

# **Why the Children are not in Schools in Punjab**

**Hafiza Nadia Bashir**

Ph.D Candidate, Department of Economics

The Islamia University of Bahawalpur

Email: [nadia\\_bashir@hotmail.com](mailto:nadia_bashir@hotmail.com)

**Rana Ejaz Ali Khan**

Head/Associate Professor, Department of Management Sciences

COMSATS Institute of Information Technology Sahiwal.

Email: [ranaejazalikhan@yahoo.com](mailto:ranaejazalikhan@yahoo.com)

No doubt primary education holds an essential significance world wide and it is basic undeniable human right. Pakistan is unfortunate in this regard and education is neglected since the birth of the country reflected by the low school enrolment. This study is related to the socio-economic factors which affected the child's school enrollment focussing on enrollment at primary level in Punjab. The binary logistic regression model is used to estimate the child's school enrollment. We have used micro data taken from PIHS. This study concluded that school enrollment is positively connected to income and employment of the head of the household and negatively linked to the school distance, cost of schooling, and positively related to the child's willingness and negatively related to the, home care, and child's age and positively with teacher's behavior parent's approval. Policies which are existence at present facilitate to generate awareness in country.

## INTRODUCTION

The literacy rate in Pakistan is not as much of as 50 percent. The participation rate at all levels is low and drop out rates is far above the ground, especially at primary level and over 5.5 million children (5-9 year age) do not be present at schools (Government of Pakistan,1998). The drop out at primary level is 45 percent, while at middle elementary and secondary level. Education is complimentary up to the primary level all over the country in Punjab and Sindh; it is free at middle and secondary level. School enrollment is the result of dealings of teachers, students, had masters and learning activities with the most important goal of preparing young generation for having flourishing future. The term “culture” is a system of mutual meanings, symbols, experiences and practices, school values, beliefs and logic making. There are many factors which affects the student’s knowledge in schools.

These includes teachers qualifications and experiences, teachers supervision to students, ability of teaching learning resources, physical facilities, students have cognitive and other abilities and their socio- economic backgrounds. Saeed, et; al (2005) established that the parental qualifications, family size and teacher direction have impact on the attainment of primary grader students. Khan and Shah (2002) estimate that “family environment and parent’s environment in educational activities of their children had a positive impact on their achievement”. According to the author, there are some factors correlated to school culture and climate that influence the student’s achievements. According to Deal and Peterson (1999) “school’s culture is one of the important factors that influence academic achievement of students. Erpelding (1999) and Hirase (2000) states that School with a positive climate had higher academic achievements of students. Some factors affect the school culture and climate; one of the most prominent is the number of teachers and students in the school. Another author Tucker (1997) bring into being that small schools have a better learning climate than large schools because in small schools there is a probability that faculty and students know each others. And this could affect the levels of openers, trust cooperation, environment and other culture and climate variables that can directly or indirectly affects the student’s achievements. Ahmad, et; al (2007).

The child labour is thought to be harmful to children's welfare in several ways. It interferes with human capital accumulation and may affect the present and future health of the child. The time a child has to spend at school is fixed; school hours are not flexible, because in this way the student will drop out. So the school hours are treated as a permanent preference variable. Working hours have negative influence on human capital accumulation. Hours spend at work tire the child, reduce learning ability reduce time accessibility for study. When the income of the parents raises the probability that a child attend school increases and number of hours worked falls as compare to hours for schooling and increases in the cost of schooling human capital accumulation will reduce. Child labor supply is expected to be lower when children are attending the school because of the negative effect on the human capital accumulation and higher marginal value of leisure. Children living in rural areas are less likely to be enrolled in school. In Pakistan girls are less likely than boys to be at school and the probability decreases further if there are pre-school-age children in the household. In contrast, girls have a higher probability than boys of being enrolled in school in Nicaragua, although the chances of attending school are reduced pre-school-age children in the household. Rosati, et; al (2003).

Objectives of study are, to highlight the factors effecting the enrollment of students at primary level in Pakistan, to identify the importance of primary education and also provide policy recommendation for the future path of achievement

## **2. REVIEW OF LITERATURE**

Shahnaz (1993) has been studied a micro analysis of demand –side determinants of schooling in Urban Pakistan. The objectives of this study was to establish the importance of some factors, that effect the decision of a household to send their children who are of school going age, between 5-14 years to school in Urban areas. The study was based upon survey data, collected for the Project Food Security Management in 1986 by Pakistan Institution of Development Economics and International Food Policy Research Institute and the analysis was based on 792 household, who have children in the age 5-14 years. The results showed that household income is positively related to child schooling. Finally, the study suggested that poverty is the key determinant of demand for child schooling.

