

**SOCIO-ECONOMIC DETERMINANTS OF CHILD LABOR IN
PAKISTAN**

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**SOCIO-ECONOMIC DETERMINANTS OF CHILD LABOR IN
PAKISTAN**

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*In the Name of Allah, the most
Beneficent, the most Merciful”*

DEDICATION

I dedicate this self-effacing endeavor, the fruit of my thoughts and study to those, who taught me how to walk and survive in this world, who have been a source of inspiration for me, My

PARENTS,

AHMAD BAKHSH

SALMA BIBI

UNCLE & AUNT

ALLAH DITTA

SHAHIDA BIBI

Brothers

MUHAMMAD BILAL

MUHAMMAD SALMAN

AZAN ALI

Sisters

RAZIA AHMAD

SADAF AHMAD

ZAIBA AHMAD

NIMRA AHMAD

BISMILLA AHMAD

Loving Cousins

&

Dr. AMTUL HAFEEZ

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LISTS OF ABBREVIATIONS

FATA	Federally Administered Tribal Areas
FBS	Federal Bureau of Statistics
HRCP	Human Rights Commission of Pakistan
HRW	Human Rights Watch
ILO	International Labor Organization
KPK	Khyber Pakhtunkhwa
LFS	Labor Force Survey
NGO	None Government Organization
UNDP	United Nation Development Program
UNCF	United Nations Children Fund
UNICEF	United Nations International Children Emergency Fund
WB	World Bank
WFCL	Worst Forms of Child Labor

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ABSTRACT

The child labor is defined as “the children who neglect their childhood and are not able to have critical conveniences that a child must have”. The United Nations Children Fund classified the child labor according to the child age and number of hours worked per week: “Age five to eleven, at least one hour of economic work or twenty eight hours of domestic work; Ages twelve to fourteen, at least fourteen hours of economic work or twenty eight hours of domestic work and Ages fifteen to seventeen at least forty three hours of economic work or domestic work”. Child labor entails “work which is of such a character that it is harmful to children’s schooling or destructive to their health and development”. This study examines the socio-economic determinants of child labor in Pakistan. The data have been taken from Pakistan Labor Force Survey 2014-15. The determinants of child labor are divided in characteristics such as (i) personal characteristics (age and gender of children), (ii) social characteristics (child’s enrollment in school, child education and education of household head), (iii) economic characteristics (wages of household head and occupation of household head), and finally (iv) household characteristics (household type, province and region). Child labor is of binary nature: that is whether a child participates in labor market or does not participate. Logit and Probit model have been used to find out the determinants of child labor in Pakistan. The results show that male children are working more as compared to female children. It is found that child enrollment in school has negative and significant impact on child labor. Child’s years of education as well as household head’s years of education have negative and significant impact on child labor. Wages of household head also have negative and significant impact on child labor. Child labor is found to be higher where household head belongs to unskilled occupation, agriculture work and sales work as compared to when the household head is assistant professional or professional worker. Household type of joint family system has strong negative effect on child labor. Child labor found to be higher in Punjab, Sindh and Khyber Pakhtunkhwa as compared to Baluchistan. It is found that urban children work less as compared to rural children.

CHAPTER 1

INTRODUCTION

1.1. Background of Study

The child labor is a prime hurdle toward the social and economic development. To eradicate the entire types of child labors is a dispute as well as durable ambition inside a number of countries. Mostly inside the developing countries, it is deliberated like a severe trouble in these days. The child labor can be defined as “the children who neglect their childhood as well as are not accomplished on the way to encompass the critical conveniences that a child must encompass”. A large number of various global organizations comprise grand struggle to reduce child labor around the globe. The several countries comprise approved legislation in the direction of ban child labor still the child labor is prevalent all over the earth.

The International Labor Organization defines child labor like every activity other than study or play, paid or not paid, which is carried out with a person beneath the age of 15 years. According to ILO estimates, more than 200 million children are involved in several types of child labor. Above 80 million of these children are involved in unsafe as well as abusive kind of child labor. The terms child labor, child work as well as the financially or economically active children are often used interchangeably into the literature. However the International Labor Office divided into three kinds of employing children: the first kind is children in employment, the second kind is child laborers and the third and final kind is the children into harmful work.

A number of studies as well as the worldwide international organizations considered that the education is a primary approach during addressing child labor. Moreover it can support children to remain absent from working activities. Although each family does not have enough money to send their children to school and yet if they enrolled. They can't pay to keep them in school. The various policies are adopted to reduce child labor. Such as imposing the lawful limitations is an alternative which has been used in several high income nations effectively, (Angrist and Krueger, 1991).

Recently, it is founded by the International Labor Organization (2013), that the most working children are sandwiched among the ages five to fourteen and there are approximately

215 million children working globally. These working children are frequently abused as well as they are working long hours within extremely terrible circumstances. This preserves effect on their healthiness actually, spiritually as well as expressively. They do not comprise the essential human being rights similar to entrance toward school as well as healthiness concern. The prime numbers of child laborers are working under harmful conditions. Also the overall quantity of child workforce is rising, still although it is illegal in act. These working children fight substantial and emotional pains as well as they are defenseless in the direction of disease. The poverty is the major cause that makes children for working as a child labor. The most of these children are working for their continued existence as well as their family.

The socio-economic determinant of child labor obsessed a severe challenge for several developing countries including Pakistan. The Pakistan is single of those countries where the frequency of child labor is extraordinarily elevated. An essential quantity of children contributed in economic behavior and adds considerably toward domestic earnings in Pakistan. The child labor phenomenon is widespread within Pakistan inside the entire parts of the economy. It frequently persists in the informal segment of economy.

The main sectors that generally fascinate child labor are manufacturing, transportation, trade, agriculture, construction as well as services. The child labor inside the manufacturing segment is divided into the sports instruction production, surgical commodities manufacturing, cottage manufacturing, chemical production, power looms, footwear manufacturing, bidi assemble, furniture, carpeting weave, engineering, flatten shops and furnishings as well as equipment. Inside construction area the child labor is affianced into marble quarrying, building, road erection, steel shops as well as the brick kiln production. Inside the transportation segment child labor initiates into automobile workshops, repair stations as well as within garages like helpers, porters, loaders and also cleaners. Inside the trade zone, it initiates like supermarket assistant moreover as a street vendor.

The most targeted countries with the child labor are Asia and Africa. More than 90% child worker together are accounted in these countries. Even though Asia has the largest number of child labor than any other country, a greater portion of African youngsters also participate in working class. Within the Asia, it is analyzed that India has the largest 44 millions child labor force in the world. The universal phenomenon that has attained much consideration from

international organization is child labor. The international organizations who pay attention towards child labor are International Labor Organization (ILO) and United Nations Children's Emergency Fund (UNICEF). They have mentioned different causes behind the child labor. The main reason behind child labor is low income of the household which results in poverty and negligence of children by parents.

According to Boyden (1994) working of children for long hours, working in dangerous and bad environment, having not proper rest, offensive behavior of owner and inappropriate salary for employment is treated as child labor. The children are depressed to do job for longer times. Children deprived of domestic break and far-away from their family members. Therefore, the children are not well grown physically. The children are working in market labor, agriculture labor and home care labor as a child labor. If a child spends at most fourteen hours a week for paid work are known as child laborer.

The Ravallion & Wodon (2000) determined that although Bangladesh Food for Education Program too much enhanced school enrollment but this do not show the way towards huge decline in child labor. Hence, commencing to a strategy position of viewpoint, it is vital to examine that school enrollment has approaching toward transference of child labor. These educational program may subsidies be acceptable like an instrument designed for decreasing the child labor.

A number of researchers such as Dessy & Pallage (2003) argued that the entire work which children perform is not injurious. The several works might bring creative wisdom chances like surveillance and daily newspapers distribution occupation. The majorities of working children approximately 96 million are living inside Asia as well as in Pacific, whereas 58 millions working children's in sub Saharan Africa have the subsequent leading rate. In fact, these two areas lonely contributed for approximately 90% of the entire child labor. Though, the Asia-Pacific area as well shows to some extent elevated contribution rate than the global usual by 14.8% of children's contribute into labor. This working rate is subsequent just near with the intention of sub Saharan Africa, wherever a surprising 28.4% of children deliberate while living being working (Diallo *et al.* 2010).

The agriculture area contains child labor within fisheries, forestry and dairy as well as poultry farming and also agriculture work. Inside the services division, the children are occupied

in market labor as household servants, cobblers, watches makers, electricians, mechanics, painters, tin packers, paper pickers as well as garbage pickers. These children are initiated into hotels as well as restaurant like service boys. They also work in inside laundry shops and barber shops in addition to stitching shops.

Pakistan is basically an agrarian economy and the largest part of child labor about 67% survive within the rural whereas 11% in industrialized zone. The large number of people depending or lying on various types of farming activities intended for their livelihood. Inside this situation it is general on the way to discover that children perform a significant economic role within the households. Agriculture is the major occupation inside the rural areas fascinating other than three quarters of child labor.

The Shujaat & Qindeel (2007) explained the results of “Agriculture Survey of Pakistan” and International Labor Organization statement (2005). According to this statement, 1.7 million peoples are intensive burdened as well as greater part of them is landless tillers functioning intended for land lords. The mostly children has functioning or working beneath bad situation along with their families in order to assist their households. Generally, in the urban region most of the children regarding three-fifths of child labor are involved in the production activity. Furthermore, the regions such as rural and the urban have dissimilar social and the economic circumstances. As a result the determinants of child labor differ to various extents. The estimates of child labor in Pakistan fluctuate extensively.

The United Nation Development Program (2007-08) as well as Mahbbub-ul-Haq Development Center (2005) demonstrated that within Pakistan 17% peoples has less than 1 dollar per day income. This income is furthermore devoted mostly lying on the provision of foodstuff toward the huge household size or family members. This income cannot be dedicated to finance educational operating cost of children. The peoples, who acquired at least 2 dollar per day, formulate 65% of whole population. The small earnings or low income among huge family units frequently leads to higher child labor probabilities.

Therefore a household will prefer on the way to formulate this intergenerational transfer into domestic assets while present earning or income is less as compared to upcoming or future earning. It denotes that, the poor families engage children toward employing activities in order to raise the earning or income for their existence.

1.2. Significance of Study

In Pakistan the child labor remains one of the main issues. The government of Pakistan approved laws in an effort to bound child labor, however all those laws are usually disregarded. In Pakistan more than 11 million children are currently working as a child labor. They have the ages among 5-14 and almost working in vicious as well as dirty situation. The United State department of child labor (2014) listed the commodities formed or produced with the child labor. They reported nine commodities of which six are produced through the child labor within Pakistan. These commodities consist of the manufacture of bricks, carpets, glass, bangles, leather as well as surgical instruments along with coal mining.

