# Child Labour and Parental Education; A Case Study of Bajaur, KP Pakistan

Faiz Ur Rahim[*], Atta Ullah[†], Madiha Asma[‡]

## Abstract

*Child labour is one of the biggest barriers to human rights worldwide. There is a significant role of parental education in character building of their children. The impact of parental education on child labour is explored in Bajaur using binary logistic approach. This research is based on primary data collected from 300 households through field survey out of which 150 are taken from Khar division and 150 from Nawagai division. The results revealed that the parental education and income of households were negatively correlated with child labour, whereas the age of child and family size had positive impact on child labour. This study suggests that there is a need to improve the parental education through different training sessions so that parents may encourage to send their children to school rather than to work.*

***Keywords:*** child labour, parental education, binary choice model, Bajaur.

## Introduction

In this era of technology, child labour is still allowed to exist. Child labour is a social issue not only in Pakistan but also abroad where kids are exploited on daily basis. The issue of child labour is quite prominent in dominating countries like Pakistan where poor families push their kids to work to earn instead of providing better education to them. Child labour is the result of many factors including poverty, social norms, lack of education, lack of work opportunities for adults, migration and emergencies. But whatever the cause is, child labour composites social inequality and discrimination and takes away the childhood of children.

Developed economies have made many strategies to minimize child labour like establishing laws relating to minimum age of work, however less developed countries failed to implement these rules and regulation to end child labour (Angrist *et al.*,1991).

In the earlier stages of 16$^{th}$ and 17$^{th}$ centuries, the societies were full of slaves and involved to work in agriculture sector. The children of slaves were usually taken from developing country like

[*] Assistant Professor in International Institute of Islamic Economics (IIIE), International Islamic University Islamabad (IIUI).
e-mail: faiz.rahim@iiu.edu.pk
[†] Atta Ullah, MS Scholar at International Institute of Islamic Economics (IIIE), International Islamic University Islamabad (IIUI).
[‡] Madiha Asma, PhD Scholar at International Institute of Islamic Economics (IIIE), International Islamic University Islamabad (IIUI

Africa. Child labour was present much before industrialization in various forms. Though the children before the mid eighteenth century led an exhausting life but their family elders did not feel their burden and miseries of harsh work. It created a great problem for Britain in industrial revolution in the 18th century [International Labour Organization, (ILO),1973].

Factories development increased in England and United States from 1780s to 1840s which led to increase massive exploitation of children. In early 1810s, approximately two million school aged children were working in a very bad condition from fifty to seventy hours a week for the whole year. In 1876s, working men's party also banned employment of a child up to 14 years of age. In spite of restrictions during 19th century, the number of industries in various countries, the employment of children also increased. (Magda, 1973).

During the 18th and 19th centuries, the colonial trend brought many problems in Asia and Africa. The socioeconomic conditions became threatening for the above-mentioned regions and the families forced their children to work to earn some money for life survival. They were also deprived to get suitable education. Consequently, With the increased volume of immigrants, the issue of child labour intensified because they were struggling for survival (Milton,2014)

The International Labour Organization (ILO) in 1973s designed a convention and declared a "fifteen years" as the minimum age for a child to do work (Magda, 1973). Though, this Convention was ratified by poorest countries but failed to eliminate child labour. It was failed because these countries were unable to provide alternatives for children to support their families. A new ILO convention was designed in 1999s to ban the above-mentioned worst forms of child labour [(International Labour Organization (ILO),1999].

Akarro *et al.*, (2011) further noted that in developing countries the number of primary and secondary school remained low and large number of children were enforced to work than to get education. Causes of the decreased children enrollment in developing countries include low quality of teachers, parent's unemployment and high cost of education (Sakurai, 2007).

In Pakistan, the history of child labour begins from 1960s when the government decided to expand its industrial base. The volume of child labour increased in the country when new factories were developed and their owners had the desire to keep labour's cost down, for which they encouraged children to do labour. In next three decades, children of age five were encouraged to do work in various factories such as brick making, sports ball manufacturing, carpets factories and mining and quarrying (ILO,2011).

The issue of child labour in Pakistan has been taken up by various governments but has not resolved it completely. Prime Minister Benazir Bhutto showed commitment to end child labour in 1996s, Prime Minister Nawaz Sharif declared ending child labour as the first policy priority of his government in 1998s, Federal Minister for labour and manpower, Sheikh Rashid also promised to eradicate child labour in 1998s. Similarly, Omar Asghar Khan, the Federal Minister for child labour and manpower made a policy of bounded and unbounded labour in order to address child labour in Pakistan (Bureau of international labour affairs, 1998).

