was concluded that childcare and education were important factors that determine the women's decision to work or not and choice of employment sector.

Mahmud (2003) focused on the emerging phenomena of feminization of labor force in Bangladesh. The results showed that female labor force participation was growing very fastly as compare to male particularly in urban area while the labor force growth process was slow in rural areas, in spite of this fast growth of female labor force participation men still dominating the market place. The author also explained the effects of feminization on the welfare of females. It was the view that feminization had a both positive and negative effects on women's welfare.

Mehendra (2004) analyzed female work participation and found that with an increase in large family size, the ability of women to participate in work reduced. The size of household was not found to be the determinant of child participation in the workforce. Euwals et al (2007) found the relationship between education and female labor force participation in Ghana. The results indicated that growth in education levels of female was responsible for the growth in labor participation rate of female during the years of 1992 to 2004. Using multinomial logit models and probit models, they finally found that education of female as indicating by the school level has a significant impact on the enhancement of female labor force participation rate in rural Ghana.

Ackah et al. (2009) investigated the determinants of women labor force participation in Ghana. The Ordinary Least Squares estimates suggested that both women fertility and educational attainment determine the labor force participation of women in Ghana. The study also observed that women with primary school or higher level education were more active than those women who had no education. The presence of children in home was significantly reduced the rate of female labor force participation controlling for education, religion, age, ethnicity and marital status.

Aminu (2010) investigated the determinants women work participation in Nigeria. The results showed that probability of employed workers participation was affected by the levels of education, residing in urban areas, and possession of assets like home and residing in urban areas. The probability of public sector employment increases with the higher level of education. Chaudhry and Jabeen (2010) pointed out factors affecting labor force participation in Pakistan. The study revealed that female labor force participation was not only affected by their education and personal choice but also from education, profession and attitude toward women work participation of their husband's, father's and other family members.

Hussain et al. (2012) focused on determinants of female labor force participation. The analysis showed that education of respondent, family type, age, number of dependents in family, number of literate females in family had positive and significant

impact on decision of female to enter into the labor market. While number of children, marital status, husband employment, household assets and parent level of education had negative impact on women work participation. Faridi and Rashid (2014) attempted to analyze the factors that plays important role in determining participation of educated female labor force. Their study was based on field survey for the district of Multan. They showed that variables like educated father or husband, ownership of assets, being educated married women, income, location, distance from headquarter, number of children, number of dependent and number of hours spent for house hold activities negatively affected the Female Labor Force Participation While age, residence in urban area, completed years of education and experience positively affects FLFP.

Besamusca et al. (2015) focused on impacts of families, economic conditions, education and gender on participation of female labor force (FLFP). The estimation showed that FLFP was positively associated with high level of female enrollment, gender parity, existence of maternity leave, high wage replacement, non-discriminatory legislation and women’s right while it had negative association with high levels of economic development and care burden for young dependants. The present study is an attempt to find out determinants of Married Women Work Participation in Southern Punjab, Pakistan. Introduction is given in section I, Data and Methodology are provided in section II, factors affecting Married Women Work Participation are explored in section III and Concluding Remarks are stated in section IV.

II. Data and Methodology

The study utilizes primary data which is collected from Southern Punjab by considering Multan Division, DG Khan Division and Bahawalpur Division. Data is collected from 474 women through Random Sampling technique involving various questions about Socioeconomic and Demographic factors. Results are analyzed using Descriptive Analysis, Correlation Analysis and Logistic Regression Analysis.

The determinants of married women work participation are analyzed in the Southern Punjab and its operational model is specified as below in functional form;

$$MWWPART = f \left(\begin{matrix} AGE, AGE^2, EDUR, WPAID1, H4, DIST, FJOB, PART, \\ AREA, FAMILY, DEPD, HEDUR, HJOB, CHILD \end{matrix} \right)$$

The above functional form is given in econometric form as;

$$MWWPART = \left[\begin{matrix} \beta_0 + \beta_1 AGE + \beta_2 AGE^2 + \beta_3 EDUR + \beta_4 WPAID1 + \beta_5 H4 + \\ \beta_6 DIST + \beta_7 FJOB + \beta_8 PART + \beta_9 AREA + \beta_{10} FAMILY + \\ \beta_{11} DEPD + \beta_{12} HEDUR + \beta_{13} HJOB + \beta_{14} CHILD + \varpi_i \end{matrix} \right]$$