Keeping in view the current position of child labor in Pakistan, the significance of this study is to examine the impacts of socio-economic determinants of child labor in Pakistan. Pakistan is a developing country, due to low income and wages the viscous circle of poverty increases day by day. Hence the child labor also increases continually and it has adverse impact on child education and wages. Most of the countries banned exporting product of Pakistan due to child labor and our exports decreased. It has adverse impact on the economic growth of country. The significant aim of this study is to devote the attention for this particular issue to minimize the child labor and its adverse impact on child's education.

The child labor problem is tremendously complicated since on one side it can acquire the children absent from school and harmfully effect human capital growth and also life time income. On the other side the working activities which a child does might not decrease the poverty of a family in the short time period.

The Pakistan state laws assert to facilitate that no children beneath the age of 14 years should employ inside some industrial unit or quarry or into additional harmful profession or service that prejudice his or her schooling as well as interferes through his or her corporal, psychological along with ethical growth. The current child labor condition inside Pakistan is furthermore conflicting toward the presented set of laws in the state concerning to the fundamental human rights designed for children. In 2005 the human rights commission of Pakistan predicted, that about 10 million children under the age of 15 years are associated with the child labor inside Pakistan.

The child labor is not simply an anxiety for the social and economic growth of the countries but also a human being rights matter. The several children work within in horrible working situation inside Pakistan. These children are constantly showing toward the hazard of receiving recurring pressure injuries, corporal cuts along with injuries, work-related diseases as well as lifetime disabilities. The entire life incomes of child laborers those who misplace the chance on the way to acquire schooling are concentrated with the human capital along with these children sufferers appropriate stimulate toward the vicious circle of poverty. Furthermore, the child labor is increasingly added appropriate an employment fear like constraint of public or social compliance circle inside a necessary element of the liable mutual production strategies.

According to the ILO (1996) 70% of the operational children are not-paid domestic worker. Furthermore the rural children and girls are less literate than the urban children and belongs the substantial rural and urban differences are observed inside their service status. Inside the rural areas, three to fourth of the all working children are effective like not-paid family unit member, whereas this percentage is one third inside the urban areas. As regarded the 46% of operational children worked more than 36 hours per week in addition to an excellent percentage worked more than 56 hours or further. However the almost all of the parents surveyed sated that most of the children work into short time period to facilitate inside the domestic enterprises.

1.3. ILO Projects for Child labor in Pakistan

The International Labor Organization has been extremely speaking and active in addressing the difficulty of child labor. The Pakistan Government, employers and employees legislative body has been selected members by the International Labor Office leading organization frequently more the years. The ILO delegate office was place up inside Pakistan in the year 1970 that was first situated at Karachi and afterward shifted toward Islamabad while it become capital of the country. Earlier than that, the ILO had an association office at Karachi by an ILO countrywide correspondent. The International Labor Office has been provided technical assist on the way to Pakistan into different fields of its proficiency also apprehension with child labor. In Pakistan there are a numbers of project ILO has conceded out into this observe. It is the list of other latest as well as still into evolution projects as follows;

- i) The fighting harmful and abusive child labor in surgical instruments developed. The extent of the project is three years with preliminary in July 2003. It is fast evaluation learning and approximately finished by the official statement is into press.
- ii) The child labor consciousness and societal recruitment programmed into FATA and Malakand division. The length of the program is one year by opening in April 2001. It is baseline learning in the direction of evaluate the extent along with superiority of the lives of children existing into the area. The outcome demonstrates that severe poverty with extensive illiteracy is the two major reasons of child labor here.
- iii) The fighting child labor inside carpet industry. The period of this quick evaluation and baseline study is three years by preliminary in September 2002. The center of attention region is South Punjab. This study aims to focus on the social lives of these children along with examine how labor affects their family unit.
- iv) The struggle child labor throughout schooling and training. The length of this school based study is three years by preliminary in September 2002 and the center of attention region is Khyber Pakhtunkhwa.
- v) The struggle child labor throughout media campaign on the way to organize conferences as well as seminars. The length of this project is two years by preliminary in July (2003) and the focus country is entire Pakistan.
- vi) The study of uphold for the national time bound programmed assist toward eradicate the awful kinds of child labor inside Pakistan. The extent of the study is four years by preliminary in October (2003). The project is still in procedure. The fundamental aims of the project are attention toward the problems of children association within the brick developed as well as inside the chemical manufacturing.
- vii) The struggle child trafficking for labor and sexual abuse. The length of the study is three years by preliminary in October (2002) and this project is still into procedure.
- viii) The stopping and removing oppressive child household work into South Asia. The length of project is two years by preliminary in March 2004. The project is still in progression.

1.4. Work Already Done

The child labor is serious issue all over the world, in Pakistan child labor increases continuously. According to the International Labor Organization (ILO) low income or wages are the supreme particular source in the wake of the child labor. In Pakistan the per capita income is very low which is near about 1900 dollar. The middle class people within Pakistan earn on average approximately 6 dollar per day. The almost Pakistani peoples has headed for give food to 9 or 10 family member by their per day income. In Pakistan the poverty level come into view toward basic necessitates that children work in sort on the way to permit their families toward attain objective get house pay. Hence, the child labor is serious issue in Pakistan and it has adverse impacts on child health and education.

The present study argues that there is a significance and negative relation among the child labor inside the country on child education as well as on child wages which are supported by many researcher, Wahba (2000), Khan (2001), Eijaz (2008), Hosen (2010), Awan *et al* (2011), Aqil (2012), Arfan et al (2016), Hussain et al (2017), Saddiqi (2018), Sara (2018) and these studies shows that child labor has insignificant impact on child education, and wages in the country. The present study analyzes the socio-economic determinants of child labor in Pakistan including some new variables which are not analyzed before nor present in previous literature.

1.5. Limitations of Study

The child labor because is a particularly multifaceted phenomena and this study limited to investigative the nature as well as level of child labor. The age of children is between five to fourteen years. The biggest quantity of working children caught up into economic activities widespread between the ages of five to fourteen. This study focuses on top of fight against social and economic determinants of child labor along with the significance of legislation for working children. The study also appears at the four provinces of the Pakistan toward clarify what policies have previously been in the direction of undertake the child labor.

Pakistan has been selected for the study since currently the Asia has more child labor across the entire globe,

has been selected for the study since today the Asia has more child labor in the entire world, for instance, Pakistan has leading magnitude of the whole world working children by mostly each third child being a child labor as well as every fourth child involving five to fourteen years of age group is engage into various economic or financial activities. Pakistan has been experiencing the burden of the phenomenon and difficulties to eliminate the child labor and its socio-economic determinants.

1.6. Objectives of Study

The study is conducted in Pakistan to examine the socio-economic determinants of child labor. Keeping in view the socio-economic determinants of child labor, this study consists of the following core objective;

- (1) To highlight the social determinants of child labor in Pakistan.

- (2) To highlight the economic determinants of child labor in Pakistan.

1.7. Research Question

The child labor is a severe crisis along with a challenge for several low income nations. The various nations have acknowledged different laws as well as have taken severe programs toward eliminate the child labor, however still the crisis is too much extensive all over the globe. This study significantly determined the socio-economic determinants of child labor and how the government under-take different plans toward eliminate the child labor by various national and international organizations as well as agencies, for the accumulation toward considerate in addition to examine various causes behind the wave of child labor which has overcomes all over the globe also a short assessment lying on how child labor has no extreme been deliberated. Furthermore, this study examines how to add into elevating the government attentiveness regarding the significance of problems associated in the direction of socio-economic determinants of child labor.

The research question is as follows;

What is the impact of social and economic factors on child labor in Pakistan?

1.8. Problem Statement

This study aims to examine socio-economic determinants of child labor in Pakistan.

1.9. Hypothesis

The main hypothesis is as follows:

- H_{01} = There is no relation between social and economic factors and child labor
- H_{11} = There is significant relation between social and economic factors and child labor

1.10. Organization of Study

This study is divided into six chapters. The chapter one contain introduction that provides the background of study, significance of study, theoretical exposition, ILO projects for child labor in Pakistan, work already done, limitations of study, objectives of study, research question, problem statement, hypothesis and organization of study. The chapter two provides a brief review of the literature on the socio economic impact of child labor. The review of literature contains both empirical international studies as well as empirical national studies.

The chapter three describes data and descriptive statistics which contain labor force survey in Pakistan and descriptive statistics of child labor in Pakistan that provide personal characteristics of children, social characteristics of children, economic characteristics of children and residential characteristics of children. The chapter four discusses the methodology which provides the model, econometric model, logit model, probit model and logit vs probit model. The chapter five describes results and discussion which provide results of logit model, results of probit model and the marginal effects of both logit and probit model and finally the chapter six explains conclusion as well as policy implications of the study.

CHAPTER 2

REVIEW OF LITERATURE

2.1. Introduction

The review of literature consists of all previous studies which are already organized and associated with “socio-economic determinants of child labor in Pakistan”. The review of literature rapidly yields several recommendations for the socio-economic determinants of child labor as well as should be producing as well as suggestions for how to go about it. The review of literature describes the theoretical framework, review of empirical international study and also review of empirical national studies.

2.2. Theoretical Framework

In several civilizations as Pakistan a substantial amount of children involved into economic or financial activities as well as add significantly toward domestic income. Since many years the child labor has been an essential attribute into approximately each segment of the Pakistan economy. These children have been working inside the informal category of child labor into family unit either in the dress of providing a hand toward family member into household tasks or in the form of household servants inside house along with surroundings. The children have been employing part time or full time on usual or unusual basis into manufacturing along with production activities, into shops as well as business lying on roads and into restaurants or hotels also across the world as well. In the same way bulk of the working children work beside their parents into agriculture procedure.

Many countries including Pakistan focus their authorized approximates of child labor on child work for income or wages. This narrow focus generates deceptive conclusions. UNICEF (1992) description initiates that 90 percent of the 1 million workforces into carpet weaving inside Punjab province were children. Inside the structure of this segment, income or wages for children would be higher within these areas by attention of industries wherever dynamic manipulate are a relative gain and due to higher wages children work additional. The children in Pakistan may survive in danger as same ways such as Nepal Kamaiya system of bonded labor. In Pakistan

Peshgi system of bonded labor emerge to be common, beneath this system the employer acquires a child commencing its parents into substitute for a payment which is extend out above the time period of child servitude.

Silvers (1996) permitted the description of seven years old child from Punjab purchase by a carpet weaver for five years at cost of 5000 rupees. The imbursement is widening out during time in sort on the way to force the bonded labor agreement. Silvers argue that it is not strange for employers in the direction of stop working toward disburse yet a third of the Peshgi. However, the Peshgi system continues for the reason that of anxious require of family enforce to send their children toward employment.