Today in Pakistan, every sector has enough number of working children who are vulnerable to various forms of violence. Bajaur is having a large number of child labour due to the large-scale destruction of school buildings by militants and absence of fundamental facilities in functional schools which led to the increased number of students drop out. Due to these massive scale school destructions, about 50,000 girls are deprived of education and therefore girls are out of schools. The official data reveals that there are 616 government run schools in Bajaur.

The main objective of the study is to explore the determinants of child labour in Bajaur Agency and to investigate them further that how significantly parent's education plays a role in reduction of child labour.

The contribution of this study can be judged on the basis of the fact that there is no empirical study available to check the impact of parental education on child labour in Bajaur. The present study fulfills this significant gap in literature on child labour.

## Literature Review

Becker (1965) introduced a neoclassical model of production and consumption for house hold decision making. He explains that the time of children will be allocated between the school and house hold production. There is a tradeoff between human capital accumulation and current consumption. Rosenzweig *et al., (*1977) were the first ones to use the Becker model for household's simultaneous decision of schooling, fertility and child in the framework of developing countries. They used aggregate data for different districts in rural India and found that the supply of child work dominates the substitution effect on income effect i.e. the earning income has a positive effect on the child working hours.

The Becker model was further expanded by Basu *et al.*, (1998) by adding two assumptions. First assumption was that a household sends children to work if their adult's incomes from all sources do not cover family needs. This assumption, he names of the luxury axiom.

The second assumption was that both adult and child are perfect substitute for one another. They used a general equilibrium model. First equilibrium is that when the wage of adults is lower than the subsistence level, they will send their children for work to achieve the luxury axiom. The second equilibrium is that when the wage of adult is above the subsistence level, they have no need to send the child for work.

Basu *et al.,* (1998) proved multiple equilibrium existence in the labour market, with equilibrium in the case, where adult wage is high and child does not work and other hand, if the wage rate of adult is low, then children will go to market in order to earn some money for survival. Rialp, (1993) and Galli, (2014) argued that the child labour supply will be increased in the sense when the opportunity of work declines for their adults. This leads to decrease in the income of households.

Majority of the studies have witnessed the negative impact of child and parent's years of schooling on the working of children. Most of the researchers have concluded that the child and parent's years of schooling increases the probability that child labour will be decreased. Rosenzweig *et al.,* (1977) and Hai *et al.,* (2010) have concluded that education of children and parents have a negative impact on the working of children.

Some empirical evidences show that there is a mixed relationship between parent's employment, child labour and their wage. Rosenzweig *et al.,* (1977) have noted that there is significant negative effect of adult male and female wages on working children in rural India. Dayioğlu, (2008) has analyzed that lack of employment of mother increases the probability of child labour in Turkey. Burki *et al.*, (1998) have studied the main supply side determinants of child labour in Pakistan and found that mother's employment inversely affects the chance of child schooling and directly affect the decisions to work. (Skoufias,1994)[20] has analyzed that adult wages don't significantly affect the chance of children working in India.

Household size also plays a significant role in the incidence of child labour as discussed by some of the studies. Rosenzweig *et al., (*1977) have analyzed that there is a direct relationship between child labour and large family size. For example, if family size increases the incidence of child labour will go up. Chaudhary and Khan (2002) have analyzed that low-quality education and large family size keep children away from school in Dera Ismail Khan.

Kulsoom, (2009) has noted that age of a child has a positive relation on working child in Rawalpindi city i.e., the older child is more likely to go to work as compared to younger. Because there are high chances of wage in labour market for older than younger. Nath *et al.,* (2000) have found that involvement rate of children increases in

labour with the increase of child's age. They conducted study in two rural territories of Bangladesh. Vlassoff, (1979) explored that the older children are more engaged in work as compared to younger children in the family and enterprise in the rural region of western India.

## Methodology

*Empirical Model*

From the above discussion, we now propose the following model for estimation of the study.

$$CHL_i = \beta_0 + \beta_1 HHI_i + \beta_2 FS_i + \beta_3 AC_i + \beta_4 ME_i + \beta_5 FE_i + \mu_i$$

HHI = House Hold Income, FS = Family Size, AC = Age of Child, ME = Mother Education, FE = Father Education

*Construction of dependent variable*

Dependent variable is child labour which is in the binary form which is child going to work =1 otherwise = 0

Parents choose to allocate their children's time in two activities which are mentioned below.