Table 1: List of the Variables

Variables	Description of Variables
Dependent variable	
MWWPART	Married Women =1 if married woman participates in economic Work Participation activities

		=0 if married woman does not participate in economic activities.
Explanatory or Independent Variables		
AGE	Age of Respondent	It is age of respondents in completed years.
EDUR	Education of Respondent	It is education of respondents in completed years.
AREA	Residence	=1 if woman belongs to urban area =0 if woman belongs to rural area
CHILD	No. of Children	It is number of children living in a household.
FAMILY	Family Setup	=1 if woman lives in joint family system =0 if woman lives in nuclear family system
DEPD	Dependency Ratio	It is ratio of household members less than 18 years and above 60 to total household size
HJOB	Husband's Job	=1 if husband is employed =0 if husband is unemployed
PART	Participation Ratio	It is ratio of no. of working people in household to total household size
WPAID1	Decision to Work	=1 if woman can take decision to do paid or unpaid job =0 if woman can take decision to do paid or unpaid job
DIST	Workplace Distance	It is distance of house from workplace in kilometres.
H4	Distance of Health Unit	It is distance of home from nearest health unit in kilometres.
HEDUR	Husband's Education	It is education of husband in completed years.

III. Factors Affecting Married Women's Work Participation

A. Results of Descriptive Analysis of Married Women's Work Participation

A descriptive analysis gives overview of variables to capture the average and variation behavior of the variables. The results of descriptive analysis of women work participation variables are produced in table 2.

Table 2: Results of Descriptive Analysis of Married Women Work Participation

Variables	Mean	Standard Deviation
Married Women's Work Participation	0.553	0.498
AGE	38.857	9.313
Husband's Education	9.006	5.915
Husband's Job	0.738	0.440
Education of Respondent	8.321	6.088
Dependency Ratio	0.400	0.253
Father's Job	0.312	0.464
Workplace Distance	2.968	5.569
No. of Earners	1.937	1.241
Residence	0.432	0.496
Family Setup	0.485	0.500
Decision to Work	0.559	0.497
No. of Children	3.523	2.258
Sanitation	0.806	0.396

Safe Drinking Water	0.823	0.382
Distance of Health Unit	4.291	4.636

Average values of age, husband's education, education of respondent, dependency ratio, workplace distance, no. of earners, no. of children and distance of health unit are 38.85 years, 9 years, 8 years, 0.40, 2.968 km, 1.937, 3.523 and 4.291 km correspondingly. 55.30 percent married women participate in economic activities, 73.8 percent respondent's husbands do job, 31.2 percent married respondent's fathers involve in economic activities, 43.2 percent live in urban areas, 48.5 percent married respondents live in joint families, 55.9 percent married women can decide about job independently, 80.6 percent married respondents have good sanitation system and 82.3 percent married respondents having access to safe drinking water. The variables married women's work participation, father's job, no. of earners, residence, family setup, decision to work, no. of children and distance of health unit have small deviation from their mean values. On the other side, age, husband's education, education of respondent, dependency ratio, workplace distance, sanitation and safe drinking water have relatively large deviation from their mean values.

B. Results of Correlation Analysis of Married Women's Work Participation

The interdependence among variables may be examined by using Correlation analysis. It also observes the problem of multicollinearity in the data. The results of correlation analysis of married women's work participation are provided in table 3. If the value of correlation coefficient is greater or equal to 0.80, so there exists the problem of Multicollinearity. The results exhibit that the values of correlation coefficient are less than 0.80 denoting that the variables are not Multicollinear with each other.

Table 3: Results of Correlation Analysis of Married Women Work Participation

Variables	AGE	HEDUR	HJOB	EDUR	DEPD	FJOB	DIST	AREA	FAMILY	WPAID1	CHILD	H4
AGE	1.000											
HEDUR	-0.154	1.000										
HJOB	-0.125	0.118	1.000									
EDUR	-0.239	0.539	0.041	1.000								
DEPD	-0.234	0.017	-0.075	0.090	1.000							
FJOB	-0.116	0.060	-0.303	0.170	0.026	1.000						
DIST	-0.039	0.129	-0.079	0.284	-0.056	0.128	1.000					
AREA	-0.075	0.184	0.035	0.236	-0.063	0.000	-0.035	1.000				
FAMILY	0.036	-0.148	-0.037	-0.189	-0.002	0.065	-0.134	-0.081	1.000			
WPAID1	-0.004	-0.061	-0.074	0.090	-0.027	0.085	0.290	-0.125	0.080	1.000		
CHILD	0.360	-0.173	0.002	-0.388	-0.022	-0.142	-0.136	-0.135	0.136	0.036	1.000	
H4	0.033	-0.077	-0.108	-0.092	-0.011	0.025	-0.003	-0.099	0.011	0.012	0.016	1.000