The bonded labor is supposed to be very sensitive into some industries. In Pakistan, the Bonded Labor Liberation Front is working to finish bonded labor. They underline brick kilns, carpet weaving industries, agriculture, fisheries, shoe production, power looms as well as decline organization like industries where bonded labor is persistent. They guess that within the carpet industry only half million children are theoretically bonded. In Pakistan it is not possible in the direction of recognize into the accessible data that how numerous of the 8.3 million children who are working for wages or income outside from their family are bonded. According to the estimations Bonded Labor Liberation Front inside Pakistan eight million children are working as a bonded laborers.

Likewise, the sibling gender composition might influence the child labor supply. This possibly will appear throughout the labor demanded within the family like by family size. The boys might need superior care than from girls. Alternatively the boys as well as girls may perhaps participate due to limited family unit income. According to the model of Garg and Morduch (1998), the family unit faced liquidity constraints hence within the family unit children participate for income. If the family unit captures greater income in the direction of spending in boys then having more boy siblings entails that the family wants in the direction of assign further assets for their schooling. This makes the entire presented siblings worse off for the reason that resources or assets turn out to be scared.

2.3. Review of International Empirical Studies

The United Nations Children Fund (1991) classified the child labor according to the child age and number of hours worked per week: “Age five to eleven, at least one hour of economic work or twenty eight hours of domestic work; Ages twelve to fourteen, at least fourteen hours of economic work or twenty eight hours of domestic work and Ages fifteen to seventeen at least forty three hours of economic work or domestic work”. The child labor entails “work which is of such a character that it is harmful to children schooling or destructive to their health and development” (ILO, 1998).

Basu and Van (1998) argued that a parent preference to send a child into the labor force may be seen as a consistent preference in a poor household facing various constraints. They précised a few assumptions, the labor market may have several balanced equilibriums one characterized by children participating in the labor force and down adult wages and a further in which children do not contribute in the labor force and adult wages are higher. Since these two equilibriums are constant, the authors argue that if children contribute in the labor force, prohibit might be put in position by the government to revise the economy from this stability to one lacking child labor.

Rao (1998) in his work on the employers analysis on child labor declared that employers appears at children like simple toward control as these children are extra obedient as well as lake of awareness for their rights as compared to adults. The children will not struggle in the direction of arrange themselves for their safety or protection. The favorite of employers in the direction of utilize the cheapest as well as mainly susceptible labor force add on the way to low wages in addition to adult unemployment. Successfully, the massive amount of working children decreases the capability of adults toward consult for reasonable wages, moreover acquires jobs away from adults. While, the employers are capable in the direction of appoint children for minimum wages and adults are incapable toward bargain for more wages and as a result it creates adult underemployment.

Tuttle (1999) added a main feature toward the trouble of child physique inside the house. She argued that one of the sound impacts of technical alteration in the textile factories was on the way to generate working chances for children opposite from their parents. That is the several

children were employ into these factories not in a delegating association along with their parents, but with the factory director. Like an outcome of these new working chances, parents initiate themselves in contest with factory director for the employ services of their children. The subsequent improved negotiating power of children elevated their significance in the house.

Verma (1999) examined that the children who are affianced inside the sales as well as service sector segment of the market into mutually rural along with urban regions like a street hawkers, household servants, salesperson, vehicle washers, beggars and even prostitutes. During several studies the children working in these sectors are considered like “street children” who run away from parental mistreatment, exit them to take out a living on their own.

Baland & Robison (2000) accumulated an essentially straight association of human being growth configuration to child labor while evaluating the effective uniqueness of family decision. They note down with the intention of when guardians are unselfish to their children, have the capability on the way to depart a legacy toward their children and have open entrée headed for assets marketplace then investment for their children schooling will be proficient. The troubles with incompetent child labor start when families are credit constrained.

Ray (2000) explained that the chance is usually defined to consist of such effects like disparity into educational level, entrance toward higher paying employments, entrance in the direction of information lying on the returns toward education as well as preference beside various clusters inside an economy. There has not been a lot effort in anticipation of freshly in the direction of look at critically reasons of child labor by way of analysis toward recognize issues which might show the way in the direction of its decline as well as final eradication.

Brown (2001) examined that the parents might not regard as the everyday expenditure as well as repayment of declines labor along with at present in the direction of perceive higher rates of return into the viewpoint. If a parent worked like a child his or her child is still more apparent toward work. Furthermore, the mothers working outdoor of the home are additional probable on the way to have female children who work because the children are compulsory toward attain beyond the not there mother tasks, as a substitute of presence school. The families inside Peru refer to school attribute like the principal cause for child labor association. The primary schools not often have the funds toward afford satisfactory education that go ahead toward the

declaration which children are better off working than going to school. The culture also has an impact on the frequency of child labor.

Delap (2001) anticipated that domestic poverty as well as income solidity are key economic determinants of children employment by using data from Bangladesh Dhaka slums. The low domestic income is associated by high rates of both child income creation as well as domestic work.

Edmonds (2001) examined that having a domestic help is a traditionally rigid practice of middle and upper class families approximately all over the world. The several children from poor families are affianced in this work, various as young as eight years old. Whereas there are cases of domestic child laborers who are in fact poorer relatives of the employers and provided opportunities to go to school while working, immensity of them are in exploited circumstances. Several are victims of trafficking and are bonded by liability to their employers. They have long working hours with very little chance for rest. They are bare to risks as performing intense domestic work. The majority of them are sufferers of verbal, corporal as well as sexual misuse. The children in this type of service sector or else identified as household child laborers are amongst the mainly complex in the direction of observe as well as arrive at like they are off-line secret into the privacy of our homes.

Glewwe (2001) analyzed that child labor may discourage long run development through dawdling downward technical growth. To support this fact, she illustrious with the intention of the accessibility or availability of cheap, unskillful child labor in reality permits employers toward evade investing into fixed assets as well as advance manufacture procedure, as a result dampening technical expansion, labor efficiency along with productivity progress into long run. The empirical details confirms that manufacture processes concerning child labor are typically carried out in the unorganized sector and in small units with simple manufactures technologies and relatively small capital.

According to Human Rights Watch (2001) unemployment is exacerbated mutually in the present and the future as a consequence of child labor. The increased contest from children for fractional employment opportunities raises adult unemployment. The adult unemployment in turn exacerbates the need for children to work. The children are frequently preferred to adult

employees because they are more dutiful are mistakenly supposed to be more proficient at certain tasks and are paid less. These apparent reimbursements to child labor have led to their accumulation employment in such tricks.

The child labor not only increases unemployment rates in the short term for adults seem to be for employment into long run. The children are fewer employable because of their restricted schooling, healthiness limitations as well as diminished skills achievement as contrast toward those who have go on the way to education. Their peers as well have the benefit of qualified and educational degrees. Whereas in some cases these degrees do not mean that those who acquire them are more skilled, degrees and certificates are frequently appreciated by employers because they declaration skill and are at times mandated by the government and unions for employment. The child laborers are at a disadvantage because of their incapability to get these degrees as easily as those who stayed in school, Human Right Watch (2001).

Sharma (2001) illustrated that working children into the Kamaiya system do household farm duties, acquire animals toward grazing land, accumulate pasture as well as contribute into additional farmhouse activities with the 40 daily work starting as early as 4 a.m. and close between 5 to 7 p.m. while several working children reported belatedly into the night. The 70% of the child laborers worked above 12 hours as a daily routine. The one third of the sampled child laborers reported accidents whereas at work. On the form of disbursement, it was reported in the direction of differ between getting foodstuff as at work and also food or money toward acquire house 57.4% or getting foodstuff barely 42.3% whereas regarding 25% of child laborers is supposed on the way to get their payments through the parents.

Beegle *et al.* (2002) discovered that a crop shock leads toward a major raise into child labor as well as reduces in school enrollment. These sound consequences additionally are inversely associated toward the intensity of resources seized with the family. The paper argued with the intention of because family used child labor on the way to handle by income shocks is due to credit limitation as well as be short of buffer stocks. Maitra and Ray (2002) observed at once child labor as well as child schooling by using the data from three countries such as Peru, Pakistan and Ghana. They argued that the chief source of child work is poverty.

Bhalotra and Heady (2003) imagined that these two kinds of work lean on the way to arise below parental control as well as command. While parents are expected to be the smallest amount demanding of employers, convinced kinds of work emerge to be no adverse than excellent work out along with convenient training. Furthermore, such type of work equips a child by fundamental skills that could not be learned somewhere else in addition to improves the confidence of child.

Emerson and Souza (2003) determined that the parents with no education frequently sent their children to work for the purpose of contribute into domestic income. The parents with education are more be liable toward well informed regarding the worth of education for their children and continue children into education through making an atmosphere favorable for learning like openly helping with school work.

Heady (2003) argued that the proponents of the wider mean argued that household as well as domestic work is unwanted in the direction of level that it conflicts by school attendance. Furthermore, some family tasks like cooking over open flames also baby care might be hazardous as well as exhausting, deflecting the child concentration from schooling concerns.

Mull (2005) stated that in Ghana the largest 62.5% children working of both sexes aged between five to seventeen years are affianced into agriculture work on the way to various extents. But a larger percentage of rural children 73.6% worked in agriculture as compared to urban children that are 21.5%. In common, a predictable 21.7% of Ghana children are affianced into financial activities by a larger proportion into rural regions 39.7% as contrast to with urban zones 19.8%. The rural children as well as young people are as well further active economically at younger ages as compared to other children into Ghana by the maximum ratio of children within the ages five to nine years categories 70.0% concerned inside several portion of agriculture work. The magnitude of adult working children into the agriculture zone reduces by age, declining toward 57.15 between the age groups of fifteen to seventeen years whereas these children are concerned more frequently into injurious work.

Ray (2004) described the child labor incident is widespread into low income countries and there is rising literature lying on this problem along with empirical facts also. Asia has a huge amount of child household workforce. These consist of children working like child guards,

maids, cooks, cleaners, gardeners also like common home helps. The lack of information is main reason of not having detailed investigation of prevalence as well as nature of child household workers inside several Asian countries. But particularly inside Asia, there is not considerable decrease within child labor contribution.

According to the World Bank (2005) between child labor there is gender discrimination. The male children and female children frequently perform dissimilar work moreover it varies with country as well as industry. For example male children are more active economically than the female children inside Latin American along with countries like Bolivia and Colombia however into Africa like Cote d'Ivoire as well as Ghana female children's are more concerned within economic activities. The male children and female children could be initiated into dissimilar kinds of economic activities. For instance the male children are more concerted into manufacturing, trade, restaurants, hotels as well as transportation, whereas the female children are more concerted into agriculture as well as household work.