1. *Child not going to work:* This category includes personal work performed by children for whom they are not given wage or reward. Besides, those children who study full time with partial domestic works are known as students but not child labour.
2. *Child going to work:* this category includes those children who perform some work or activity and in response they get some wage or reward is called child labour.

## Methodology

The study estimates the model in which dependent variable is a function of many independent variables. The nature of the dependent variable is in categorical; therefore, we estimate our regression through binomial logit model. The impact of household income, child age, education of mother, education of father and family size on child labour is tested through binomial logit regression. The study examines the supply side determinants of child labour in Bajaur.

*Sampling Frame*

Primary data was collected with the help of a questionnaire developed with stratified sampling. The data was collected at household level in 2018. The questionnaire included wide range of questions related to economic and social conditions of the household and had four sections; a) information about the head of the household, b) information about the children, c) information about parents, d) information about household. Over all 300 households were surveyed from the rural and urban areas of division Nawagai and Khar, having

four tehsils (two tehsils in each division). Further two tehsils and 75 households were selected for survey from each tehsil making it a total 150 households sample. Those households were considered valid where at least one child between the age 5-15 was present.

## Results and Discussion

*Descriptive Analysis*

This section is divided into three different subsections, each containing descriptive statistics of child activity across two age groups (from 5-10 and 11-15 years) and gender (male and female) including overall areas, Khar and Nawagai Division.

***Table 1: Descriptive Statistics of Child activity across different age groups and gender (overall areas)***

| Child activity | Age Group (Years) | Male with percentage | Female with percentage | Total with Percentage |
|---|---|---|---|---|
| Child not going to work. | 5-10 | 106<br>54% | 90<br>46% | 196<br>56% |
| | 11-15 | 104<br>67.5% | 50<br>32.5% | 154<br>44% |
| | 5-15 | 210<br>60% | 140<br>40% | 350<br>52.4% |
| Child going to work. | 5-10 | 140<br>89.1% | 17<br>10.9% | 157<br>49.5% |
| | 11-15 | 152<br>95% | 08<br>05% | 160<br>50.5% |
| | 5-15 | 292<br>92.2% | 25<br>7.8% | 317<br>47.6% |

*Source: Data collected by author*

From the above table, it is clear that those children who are not going to work are 52.4 percent (350) of the total (667) children. Out of these, 60 percent are male while 40 percent are female children. In the second category children going to work are 47.6 percent (317) of the total (667) children. Out of these going to work children are 89.1 percent are male while 10.9 percent are female children.

***Table 2: Descriptive Statistics of Child activity across different age of groups and gender (Division Khar).***

| Child activity | Age Group (Years) | Male with percentage | Female with percentage | Total with percentage |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Child not going to work. | 5-10 | 49<br>51.04% | 47<br>48.96% | 96<br>68.57% |
| | 11-15 | 31<br>70.46% | 13<br>29.54% | 44<br>31.43% |
| | 5-15 | 80<br>57.14% | 60<br>42.86% | 140<br>44.44% |
| Child going to work. | 5-10 | 29<br>72.5% | 11<br>27.5% | 40<br>22.85% |
| | 11-15 | 130<br>96.29% | 05<br>3.71% | 135<br>77.15% |
| | 5-15 | 159<br>90.85% | 16<br>9.15% | 175<br>55.56% |

*Source: Data collected by author*

From the above table, it can be clearly seen that children who are not going to work are 44.44 percent (140) of the total (315) children. Out of these not going to work children, 57.14 percent are male while 42.86 percent are female children. In the second category children going to work are **55.56** percent (175) of the total children (315). Out of these going to work children are 90.85 percent are male while 9.15 percent are female children.

***Table 3: Descriptive Statistics of Child activity across different age groups and gender (Division Nawagai)***

| Child activity | Age Group (Years) | Male with percentage | Female with percentage | Total percentage |
|---|---|---|---|---|
| Child not going to work | 5-10 | 75<br>53.57 | 65<br>46.42% | 140<br>66.66% |
| | 11-15 | 55<br>78.57% | 15<br>21.42% | 70<br>33.34% |
| | 5-15 | 130<br>61.9% | 80<br>38.09% | 210<br>59.66% |
| Child going to work | 5-10 | 43<br>87.75% | 06<br>12.25% | 49<br>34.50% |
| | 11-15 | 90<br>96.77% | 03<br>3.23% | 93<br>65.50% |
| | 5-15 | 133<br>93.66% | 09<br>6.34% | 142<br>40.34% |

*Source: Data collected by author*

The above table shows that those children who are not going to work are 59.66 percent (210) of the total (352) children. Out of these, 61.9 percent are male while 38.09 percent are female children. In the second category children going to work are **40.38** percent (142) of the total children. Out of these are 93.66 are male while 6.34 percent are female children.