C. Results of Econometric Analysis of Married Women's Work Participation

The determinants of married women work participation are investigated in this section and their results are reported in table 4. In which married women work participation is taken as dummy variable. In this table, first column shows names of explanatory variables, second column provides value of coefficients, third column gives respective standard errors, z – statistics are stated in forth column, probability values are presented in fifth column and their marginal effects are furnished in sixth column.

Regarding age of respondent, it is generally seen that younger women have much spare time and less domestic responsibilities so they may easily involve in economic activities. In the analysis, age is examined to be positively related with married women's work participation. It is found to be statistically significant at 10 percent level. Younger married women are 4.1 percent more likely to be engaged in economic activities. To trace out the effect of older age, the study considers square of age. The sign of age square is negative revealing that at higher age, the participation of married women will decrease. It is statistically significant at 5 percent level. Older married women are 0.1 percent less motivated to be engaged in economic activities. The reason may be that older married women are relatively much engaged in their children and family matters so they don't have much time to be engaged in economic activities. These findings are reconciled with earlier studies conducted by Goksel (2013), Naqvi and Shahnaz (2002) and Faridi and Rashid (2014).

Taking into consideration the education of respondent, it is turned out to be positively associated with married women's work participation. It is statistically significant at 10 percent level of significance. Highly educated women have more employment opportunities in labor market and they can easily get good job. Highly educated married women are 1.1 percent more motivated to involve in economic activities as compared to less educated married women. Similar results are also concluded by Goksel (2013), Faridi et al. (2009), Naqvi and Shahnaz (2002), Ackah et al. (2009), Evans and Saraiva (1993) and Faridi and Rashid (2014) in their studies. As regards to decision to work, if married women can independently decide about their job status so there would be more chances of married women's participation in work. The coefficient of this variable is positive and statistically significant as well at 1 percent level of significance. The probability of participation increases by about 48 percent if women can decide independently about their job.

To capture the effect of health on married women's work participation, distance of health unit is considered. It is turned out to be negatively related with women's participation in economic activities having statistically significant probability value at 5 percent level of significance. On the average, the probability of married women's work participation will increase by 1.4 percent if health unit is near to home. It may be justified as the nearer health unit may easily be visited by married women so that any issue of health may easily be resolved and women can easily take part in economic activities.

The distance of workplace from home is found to be statistically significant 1 percent level of significance. It is positively associated with married women's work participation. On the average, the probability of married women's work participation increases by 11.6 percent if workplace distance increases. Fathers plays vital role in women's work participation. Father's job has positive relationship with married women participation in economic activities having insignificant probability value [Faridi and Rashid (2014)]. Normally, fathers put special attention on education and job of their daughters and they prefer their even married daughters to have good jobs and education to survive morally, economically and socially and to have improved social status in the society. With reference to participation ratio, it is uncovered that participation ratio is directly related with married women's work participation with statistically insignificant z – statistics value. If more household members are participating in economic activities so

they would prefer their women to be on job for improvement of socioeconomic status of households.

Relating to residence (rural or urban), it is noticed that the married women belonging from rural areas are much involved in economic activities. Although they have few employment opportunities available in such areas but mostly of them are working with their husbands in the fields in the season of wheat or cotton especially. It is also analyzed that all family members work together in the fields. On the other side, educated women are teaching in private or public schools or working in rural health centers. The negative sign attached with residence variable exhibits lower work participation of urban married women and it is statistically significant at 1 percent level of significance. The probability of married women work participation in urban areas is 26.4 percent less as compared to married women work participation in rural areas.

Pertaining to family setup, the value of its coefficient indicates positive and statistically significant effect of joint family setup on married women work participation at 1 percent level of significance. Almost, the probability of married women's work participation increases by 18 percent in joint family setup. Because there are more family members available to take care of home and their children so married women can easily move outside the home for their jobs. Similar findings are also concluded by Naqvi and Shahnaz (2002), Faridi and Rashid (2014). As regards to dependency ratio, it is examined that more no. of dependents in home motivates married women to involve in economic activities to maintain their family status. In the current research, dependency ratio is revealed to be positively linked with married women's work participation but the value of coefficient is statistically not significant.

