City University Research Journal
Volume 08 Number 02 July 2018 PP 298-310

SOCIO-ECONOMIC DETERMINANTS OF WORKING WOMEN'S EARNINGS IN PUBLIC AND PRIVATE SECTOR ORGANIZATIONS OF KHYBER PAKHTUNKHWA

Fazli Qadir [1] Muhammad Afzal [2] and Muhammad Tariq[3]

ABSTRACT

The current study examines the role of socio-economic factors in determining working women's earnings, working in public and private sector organizations in ten selected districts of Khyber Pakhtunkhwa, Pakistan. For this purpose, primary data has been collected from 789 respondents through a well-structured questionnaire women's working in different organizations of Khyber Pakhtunkhwa during November-December 2017. The study used two stage sampling technique for the selection of the respondents. Ordinary least squares method has been used for the estimation of the results. The results show that education, experience, place of job, family income, residential area and male preference over female have a positive and significant impact on women earnings. Whereas, dependency on male members of the family, access to health facilities and family sufferings from the job of female workers showed a significant negative impact on working women's earnings. These findings suggest that working women's earnings are largely dependent on socio economic factors in public and private organizations of the province.

Key Words: Socio-economic factors, earnings, Mincer wage function, Khyber Pakhtunkhwa

INTRODUCTION

The pace of economic growth has been remained slow in those countries where gender discrimination percentage is very high against those which offer equal opportunities in education and employment to both male and female population. Human capital investment has optimistic effects and is considered worthy for increasing productivity and controlling population growth (Faridi, Chaudhry & Anwar, 2009). Millennium Development Goals (MDGs) perceive investment in health, education and human capital of women as an important approach for development because educated and healthy women are more capable to engage in productive activities, have more chances of employment, earn higher incomes, have more money to invest in the education of their children and will prefer a small family (World Bank, 2003).

In the modern age, women are receiving higher education for the purpose of employment and economic gains because it has become almost difficult for a single male household head to support family livelihood expenditures due to high inflation rates in the goods and services markets (Nawaz, Afzal, & Shehzadi, 2013). They are now stepping forward not only to support household expenditures but also help in upgrading the standard of living in the society. This has changed radically the status of women in the society (Avais, Wassan, & Shah,2014).

Pakistan, total labor force participation rate (TLFPR)is 32.3 percent and female labor force participation rate (FLFPR) is 15.8 percent. In KP, FLFPR is 9.90% (Government of Pakistan, 2016).

[1] Ph.D Scholar, Department of Economics, Preston University Kohat, Islamabad campus
[2] Professor, Department of Economics, Preston University Kohat, Islamabad campus
[3] Assistant Professor, Department of Economics, Abdul Wali Khan University Mardan

© 2018 CURJ, CUSIT

The following table shows labor force participation rates of the population in Pakistan as well as in Khyber Pakhtunkhwa.

Table 1: Labor Force Participation Ratesin Khyber Pakhtunkhwa

Location	Male (%age)	Female (%age)	Total (%age)
Pakistan	48.1	15.8	32.3
Rural	47.4	20.2	34.0
Urban	49.4	7.5	29.0
Khyber-Pakhtunkhwa	40.0	9.9	25.0
Rural	39.3	10.7	25.1
Urban	42.9	6.1	24.7

Source: Labor Force Survey of Pakistan,2014-15.

The above table-1indicates that FLFPR is quite low (9.9%) in Khyber Pakhtunkhwa as compared to Pakistan (15.8%) which could be ascribed to various socio-economic factors prevailing in the study area. It is perceived that these factors may also have a strong impact on their economic standings in the household in Khyber Pakhtunkhwa (Din & Khan, 2008).

Earnings are considered important for social and economic development of a society and poverty reduction. Females constitute about half of the total population in Pakistan and play a very significant role in the economy (Faridi et al., 2009). The analysis of the working women earnings (WWE) is helpful in determining employment policy and policy formulation for human resource development and growth.

1.1 Justification of the Study

Women have to face problems while performing their jobs and obligations. These problems may be social, economic, cultural, religious, institutional and also domestic (Qureshi, 2000; Maqsood, Chaudhry, Zia, & Cheema, 2005; Maan, Tanveer, Saboor, Asghar & Ali, 2006; Whitehead, 2011).