Emerson and Knab (2006) explicated that poverty lonely could not be the core reason of child labor. They elaborated a model in their study which recommends a dissimilar method by that child labor might be conveyed through the generations of a household, differentiation into probability. The domestic dynamics as well as poor public educational system are also refer to like core supplier on the way to child labor. For instance, the parents with low educational status in spite of high income are more apparent on the way to put their children toward work.

Kuti (2006) described that educated mothers are mainly apparent be usefully in employment and might expected have a smaller time to focus to her jobs at house, as a consequence resulting to the increasing of useless pressure on the children mostly the females to embrace out these duties in the mother absence due to her work, as a result miserly the child of required rest and freedom activities vital for their growth and developments.

Nkamleu and Kielland (2006) have extended this consideration by formation the distinction between working outside the house and working in the family business. The heritage laws in sustain of inherited children increase the significance of work perform at a farm or household business comparative to schooling. This leads to the alternate estimate that further

children will be more affianced in paid work to raise extra income, although will work fewer in the family business, whereas this work leads to work perform costly for inheriting the businesses.

Sakamoto (2006) found that the illiterate as well as weak educational level father is a supplementary cause of child labor. There is a negative association between the father educational levels and the supply of child labor. The father with high education level is sound alert of the consequence on the way to schooling their children. The less educated father believes that sending their children on the way to education are extremely expensive as well as instantaneously wastage of time along with currency. As a result he acquires into account the immediately as well as opportunity cost of schooling their children. He explained that the father educational level plays an essential spirit in the up-bringing of a child.

The sufficient educational level formulates it straight forward on the way to create an assessment relating in the direction of the upcoming of a child like whether a child is go on the way to employment or on the way to go toward education. If the father has educational level till secondary school there will be low probability on the way to send a male child to employment. The prevalence of child labor falls near zero where the father has educational status post graduate. The educated parents are sound responsive of the significance of civilizing their children. The un-educated parents are an additional reason of child labor.

Duryea *et al.* (2007) discovered that short-run economic shock at the domestic level influence the child labor alteration into Brazil. They determine of economic shock with family head alteration from employment toward unemployment and discover out that child labor emerges behind the domestic economic shock. The loss of job by head of family enhances the possibility which a child go into the labor force drop out from school as well as fails toward continue into school.

The panel data of these children permits them on the way to conclude that in lack of credit market families which are incapable toward continue short-run economic shock exploit the child labor like an instrument in arrange to flat expenditure. The employment of mothers as well as that of their children cannot be consideration of as autonomous proceedings raises in the chance of women employment as well raises children probability of employment.

Faish (2007) assumed that child labor produces unskillful as well as unqualified labors that in turn have an effect on economy and country growth. The families that are living close up toward the survival point in addition to if they are persuaded on the way to send their children toward school as an alternative of work an exogenous shock would have an unfairly cruel shock on their wellbeing.

Baker (2008) explained that the child the child employee usually a symbol of urban poverty within several nations as well as unique into Sub Saharan Africa. The urban children frequently are concerned into household work as well as sales. These children working circumstances are extremely pitiable, injurious also crowded. Similarly these children also work for long hours with extremely low wages or no wages. The girls are generally the mainly in danger. These girls are usually trafficked for marketable sexual abuse into urban centers. These children faced several troubles because of poverty. The poor urban children are at severe hazard of countless troubles like lack of education, healthcare as well as social safety.

Huebler (2008) stated that the urban children concentrate additional toward school or education then the rural children. The urban regions offer superior education entrances, excellence as well as transportation than the rural regions. For the poor rural children living faraway from school, transport expenditure frequently turn into a difficult matter for their households. The culture is an additional aspect that is driving children within labor marketplace. The diverse cultures of several civilizations formulate children toward initiate work at extremely small age that associated toward customs as well as cultural factors.

Bhat *et al.* (2009) discovered that educational activities are important foe growth and development for instance education can build children grow as well as study ensuing into intellectual civilizations into the future, also education can grant skillful laborers. Furthermore, education can progress children life both for themselves as well as their households. Moreover, the children with well educational status can learn how to be appreciative toward society along with be expected toward bountiful into future whenever these children rise up.

Tauson (2009) explained that in rural Guatemala, the parents choose their children on the way to since they believe that it helpful for them as these children learn work skills. The several rural families migrate toward urban regions due to rural push and urban pull factors. As a of

which these children are frequently enforced to live as well as work into the street like they do not have access toward fundamental necessities of life such as foodstuff, clothes, shelter along with they develop into street workforce like hawker. The generally street workers are at risk on the way to violence as well as turn into more vulnerable toward unlawful work like thieving, trafficking drugs along with prostitution.

Bhat (2010) argued that the excellence education can facilitate on the way to stay children missing from work, therefore, it is significant for a school in the direction of have educated teachers into sufficient statistics toward sustain high student teacher relation inside the class rooms. On the other hand for several poor parents it can be expensive toward send their children into school, like these families survive lying on children earnings also cannot have enough money for school fees, uniforms as well as other extra expenditure.

Therefore the male children tend to be affianced additional into economic activities whereas girls or female children are more concerned inside domestic tasks and taking care of siblings. In common, girls are frequently prepared hidden into labor while they symbolize an extremely huge percentage of operational children. This is due to the parents frequently has on the way to choose to send barely several of their children toward school along with it is frequently the female children who loses out.

Akarro and Mtweve (2011) explained that the quantity of primary as well as secondary school remains low into third world countries due to millions of children are being enforced toward work instead of attending schools. Though there might be diverse consequences other than child labor that have an effect on primary school enrollment.

Behrman (2011) derived that in the case of survival position of parents, risks of association in child labor is higher for male children than females while father is not existing, also, on the other hand proportion of child labor is high for girls than boys while mother is not existing. The hazard of involvement into child labor is extremely higher while both of the parents are not living than like both are living.

According to Brown (2012) only in Pakistan there has been 7.3 million primary school aged children not enrolled into school. The parents consider sending their children toward work instead of school due to the expenditure of education, poor excellence of education, be short of

teachers as well as school supplies of poor teaching. Furthermore, the urban and rural regions are different in conditions of how schooling as well as child labor is correlated. The education level is frequently too much low among children living into rural regions. The low wages generate poverty and poverty generates several harms like child labor, prostitution, fraud, theft, amplified unemployment poor livelihood circumstances and starvation.

According to Congdon (2012) the poverty alone is not single which is forcing children toward work, however there also have a number of supplementary factors that force children to work. The several researchers have extended their work on this matter such as boost into population growth rate, female labor force involvement along with fruitfulness as well raises the child labor involvement the same usual child labor ratio across the countries raises by the magnitude of the rural population, female labor force involvement as well as fruitfulness whereas it diminishes by raises into GDP per capita, the element of public education spending into gross national income, life expectancy as well as the contribute to the labor force within industry otherwise agriculture.

Ortiz *et al.* (2012) argued that the child poverty passes on toward offspring who are born to poor parents. The child poverty be different from adult poverty as it has dissimilar causes as well as special causes, for instance it deprives a child of his or her babyhood. It might influence a long durable as well as mental composition into their mind also the shock of poverty in childhood foliage everlasting impacts on children. The poverty manipulates children into several societal ways such as undernourishment can influence healthiness as well as schooling that in turn might effects a child extensive tenure growth and development.

Buchheit (2017) examined that about 2 million school age children were working 50 to 70 hours per week and the majority of them were coming from families which were poor. If parents could not support their children then, they would sometimes send them to a mill or factory owner. They were operational in difficult circumstances that were rigorously distressing their healthiness also they were paid merely 10 to 20 percent of an adult's wages. Even though the work was difficult, children had no probability to escape as the factories were using various techniques on the way to stop the children from running. Children were doing hazardous work like; working in coal mines, carrying heavy loads as well as working in textile factories. These

children have no substitute but work since their families depended on the wages which they were earning.

Gayathri (2017) determined that child labor is nothing but the employment of children in some work that deprives them from their childhood. Work in the sense that does not allocate the children to attend the school regularly. Child labor are the children who live inside the four walls of society, where the first wall is poverty, second wall is a illiteracy, third wall is hunger and the fourth wall is the unemployment that leads toward low household income. He explained the motive of the child labor, difficulties faced by the child labor in addition to impacts of child labor against society. The economics of child labor that deals with the economical or financial activity of children in the profession have adverse impacts on human capital growth.

2.4. Review of National Empirical Studies

We exist into the world where 306 million children are working, ILO report (2010). Amongst all of these children 215 million children are asserts like the child labor inside that 115 million children are bound on the way to work into harmful work situation. The country Pakistan is undergoing since enormously warmer socio-economic as well as political disorder. There are several causes why allocates of the child labor are rising due to low income, low wages huge household sizes, societal thoughts, low literacy rate, bad economic or financial disaster, rural as well as urban immigration, labor difficulty, promptness of natural disasters, ruined of transportation because of country wide floods, earthquake also huge enhance of unemployment. The insufficiency of enforcement into basic educational rules, extremely higher population growth rate as well as shortage of financial or economic assets, this is the cause why the percentage of child labors within Pakistan since superior than the majority other countries (Ahmed 1991).

The Pakistan is multi-linguistic and miscellaneous society. Barki & Fasih (1998) stated that the cultural as well as demographic differences among the four provinces of Pakistan are the main causes why the determinants might vary across provinces. This statement examines the extreme situation of this concern inside Pakistan. According on the way to this statement the cruelty by child laborers is a bad issue within Pakistan which had been continual into years 2010.

The majority of the instance, this kind of cruelty is being unreported for as well as unobserved. It is furthermore not still sheltered with labor rules.

The Pakistani consequences as well illustrated concentration to the required to target household living standard. Ali and Hamid (1999) described that the key determinants of child labor into Multan, Pakistan. The researcher tried to discover the core reasons of children female which are working as a child labor within Multan city. These researchers used a primary data and took a sample of 60 females working children, functioning like maid household servants, child sitters as well as further domestic activities such as cleaning, washing, cooking along with baby care. They initiated that parental educational level, household size and domestic principle amplified learning expenses as well as inadequate educational amenities are the core determinants of female children into Multan city working as a child labor.

Khan (2001) examined that the people who survive beneath poverty line, subsist into separate sheltering position along with poor clean as well as hygienic circumstances. The several of them survive into slums and underprivileged housing areas also a number of them not having housing and healthiness care as well as nourishment adequacy. Though the low literacy rate is extreme additional widespread amongst poor peoples, numerous of these peoples are failed away from school due to very higher expenditure of educating. In universal, the poor people earns extremely low as well as despite of this reason parents are not capable on the way to acquire concern of the entire tasks of their children also they compel their children toward work in the direction of enlarge domestic earnings.