***Table 4: Correlation Coefficient (r):***

| Variables | Child Labour | Household Income | Family Size | Education of Mother | Education of Father | Age of Child |
|---|---|---|---|---|---|---|
| Child Labour | 1.0000 | | | | | |
| House Hold Income | -0.1026 | 1.0000 | | | | |
| Family Size | 0.1144 | 0.1977 | 1.0000 | | | |
| Education of Mother | -0.1831 | 0.0124 | -0.0712 | 1.0000 | | |
| Education of Father | -0.1042 | -0.2410 | -0.0762 | 0.0302 | 1.0000 | |
| Age of Child | 0.1623 | -0.0842 | -0.0160 | -0.0633 | -0.0635 | 1.0000 |

*Source: Data collected by author*

House hold income, mother education and father education have negative and extremely weak correlation with child labour. Family size and age of child are positively and weakly correlated with child labour. There is no problem of multicollinearity.

***Table 5: Regression Analysis***

| Child Labour | Coefficient | Stranded Error | Z Statistics | P-Value |
|---|---|---|---|---|
| House Hold Income | -.0000287 | .8190106 | -3.50 | 0.000 |
| Family Size | .0876034 | .0273165 | 3.21 | 0.001 |
| Education of Mother | -.6905631 | .1640003 | -4.21 | 0.000 |
| Child Age | .1349708 | .0382332 | 3.53 | 0.000 |
| Education of Father | -.5425041 | .1831378 | -2.96 | 0.003 |
| Cons | -.6377601 | .4879151 | -1.31 | 0.191 |

*Source: Data collected by author*

In table 5 results of logistic regression are shown. The results show that education of father, education of mother and household income has affected child labour negatively. Whereas the child age and family size have positive relationship with child labour.

## Explanation of variables

*Household Income*

The results indicate that income of the household negatively affects child labour. This suggests that child labour will decrease when household has more income. Khan *et al.,* (2003) have found that poor

family's children prefer work as compared to attending school while the children of rich families prefer attending school over work. There are other studies that support and favor of this analysis like Nath, (2000), Hafeez *et al.*, (1979) and Maitra *et al.*, (2005).

*Family Size*

The finding of the study shows a positive relationship between family size and child labour. Rosenzweig *et al.*, (1977) have analyzed that there is a direct relationship between child labour and large family size. Chaudhary *et al.,* (2002) have analyzed that low quality education and large family size keep away children from school.

*Age of Child*

Our study finds a positive and significant relationship between child's age and child labour. Kulsoom, (2009) and Khan *et al.,* (2003) have analyzed that work of children is positively related to child age in Pakistan. Nath *et al.,* (2000) found that involvement rate of children is increasing in child labour with the increasing child's age Vlassoff, (1979).

*Education of Father*

The relationship between education of father and child labour in our study is negative and statistically significant. From this study we seen that some of the studies have also analyzed that father's education reduce the involvement child of in the labour force more effectively than that of mother. Tienda, (1979) concluded that, fathers having high level of education have a negative impact on the working of children, while mother's education has effect on schooling only but not on the working of children. Nath *et al.,* (2000) and Basu, (1999) also have analyzed that Schooling of fathers has most significant effect on child labour.

*Education of Mother*

Mother's education is statistically significant in this study. Some studies have investigated that mother's education has more impact on child labour as compared to father's education. Addison *et al.,* (1997) have analyzed that father's education is less important factor than mother's education to reduce the hours of child labour work. Rosenzweig *et al.,* (1977) and Khan *et al.,* (2003) have examined that father's education has no significant impact on children schooling than that of mother's education.

*Conclusion*

The continuing persistence of child labour poses a threat to overall Pakistan's economy. Main focus of our study is to investigate

the role of parental education on child labour in Bajaur, Pakistan. The model is estimated on primary data collected from Khar and Nawagai divisions of Bajaur. The findings revealed that 47.6% children are going to work and 52.4% children are not going to work. The results claim that the parental education and income of households are negatively whereas the age of child and family size are positively correlated with child labour.