In Khyber Pakhtunkhwa, people live with more traditional and rigid life style and perceive to be more religious. Also, persistence of a decade old terrorism wave has strongly affected the society in Khyber Pakhtunkhwa. Its economy has suffered from recession. In such a situation woman are working side by side of the male family members. In Punjab and Sindh provinces of Pakistan, detailed literature (Qureshi, 2012; Maqsood et al., 2006; Avais et al., 2014) is available, and there is inadequate research on the relationship of earnings and socio-economic factors in Khyber-Pakhtunkhwa. This study highlights the socio-economic determinants of employed women's earnings in Khyber Pakhtunkhwa.

1.2 Objectives of the study

The purpose of the present study is to investigate the role of socio-economic factors determining women's earnings in public and private sector organizations of Khyber Pakhtunkhwa.

© 2018 CURJ, CUSIT

1.3 Hypothesis of the study

The following are the hypothesis of the study

H0: Socio-economic factors do not affect working women's earnings in public and private sector organizations of Khyber Pakhtunkhwa

H1: Socio-economic factors have effect on working women earnings in public and private sector organizations of Khyber Pakhtunkhwa

REVIEW OF LITERATURE

Review of literature is necessary for a researcher to know about the previous work done on the topic at hand, different methodologies, techniques, tools, variables, areas of the study, and their results. It helps in finding the research gaps. Therefore, for the purpose of the current study, a reasonable literature review is presented as follows.

Nazar and Chaudhry (2017) analyzed private returns to education in district Multan, Pakistan. A random sample of 850 wage earners including both sexes was selected. For the purpose of analysis, Ordinary Least Square (OLS) technique and Mincerian wage function is used. This study examined earnings differential due to gender, location, marital status, and medium of instruction as proxy for quality of education. They found that wage earners have higher returns to education. Also, employees of urban areas, unmarried employees and employees who got schooling in English medium schools have higher returns to investment in education.

Singh and Dubey (2016) analyzed work life balance (WLB) and employees' retention in Information Technology (IT) and Business Process Outsourcing (BPO) sectors in India in 2016. The target populations of the study were 500 employees in Indore city. Descriptive approach, Correlation and regression were applied for analysis of this research study. Questionnaire contained a set of 15 measures of WLB. It was concluded that WLB affect stress, engagement and productivity among employees. It was suggested that companies should take into considerations the work-life balance to keep engage their employees intact and within the company by planning flexible working hours, best work culture, family guidance, etc.

Aslam (2009) investigated the effect of different factors on earnings using PIHS data for the Pakistani labor market. Mincer's human capital earnings function was estimated using standard human capital variables along with control variables in different specifications. The IV2SLS estimation procedure was adopted for correction of endogeneity of schooling and possible measurement error in schooling which produced higher returns to schooling estimates than the OLS method. Two-step Heckit method was used to correct for sample selection bias.

Din and Khan (2008) studied social and economic and cultural constraints faced by rural women in Mardan district, North West Frontier Province (NWFP). Results of Primary data and descriptive statistics showed a very limited socioeconomic and cultural role of women along with a low status in the study area. Cultural restrictions like young age marriage, restriction of women to indoor activities, low access to health facilities, and no choice of selecting a life partner are common in the study area. They concluded that the existing scenario can be changed by the expansion of training institutions and cottage industries in the research area.

Khan and Khan (2006) checked the contribution of employed women in the household budget working in public and private sectors. Data on 937 observations were collected and analyzed through OLS regression. They found positive impact of female as household head, education, nuclear family,

married status and ownership of assets on their contribution in household budget. Non-linear effect of age on their contribution in household budget was observed. The share of the employed women increased in the household budget when the husband is unemployed or has low level of education.

Rakhshanda et al., (2005) conducted a research study on the social and economic problems faced by women employed in different sectors in urban areas of District Faisalabad. A well-designed interview schedule was used for data collection. Results showed that most of the working women are performing their jobs for economic assistance to their family and household heads and for upgrading their standard of living.

