

Female Employment and Reduction in Family Size in Khyber Pakhtunkhwa



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Abstract: This study examines the association between female employment and small family size trends. This study based on primary data follows a cross-sectional study design. The study's data were collected from 384 respondents of District Peshawar's six communities through a comprehensive pre-tested questionnaire/interview schedule, the association between the study variables was obtained through the application of chi-square test statistics. The association between the variables depicted that women are moving towards the labor force due to inflation, which has empowered them to decide the family size, marry late and adopt a small female size. Furthermore, the labor force participation has pushed females to concentrate more on careers than the large family size, which gives them little time to take care of family, especially the larger one; consequently, they opt for small family size. The study provides a sociological insight to those concerned with the field of demography.

Key Words: Women Employment, Family Size, Fertility, Family Responsibility, Marriage Age

Introduction

An increasing number of studies have reported significant effects on female workers' supply from childrearing and family size (Lundberg and Rose 2000; Lundborg et al. 2014). Further, The impact of having children on women's hourly wages has been examined in a broad literature focused primarily on cross-sectional correlations or panel data estimation (Abendroth et al. 2014; Aisenbrey et al. 2009; Angelove et al. 2016; Budig and England 2001; Gangl and Ziee 2009; Staff and Mortimer 2012; Wilde et al. 2010). Besides, the link between women's empowerment (employment, etc.) and their fertility has been a central element in gender and development studies. The drop in fertility is perceived to be the product of such developments in women's empowerment (Phan, 2013). Moreover, research reveals that depending on the job sector, the relationship between women's paid employment and women's recorded preference for children varies (Behrman, and Duvisac, 2017).

Population growth has always been a significant problem in Pakistan (Ataullahjan et al., 2019). Population growth was low at the time of

independence. It accelerated with the improvement in Pakistan's living standard, especially the health (Afzal, 2009). By the 1990s, it reached an alarming 158 million (Bongaarts, 2009) and became a threat to national security, forcing governments to take revolutionary steps to control it. It resulted in a decline in population growth since the late 1990s (Hassan & Rafaz, 2017). Several factors affect the phenomenon of a decrease in the population.

This includes improvements in health and educational facilities (Eberstadt, 2010), economic hardships, late marriage trend (Hertrich, 2017), increased contraceptive use (Ataullahjan et al., 2019), improvement in mother and child's health (Som & Mishra, 2019), the positive trend towards modernization (Gries & Grundmann, 2018), urbanization (Flückiger & Ludwig, 2017), female involvement in the labor force (Klasen, 2019) and role of media (Billari et al., 2019).

An increase in female involvement in the labor force is a new phenomenon of the modern world (Hasani, 2013). It started way back in the mid-19th century in England through females' involvement as a

professional in the textile industry (Moos, 2017) due to world war II (Boehnke & Gay, 2020). However, during the 19th-century, males dominated the size of employed persons (Frader, 2020). The late 20th and early 21st century provided new opportunities for females (Olivetti & Petrongolo, 2016). A significant change in female labor force size was found globally in South Asia, followed by East Asia and Central and Eastern Europe (ILO, 2012). Like other South Asian countries, the female population involved in Pakistan's labor workforce increased from 13 percent in 1990 to 25 percent in 2014 (Sharma, 2019; The World Bank, 2016).

The decline in family size is one of the significant effects of increased female involvement in the labor force (Cools et al., 2017; Jayachandran, 2020). The working-class women, to some extent, have succeeded in reducing the family size compared to the nonworking women folk (De Laat & Sevilla-Sanz, 2006). The possible reasons were more say of females after the job in the size and economic affairs such as income (Schaffnit & Sear, 2017), expenditures which included avoiding extra time and money over excessive pregnancies (Kan & Hertog, 2017). Financial security or women empowerment helps women keep their families small (Shakya et al., 2018). Attainment of education further supplements it by focusing more on making females capable of acquiring and doing a job and paying little attention to marriage and childbearing (Nitsche & Brückner, 2020). This resulted in the emergence of non-traditional roles and values wherein females followed the philosophy of opportunity and cost to bear the childbearing burden (Hilevych & Rusterholz, 2018).

The fertility decline among educated and working women is directly linked with decreased infant and child mortality (Khan et al., 2018). The improvement in the health of surviving children leads to lowering fertility (Basu, 2002). Results report a negative relationship between maternal education and child mortality (van Soest & Saha, 2018). Educated mothers got more awareness, ability, and skills to nourish their children (Cui et al., 2019). Simultaneously, women's participation in the labor force was associated with infant and child care for working females (Khan & Awan, 2017). Consequently, working women limit their family size to give time to jobs and children. The child's survival rate among such females was also better due to better discipline and superior knowledge about the children

and their health. According to medical practitioners' instruction, working women's children receive proper care and timely treatment (HUANG, 2019).