Chaudhry (2002) considered economic and social determinant of child labor to Dera Ismail Khan, Pakistan. The study utilized allocation of monthly wages of the working children as a dependent variable along with measuring of male and female working children, quantity of income as well as earning of children remuneration collection as an independent variables. They initiated that within Dera Ismail Khan Children work longest hours with very low wages or no wages. The majority of children in this district are bare on the way to dust as well as the firms into repair shops, timber work along with the metal work industrial unit.

The children are place toward labor into such a technique that destroys the exact on the way to usual substantial in addition to intellectual growth. The children are at enormous hazard

appearance eye side difficulty, bone malformation, continual lung infection as well as several times it show the way toward loss or death.

Jafarey (2002) maintained that the majority of the premises of child labor by small exclusion are stand lying on the same opinion as well as conclusion. At first, the child labor is socially disagreeable furthermore its decline is a valuable objective. At second, there are various further required activities alike to schooling as well as free time for the children and lastly, the child labor choice is right of parent's not a child.

Arif (2004) determined the health condition of working children into Pakistan by two very essential indicators, the first indicator is morbidity and the other indicator is undernourishment considered through weight for age as well as height for age. The vaccinated children were a lesser amount of probably on the way to be sick as compared toward those children who did not have vaccination. The newborn children of working women were at huge hazard of being ill involving these women had fewer time for child care. The distance toward the nearest healthiness facility had considerably harmful effect on child morbidity, meaning that more the distance fewer the chance of being ill.

The treatment of the commonness of child morbidity was depending on the mother opinion. In the case of longer distance on the way to nearest healthiness facility, the child is less probability toward taken there accepts he or she had some severe sickness as well as the family had enough assets. This might in turn had influenced the reporting of illness. The children living into Baluchistan were further probability toward be ill than children living inside the Punjab.

Khalid and Shahnaz (2004) found that elevated expenditure of household into urban regions was the chief reason of child labor compared with rural areas. In the urban areas behind the child employment poverty was the fundamental principle. However few various factors were as well initiated causal to child employment. For instance father wages, domestic gauge, qualification of parents, children makeup in favor toward employ due to domestic requirements.

According to the Federal Bureau of Statistics Pakistan (2007) the country Pakistan is low income country of 160.9 million people rising with the annual rate of 1.8% and having 54% of population beneath the age of 19 years. This sort of arrangement is both a chance along with a

confront for the conniver as well the strategy creator on the way to exploit such massive savings like the forthcoming associates are reasonable for rising young people inside a precious human being source of the country. For the purpose of recording this difficulty as well as regulating its different aspects an up to date discomfited nationwide data lying on child labor does unluckily not exist into Pakistan.

Khan *et al.* (2007) considered on the child labor into automobile workshops of Peshawar Pakistan try on the way to discover the working children characteristics within vehicle workshops inside Peshawar. They used primary data for this motive and used a random sample of 200 male working children inside dissimilar workshops into Peshawar city and discovered that bulk of the children has no schooling and poverty is the main cause also parents have less educational status as well as were inadequately salaried employments. The huge household size as well imposed these children toward employment into automobile workshops.

The researcher as well tried on the way to discover, moreover working on these workshops children undergoes from damages or not. Also he initiated that 31% of working children experience from dilute eyes problem also 29% has continual cough as well as 22% endure from diarrhea along with whereas 40% have no chief injuries.

Raza (2007) argued that there is no simple answer on the way to explicate that the millions of children not at all goes to school. The massive gender disproportion with less enrollment rate as well as huge dropout rates like early on as class five. The one of the main reasons of child labor are lack of education in Pakistan. He explained that a predictable 25 million children are attending schools. Moreover he has included that poor children are poor children are missing education amenities along with the culture impediment for the school enrollment of females children. In Pakistan no significance of curriculum on the way to the requirements in labor markets are a number of the troubles tackled as a result in educational segment. It is supreme dispute in for the nation on the way to generate an atmosphere where each child attends the school

Eijaz (2008) described that Pakistan is the developing country and has an extensive sum of children participating into financial activities as well as contributing very much as well

household income. The age of 5-14 years of children are working an extensive variety of production activities. The several children are serving their families into home cleaning and various are selling newspapers as well as cigarettes into streets are employing inside the formal as well as informal segments of the economy.

The education ministry of Pakistan (2008) explained that 6 million children are out of school in primary school of age group. At the primary school the one third of children in their premature early days is presence in schools with the dropout ratio 40 to 50 percent. On the other side the whole public expenditure on educational sector was just 2.21% of gross domestic product between the years 2007-08. The greater parts of schools buildings required maintenance. This is investigative of overlooking educational segment into the earlier period and as well draw attention to the problem on the way to entire access toward education. In the worldwide, Pakistan has one of the most shocking education statistics. The millions of children have not at all set foot into schools. About 50% of the people have never gone to schools within Pakistan.

The enrollment rate in the schools as well as primary and secondary education completion statistics paints an apologetic picture as well. Pakistan is worse off by means of merely one third of children in primary school goes between 5 to 9 year of ages completing class five also just 43 percent female children enroll in primary school schools as compared to 57 percent of male children in Pakistan. The gender gap between the male and female children also increasing day by day significantly in secondary enrollment by means of only 22 percent females and 62 percent males children.

The Pakistan is primarily agrarian country along with accumulation of child labor 67% subsist into rural regions whereas 11% inside industrialized segment. The most horrible kinds of child labor are burden as well as enforced labor that is regularly there into brick kiln industrialized along with farming division.

The ILO (2008) estimated of Labor Force Survey of Pakistan (1996), more than 3.3 million children out of 40 million children between 5 to 14 years of the age are financially active on full time basis into different employment within the official as well as unofficial sectors inside Pakistan. A substantial ratio of employing children between 5 to 14 years of age group as

well as 46 percent is working long hours then the usual working hours which are 35 hours in one week but 13 percent children are working more than 56 hours per week.

The only glass bangles manufacturing industry of Hyderabad be projected on the way to engaged 9900 to 10000 children. The quantity of children operational into surgical instrument mechanized is anticipated in the direction of approximately 5850. There were comparatively less amount of the children into Kasur tanneries as well as coal mines of Chirat and Chakwal. The tanneries engaged 700 to 750 children below the age of 18 years, whereas coal mine of Chakwal as well as Chirat affianced nearly 750 to 1000 children correspondingly.

Khan (2008) conducted a study lying on reasons of no education along with the child labor within the rural regions of Pakistan. The primary data was taken through cluster sampling from Pakpaton as well as from Faisalabad. The household has chronological probit model was used and he discover that domestic cause are to be regard like for humanizing involvement into education as well as eradication of the child labor. It was originated that the higher educational level of household head as well as income has an affirmative and significant relation by education diminish into income and inversely influence wellbeing of children. The outcome illustrates that elder children have additional capability on the way to work then younger children and suit a motive of drop out schooling. The gender gap as well as school contribution reduces as the age of children rising. The parental characters are considerable factors of child education as well as child labor.

Ali (2011) conducted a study in district Swabi and explained economic factors which were responsible for child labor. The study was based on a sample of 225 respondents who were interviewed to study the determinants of child labor in the surroundings and initiate 37 percent of working children reported that their parents were labors having no good employment and 70 percent of children recognized that the family income was excessively low and they had to work for household sustain. It was also initiates that half of the respondent's parents were having wages less than PKR 4,000 per month. It can be inferred of children from the statistics which parents were having low earnings sent their children toward labor market.

Awan (2011) studied the word child labor refers toward the child appointment into every work that underprivileged him of his right to schooling, childhood as well as psychologically,

bodily, communally or ethically destructive along with abusive. It depends upon numerous key issues as income, healthiness care along with parental educational status, lack of consciousness regarding the rules as well as societal position.

Awan and Waqas (2011) struggled on the way to find out answer toward the problem of why parents formulate children work. The probit model is used in a cluster survey for Punjab. The child labor averts children from schooling, improved healthiness as well as unhelpful for economic growth. The approximately 30% of child labor belongs to low income countries or developing countries and the Asia adds 12%. The child labor variables are age, gender, household size, region, income, family head education as well as mother education. The age, gender, household size as well as region is positively associated with child labor and family head education also mother education negatively correlated with child labor.

Yasin *et al.* (2011) described that the reasons of child labor as well as bias of earnings within dissimilar sectors, a case study of urban Multan. The researchers attempted toward discover the major causes of child labor into Multan city. In favor of this motive they used primary data also took a random sample of 200 children. Toward appraise the level they used Gamma as well as Chi square test. They accomplished that huge household size, less income, low level of parental education as well as jobless adults within household are the major causes of child labor.

Ahmad (2012) struggled toward discover the factors of the child labor. They have used the primary data with a sample of 100 children belonging to shadman market Lahore. They have studied that the mean was descriptive as well as cross sectional. They determined that inside the South Asia out of total 30 million children which have the age 5 to 14 years into peak 6 million children are working as a child labor. Their result shows that household size as well as poverty has positive relations by the child labor along with the household income have negatively affiliation with child labor. It is also recommended that anti child labor rules should be imposed severely by the government.

Ali *et al.* (2012) explained that little hands on heavy work and factors of child labor on automobile workshops into Sargodha. They strived in the direction of determine the factors of child labor working on automobile workshops into Sargodha city. For this reason they used the

primary data along with took a sample size of 200 working children as well as discover that poverty, low educational level of children, no employment along with parental low educational status are the core causes of this societal malevolence.

Aqil (2012) implicated that as parents have worked into their babyhood their children will be work also, passing it from a generation toward generation. Since a consequence at the time while they are full developed, they turn into illiterate as well as no skilled or very low skilled as a result parental education plays a crucial responsibility into children schooling since it can enhance the probability for their children on the way to have a excellent education.

Malik *et al.* (2012) explained the provide area factors of child labor and collected the data from the Multan and Sukkur two cities of Pakistan. They revealed that poverty is an essential reason which generally pushes the children toward employment. However the household earnings as well as parents' educational status manipulate parent's choice on the way to send their children toward employment for their own financial success. There are few resemblances in these two districts such as huge household size as well as low domestic earnings. Although in both of these districts economic prosperity of family head cooperated with educational level as well as incentive for these parents who send their children to school instead of employment can diminish the probability of child labor.