Naqvi and Shahnaz (2002) studied the impact of schooling, experience and social and economic factors on female participation in income generating activities using cross-sectional data from integrated household survey (PIHS) (1998-99) for the age group of 15-49 years. They used multinomial logit and probit models for estimation of the parameters. Results showed an inverse relationship between the dependent variable female labor force participation and marital status, primary education, number of children and female as a household head.

Shabbir (1994) examined the impact of schooling, experience, occupational categories, provincial effects and urban rural area origin variables on earnings using Mincer wage model. Data were collected during 1979. The results showed that each additional year of schooling increase monthly earnings by 7-8%, while returns to experience were about 6% and males in Punjab earn less as compare to other provinces. Also, males of urban area are earning more than rural area in all provinces except the males in Khyber Pakhtunkhwa province.

Kozel and Alderman (1990) examined different factors of labor force participation decision in the urban areas of Pakistan. To estimate the impact of these factors, OLS regression technique and Tobit model were used. Study concluded that the rate of employed women participation in the labor force rises with an increase in the expected earnings and education level. Mincer (1962) investigated the relationship between working hours and female labor force participation overtime. He showed that income of the family has no influence on the wife's demand for leisure and reported a converse relationship of the labor force participation and life time wealth. He concluded that number of children effects the female labor force participation decision (Abbas & Peck, 2007).

The above review of literature shows that using earning function, along with the standard human capital variables, other characteristics of women e.g. social and economic, demographic, cultural and religious factors also affect earnings and are used in the earning function. Ordinary Least Square (OLS), fixed effect model using instrumental variable approach for correction of endogeneity and Tobit model have been used for the analysis for earnings and female labor force participation decision in income generating activities. The current study used additional socio-economic variables like family sufferings, male preference, dependency on male family members of females, independence of salary spending, access to health facilities and working women respect in the society in earnings analysis which are ignored in the previous studies and creates a research gape.

MATERIALS AND METHODS

The following section shows information about the data and methodology of the study.

3.1 Universe of the Study

All the twenty-six districts of Khyber Pakhtunkhwa form universe of the current study. Working women in public and private sector organizations of these districts in Khyber Pakhtunkhwa is the

© 2018 CURJ, CUSIT

target population of the study.

3.2 Sample Size and Sampling Technique

The current study used two stage cluster sampling technique. The total twenty-six districts of KP constitute twenty-six clusters of the target population. In the first stage, Simple Random Sampling technique (SRS) is used for selection of ten districts for data collection as study population, due to travelling and administration cost and time factor. District Peshawar, Nowshera, Charsadda, Mardan, Abbottabad, Bannu, Swat, Dera Ismael Khan, Mansehra and Swabi are selected by SRS technique as sampled clusters for study population. In the second stage, convenience sampling technique is utilized to collect primary data from the respondents.

In the selected districts women are mostly working in the agriculture, education, health, banking, administration and Non-Governmental Organizations (NGOs). These women are working at various positions. For collection of the data, a detail questionnaire was designed and all the important information were incorporated in it. The questionnaire was discussed with experts and pre-tested in the field before using for data collection. Out of 1000 women, 789 respondents returned the questionnaires.

3.3 Data Analysis

Analysis of the data is carried out through descriptive statistics and Mincer earnings function. Mincer earnings function is estimated through OLS technique which has been commonly used in this type of research studies (e.g. Aslam, 2009; Khan and Toor, 2003; Nazli (2004); Qureshi (2012). Since Mincer (1974), it has become a common methodology to measure gain from education usingMincerian equation (Card, 1999).

3.3.1 Theoretical Model of the study

Mincer (1974) in his pioneer work on earnings in America used schooling and experience as major factors that influence earnings. Mincer modelled the natural logarithm of earnings as a function of years of education and years of potential labour market experience. In the Mincer's earnings function, log earnings are modelled as the sum of a linear function of years of education and a quadratic function of years of potential experience:

$$\log z = \log z0 + c\ S + r1X + r2X2 \quad (1)$$

Where z is earnings, z0 is earnings of an individual without any education and experience, S is years of schooling and X is years of potential labor market experience. The coefficient c is the rate of return to an additional year of education. The current study will follow this model by including socio-economic determinants of earnings in the earning function.