Arif, et. al. (1999) Examined that primary education has many substantial social and economic effects. Primary education is a necessary element of human capital and plays an important role in

the economic growth and development of a country. Other authors like Butt(1984),Azhar (1988) they said that due to primary education one can increase one's earnings. They explained that poverty holds a significant negative influence on the primary school enrollment. The results of this study showed that increasing household income will result in an increase in primary school enrollment. They have been used probit function to explain the factors determining the probability of opening school. The data used in this study was collected by IFPRI in its survey of rural Pakistan during 1988-89. They examined that children belonging to poor households are not as much of liable to attend primary school.

Paterno (2001) discussed that illiteracy remain a foremost hurdle to economic development in many countries. Increasing to primary schooling is a main concern in the struggle against poverty. He also discussed about school excellence have a diverse effect on student achievement. Schooling choices of poor households are very sensitive to school fees and quality. Source of data of this study was (PIHS) 1991.

When we make a comparison between these studies the results showed that poverty is a major contractor to effect economic development and enrollment of students. And also the results of these studies showed that income of the household has a positive link with child's schooling. Rosati,et;al (2003) also analyzed the determinants of school attendance and hours worked when the income of the parents raises the probability that a child attend school increases and number of hours worked falls as compare to hours for schooling and increases in the cost of schooling human capital accumulation will reduce. The secondary data have been used for this article. This article adds to the literature by focusing on the instantaneous decision on school attendance and amount of work supplied.

Naushin (2004) has attempted to analyze the evolution in primary and secondary schooling in Pakistan: Gender and age multitude analysis. The aim of this study was to evaluate the varying pattern of school attendance through age cohort analysis for both males and females in Pakistan. The study depended upon the 1998 census data on educational attainment at and beyond the usual age of entrance into formal school system that gives the number and proportion that have passed at least grade 1.The result showed that, in rural areas both males and females have experienced important gains in attaining at least primary education, among recently- born cohorts. Further a profound rise in school attendance among younger age cohorts contributing to removal of gender gap in primary- level schooling in urban areas only.

Cardoso et al; (2007) has analyzed school drop-out and drive out factors in Brazil: The role of early parenthood, child labour, and poverty. The aim of this paper was to identify the major drop-out and push-out factors that lead to school rejection in an urban surrounding.

The data – World Bank Fortaleza Survey were collected in three neighborhoods in Fortaleza: Autarn Nunes, Edson Queiroz, and Pirambu in 2003. About 500 questionnaires were applied in each neighborhood. The Wald test Statistic and Instrumental variable model was applied. Findings indicated that early parenthood has a strong impact driving young people out of school. Extreme poverty is another factor lowering school attendance, as children who have suffered hunger at some point in their lives are less likely to be found attending school.

Some policy implications were recommended that reducing the costs of school, such as transportation could improve the record of school attendance. Moreover, early childhood development programs and improved nutrition and health would support development of cognitive skills of children in extreme poverty.

Another study is different from these two studies in this study according to Boo (2008) schooling employment decisions in 12 urban areas in Argentina over 12, years during the slump years 1998-2002. He also explained that how macroeconomic crisis impact on school enrollment and child labor in a developing country. If children drop out of school and sent into the labor market due to fall in household income. The quality of education may put up with due to reductions in both private and public spending. The result of this study was that macroeconomic crisis do not always slow human capital accumulation. The macroeconomic effects spotlight on whether the income or substitution effect dominates as macroeconomic conditions change.

Siddiqui, et; al (2007) examined that South Asia has one of the most distressing education situation in the world. Millions of children have never set foot in school. Seven millions children do not attend school in Pakistan and about 50 percent of the population has never attended school. And gender gap increases substantially in secondary enrollment with only 22 percent females and 62 percent males. Factors such as parent's education, their enrollment, health, and child age household poverty number of siblings; these are the demand side factors affecting the decision to go to school. The workforce participation by women has negative as well as positive affect on children enrollment.

According to Lam and Schoeni (1993) Knight and Sabot (1990) the employment status of parents and their schooling achievements increases their children's years of schooling. Some

studies like, Jayachandran (2002) concludes that higher level of workforce contribution by women could result in less enrollment especially for girls. Simple sequential model use for the check affect of the socioeconomic variables with three quantitative variables. The data for this study have been obtained from the Pakistan Integrated Household Survey (PIHS), of 2000-01.

Iram, et; al (2008) Identified some socio-economic factors which affected the parent's decision towards child's schooling. They have been discussed that some house holds characteristic e.g household income, parent's education, location, area class besides community and social set up and also demand and supply side characteristics affect the decision making of parents. This study explored the economic determinants of school preference at primary level. Binary logistic regression model have been used to analyze the factors disturbing the enrollment of students. The results of this study showed that income and education of parents and employments status were positively affecting the school enrollment of child. The age of child, distance cost of schooling were significantly and negatively related to school enrollment. The data used in this study have been collected from Household Income Expenditure Survey (HIES).

