

EMPIRICAL DETERMINATIONS OF FEMALE ENROLMENT TRENDS IN EDUCATION SECTOR OF PAKISTAN

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ABSTRACT

Education is a basic human right (United Nations, 2010). Education is a major source of creating and developing variety of productive capacities and expertise among human beings. Females' access at all levels of education makes them efficient and effective in their personal and professional roles and enables them to contribute in the economic and non-economic development of their societies and nation's. Country Pakistan is a less developed country of the world, where female seldom have access to their basic rights including education. To uplift the unstable economy of the country, Government of Pakistan focused to provide education to all, up to higher education level. Since last 64 years of independence, Government of Pakistan took various education policies, plans and schemes to enhance accessibility of education with special focus on female but females' education status remain unsatisfactory. Therefore, this research paper is focused to presents the current scenario of female education in Pakistan and to examine the growth in female education at various education stages, during past 20 years in Pakistan. This research study also identifies the causes and socio-economic obstacles which makes female deprive to get education in this modern era.

Keywords: *Female, Education Stages, Growth, Less Developed, Basic Rights, Socio-Economic*

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INTRODUCTION

Country Pakistan has frequently facing many economic (i.e. poverty, unemployment etc.) and non-economic problems (i.e. corruption, terrorism etc). The weak and unstable economy of Pakistan demands highly educated and efficient human resource to develop their economy (Syeda, et al., 2006). Female makes more than half of the total population in Pakistan and accessibility of education to them is necessary for economic and non-economic development of this country (Social Policy and Development Centre, 2003).

But due to various direct and indirect factors large proportion of female population in Pakistan remains illiterate and limited have access at higher education levels. Therefore, through empirical analysis this study presents the status of female education in Pakistan and find out major impediments towards female education. This research study has four components. The first component in a few words gives introduction; second component provides the review of literature. Third component highlights research methodology of this study. The fourth component presents the findings, conclusions and recommendations.

CONCEPTUALIZATION

The word "Education" refers to the process to improve the knowledge, to learn various skills and get training in particular field (United Nations Educational, Scientific and Cultural Organization, 2012). Education helps to improve personal character; mental abilities and efficiency in work consequently, social and economical status of educated peoples become raise (Iqbal. et al., 2013). In formal education system in Pakistan and elsewhere in the world, there are various education stages (including primary, middle, high secondary and tertiary etc.). Besides having primary and secondary education, people's access up to higher education level is necessary to make human population as efficient human

capital who can offer their full contribution for their nation's socio-economic growth. On other side, good quality of education at all stages of education indicates strong education system of a country and opens the doors of economic prosperity in a country. Education has great role in female empowerment (Chaudhry et al., 2012). Female's education play important role to upgrade their socio-economic status in society (Chitrakar, 2009).

In Pakistan female makes 50 percent of the total human resource and availability of education to them (i.e. up to higher education level) will boost up their economic contribution and up lift their status in society (Pakistan Education Statistics, 2010-11). Consequently, weak and unstable economy of Pakistan will be in better-off position. While, in Pakistan female not often have equitable access to their basic rights including education (Begum et al., 2011). Pakistan was come into existence on 14th August 1947 and inherited weak and insufficient education system. Government of Pakistan realizes the importance of education for both male and female and took many initiatives to upgrade education status for both male and female (Isani & Virk, 2003). Throughout history, Government of Pakistan have made eight five years plans (i.e. from 1955 to 1998), and formulate many education policies such as New Education Policy 1970, National Education Policy 1972, National Education Policy 1979, National Education Policy 1992, National Educational Policy 1998-2010, National Education Policy 2009 and introduce various educational programmes such as Literacy and Mass Education Commission (LAMEC) and Nai Roshni School program (Social Policy & Development Centre Annual Review, 2003 & Pakistan Institute of Legislative Development and Transparency, 2011). All these education policies, plans and programmes were focused to enhance the accessibility of education to all (i.e. male and female) and to upgrade the quality of education. However, various studies shows that after decades of efforts, country Pakistan still not able to provide education from primary to higher education levels and female remain more deprive to get education at various education stages. This opens the area to

investigate progress in female education at different stages of education and to find out qualitative and quantitative impediments in the direction of female education in Pakistan.

METHODOLOGY

This research study focused to examine status of female education in Pakistan therefore, secondary data was collected regarding female enrolment at various education stages (i.e. primary, middle, high and at tertiary level). This research study is secondary data based therefore, annual time-series data for the period 1991 to 2010 have been taken. In order to measure the significance progress in female education, Ordinary Least Squares (OLS) was applied. The secondary data was taken for these variables from the website of State Bank of Pakistan and Economic Survey of Pakistan, 2012. Statistical Package for Social Sciences (SPSS)** and MS-Excel were used to analyze the data and to present the findings. The findings of this study would provide numerical facts about female education in Pakistan which help to generate compatible initiatives to overcome the hurdles in the direction of female education and to improve the female education status in the country.