3.3.2 Empirical Model of the Study

The empirical model of the study is given below:

$$WWE = B0 + B1SCH + B2EXP + B3URB + B4FI + B5REA + B6FAS + B7MAP + B8DPM + B9SAS + B10AHE + B11WWR + ei \quad (2)$$

In equation 1 WWE is the dependent variable. Whereas, SCH, EXP, URB, FI, REA, FAS, MAP, DPM, SAS, AHE and WWR are the independent variables.

© 2018 CURJ, CUSIT

Table: 2 Description of the Variables

Variable	Symbol	Definition
Working women annual earnings	WWE	▪ WWE is the natur al logarithm of working woman annual earnings in Pakistani rupees. It is obtained from monthly salaryof the employed women and multiplied by twelve.
Education	SCH	▪ Education is measured in number of years of completed schooling. Ten years for "Matric level schooling", twelve years for "Intermediate level",14 years for "Bachelor level", 16 years for "Bachelor level" and nursing course, 16 years for "Master level", 17 years for Bachelor of Medicine-Bachelor of Surgery (MBBS) degree holders, 18 years for "MPhi l level" and 21 years for "Ph.D. level" education,
Experience	EXP	▪ Total years of service in an organization
Family Income	FI	▪ Total annual income of all family members minus working women income.
Place of Job	URB	▪ To control for the differences of rura l or urban location of job area in earnings, a dummy variable is included in the study following Khan and Toor (2003). This variable is equal to"0" if woman is employed in rural area and equal to "1" if employed in urban area.
Place of Residence	REA	▪ Women living in urban areas have more chances of higher education as well as employment opportunities against women living in rural areas. Hence place of residence is included asa dummy variable for urban and rural area s and is equal to "1" if working women is living in rural area and "2" if equal to urban area.
Family sufferings	FAS	▪ The phenomenon of dual job i.e. domestic and paid work obligations create a variety of problems for the working women in bringing balance between duty and household responsibili ties. Therefore, it is important to analyze the impact of family sufferings on earnings. Family sufferings are set equal to "1" if woman response is "Yes" and "2" if response is "No".
Male Preference	MAP	▪ In Khyber Pakhtunkhwa, male members of the famil y are considered superior to female members in all aspects of life from education to feeding, mobility and employment decision. Therefore , this variable will reflect the perception of working women about their position and importance in the household environment. This variable is equal to "1" if the response is "Yes" and "2" if the response is "No".
Dependency on Male	DPM	▪ In a traditional society like Khyber Pakhtunkhwa, women are largely dependent on men for their day to day essentials and livelihood. T herefore, to investigate whether working women are dependent for their various day to day necessities on men in spite of receiving education and economic benefits every month or they are independent. So this variable is included in the model as dummy varia ble equal to "1" if response is "Yes" and "2" if response is "No".
Salary spending	SAS	▪ It is perceived that working women are not fully authorized to spend their earnings.This has a negative impact on their earning and reduces their efficiency because of discrimination. So this variable is included in the model to assess the extent of freedom of salary spending. It is equal to "1" if working woman is free to utilize her salary and "2" if she is not free.
Access to health facilities	AHE	▪ This variable is an indicator of the social status of working women. Families having higher incomes are considered to have more access to health facilities as compare to the families having low incomes. This variable is included to estimate whether access to health facilities has any impact on earnings or not.This variable is equal to "1" if the response is "Yes" and "2" if the response is "No".
Working women respect	WWR	▪ Women paid work is not much liked as compare to the women domestic work in their housesin a customary society like Khyber Pakhtunkhwa. Therefore this variable will investigate the insight of working women regarding their respect in the society and is equal to "1" if their response is "Yes" and "2" if they say "No".

© 2018 CURJ, CUSIT

RESULTS AND DISCUSSION

This section presents the results and discussion of the study. The details are as under.

4.1 Descriptive Statistics

Table 3 shows that mean age of the sampled working women in the study area is 33.67 years. The mean years of schooling observed are 15.57 years and mean experience is 8.328 years of the sampled working women. The mean annual family income reported is 731786.6 PKR and working women annual earnings are 514956.5 PKR.