In connection with females' involvement and small family size, a vast body of literature has reported a significant effect of family size and parenthood on the female labor force (Lundborg et al., 2014). The difference in family size was not significant, except among the wives of skilled professionals and people in the business. For (Saxena and Aoun, 1997), the small family was exceptionally high among the families where husbands were professionals or working in the professional sector in Thailand. The association was also more in the case of both male and female participation in the workforce. Already born child care was more important than their ability to produce another child was the other finding concerning the small family size. (Korzec, 1997) examined whether early childbearing is a hurdle in women's entry into the labor market. It was found that the income of the women who gave birth to their first child after the age of 30 was more than those who gave birth at earlier ages. The latter also had problems in getting jobs due to lack of experience. Females who started their career earlier delayed childbearing till the establishment of their occupation.

Fertility choices among such women depended on their expected wages in the market, or the high expected wages led to choose to delay childbirth. In connection with female empowerment and family size, (Sedgh et al., 2014) found that female empowerment was linked with the number of children compared to the sex of children. The significant factors affecting empowerment were the socio-economic status, level of education, and employment status. However, the level of empowerment is varied among regions and contexts.

Objectives of the Study

- a. To measure the association between female employment and reduced suction in family size in the target area of the study;

Methodology

The present study probes female employment or involvement in the workforce in reducing the family size in Khyber Pakhtunkhwa.

Study Design

As per the requirement, this study has adopted a cross-sectional, also known as a single-shot study design.

The Universe of study

District Peshawar of the Khyber Pakhtunkhwa province was the universe of the study. It is the provincial capital composed of rural and urban communities. District Peshawar consisted of 234,434 households according to the ([Pakistan, Bureau of Statistics, 1999](#)) Provide reference. A total of 119,515 belonged to the urban areas compared to 114,919 from rural areas. Three communities from both rural and urban areas were selected randomly for the present study.

Sampling and Sample Size

The study has employed a sample random sampling technique for choosing the study respondents. Furthermore, from the population mentioned above, 384 respondents were proportionally selected as study respondents on the analogy of ([Sekaran 2016](#)).

Data Collection

The data were collected through both interview schedules and questionnaires. The illiterate respondents were interviewed, and the literate respondents were entertained through the questionnaire. While keeping in view the cultural sensitivity, the female respondents were interviewed by educated and well-trained female enumerators.

Data Analysis

After data collection, it was coded and entered into the computer; SPSS version 26 was used to analyze the data on two levels, i.e., uni and bi-Variate. The univariate analysis comprised the distribution based on frequency and percentages. The bivariate analysis was

used to measure the association between dependent and independent variables by applying the Chi-Square and Fisher Exact test statistics. The association less than 0.05 was declared significant, while exceeding 0.05 was considered nonsignificant.

This is not clear why you have adopted many sampling methods and which were those; in the cross-sectional study, only a simple random sample method can be applied because it's an observational study. [rewrite this paragraph and include only important things, the above description can confuse the reader.]

Results

Female Employment and Small Family Size

Table-1, while describing female employment's role in reducing fertility reports, 60.9 percent of the respondents allowed their females to participate in the labor workforce. It is attributed to the high cost of living (65.6 percent). Table further states that 82.6 percent of the respondents validated that working women usually have a small family size compared to large among females at home in 86.7 percent of the cases. The primary reasons for low fertility among working females were marriage at a later age (77.9 percent), more power with women to make decisions regarding family size (64.6 percent), do not have sufficient time to look after their children, especially in the case of a large family (76.3 percent) and more concerned about their job (59.9 percent). The female's role has been changed from childbearing to income contribute also reported in 59.1 percent of the cases. Similar results were obtained by ([Khan and Awan 2011](#); [Blau and Kahan, 2000](#)).

Results reported that high living costs pushed the families to allow females to participate in the labor workforce and decreased their families' size. It is attributed to marrying later, lack of time, more potent in decision-making, and more concerned with the job and various affairs relating to the family.

Table 1. Showing the Frequency Distribution regarding Female Employment

S. No	Statement	Yes	No	Do not Know	Total
1.	Female employment is allowed in your family.	234(60.9%)	144(37.5%)	6(1.6%)	384(100%)
2.	Higher living cost pushes female to participate in the labour force.	252(65.6%)	100(26.0%)	32(8.3%)	384(100%)
3.	Family size tends to be higher among women at home.	310(80.7%)	56(14.6%)	18(4.7%)	384(100%)