Mumtaz *et al.* (2012) explained that persistent household poverty, illiteracy, unemployment as well as parental education are the important reasons behind child labor in automobile workshops in Sargodha. Two hundred boys were interviewed and results of the survey exposed that large number of boys start work at the age of eight years. Moreover, high proportion of boys never attended school in their life also their parents had no formal education. The majority of children have extremely low wages like average wage ranged between five hundreds to seven hundred per month. These working children have huge families ranging between five to seven household members and boys are working frequently because their parents sent them toward work due to poverty as well as monetary constraints.

Kashif and Hussain (2013) reported that several key factors such as tentative jobs market, inflation, poor living standard, weak economy, community negligence as well as lack of

knowledge of parents, push the children on the way to labor market. According to them, child labor is dependent on their respective domestic income, working position of parents, education of household head and when poor families face difficulty to produce earnings, they push their children toward employment.

Siddiqi (2013) conducted a case study in Lahore, Pakistan where 40 percent of peoples were living under poverty line and founded that huge family size was one of the causal issue to send their children into child labor. He examined that child labor is an extreme issue faced by developing nations all over the world. Parental decision plays very important function in promoting child labor. Children contribute more in reducing the economic burden in developing countries as compared to the children of developed countries. School enrollment being a substitute of child labor and parents decide on the decision of education and work option based on usefulness. The stipulation of free text books in addition to amenities at primary level can enhance the school enrollment. By providing various inducement at the early stage can decrease child labor. Education can improve the proficiency as well as opportunities of sufficient by means of governmental incentive program.

Tanver *at el.* (2014) in their study designated that generally between the ages of twelve to fifteen years old group of children vigorously contributed in the work in Lahore city. The study further explained that approximately fifty six percent of the working children were illiterate as well as unpaid and the basis for working integrated domestic poverty also it was essential for the children to economically support their family unit.

Haider & Qureshi (2015) explained in their study which is accomplished in precise region of South Punjab, Pakistan. They originated that the core source of child labor was poverty together with father earnings, household size as well as educational level of the parents. They found that children develop an interest in labor due to household tasks, a lack of educational opportunities for children from poor families' also household poverty at the cost of their education. The children have to do more work due to the poverty; families are incapable on the way to maintain and as a result making children work as well as sustain their family unit together with their elders.

The World Bank (2015) examined that in Pakistan more than 3.3 million children out of 40 million children between the ages of 5 to 14 years are active financially. The predictable 1.7

million children from the age of five worked in brick making kilns. The mass of these children are enforced into labor force because of poverty. These children lack essential human rights, education, access to social protection are showing to security, health, sanitation and safety associated risks as the working situation at brick kilns are not appropriate for children.

Arfan *et al.* (2016) determined the social as well as economic factors of child labor at brick kilns in district Jhang, Pakistan. They implemented qualitative approach as well as accomplished in detail discussion and found that the economic issues oblige the household on the way to employ their children along with them for the purpose of improvement of family financial constraints. The labor at brick kilns in Pakistan is measured as a bonded labor as few low income households borrow currency from the owner of brick kilns for the purpose of accomplishment of domestic requirements and in return the whole family unit has to perform work at brick kilns until the currency is revisit along with interest.

Hussain *et al.* (2017) explained the socio-economic determinants of child labor of 150 household that have lack of awareness from child labor and pushes these children into working activities. They found that the child labor is reliant on their own domestic earnings, occupational level of parent's, educational status of family head's and also poor households face difficulty toward income generating activities, therefore these parents' push their children into labor market.

According to ILO (2017) a lot of children work in industries which engage unbearable violence like child slavery, trafficking, loan bondage forced labor or illegal activities that are measured like offensive for children. Based on International Labor Organization explorations child labor at least has one of the subsequent characteristics; disobeys a country minimum age and wage laws, damages children physical or mental healthiness, avert children from attending school, exploit children as well as undermine labor standards.

Rahman & Hakim (2017) worked on the nutritional status of child worker. They conducted a cross sectional study and the outcome of the study was of 45 percent children were fixed salary earners and 89 percent of the employees worked to sustain their family unit. Anthropometric consideration showed that their 26 percent responded were stunned, 15 percent as well as 26 percent respondents were exhausted and vanished malnourished. Furthermore 39

percent of the children were thinner. Overall, 52 percent and 60.8 percent of the calorie are desired to the boy and girl child workers and 77.6 percent and 82.2 percent of the protein requirement were fulfilled by boys as well as girls correspondingly apart from thiamine and vitamin C other micronutrients were extremely inadequately fulfilled.

Khan *et al.* (2018) tried to examine the determinants as well as working condition of child labor in automobile workshops of Tehkal market in Peshawar, Pakistan. The comprehensive descriptive analysis as well as multivariate analysis is undertaken on the way to evaluate the data and report results. The results illustrates that child labor in several regions is a comprehensive incident. The majority of the children leave their schools to learn working proficiency for future employment security. Mainly of the sampled children contribute more than 60 percent to household income. Most of the children has father alive and reside in rental residences along with their parents. More than half of the children report substantial physical condition and drug addiction difficulty of their fathers. The data moreover reveal that merely 1 percent of the children are the only bread earners of their household.

The working situation of the automobile workshops is harmful with no fundamental amenities. Almost 85 percent of the children account punishment at work place by underpaying their earnings followed by substantial exploitation. The multivariate analysis demonstrates that low family income, literacy level; profession, household size as well as parental substantial physical condition are the main reasons of child labor. The coefficient of all the variables is significant and having accurate theoretical signs forecasting that these variables greatly influences the income per hour of the child.

Kamruzzaman & Hakim (2018) explained that child labor is a general practice in developing countries. Children are the future of a state and so if they are exploited they would not be able to participate in the nation welfare. Furthermore, children constantly articulated their concerns regarding the deficiency of a secure atmosphere which leads them toward violence, exploitation as well as utilization within the household, society, street, workplace and school. They are mistreated haphazardly in their workplaces across the state. Beating, punching, burning, assassination as well as rape are happening against them. They also suffer from healthiness damage because of working at their early stage. These working children are extremely deprived of the schooling. It can make enormous impact at all elements in the community. This is the

reason, why they are need of appropriate action at the countrywide level on the way to take care them for their flourish growing as they can be the asset of country in future.

The authors have practiced that the children are currently working for their hand to mouth in multi-dimensional sectors like agriculture, service sector, manufacturing, construction, household work, transportation etc. They are forced to perform more than one shift duty a day. They are on the diverse types of workplace discrimination where physical exploitation, healthiness damage, economical exploitation as well as sexual misuse are peak level. There is no pain on their educational deprivation in our current community.

Sara (2018) analyzed whether the form of respondent plays a role in amplification the dissimilarities in child labor statistics. The presented results recommend that it most surely does. The estimates of child labor increase by approximately 35 to 65 percent when child self reports rather than proxy reports are used on the way to build indicators of child labor occurrence. The disparity among children and proxies subsists in 14 to 31 percent observations. The core intention of worldwide and regional estimates of child labor is to examine global trends as well as regional disparities. The study proposes that the elected respondent is essential for exact measurement, cross study comparability as well as proficient targeting.

CHAPTER 3

DATA AND DESCRIPTIVE STATISTICS

3.1. Introduction

This chapter describes data and descriptive statistics of child labor in Pakistan. The data is taken from Pakistan Labor Force Survey (LFS) 2014-15.

3.2. Labor Force Survey of Pakistan

The Labor Force Survey of Pakistan (1999-2000) was country-wide sample survey account information lying on labor force contribution of household members having age of 10 years and over on labor market, schooling, demographic characteristics as well as socio-economic determinants of the families. It showed that the children having ages from 10 to 14 years symbolized on average approximately 20 percent of the entire population of Pakistan. The almost 11 percent children are working inside the whole country by substantial gap amongst the labor force contributions ratios of male children as well as female children at 18.32 percent and 2.79 percent correspondingly.

The maximum ratio of labor force contribution is viewed into Punjab 11.83 percent while the smallest into Sindh at roughly 8.5 percent. The statistics for labor force contribution ratios for the children are rising greatly from 11 percent toward approximately 19 percent as particular inquiring inquires are integrated. The similar outline is detected for entire provinces.

The LFS showed that the unemployment rate of children between the ages of 10 to 14 years was approximately 21 percent in the survey year. The female unemployment rate is examined on the way to be extremely elevated compared to the male unemployment rate into the whole four provinces of the country. Furthermore, the maximum quantity of unemployment people was watched into KPK. In the middle of the unemployed children between the age from 10 to 14 years the greater part is initiate uneducated by the maximum form for unemployed illiterates at 21.57 for Baluchistan. The 31 percent of children between the age group of 10-14

are employing within informal sector whereas 23 percent are belonging toward basic professions inside the whole country.

In accumulation, one further statement through FBS illustrated more eye-opening details, according to that there are 21 million children inside Pakistan amongst the age of 10 to 14 years. The proportion of gender male is 73 percent and female gender contributed 27 percent comparatively. These information are considerably additional than the data along with statistics used to be in 1996. These significantly harsh figures express that child labor is constantly rising in Pakistan.

The Pakistan Bureau of Statistics explained the Labor Force Survey (2012-13) maximum 4.4 percents of children between the 10 to 15 years of age group are the component of country active labor force. In this view, the numbers of children working like a labor force within the thought age has truly amplified over a period of one year. For instead the (2010-11) labor force survey exposed that 4.29 percents of children among the age group of 10 to 15 years were the piece of country labor force. In reality, the working children as a child laborers is greatly higher as the labor force survey does not take economically active children below ten years of age into description.

3.3. Labor Force Survey of Pakistan 2014-15

In Pakistan a most essential resource of labor force data is the Labor Force Survey that has been accomplished yearly since 1963 through the Federal Bureau of Statistics. The aim of the Labor Force Survey is on the way to provide strategy makers as well as researchers by individual along with domestic level data, necessary on the way to evaluate the effects of policy programs lying on individuals as well as households. The Labor Force Survey reported labor force involvement for whole family members of more than 10 years. This also contains queries lying on labor marketplace, education as well as socio-economic determinants of households.

We used primary data which has been taken from Labor Force Survey (2014-15) of Pakistan for this study that have 22,060 households as well as 264000 individuals. We followed the limit of 10-14 years in sort on the way to confine superior information concerning the child labor. The study is based on sample of 5,803 children.

3.4. Descriptive Statics of Child Labor

The descriptive statistics of child labor in Pakistan describe the personal characteristics of children, social and economic characteristics, household and residential characteristics.

3.4.1. Personal Characteristics of Children

The personal characteristics of children contain age wise distribution of child labor, distribution of child labor by gender and distribution of child labor by marital status.