Table 3: Descriptive Statistics

Variables	AGE	SCH	EXP	AFI	WWE
Mean (Std.Deviation)	33.671 (6.893)	15.575 (1.645)	8.328 (5.639)	731788.6 (520449.6)	514956.5 (261314.7)
Min-Max	22-58	10-21	01-22	36000-48,00,000	102,000---2,100,000

Data Source: Field survey, Nov-Dec, 2017

Survey data reveals that 48.92 percent working women belong to rural area and 51.08 percent belong to urban are a and there is a very small difference between the areas of residence of the employed women. On the other hand, it is observed that 54.88 percent of the sampled women are performing jobs in rural area while45.12 percent are doing jobs in urban area, as shown in the following table 4.

Table 4: Distribution of Working Women on basis of Place of Residence and Job

Place of Residence	Frequency	Place of Job	Frequency
Rural Area	386 (48.92%)	Rural Area	433 (54.88%)
Urban Area	403 (51.08%)	Urban Area	356 (45.12%)
Total	789 (100%)		789 (100%)

Data Source: Field survey, Nov-Dec, 2017

Survey data indicates that the highest percentage (60.08%) of employed women in the study area are having 16 years of education and on the other extreme (0.63%) are the women with 10 years of education. Also, 19.01% are having 14 years, 6.97% are having 12 years, 6.34% are 18 years, 5.07% are having 17 years and only 1.90% is having 21 years of education in the sampled working women as is evident from the following table 5.

Table 5: Distribution of Working Women on basis of Education

Years of schooling	10 years	12 years	14 years	16 years	17 years	18 years	21 years	Total
Frequency/ Percentage	05 (0.63%)	55 (6.97%)	150 (9.01%)	474 (60.08%)	40 (5.07%)	50 (6.34%)	15 (1.90%)	789 (100%)

Data Source: Field survey, Nov-Dec, 2017

© 2018 CURJ, CUSIT

Working women in societies have to perform dual jobs. They have to fulfill the household responsibilities before leaving for the paid job. In the current study, a question is asked from the respondents to perceive the insight of the women regarding family sufferings that whether family members suffer from the jobs of the working women or they face no problem. Among all the respondents, 52.09% reported that their families suffer from their job while 47.91% answered that their families do not suffer from their jobs as shown in table 6.

Table 6: Perceptions of Working Women Showing Response to Family Sufferings from the Job

Are your family suffering with your job?	Frequency	Percent
Yes	411	52.09
No	378	47.91
Total	789	100.00

Data Source: Field survey, Nov-Dec, 2017

A question was included in the questionnaire to assess the idea of working women that whether males are preferred over female in the jobs, salaries and other obligations or not. Table 7 indicates that 62.31 percent of the working women responded that males are preferred, while 37.69 percent answered that males are not preferred. This survey data confirms that there is prevalence of gender discrimination in the study area.

Table 7: Perceptions of Working Women Regarding Male Preference for Jobs

Is there any female discrimination regarding jobs and salaries in society?	Frequency	Percent
Yes	491	62.31
No	297	37.69
Total	788	100

Data Source: Field survey, Nov-Dec, 2017

Women with access to health facilities can perform efficiently, peacefully and proficiently. In the absence of health facilities, women may face strong health related issues and problems that may reduce their performance at the work place as well as at home. Survey data indicates that 87.07 percent have access to health facilities and 12.93 percent of the working women have no approach to health facilities in the study area as shown in the below table 8.

Table 8: Perceptions of Working Women regarding access to Health Facilities

Do you have access to health facilities?	Frequency	Percent
Yes	687	87.07
No	102	12.93
Total	789	100

Data Source: Field survey, Nov-Dec, 2017

© 2018 CURJ, CUSIT

In this modern time all governments of the world are keen to empower women by providing scholarships in education as well as employment quota in public sector jobs but still they are dependent on their male family members. In the current study, a large percentage (81.12%) of working women confirmed that they are dependent on their male family members to meet their daily needs. Only a small portion of working women (18.88%) reported that they are independent in fulfilling their needs as shown in below table 9.