The married women have generally less permission for job if their husbands are educated enough and if they are earning well by their business or job. Husband's education appears to be negative with married women work participation. The value of z - statistics is -1.19 which is significant insignificant. On the other side, coefficient value of husband's job is - 0.984 denoting that married women work participation declines if husband is doing job [Faridi and Rashid (2014)]. Statistically, it is significant at 1 percent level of significance. Due to job of husband, the probability of married women's work participation declines by about 24.3 percent on the average.

Taking into mind the number of children, interesting findings are revealed by the logistic regression analysis with reference to married women's work participation. As number of children increases so activities of married women rises at home as well because women have to take care of her children and also of husband. In this situation, it would not be comfortable for married women to go outside for the purpose of doing job. The current analysis also concludes the same results as the sign of coefficient attached with no. of children is negative but the probability value is statistically insignificant. Mahendra (2004), Faridi et al. (2009), Naqvi and Shahnaz (2002) also found same results in their studies.

Constant shows the effect of all variables which are not included in the study but have an effect on married women's work participation. Constant has significant negative effect on married women's work participation. McFadden R - square demonstrates the

proportion of explained variations in women's work participation which is due to variations in independent variables considered in the current model. On the basis, 39.5 percent variations in married women's work participation are explained by the considered independent variables in the model. The value of LR statistics is 257.394 and probability value is 0.00 revealing that overall logistic model is significant at 1 percent level of significance.

Table 4: Logistic Regression Results of the Determinants of Married Women Work Participation

Explanatory Variables	Coefficients	Standard Errors	z-Statistics	Probability	Marginal Effects
Constant	-3.886	1.877	-2.070	0.038	-0.961
AGE	0.168	0.091	1.839	0.066	0.041
AGE²	-0.002	0.001	-2.051	0.040	-0.001
Education	0.046	0.028	1.647	0.100	0.011
Decision to work	1.942	0.261	7.440	0.000	0.480
Distance of Health Unit	-0.056	0.025	-2.251	0.024	-0.014
Distance of Workplace	0.471	0.091	5.143	0.000	0.116
Father's Job	0.501	0.321	1.561	0.119	0.124
Participation ratio	0.652	0.527	1.238	0.216	0.161
Residence	-1.068	0.268	-3.985	0.000	-0.264
Family Setup	0.728	0.261	2.787	0.005	0.180
Dependency ratio	0.497	0.545	0.912	0.362	0.123
Husband's Education	-0.030	0.025	-1.197	0.231	-0.007
Husband's Job	-0.984	0.336	-2.930	0.003	-0.243
No. of Children	-0.028	0.066	-0.424	0.671	-0.007
McFadden R-squared		0.395	Mean dependent var		0.553
LR statistic		257.394	Prob. (LR statistic)		0.000

Dependent Variable: Married Women Work Participation (If woman participates = 1, Otherwise = 0)

IV. Concluding Remarks

The study is intended to explore the socioeconomic and demographic causes of married women work participation in Southern Punjab. Primary data from 474 married women is gathered from three divisions i.e. Bahawalpur, Multan and DG Khan through random sampling technique. Econometric results are calculated using Logistic regression. The results of descriptive statistics propose that 55.3 percent women are working, average age of married women is 39 years, average education of their husbands is 9 years, 73.8 percent husbands are on job, married women are 8 years educated, 40 percent of married women's households are dependent, fathers of 31.2 percent are working, the distance of workplace from home is 2.968 km, approximately 2 women are working in each house, 43.2 percent married women belong to urban areas, 48.5 percent women are living in joint setup, 55.9 percent married women can decide about their work, married women have on average 3.523 children, 80.6 percent are provided good sanitation

facility, 82.3 percent have access to safe drinking water and the average distance of health unit from home is 4.291 km in Southern Punjab.

For analyzing Multicollinearity problem, the study utilizes correlation matrix which portrays that the values of correlation coefficient in women's work participation, married women's work participation and women empowerment models are significantly lower than 0.80 which concludes that these models are free from this problem. Married women's work participation are affected by age of respondent, square of age, education of respondent, decision to work, distance of health unit, distance of workplace, residence, family setup and husband's job. In these factors age of respondent, education of respondent, decision to work, distance of workplace and family setup are concluded as motivating factors for married women's work participation while square of age, distance of health unit, residence and husband's job are confirmed as de-motivating factors for married women's work participation in economic activities. The study recommends that there should be easy access to educational institutes and health centers for married women.

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