The sample size of the working children between the age group of 10-14 years consists of 5,803 children who decide to work or not. Table 3.1 describes age wise distribution of child labor. The table indicates the probability of child labor increase with the increase in age of the child. For example, 64.4% children belonging to age group of 13-14 years are likely to work as compared to about 36% children of similar age who don't find work. This shows that children becomes stronger both physically as well as mentally with age and therefore have higher probability to work.

Table 3.1 Age wise distribution of child labor

Age in years	Unemployed	Employed	Total
10 years	759 (72.56) [27.51]	287 (27.43) [8.11]	1046 (18.02)
11-12 years	993 (51.42) [36.00]	938 (48.57) [30.80]	1931 (33.27)
13-14 years	1006 (35.59) [36.47]	1820 (64.40) [59.77]	2826 (48.69)
Total	2758 [47.52]	3045 [52.47]	5803

Note. Numbers in round brackets are percentages from row totals and statistics in square brackets are percentages from column totals.

Source: Author's own calculation based on 2014-15 Labor force Survey data.

Table 3.2 describes the gender wise distribution of child labor. The table indicates the probability of child labor is higher among male children as compared to that among female children. For example, 54.88% male children are probably on the way to work or employed evaluated with the 48.83% female children or girls. This shows that the boys have more likelihood to employ than the girls. This might be because of the reality that boys are required to be earners of their families. In addition, within group of employed worker about 63% are male workers, where as 37% are female workers.

Table 3.2 Distribution of child labor by Gender

Gender	Unemployed	Employed	Total
Female	1182	1128	2310
	(51.16)	(48.83)	(39.80)
	[42.85]	[37.04]	
Male	1576	1917	3493
	(45.11)	(54.88)	(60.19)
	[57.14]	[62.95]	
Total	2758	3045	5803
	[47.52]	[52.47]	

Note. Numbers in round brackets are percentages from row totals and statistics in square brackets are percentages from column totals.

Source: Author's own calculation based on 2014-15 Labor force Survey data.

Table 3.3 describes the marital status wise distribution of child labor. The table indicates the child labor probability of never married children is higher as compared to the married children. Among married children 68% children are likely to work as compared to 32% non-working children in the group of married children. However, it is found that sample size of never married children is higher in the total sample.

Table 3.3 Distribution of child labor by Marital Status

Material status	Unemployed	Employed	Total
Never married	2748	3028	5776
	(47.57)	(52.42)	(99.56)
	[99.63]	[99.44]	

Married	8 (32) [0.29]	17 (68) [0.55]	25 (0.43)
Total	2756 [47.52]	3045 [52.47]	5801

Note. Numbers in round brackets are percentages from row totals and statistics in square brackets are percentages from column totals.

Source: Author's own calculation based on 2014-15 Labor force Survey data.

3.4.2. Social Characteristics

The social characteristics contain distribution of child labor by enrolment in school, distribution of child labor by years of education, distribution of child labor by literacy rate and distribution of child labor by head's education.

Table 3.4 describes enrolment wise distribution of child labor. The table indicates that 82.25% of working children are not enrolled currently. The probability of child labor decreased with enrolment in higher classes. For instance, 15% children enrolled at primary/middle level are likely to work whereas 62% children enrolled at matric and about 85% are enrolled at primary/middle level are not likely to work. This shows that as the educational level increases the child labor is likely to decrease.

Table 3.4 Distribution of child labor by Enrolment

Enrolment	Unemployed	Employed	Total
Not enrolled currently	450 (14.74) [16.31]	2602 (85.25) [85.45]	3052 (52.59)
Primary/Middle	2247 (84.69) [81.47]	406 (15.30) [13.33]	2653 (45.71)
Matric	61 (62.24) [2.21]	37 (37.75) [1.02]	98 (1.68)

Total	2758	3045	5803
	[47.52]	[52.47]	

Note. Numbers in round brackets are percentages from row totals and statistics in square brackets are percentages from column totals.

Source: Author's own calculation based on 2014-15 Labor force Survey data.

Table 3.5 describes education wise distribution of child labor. The table indicates that 83.67% of working children are illiterate. The probability of child labor decreased as the educational level increases. For example, 26.33% children belonging to nursery are likely to work, 37.88% children belonging to primary are likely to work and 58.72% children belonging to middle are likely to work as compared to 83.67% illiterate children. This shows that illiterate children have higher probability to work then children have educational level middle.

Table 3.5 Distribution of child labor by Education Level

Education	Unemployed	Employed	Total
Nursery/K.G	1511	2275	3786
	(39.91)	(60.08)	(65.24)
	[54.78]	[74.71]	
Primary	1176	669	1845
	(63.73)	(37.88)	(31.79)
	[42.63]	[22.95]	
Middle	71	101	172
	(41.27)	(58.72)	(2.96)
	[2.57]	[3.31]	
Total	2758	3045	5803
	[47.52]	[52.47]	

Note. Numbers in round brackets are percentages from row totals and statistics in square brackets are percentages from column totals.

Source: Author's own calculation based on 2014-15 Labor force Survey data.

Table 3.6 shows literacy wise distribution of child labor. The table indicates that 80.22% of working children are illiterate. The probability of child labor decreased as the children have become literate. Among the literate children 32% are likely to work where as 68% are likely to

unemployed. This shows that illiterate children have higher probability to work than literate children.

Table 3.6 Distribution of child labor by Literacy Rate

Literacy	Unemployed	Employed	Total
Literate	2271	1069	3340
	(67.99)	(32.00)	(57.55)
	[82.34]	[35.10]	
Illiterate	487	1976	2463
	(19.17)	(80.22)	(42.44)
	[17.65]	[64.89]	
Total	2758	3045	5803
	[47.52]	[52.47]	

Note. Numbers in round brackets are percentages from row totals and statistics in square brackets are percentages from column totals.

Source: Author's own calculation based on 2014-15 Labor force Survey data.

Table 3.7 describes the child labor by heads' education level. This demonstrates an inverse relationship between heads' educational level and child labor. As the educational level of head of the family rises the incidence of child labor reduces. The higher rate of child labor prevails in the households where the head has lower educational level. The table indicates that 83.51% of working children are those where the head of family has no formal education. The probability of child labor decreases as the father educational level increases.

For example, 40.04% children are likely to work when the heads' educational level is primary or middle and about 13% children are employed when the heads' educational level is graduation. This shows that no formal education of father has higher probability to child labor. However higher educational level of the head leads to lower probability of child labor.

Table 3.7 Distribution of child labor by Head Education

Education	Unemployed	Employed	Total
No formal education	362 (16.48) [13.12]	1834 (83.51) [60.22]	2196 (37.84)
Primary/Middle	1018 (59.95) [36.91]	680 (40.04) [22.33]	1698 (29.26)
Matric	1045 (68.25) [37.88]	486 (31.74) [15.96]	1531 (26.38)
Intermediate	197 (86.40) [7.14]	31 (13.59) [1.01]	228 (3.92)
Graduation	131 (87.33) [4.74]	19 (12.66) [0.62]	150 (2.58)
Total	2758 [47.52]	3045 [52.47]	5803

Note. Numbers in round brackets are percentages from row totals and statistics in square brackets are percentages from column totals.

Source: Author's own calculation based on 2014-15 Labor force Survey data.

3.4.3. Economic Characteristics

The economic characteristics contain the distribution of child labor by heads' wages, distribution of child labor by heads' work hours and finally distribution of child labor by heads' occupations.

Table 3.8 describes distribution of child labor by heads' wages. The table indicates the probability of child labor decreases as heads' wages increases. For instance, 1% children are unemployed as compared to about 99% employed when the heads' wages are up to 2000.

As the heads' wages increases the child labor decrease. For instance, as the wages increase up to 3000 the child labor decreases from 99% to 85.40%, as the wages increase up to 4000 the child labor decreases from 85.40% to 76.60%, as the wages increase up to 5000 the child labor decreases from 76.60% to about 56%, as the wages increase up to 6000 the child labor decreases from 56% to 43.40%, as the wages increase up to 7000 the child labor decreases from 43.40% to 33.88%.

As the wages increase up to 8000 the child labor decreases from 33.88% to about 23%, as the wages increase up to 9000 the child labor decreases from 23% to 17.46, as the wages increase up to 10000 the child labor decreases from 17.46% to 11.35% as the wages increase 10000 and above the child labor decreases from 11.35% to 5.55%. This shows that as the heads' wages increase the child labor will decreases.

Table 3.8 Distribution of child labor by Heads' wages

Wages	Unemployed	Employed	Total
Up to 2000	9	1314	1323
	(0.68)	(99.31)	(22.79)
	[0.32]	[43.14]	
2000-3000	89	521	610
	(14.59)	(85.40)	(10.51)
	[3.22]	[17.11]	
3000-4000	117	383	500
	(23.40)	(76.60)	(8.61)
	[4.24]	[12.57]	
4000-5000	173	220	393
	(44.02)	(55.97)	(6.77)
	[6.27]	[7.22]	
5000-6000	223	171	394
	(56.59)	(43.40)	(6.78)
	[8.08]	[5.61]	
6000-7000	281	144	425
	(66.11)	(33.88)	(7.32)

	[10.18]	[4.72]	
7000-8000	346	103	449
	(77.06)	(22.93)	(7.73)
	[12.54]	[3.38]	
8000-9000	411	87	498
	(82.53)	(17.46)	(8.58)
	[14.90]	[2.85]	
9000-10000	531	68	599
	(88.64)	(11.35)	(10.32)
	[19.25]	[2.23]	
10000 and above	578	34	612
	(94.44)	(5.55)	(10.54)
	[20.95]	[1.11]	
Total	2758	3045	5803
	[47.52]	[52.47]	

Note. Numbers in round brackets are percentages from row totals and statistics in square brackets are percentages from column totals.

Source: Author's own calculation based on 2014-15 Labor force Survey data.

Table 3.9 describes distribution of child labor by heads' work hours. The table indicates the probability of child labor decreases as heads' working hour increases. For instance, 83.33% children are unemployed as compared to 16.66% employed when the heads' working hours are zero. As the working hours increases the child labor also decreases. For instance, 29.71% is non-working children as compared to 69.29% working children as the heads' working hour increases from 60 hours and above. This shows that when the heads' working hours increase the children have less probability to work.