S. No	Statement	Yes	No	Do not Know	Total
4.	Working women usually have a small family size.	317(82.6%)	45(11.7%)	22(5.7%)	384(100%)
5.	Working women usually marry at a later age.	299(77.9%)	40(10.4%)	45(11.7%)	384(100%)
6.	Female participation in the labor force empowers them to make decisions regarding family size.	248(64.6%)	78(20.3%)	58(15.1%)	384(100%)
7.	Working women are concerned more about their job than the size of the family.	230(59.9%)	110(28.6%)	44(11.5%)	384(100%)
8.	Working women do not have sufficient time to look after their children, especially the large family.	293(76.3%)	68(17.7%)	23(6.0%)	384(100%)
9.	The female role has been changed from childbearing to contribute to family income.	227(59.1%)	79(20.6%)	78(20.3%)	384(100%)

Source: Field Survey (frequencies while percentages of the respondents are presented in parenthesis)

Female Employment and Small Family Size

Female involvement in the labor force affects the size of their families. In connection with the role of female employment, table-2 reports a significant association between the dependent variable and the independent variable's statements that the higher living cost pushed females to participate in the labor force (P=0.003), working females usually have a small family size (P=0.003). The statements that had a nonsignificant association included female employment in your family (P=0.100), and family size tends to be higher among women at home (P= 0.077). The results support the findings ([Owuamanam and Alowolodu, 2010](#); [Angrist et al., 2006](#); [Caceres, 2006](#); [Black et al., 2005](#)).

Regarding the significant causes of the decline in fertility, table 2 again reports a significant association between small family size with the statements that working women usually marry at a later age (P=0.000), labor force participation empower them to make decisions regarding family size (P=0.002), they are more concerned about their job than the size of the family (P=0.001), they do not have sufficient time to look after their children especially the large family (P=0.000), and the female role has been changed from childbearing to contribute in family income (P=0.017). Same were the findings of ([Kaboudi et al. 2013](#); [Schuler et al. 2006](#); [Ronsmans et al. 2006](#)).

Table 2. Showing the Association between Female Employment and Small Family Size at Bivariate Level

S. No	Statement	Small Family Size			Chi-square P=value
		Yes	No	Do not know	
1.	Female employment is allowed in your family.				= 7.779 (p=0.100)
	Yes	141 (36.7%)	65 (16.9%)	28 (7.3%)	
	No	93 (24.2%)	31 (8.1%)	20 (5.2%)	
2.	Higher living cost pushes female to participate in the labour force.				= 15.692 (p=0.003)
	Yes	169 (44.0%)	61(15.9%)	22 (5.7%)	
	No	48 (12.5%)	32 (8.3%)	20 (5.2%)	
	Do not know	18 (4.7%)	7 (1.8%)	7 (1.8%)	

S. No	Statement	Small Family Size			Chi-square P=value
		Yes	No	Do not know	
3.	Family size tends to be higher among women at home.				= 8.444 (p=.077)
	Yes	199 (51.8%)	75 (19.5%)	36 (9.4%)	
	No	29 (7.6%)	19 (4.9%)	8 (2.1%)	
4.	Don't know	7 (1.8%)	6 (1.6%)	5 (1.3%)	= 16.282 (p=0.003)
	Working women usually have a small family size.				
	Yes	208 (54.2%)	74 (19.3%)	35 (9.1%)	
5.	No	19 (4.9%)	18 (4.7%)	8 (2.1%)	= 36.004 (p=0.000)
	Do not know	8 (2.1%)	8 (2.1%)	6 (1.6%)	
	Working women usually marry at a later age.				
6.	Yes	196 (51.0%)	72 (18.8%)	31 (8.1%)	= 16.887 (p=0.002)
	No	23 (6.0%)	16 (4.2)	1 (0.3%)	
	Do not know	16 (4.2%)	12 (3.1%)	17 (4.4%)	
7.	Female participation in the labour force empowers them to make decisions regarding family size.				= 17.625 (p=0.001)
	Yes	166 (43.2%)	60 (15.6%)	22 (5.7%)	
	No	45 (11.7%)	20 (5.2%)	13 (3.4%)	
8.	Do not know	24 (6.2%)	20 (5.2%)	14 (3.6%)	= 34.887 (p=0.000)
	Working women are concerned more about their job than the size of the family.				
	Yes	156 (40.6%)	48 (12.5%)	26 (6.8%)	
9.	No	62 (16.1%)	36 (9.4%)	12 (3.1%)	= 12.013 (p=0.017)
	Do not know	17 (4.4%)	16 (4.2%)	11 (2.9%)	
	Working women do not have sufficient time to look after their children, especially the large family.				
10.	Yes	186 (48.4%)	77 (20.1%)	30 (7.8%)	= 12.013 (p=0.017)
	No	43 (11.2%)	18 (4.7%)	7 (1.8%)	
	Do not know	6 (1.6%)	5 (1.3%)	12 (3.1%)	
11.	The female role has been changed from childbearing to contributing to the family income.				= 12.013 (p=0.017)
	Yes	152 (39.6%)	53 (13.8%)	22 (5.7%)	
	No	46 (12.0%)	23 (6.0%)	10 (2.6%)	
12.	Do not know	37 (9.6%)	24 (6.2%)	17 (4.4%)	= 12.013 (p=0.017)