Table 9: Perceptions of Working Women Regarding Females Dependency on Men

Are women dependent on men in our society?	Frequency	Percent
Yes	640	81.12
No	149	18.88
Total	789	100

Data Source: Field survey, Nov-Dec, 2017

Female work side by side their male members and can play vital role in increasing production and poverty reduction. So, it is the need of the day to recognize their role and give them proper importance and respect. Table 10 shows that 82.76% of working women were of the opinion that working women are respected in society due to their education and economic contribution in the family budget but still 17.24% of the respondents were of the opinion that working women are not respected in society.

Table 10: Perceptions of Working Women Regarding Respect in Society

Do you think people give respect to working women in our society?	Frequency	Percent
Yes	653	82.76
No	136	17.24
Total	789	100

Data Source: Field survey, Nov-Dec, 2017

Since society in KP is a male dominated society, so it is important to investigate that are working women free to spend their salaries? Or male members of their families utilize their earnings. Survey data indicates that majority (80.86%) of working women have freedom of salary spending. Although 19.14%showed that they are not free to utilize their salaries, majority of the working women responded that they are free to spend salaries as shown in the following table 11.

Table 11: Perceptions of Working Regarding Salary Spending

Are you spending all money with full freedom?	Frequency	Percent
Yes	638	80.86
No	151	19.14
Total	789	100.00

Data Source: Field survey, Nov-Dec, 2017

© 2018 CURJ, CUSIT

4.2 Estimation results

This section presents the diagnostic tests and estimation results for the Mincer wage model. In Table 12, popular Breusch-Pagan test results for checking the heteroscedasticity of variance of the residuals are given which is common characteristic of cross sectional data. P-value greater than 0.05 suggests that we cannot reject the hypothesis of homoscedasticity in the residuals in this wage regression model.

Table 12: Breusch-Pagan Test Results for Heteroscedasticity

Breusch-Pagan test for Heteroscedasticity
H_o: No Heteroscedasticity; H_1: Heteroscedasticity Exists
χ^2 = 3.48; P-value = 0.0621

Variance Inflation Factor (VIF) is a rigorous check for multicollinearity among regressors. For checking multicollinearity, the rule of thumb is that if VIF>5, then multicollinearity is present. The following table 13 shows results for VIF and no value is greater than 5. Which suggests that there is no problem of multicollinearity among the independent variables. So, multicollinearity is not a problem in this regression.

Table 13: Results of Variance Inflation Factor Test

Variable	REA	URB	SCH	AFI	FAS	EXP	MAP	WWR	DPM	SAS	AHE	Mean VIF
VIF	1.76	1.71	1.25	1.22	1.15	1.12	1.06	1.06	1.05	1.04	1.03	1.22
1/VIF	.567	.583	.802	.817	.872	.893	.942	.943	.954	.961	.967	

For checking the assumption of normality of the residuals in the linear regression model, we have used Jarque-Bera test. Results show that p-value is greater than 0.05 and we cannot reject the hypothesis of normality suggesting that residuals are normally distributed. So the assumption of normality of the residuals is hereby not violated in the regression analysis as shown in the following table 14.

Table 14: Jarque-Bera test results for normality of residuals

Jarque-Bera Test	
Ho: Residuals are normally distributed;	H_1: No Normality
J-B Test Statistic: 3.364	P-Value= 0.186

After checking the assumptions of CLRM for Mincer earnings function, it is evident that regression model is not suffering from the problems of multicollinearity, non-normality of residuals and heteroscedasticity. The following table 15 shows estimation results of Mincer earnings function.

Table 15: Regression Results of Working Women Model

Variable	Parameter Estimate	Standard Error	t-value	P-value
CONSTANT	8.3858	0.2384	35.17	0.000
SCH	0.0899	0.0074	12.12	0.000
EXP	0.0481	0.0020	23.45	0.000
URB	0.0852	0.0287	2.96	0.003

© 2018 CURJ, CUSIT

AFI	0.1965	0.0176	11.12	0.000
REA	0.1636	0.0290	5.64	0.000
FAS	-0.0577	0.0234	-2.46	0.014
MAP	0.0732	0.0232	3.15	0.002
DPM	-0.0687	0.0285	-2.41	0.016
SAS	0.0162	0.0283	0.57	0.566
AHE	-0.0752	0.0331	-2.27	0.023
WWR	0.0226	0.0278	0.81	0.417
R-squared: 0.64 Adj R-squared: 0.63 F-value: 119.40 P-value: 0.0001				

Table 15 shows results from OLS estimation. The p-value for F-statistic shows overall significance of the model. High value of R2(0.649) indicates that 64 percent of variation in the dependent variable earnings is explained by the set of explanatory variables.