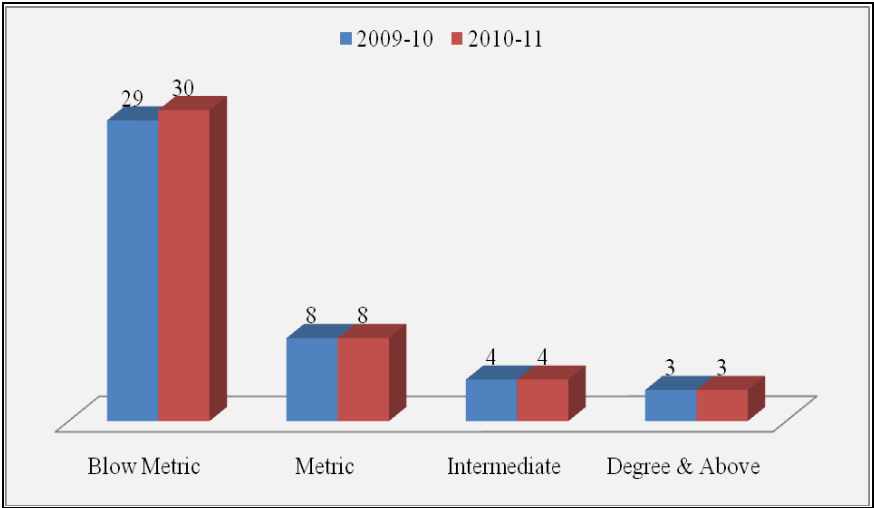
RESULTS AND FINDINGS

Study results in figure 1 shows status of female education in Pakistan. Data highlights that the ratio of female who are getting education is not satisfactory in all mentioned levels of education infect, downward trend is observed at each higher education level. Comparative analysis for female education status in Pakistan during reported years (i.e. 2009-10 and 2010-11) shows no any improvement. According to Iqbal et al., (2013) poverty, conservative believes about female education, political instability,

** SPSS is the statistical packages which can perform highly complex data manipulation and analysis with simple instructions.

corruption etc are major factors that prevent female to have access to their basic right (i.e. education).

Figure-1: Female Population by Level of Education in Pakistan (%)



Source: Economic Survey of Pakistan 2011-12, p.34

Table 1 shows female literacy trends in Pakistan, data figures indicates that female literacy rate in Pakistan has been significantly improved however, large proportion of female population in Pakistan still remain illiterate. Government of Pakistan took many initiatives (this includes education policies, plans and schemes) to improve the female literacy rate in Pakistan. Consequently; female education status has been improved however, in Pakistan access to basic education still a major issue (United Nations Educational, Scientific and Cultural Organization, 2012). Therefore, in this modern era 55 percent Pakistani women remain illiterate.

Table-1: Female Literacy Trends in Pakistan n=10 (%)

Years	Literate Female	Illiterate Female	Total
1981-82	12	88	100
1998-99	16	84	100
2001-02	32	68	100
2004-05	37	63	100
2005-06	40	60	100
2006-07	42	58	100
2007-08	42	58	100
2008-09	44	56	100
2009-10	45	55	100
2010-11	45	55	100

Source:Economic Survey of Pakistan 2010-11 & Economic Survey of Pakistan 2011-12

Table 2 demonstrates female literacy trends in Pakistan by region. Comparative analysis of data figures shows in urban areas of Pakistan 33 percent female remain illiterate in contrast in rural areas 65 percent rural female remain illiterate. This indicative that in Pakistan compare to urban female, rural female is more deprive in order to get education. Pakistani society is highly divided in rural and urban regions in all provinces (Isani & Virk, 2003). In urban Pakistani communities, peoples are more aware about the importance of education and parents have more positive opinion about their male and female child (Chitrakar, 2009). On other side, better quality of education particularly, in term of private sector is also available in urban areas therefore, comparatively female education status in urban is seems to be better than rural areas Colclough et al., 2000). Better learning environment is the great source to improve the quality of education and to motive girls towards education Social Policy and Development Centre, 2003). Whereas, in rural communities, proper physical facilities (i.e. washroom, electricity, water etc) also not available in many rural

schools and colleges (Economic Survey of Pakistan 2011-02). Therefore, large proportion of rural female remains illiterate.