Source: Figures in the table represent survey * Frequencies while percentages of the respondents are presented in parenthesis, and the end column number in parenthesis represents the p-value

Discussion/Analysis

As a whole, results show that working women are more motivated and concerned about their jobs and career growth than having a large family size. (Riaz and Pervaiz, 2018) also found a positive association of women's employment with their empowerment enabling them to make decisions regarding their health care and contraceptives in restricting family size to a desirable limit and participation in other major household activities. However, this was also because employment gave them little time for children's reproduction and socialization. For being in the developing world and famous for a stereotype of only being confronted to the four walls of homes, Pakistan

women are now on the breadwinner journey from child-bearer (Behrman, and Duvisac, 2017).

Moreover, the late 20th and early 21st century provided new opportunities for females. A significant change in female labor force size was found globally in South Asia, East Asia, and Central and Eastern Europe (ILO, 2012). Like other South Asian countries, the female population involved in Pakistan's labor workforce increased from 13 percent in 1990 to 25 percent in 2014 (The World Bank, 2016).

The female labor force plays a vital role in the nation's development. It significantly decreases the population—several contributing factors in the study area behind the relationship between women's employment and fertility decline. The foremost was

the age of marriage; working women tend to marry late, which gives them little time to have a considerable family size (Jensen, 2012). Besides late marriage, studies also show that women's participation in income-generating activities is positively associated with their late entry into motherhood, especially the second child's mother. Moreover, the working arena also empowered women to decide on luxury life, concentrate on health, acceptability to contraceptives, and family economic planning (Phan, 2013; Vikat, 2004).

Population growth in Pakistan remained a significant problem. Even though Pakistani society is highly culture-sensitive and patriarchal, the rapid population growth and high inflation have motivated the masses to let females be part of the labor force, as mentioned by (The World Bank, 2016; ILO, 2012).

(Khan and Awan, 2011) found a link between the numbers of children with female empowerment compared to the sex of children. Among the significant factors affecting women's empowerment were their employment status, education level, and socio-economic conditions. In contrast, the context and level of empowerment were found different among regions.

Children's performances were related to family size; the higher the size of the family, the lower would be the quality of the children (Hatton et al., 2018; Kugler & Kumar, 2017). The many researchers' findings revealed that the quality of children is more important than quantity (Dang & Rogers, 2016; Fitzsimons & Malde, 2014; Ponczek & Souza, 2012). The industrialized world emphasizes small family size (Oláh, 2015; Oláh et al., 2018), parents are more concerned regarding their children's education, health, and food (Dang & Rogers, 2016). The larger families could not feed and provide quality education and nutrition (Chen et al., 2018). The dropout ratios were higher in large families (Kang, 2011), especially with the high number of females (Mughal et al., 2019). This phenomenon is highly found in the developing world as due to better socio-economic conditions in western societies, parents have no worries regarding their education.

The decline in family size is one of the significant effects of increased female involvement in the labor force (Blau and Kahn, 2000). (Diamond et al. 1999) found that the family size of working women was smaller as in contrast to the nonworking women folk. The possible reasons were more say of females after a

job in the size and economic affairs such as income, expenditures that included avoiding extra time and money over repeated pregnancies. Furthermore, social security, financial freedom help females to reduce family size. In connection with the statement that working women are more concerned with the job than the number of children, it was found by (Cools et al. 2017) that adding a child to the family not only reduces their chances of being hired by higher-paying organizations but also the increase in rank with top earnings within the same organization.

Furthermore, therefore the decision for a working woman to move beyond second child can be costly not only in terms of improvement in rank but also time and money. Attainment of education further supplements it by focusing more on making females capable of acquiring and doing a job in some formal organization and paying little attention to marriage, resulting in a delay in marriage, childbearing, and ultimately fewer children due to the autonomy obtained through education and employment. This further resulted in the emergence of non-traditional roles due to their involvement in the labor market to provide a resource to take good care of their children (Hahn et al., 2018).

Conclusion

The study found a positive trend towards the small family in both the sampled respondents' perceptions and actions. Family size in the study area had been found on the decline, especially among working women. With the change in society's socio-economic dynamics, the high cost of living pushed females to enter the labor force, which enabled them to raise a large families. Due to marriage later, more power regarding making decisions about family size after employment and did not have sufficient time to raise a large family. Further, they were more concerned about the job and change in their role from housewife to earner in family income. The study recommends balancing working women's responsibilities both at home and workplace, especially caring for children in the shape of daycare facilities and maternity leave.

Limitation and Study Forward

The present study is only confined to probe out the employment aspect concerning the reduction in family size. Other dimensions can also be associated with a decrease in family size.

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