Estimation results show that wages increased 8.99 percent with each additional year of schooling. This impact of education on earnings is also found similar to the studies (Nazli 2004; and Nasir 2002) using Mincer earning function. The coefficient of experience shows substantial increase in wages with each additional year spent in the labour market for female workers. The returns to experience with each additional year spent in the service and labor market found to be 4.81% per year and significant. Current analysis indicates that women working in urban areas are earning 8.5 percent more income than those women working in rural area labor market.

Faridi et al., (2009) found a negative impact of household income and assets on female work participation in earning activities. As a contrast to this, we found a very significant impact of 19.6 percent increase in annual earnings of working women as a result of an increase of one percent annual family income. Females in urban areas earn significantly more (16.3 percent)than those residing in rural areas.

Working women who responded that their families suffer from their jobs earn 5.7 percent less income than women who reported that their families do not suffer. In patriarchal society like Pakistan, it is considered that males are preferred in jobs, salaries and employment opportunities and women are dependent on their male family members. Working women who reported that male colleagues are not preferred in jobs, salary and job opportunities are earning 7.3 percent more income than those women who reported that males are preferred. Also working women who are of the view that they are dependent on their male family members earn 6.8 percent less than women who perceive that they are not dependent on male members.

Dummy variable for freedom of salary spending reveals a non-significant impact of 1.6 percent more income for the women who reported that they are free to spend and utilize their salaries than women who reported that they are not free in taking this decision by her own well. Working women who reported that they have access to health facilities earn 7.5 percent more income than women who do not have access to health facilities. This impact on earnings is significant.

© 2018 CURJ, CUSIT

CONCLUSION

The study examined the role of socio-economic factors determining working women earnings in public and private sector organizations of ten districts of Khyber Pakhtunkhwa, Pakistan. Data has been collected from 789 randomly selected women working in different organizations of the province. All the data has been collected from the respondents through a well-structured questionnaire during November-December 2017. The study used two stage sampling technique for the selection of the respondents. Ordinary least squares method has been used for the estimation of the results.

It is concluded that education, experience, place of job, family income, residential area and male preference over female have a positive and significant impact on women earnings. Whereas, dependency on male members of the family, access to health facilities and family sufferings from the job of female showed a significant negative impact on working women earnings. These findings suggest that working women's earnings are largely dependent on socio economic factors in all the organizations of the province.

REFERENCES

Abbas, Q., &Peck, F. J. (2007). The Mincer human capital model in Pakistan implications for education policy. *Cardiff Business School Working Paper No: E2007/24*.

Aslam, M. (2009). Education gender gaps in Pakistan: is the labor market to blame? *Economic Development and Cultural Changes*,57 (4), 747-784.

Avais, M. A., Wassan, A. A., & Shah, S. (2014). A case study on problems of working women in Sukkur. *Academic Research International, 5* (2), 325-333.

Bhatti, S. H. (2012). Estimation of the Mincerian wage model addressing its specifications and different econometric issues. PhD thesis. *Universite de Bourgogne*, English.

Card, D. (1999).The causal effect of education on earnings. *Chapter 30 in Ashenfelter and Card eds. Handbook of Labor Economics*,3-A, 1801-1863.

Faridi, M. Z., Chaudhry, I. S., & Anwar, M. (2009). The Social and economic and demographic determinants of women work participation in Pakistan: Evidence from Bahawalpur district. *A Research Journal of South Asian Studies, 24*(2),353-369.

Farooq, M., & Sulaiman, D. J. (2009).Gender earnings inequality and discriminationin the Pakistani Labor Market. *The Dialogue, 4* (3), 373-385.

Government of Pakistan, (2016-17). *Economic Survey.* Islamabad. Ministry of Finance.

Government of Pakistan, (2015). *Labour force survey (2014-15)*. Islamabad. Federal Bureau of Statistics, Statistics Division.