Table-2: Female Literacy Rate by Regions n=6 (%)

Year	Rural		Urban	
	Total	Female	Total	Female
2005-06	47	33	72	64
2006-07	48	32	73	66
2007-08	51	36	73	65
2008-09	48	33	74	66
2009-10	49	34	73	66
2010-11	50	35	74	67

Source: Economic Survey of Pakistan 2010-11 & Economic Survey of Pakistan 2011-12

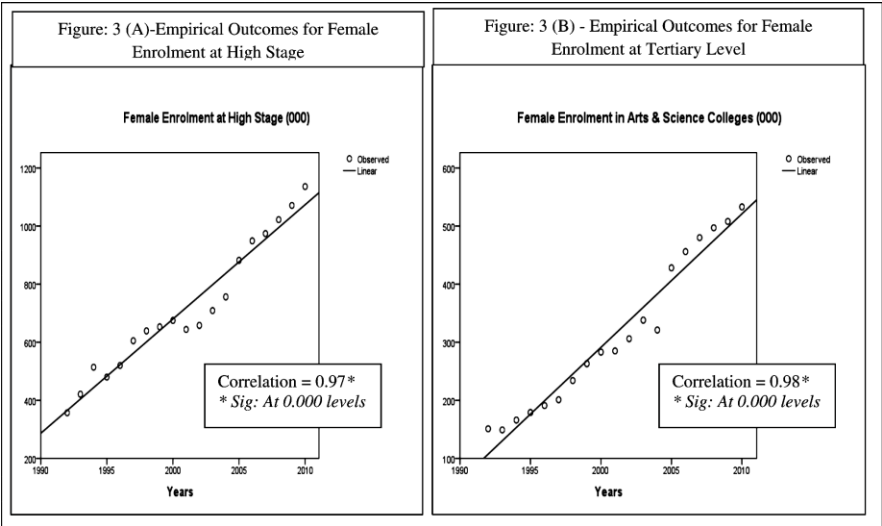
Enrolment trends indicate the performance of education sector in a country (United Nations Educational, Scientific and Cultural Organization ⁺⁺, 2012). Government of Pakistan took many initiatives to enhance the female enrolment at all education stages and increase the numbers of separate schools, colleges, professional colleges and universities particularly for females (Economic Survey of Pakistan 2011-12).

Figure 2 shows the outcome of simple linear regression analysis for female enrolment at primary and middle stages during past 20 year in Pakistan. In figure 2 (a) and (b) pattern of regression line and positive values of correlations for primary stage (i.e. 0.98) and for middle stage (i.e. 0.96) indicates that female enrolment at primary and middle stage has been significantly improved during mentioned years. However, comparative analysis of figure 1 with

⁺⁺ United Nations Educational, Scientific and Cultural Organization are the agency of United Nations. Its aim is to contribute towards socio-economic development of nations.

table 1 and 2, highlight that large proportion of female population still remain illiterate. According to Chaudhry et al., (2012) Government of Pakistan did not give proper attention to promote the education in Pakistan with special focus on female on other side, unfavorable socio-economic scenario for female education also suppose to responsible for unsatisfactory status of girls education in Pakistan.

Figure-2: Empirical Results for Female Enrolment at Primary and Middle Stages in Pakistan n=20 Years (1990 to 2010)



DataSource: State Bank of Pakistan (2010)

Table 3 presents empirical results of simple regression models. Modle1 shows positive values of B-coefficients (i.e. 239.28 for female enrolment at primary stage and 73.48 for female enrolment at middle stage), values of F-statistics (i.e. 415.5 for female enrolment at primary stage and 220.5 for female enrolment at middle stage) and significant values of t- statistics(i.e. 20.4 for female enrolment at primary stage and 14.8 for female enrolment at middle stage) indicates that the equation 1 and equation 2 both as a whole are statistically significant in explaining Female enrolment at primary and middle stages respectively, in Pakistan. The comparative values of R square (i.e.

0.96 for female enrolment at primary stage and 0.92 for female enrolment at middle stage) and values of B-coefficients indicate that compare to middle stage, female enrolment at primary stage was more significantly improved.