We have been collected some similar results and some contradicting results from the above studies all the author's have been discussed about parent's decisions to go to school and also have been discussed about that school enrollment depend on parents income, employment status. And also have been discussed that poverty is the

Goksel (2008) has been studied the determinants of school attainment in Turkey and the impact of the expansion of compulsory education. The objective of this study was first to explain the main factors that effect the demand for education in Turkey both for boys and girls. Then to investigate whether or not there are any differences between genders, and finally to try to evaluate the impact of the extension of compulsory education in Turkey. The data was utilized from the House Hold Income and Consumption Survey of State Institute of Statistics of Turkey data sets from 1994 and 2002. The determinants of school ability were analyzed by applying probit models. The variables that were used as exogenous variables include: children's age, parents education, two dummies showing whether mother and father are self- employed, one dummy showing whether only mother is present in the household, one dummy showing whether only father is present in the household, and a dummy variable that shows whether the household is located in the urban area or not.

The result indicated that girls are more negatively affected by the number of the boys in the house hold; boys are influenced negatively by having a self employed father. It was proved that when mother have the power to decide they give more importance to their children's education. Further, the income is an important factor in the demand for schooling, so income inequality would negatively affect the school attainment.

### **Data and Methodology**

Pakistan Integrated Household Survey (PIHS) 2001 was used for data requirement of the study. Data have been comprised of 4531 observations from all over the Punjab. We have used Binary Logistic Model to determine the probability of school enrollment. Logistic regression is useful to find out the presence or absence of characteristics (Iram, et. al. 2008).

### **Definitions of Variables**

The included variables in this analysis were: whether the school is expensive to be afforded by the parents (TOEXPNSV); region, i.e. urban or rural, urban = 1 and rural = 0 (REG); parents did not approve, 1 = yes, 0 = no (PARNTAPR); age of child is a continuous variable (AGE); child willingness to go to school, 1 = yes, 0 = no (CHLDNTWL); education not useful (EDUNTUSF); and sex of the child, 1 = male, 0 = female. We have used these variables for the purpose to examine the factors affecting the enrollment of students. All of these variables were independent variables. We have used enrollment of students as a dependent variable (binary variable as currently attending = 1 and never attended and attended in the past = 0). The functional form of the model is given as:

$$\text{Enroll} = f(\beta_0 + \beta_1 \text{REG} + \beta_2 \text{TOEXPNSV} + \beta_3 \text{CHLDNTWLNG} + \beta_4 \text{AGE} + \beta_5 \text{SEX})$$

### **Results and Discussion**

In low income developing countries like Pakistan parents engage their children at home for some help with work especially in rural areas. Child's willingness is not a highly significant variable. To expensive variable has more significance level. Because child's schooling depend on cost of school. Age of child has more significance level. In rural areas some children go to school at later age and this issue creates a problem for child to adjust himself with his fellows. Sex of child also has a higher significance level according to the results. There were some studies in which

authors have used the same model . Siddiqui et,al (2007) also discussed about the determinants of child's schooling, Iram et, al (2008) has also explain the same characteristics and has used the same model.

## Logistic Regression

**Table 1**

| <b>Case Processing Summary</b> |                      |          |                |
|--------------------------------|----------------------|----------|----------------|
| <b>Unweight<br/>ed Cases</b>   |                      | <b>N</b> | <b>Percent</b> |
| Selected Cases                 | Included in Analysis | 11672    | 50.0           |
|                                | Missing Cases        | 11673    | 50.0           |
|                                | Total                | 23345    | 100.0          |
| Unselected Cases               |                      | 0        | .0             |
|                                | Total                | 23345    | 100.0          |

If weight is in effect, see classification table for the total number of cases.

| <b>Dependent Variable Encoding</b> |                       |
|------------------------------------|-----------------------|
| <b>Original Value</b>              | <b>Internal Value</b> |
| 0                                  | 0                     |
| 1                                  | 1                     |

According to the results enroll was a dependent variable. We have examined that currently attended = 1 and never attended and attended in the past =0

## Block 0: Beginning Block

**Table 2 Classification Table**

| Predicted<br>ENROLL | Percentage<br>Correct |
|---------------------|-----------------------|
|---------------------|-----------------------|



|        |          |   |      |      |
|--------|----------|---|------|------|
| Step 0 | Observed | 0 | 1    |      |
|        | ENROLL   | 0 | 8568 | 0    |
|        |          | 1 | 3104 | 0    |
|        | Overall  |   |      | 73.4 |