Gondal, A. H. (2000). Women's involvement in earning activities: evidence from rural Pakistan. *The Lahore Journal of Economics, 8*(2), 123-136.

Hyder, A. (2007). Wage differentials, rate of return to education, and occupational wage share in the labour market of Pakistan. *Pakistan Institute of Development Economics (PIDE) Working Paper No. 2007:17*.

Jalal-ud-Din, M., & Khan, M. (2008). Social, economic and cultural constraints of women in Pakistan with special reference to Mardan district, NWFP province. *Sarhad Journal of Agriculture, 24*(3), 485-493.

Jamal, J. (2015).Private returns to education in Pakistan: a statistical investigation. *MPRA Paper No.70640*.

Kozel, V., &Alderman, H. (1990).Factors determining work participation and labour supply decisions in Pakistan's urban area. *The Pakistan Development Review, 29*(1),1-18.

© 2018 CURJ, CUSIT

Khan, T.,& Khan, R. E. A. (2006). How much women are struggling for family survival? *MPRA* Paper *No, 17157*.

Khan, F. S., & Toor, I. A. (2003). Changes in returns to education in Pakistan: 1990-2002. *The Lahore Journal of Economics, 8*(2),83-98.

Maqsood, R., Chaudhry, B., Zia, Q., & Cheema, A. (2005).Problems of employed women at Faisalabad–Pakistan. *Journal of. Agriculture and. Social Sciences,* 1(3), 245–247. Maan, A., Tanveer, F., Saboor, A., Asghar, K., & Ali, I. (2006). Tracing the snap shot of working women:A behavioral analysis of their family members. *Pakistan Journal of Agriculture and SocialSciences,43*(1-2), 77-81.

Mincer, J. (1962). Labour force participation of married women: A study of laboursupply. In H. G.Lowis (ed.) Aspects of Labour Economics, Princeton, N. J. *Princeton University Press.63-97*.

Mincer, J. (1974).Schooling, experience and earnings.New York: National Bureau of Economic Research. *Columbia University Press*.

Nawaz, M. A., Afzal, N., & Shehzadi, K. (2013). Problems of formally employed women: A case study of Bahawalnagar, Pakistan. *Asian Journal of Empirical Research, 3*(10), 1291-1299.

Naqvi, Z. F. & Shahnaz, L. (2002). How do women decide to work in Pakistan? *The Pakistan Development Review,* 41(4), 495-513.

Nasir, Z. M. (1998). Determinants of personal earnings in Pakistan: Findings from the labour force survey 1993-94. *The Pakistan Development Review, 37* (3),251–274.

Nasir, Z. M. (2002). Returns to human capital in Pakistan: A gender disaggregated analysis. *The Pakistan Development Review , 41* (1), 1-28.

Nazli, H. (2004). The effect of education, experience and occupation on earnings: Evidence from Pakistan. *The Lahore Journal of Economics, 9* (2), 1-30.

Nazar, R., & Chaudhry, I, S. (2017).The return on investment for education in Pakistan. *PakistanJournal of Commerce and Social Sciences, 11* (3), 1069-1083.

Qureshi, M. G. (2012). The gender differences in school enrolment and returns to education in *Pakistan.Pakistan Institute of Development Economics,Islamabad. Working Paper No.84*.

Rakhshanda, M., Bushra, C., Zia, Q.,& Cheema, A. (2005).Problems of employed women at Faisalabad, Pakistan.*Journal of Agriculture and Social Sciences, 1*(3), 245-247.

Shabbir, T. (1994). Mincerian earnings function for Pakistan.*The Pakistan Development review,33*(1), 1-18.

Singh, R., & Dubey, K. (2016).An analytical study on work life balance in employee retention with special reference to IT and BPO sectors.IJRDO-*Journal of Applied Management Science*, (8),22-34.

World Bank, (2003). Gender equality and the millennium development Goals. Retrieved from http://www.worldbank.org.

Whitehead, K. A. (2011). Women in the workforce: how cultural factors affect labor supply. *University of Tennessee*, Honors Thesis Projects.

Zareen, N. F.,& Shahnaz, L. (2002). How do women decide to work in Pakistan?*The Pakistan Development Review, 41*(4), 495-513.