Table-3: Regression Results for Female Enrolment at Primary and Middle Stages in Pakistan n=20 Years (1990 to 2010)

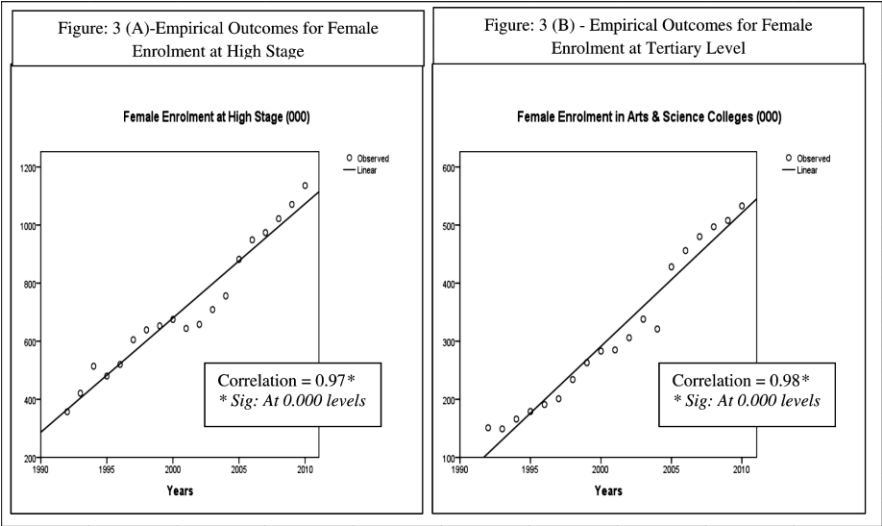
Models	Variables		Statistical Measures			
	Dependent (Y)	Independent (X)	R ²	F-Statistics	T-value	B-coefficient
Model 1	Female Enrolment at Primary Stage	Years	0.96	415.5 *	20.4 *	239.28
Model 2	Female Enrolment at Middle Stage	Years	0.92	220.5 *	14.8 *	73.48

Data Source: State Bank of Pakistan (2010)

* Sig: At 0.000 levels

In figure 3 (a), pattern of regression^{††} line and significant value of correlation (i.e. 0.97) indicate positive and direct relationship between years and female enrolment at high stage. This indicates that female enrolment at high stage was significantly increased at each passing year. In figure 3 (b), pattern of regression line and significant value of correlation (i.e. 0.98) shows positive and direct relationship between years and female enrolment at tertiary level. This indicates that female enrolment at tertiary level was significantly increased in Pakistan at each passing year.

^{††} Regression is a statistical process for estimating the relationships among variables



Data Source: State Bank of Pakistan^{§§} (2010)

Table 4 presents empirical results of simple regression models. Model 4 and 5 shows positive values of B-coefficients (i.e. 39.351 for female enrolment at high stage and 22.982 for female enrolment at tertiary level), values of F-statistics (i.e. 322.3 for female enrolment at high stage and 424.9 for female enrolment at tertiary level) and significant values of t- statistics(i.e. 17.9 for female enrolment at primary stage and 20.6 for female enrolment at tertiary level) indicates that the equation 4 and equation 5 both as a whole are statistically significant in explaining female enrolment at high and at tertiary level in Pakistan. The comparative values of R square (i.e. 0.95 for female enrolment at high stage and 0.96 for female enrolment at tertiary level) and values of B-coefficients indicate that compare to high stage, female enrolment at tertiary level was more significantly improved in Pakistan.

^{§§} State Bank of Pakistan is the central bank of Pakistan started operation on first July 1948.

Table-4: Regression Results for Female Enrolment at High Stage and at Tertiary Level in Pakistan n=20 Years (1990 to 2010)

Models	Variables		Statistical Measures			
	Dependent (Y)	Independent (X)	R ²	F-Statistics	T-value	B-coefficient
Model 3	Female Enrolment at High Stage	Years	0.95	322.3 *	17.9*	39.351
Model 4	Female Enrolment at Tertiary Level	Years	0.96	424.9 *	20.6*	22.982

Data Source: State Bank of Pakistan (2010)

* Sig: At 0.000 levels

CONCLUSIONS AND RECOMMENDATIONS

Education^{***} has gigantic benefits in economic and non-economic fields of life and well educated human resource can play efficient role in economic and non-economic development of the nations. Women comprise 50 percent of the total population in Pakistan and well educated women can play productive role in socio-economic development of the country. Government of Pakistan took many initiatives to ensure accessibility of education to everyone, at all stages of education. Empirical results shows that at all stages of education (i.e. primary, middle, high and at tertiary level) female enrolment were significantly increased in Pakistan. Whereas, trends regarding female literacy show that in Pakistan large proportion of female population remain illiterate and regional discrimination also found in the country (i.e. in relation to female education). Therefore, it is suggested that Government of Pakistan should have to uplift their education policies, plans and schemes with special focus on female education.

^{***} Education is the fundamental right for all nations that humans have by the fact of being human.

To remove the regional disparities, special initiative should be taken from both public and private sectors to upgrade the status of female education with special focus on rural females. To improve the quality of education and to motivate females towards education there is need to improve physical learning environment in all education institution.

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