Percentag  
e

Constant is included in the model.  
The cut value is .500

#### Variables in the Equation

|        |          | B      | S.E. | Wald     | df | Sig. | Exp(B) |
|--------|----------|--------|------|----------|----|------|--------|
| Step 0 | Constant | -1.015 | .021 | 2348.989 | 1  | .000 | .362   |

#### Variables not in the Equation

|        | Variables  | REG     | Score   | df | Sig. |
|--------|------------|---------|---------|----|------|
| Step 0 |            | TOEXPNS | 520.796 | 1  | .000 |
|        |            | V       | 172.308 | 1  | .000 |
|        |            | CHLDNTW | 64.364  | 1  | .000 |
|        |            | L       |         |    |      |
|        |            | EDUNTUS | 2.175   | 1  | .140 |
|        |            | F       |         |    |      |
|        |            | PARNTAP | 53.563  | 1  | .000 |
|        |            | R       |         |    |      |
|        |            | AGE     | .215    | 1  | .643 |
|        |            | SEX     | 33.113  | 1  | .000 |
|        | Overall    |         | 872.081 | 7  | .000 |
|        | Statistics |         |         |    |      |

### Block 1: Method = Enter

#### Omnibus Tests of Model Coefficients

|        | Chi-square | df | Sig. |
|--------|------------|----|------|
| Step 1 |            |    |      |
| Step   | 1078.480   | 7  | .000 |
| Block  | 1078.480   | 7  | .000 |
| Model  | 1078.480   | 7  | .000 |

#### Model Summary

| Step | -2 Log likelihood | Cox & Snell R Square | Nagelkerke R Square |
|------|-------------------|----------------------|---------------------|
| 1    | 12441.76          | .088                 | .129                |

**Table 3 Classification Table**

|                           |                    | Predicted<br>ENROLL |      | Percentag<br>e Correct |
|---------------------------|--------------------|---------------------|------|------------------------|
|                           |                    | 0                   | 1    |                        |
| Step 1                    | Observed<br>ENROLL | 0                   | 1    |                        |
|                           |                    | 8567                | 3104 | 100.0                  |
|                           |                    | 1                   | 0    | .0                     |
| Overall<br>Percentag<br>e |                    |                     |      | 73.4                   |

The cut value is .500

**Table 4  
Variables in the Equation**

|        |          | B      | S.E.   | Wald    | df | Sig. | Exp(B) |
|--------|----------|--------|--------|---------|----|------|--------|
| Step 1 | REG      | 1.005  | .044   | 524.257 | 1  | .000 | 2.731  |
|        | TOEXPN   | -7.371 | 2.767  | 7.095   | 1  | .008 | .001   |
|        | SV       |        |        |         |    |      |        |
|        | CHLDNT   | -7.237 | 4.485  | 2.604   | 1  | .107 | .001   |
|        | WL       |        |        |         |    |      |        |
|        | EDUNTU   | -7.732 | 24.320 | .101    | 1  | .751 | .000   |
|        | SF       |        |        |         |    |      |        |
|        | PARNTA   | -7.364 | 4.892  | 2.266   | 1  | .132 | .001   |
|        | PR       |        |        |         |    |      |        |
|        | AGE      | -.027  | .007   | 15.421  | 1  | .000 | .973   |
|        | SEX      | -.250  | .044   | 32.681  | 1  | .000 | .779   |
|        | Constant | -.962  | .077   | 155.859 | 1  | .000 | .382   |

Variable(s) entered on step 1: REG, TOEXPNSV, CHLDNTWL, EDUNTUSF, PARNTAPR, AGE, SEX.

The results of the above table showed that region has a positive link with child's schooling and has a higher level of significance. There is a positive relationship between region and enrollment of students. The variable too expensive has a higher level of significance. Because cost of schooling was negatively related to school enrollment. It expressed that when the cost of schooling increases then the enrollment of children will decrease. Child willingness was significant at 10 percent not higher level of significance but we expect that this variable was significant at 10 percent. The parent's approval also significant at 13 percent not a higher level of significance. Age of child has a higher level of significance. The variable sex of child also has a

higher level of significance. Some policy implications are recommended that reducing the cost of schooling, such as transportation could improve the record of school attendance.

### **Conclusion**

Education is a basic human right and it holds a significant importance of the world wide. This paper examines the factors affecting the enrollment of children at primary level. Child's willingness, parent's approval, cost of schooling, age of child, sex of child were the explanatory variables for child's schooling. We have used binary logistic regression model to determine the school enrolment. As we have explained in the results discussion that some variables have higher level of significance and some of these variables have normal level of significance. Some policy implications are recommended that is reducing cost of schooling, such as transportation could improve the record of school attendance. Thus making quick delivery of system in education parent's unawareness along with poverty also contributes low turn out of children in schooling. Therefore these factors may be held responsible for low turn out of children in schooling.

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