*Recommendations*

The present study suggests that there is a need to improve the parental education so that parents may be able to encourage to send their children to school rather than to work. The study also suggests that government and private sector should provide educational facilities to poor people of Bajaur. Furthermore, open skill development centers in rural and urban areas should be established so that those who do not afford formal education can develop skills for themselves in order to get jobs.

## References

Addison, T., Bhalotra, S., Coulter, F., & Heady, C. (1997). Child Labour in Pakistan and Ghana: a comparative study‖ Centre for Development Studies. *University of Bath, United Kingdom*.

Akarro, R. R., & Mtweve, N. A. (2011). Poverty and its association with child labor in Njombe District in Tanzania: the case of Igima Ward. *Current Research Journal of Social Sciences*, *3*(3), 199-206.

Angrist, J. D., & Keueger, A. B. (1991). Does compulsory school attendance affect schooling and earnings? *The Quarterly Journal of Economics*, *106*(4), 979-1014.

Basu, K., & Van, P. H. (1998). The economics of child labor. *American economic review*, 412-427.

Basu, K. (1999). Child labor: cause, consequence, and cure, with remarks on international labor standards. *Journal of Economic literature*, *37*(3), 1083-1119.

Becker, G. S. (1965). A Theory of the Allocation of Time. *The economic journal*, *75*(299), 493-517.

Bureau of international labour affairs 1998, U.S. department of labor. Available at, https://www.dol.gov/agencies/ilab

Burki, A. A., Fasih, T., & Din, M. U. (1998). Households' Non-leisure Time Allocation for Children and Determinants of Child Labour in Punjab, Pakistan [with Comments]. *The Pakistan Development Review*, 899-914.

Chaudhary, M. A., & Khan, F. N. (2002). Economic and social determinants of child labour: A case study of Dera Ismail Khan, Pakistan.

de Lange, M. (1973). Working Children.

Dayioğlu, M. (2008). Mother's and children's employment in Turkey. *The Journal of Developing Areas*, 95-115.

Galli, R. (2001). *The economic impact of child labour* (Vol. 128). Geneva: International Institute for Labour Studies.

Hafeez, S., & International Labour Organization. Working Conditions and Environment Department. Conditions of work and life branch. (1979). *Child Labour in Pakistan*. ILO.

Hai, A. A., Fatima, A., & Sadaqat, M. (2010). A case study for the fishing sector on Balochistan coast. *International Journal of Social Economics*, *37*(4), 316-338.

International Labour Organization. (1973). ILO Convention No. 138 on the Minimum Age for Admission to Employment and Work.

International Labor Organization (ILO). (1999)."Worst Forms of Child Labor Convention, C182.

ILO. (2011). Global Employment Trends for Youth: 2011 Update.

Khan, R. E. A., & Ali, K. (2003). Determinants of schooling in rural areas of Pakistan.

Kulsoom, R. (2009). Child Labor at District Level: Evidence from Rawalpindi. *Retrieved on*, *24*.

Maitra, P., & Ray, R. (2005). The impact of intra household balance of power on expenditure pattern: The Australian evidence. *Australian Economic Papers*, *44*(1), 15-29.

Milton Fried. (2014) "*Child Labor The New Book of Knowledge Grolier Online*", 26 June 2014. Available at https://findsbooks.com/smart/index.php?file_name=child+labor+the+new+book+of+knowledge+grolier+online&spid=3c1p2q67e0a5j[5].

Nath, S. R., & Hadi, A. (2000). Role of education in reducing child labour: evidence from rural Bangladesh. *Journal of biosocial science*, *32*(3), 301-313.

Rosenzweig, M. R., & Evenson, R. (1977). Fertility, schooling, and the economic contribution of children of rural India: An econometric analysis. *Econometrica: journal of the Econometric Society*, 1065-1079.

Sakurai, Riho. (2007) "Child labour and education." *Paper commissioned for the EFA Global Monitoring Report*.

Skoufias, E. (1994). Market wages, family composition and the time allocation of children in agricultural households. *The Journal of Development Studies*, *30*(2), 335-360.

Tienda, M. (1979). Economic activity of children in Peru: Labor force behavior in rural and urban contexts. *Rural Sociology*, *44*(2), 370.

Vlassoff, M. (1979). Labour demand and economic utility of children: a case study in rural India. *Population Studies*, 415-428.