Table 3.9 Distribution of child labor by Heads' work hours

Work Hours	Unemployed	Employed	Total
0 hours	15	3	18
	(83.33)	(16.66)	(0.31)
	[0.54]	[0.098]	

Up to 10 hours	4 (7.69) [0.14]	48 (92.30) [1.57]	52 (0.89)
10-20 hours	110 (17.18) [3.62]	530 (82.81) [17.40]	640 (11.02)
20-30 hours	382 (25.19) [13.85]	1134 (74.80) [37.24]	1516 (26.12)
30-40 hours	63 (30.28) [2.28]	145 (69.71) [4.76]	208 (3.58)
40-50 hours	541 (35.82) [17.76]	969 (64.17) [35.13]	1510 (26.02)
50-60 hours	216 (47.36) [7.09]	249 (53.54) [9.02]	465 (8.01)
60 hours & above	428 (30.70) [14.05]	966 (69.29) [30.02]	1394 (24.02)
Total	2758 [47.52]	3045 [52..47]	5803

Note. Numbers in round brackets are percentages from row totals and statistics in square brackets are percentages from column totals.

Source: Author's own calculation based on 2014-15 Labor force Survey data.

Table 3.10 describes distribution of child labor by heads' occupation. The table indicates the probability of child labor changes for different heads' occupation like professional's agriculture work, sale work and elementary. For instance, 39.47% children are employed when heads' occupation is professional's, as compared to about 53% probability of child labor when heads' occupation is agriculture and related work and 54.68% employed when heads' are in

elementary or unskilled worker. This shows that the children have higher probability to work when the heads' occupation is elementary as compared to other occupation.

Table 3.10 Distribution of Children by Head Occupation

Head Occupation	Unemployed	Employed	Total
Professional /Assistant professional	253 (60.52) [9.17]	165 (39.47) [5.41]	418 (7.20)
Sales work	724 (47.32) [26.25]	806 (52.67) [26.46]	1530 (26.36)
Agriculture work	974 (46.96) [35.31]	1100 (53.03) [36.12]	2074 (35.74)
Elementary	807 (45.31) [29.26]	974 (54.68) [31.98]	1781 (30.69)
Total	2758 [47.52]	3045 [52.47]	5803

Note. Numbers in round brackets are percentages from row totals and statistics in square brackets are percentages from column totals.

Source: Author's own calculation based on 2014-15 Labor force Survey data.

3.4.4. Household Characteristics of Children

The household characteristics of children contain distribution of child labor by household type, distribution of child labor by provinces and finally distribution of child labor by region.

Table 3.11 describes the distribution of child labor by household type. The table indicates the probability of child labor is higher among joint family of children as compared to that among nuclear family of children. For example, 49.01% children are likely to work or employed in joint family as compared to 33.07% children in nuclear family. This shows that children have higher probability to work in joint family then nuclear family.

This may be due to the joint or large family size more children worked that they are required to be the earners of their family as compared to nuclear family children. In addition, within group of employed children about 69% belong to joint family system, where as 33.07% are nuclear family children.

Table 3.11 Distribution of child labor by Household Type

Household Type	Unemployed	Employed	Total
Joint family	2193	2108	4301
	(50.98)	(49.01)	(74.11)
	[79.51]	[69.22]	
Nuclear family	565	1007	1502
	(37.61)	(67.04)	(25.88)
	[20.48]	[33.07]	
Total	2758	3045	5803
	[47.52]	[52.47]	

Note. Numbers in round brackets are percentages from row totals and statistics in square brackets are percentages from column totals.

Source: Author's own calculation based on 2014-15 Labor force Survey data.

Table 3.12 describes Province wise distribution of child labor. The table indicates the distribution of child labor across the four provinces. For example, 83.7% children belonging to Khyber Pakhtunkhwa are likely to work; in Punjab 68.99% children belong to age group of (10-14) years are likely to work as compared to 31% nonworking children in the age group. Furthermore, 91.61% children belonging to Sindh and 22.71% children belonging to Baluchistan are likely to work. This shows that intensity of child labor is even higher in Sindh and Khyber Pakhtunkhwa as compared to other provinces.

Table 3.12 Distribution of child labor by Province

Province	Unemployed	Employed	Total
Punjab	617	1373	1990
	(31.00)	(68.99)	(34.29)
	[22.37]	[45.09]	

Sindh	79 (8.38) [2.86]	863 (91.61) [28.34]	942 (16.23)
Khyber Pakhtunkhwa	44 (16.92) [1.59]	216 (83.07) [7.09]	260 (4.48)
Baluchistan	2018 (72.28) [66.27]	593 (22.71) [19.47]	2611 (44.99)
Total	2758 [47.52]	3045 [52.47]	5803

Note. Numbers in round brackets are percentages from row totals and statistics in square brackets are percentages from column totals.

Source: Author's own calculation based on 2014-15 Labor force Survey data.

Table 3.13 describes region wise distribution of child labor. The table indicates the probability of child labor increase rural children as compared to urban children. For instance, 62.49% children belonging to rural are likely to work as compared to 21.68% urban. This shows that rural children have higher probability to work then urban children.

Table 3.13 Distribution of child labor by Region

Region	Unemployed	Employed	Total
Rural	1642 (37.50) [59.53]	2736 (62.49) [89.85]	4378 (75.44)
Urban	1116 (78.31) [40.46]	309 (21.68) [10.14]	1425 (24.55)
Total	2758 [47.52]	3045 [52.47]	5803

Note. Numbers in round brackets are percentages from row totals and statistics in square brackets are percentages from column totals.

Source: Author's own calculation based on 2014-15 Labor force Survey data.

CHAPTER 4

METHODOLOGY

4.1. Introduction

This study is conducted to identify socio-economic determinants of child labor in Pakistan. In order to examine the objective primary data is taken from Labor Force Survey (LFS, 2014-15). It provides information about the labor market, education and socio-economic situation of households. Therefore this study attempts to provide with realistic overview of social and economic determinants of child labor in Pakistan. The methodology of this study contain the model through with the estimation of study are determined.

In this study theoretical model contained child labor as a dependent variable and independent variables comprises age, gender, education, occupation, household size, working hours, wages, parental education, father occupation, province and locality. The design of model with dummy variables is as follow:

$$\text{Child Labor} = f(\text{age, gender, enrollment, child education, head education, head wages, head occupation, household type, province, region})$$

The variables which are used in this model and their association with child labor are explained as follows;

The UNCF (1991) classified the child labor through the child age along with number of hours worked in one week. The age of children between 5 to 11 years is classified as, at least one hour of economic work or 28 hours of household work, the age group of children between 12 to 14 years at least 14 hours of economic work or 28 hours of household work and finally of children between age 15 to 16 years at least 43 hours of economic work or household work.

There is gender discrimination among child labor. Male children are expected to work more than female children. The male children and female children can be originating into dissimilar kinds of economic tasks. The male children are additional concerted into industrialized, trade, restaurants, hotels as well as transportations, whereas female children are

additional concerted into agriculture as well as household activities. In Pakistan male children probably work longer hours than female children, World Bank (2005).

The enrollment of children in school is expected to have negative impacts on child labor because when the children are enrolled into school they do not work as a child labor. This shows that when there is higher enrollment rate in a country, the child labor will be diminished because it is inversely related with enrollment, Ravallion & Wodon (2000).

Similarly, it is expected that years of education of children is likely to reduce the child labor. The numbers of children in primary as well as secondary school remain low within low income countries as millions of children are being enforced on the way to employment instead of going toward school. In a less severe situation where parents merge their children work along with school, the case wherever also work or school comes out in the child free time. The employment or work will have undesirable effect on the way toward child learning. For instance, children might miss school due to work or use the time chosen for homework for the reason of work. It has as will be argued that work exterior then home has a considerable harmful effect lying on educational success, recognized mostly on the way to child fatigue as well as universal distraction of attention missing from educational concerns, Diallo *et al* (2010).

The years of education of head are likely to have significant as well as negative impacts on child labor. As the educational level of head increases the child labor will be decreased. It is because of the reason that literate household head averts their children from labor work as compared to illiterate household head. Therefore, the household head who have the higher educational level the probability of work for their children would be decreased, Emerson & Souza (2002).

Similarly the head wages have has significant and negative impacts on probability of child labor as heads' earning more wages are less likely to send the household children toward labor market. The head unskilled jobs are liable to have inferior wages and supply and demand pressures mean that additional plentiful unskilled labor depresses wages further. The inferior wages are the major reasons of the occurrence child labor into Pakistan, Hussain *et al* (2017).

The head occupation replicates the socio-economic condition of the household and the periodicity of his wages imitates the strength into occupation as well as socio-economic

situations of a household. The people affianced into professional occupation are fewer liable on the way to send their children toward employment. The head who are agriculture or elementary employees are further liable on the way to send their children toward work in the direction of increase the earnings of the household, Malik *et al* (2012).

The households with combined family type were further expected to be poor compared to those with nuclear family type. The children in the larger family were seen to comprise fewer educations, fewer literacy rates in the family and as well further behind in the school grade and extra liable to be at work, Ahmad (2011).

There are few socio-economic disparities amongst the all four provinces of Pakistan. The entire factors are not similar in these provinces which are causing supply of child labor as well as investigating the involvement of those determinants in these provinces on the way to how greatly every reason contributing in to child labor, Khalid & Shanaz (2004).

The child labor has been a compound rural region difficulty, also along with the children serving out into the farmhouse with their households. The immense mainstream of child labor is concerned into agriculture sector. The low income rural family units consider making their children work into farmhouse might raise domestic earnings. The children living into rural regions work further as well as longer hours as compared to the children living in urban areas. The concerning presence because of partial access toward school of the children living inside rural areas are further expected on the way to be concerned into child labor, Shujaat and Qindeel (2007).

Table 4.1. Description of Variables

VARIABLES NAME	ABBREVIATION	DESCRIPTION
Dependent Variable		
Child Labor	CHILD	= 1 , if a child is involved in economic activity during the last week = 0, if a child is not involved in economic activity during the last week
Independent Variables		
Age	AGE	= Complete year of age of child
Male	MALE	= 1, if child is male = 0, if child is female
Enrollment	ENR	= 1, if child is enrolled in school = 0, if child is not enrolled in school
Child Education	EDU _{CHILD}	= Years of education of a child
Head Education	EDU _H	= 1, if father is literate = 0, if father illiterate
Head Wages	WAGE _H	= Total monthly wages of head
Head Occupation		
Sales Work	SALE	= 1, if head is working in sales occupation = 0, otherwise
Agriculture Work	AGRI	= 1, if head is working in agriculture occupation = 0, otherwise

Elementary	ELEM	= 1, if head is working in elementary occupation = 0, otherwise
Household type	HHT	= Type of working members in the family
Joint	JOINT	= 1, if the individual lives in joint family = 0, otherwise
Punjab	PUNJ	= 1, if child lives in Punjab = 0, otherwise
Sindh	SIND	= 1, if child lives in Sindh = 0, otherwise
Khyber Pakhtunkhwa	KPK	= 1, if child lives in Khyber Pakhtunkhwa = 0, otherwise
Urban	URBAN	= 1, if child lives in urban area = 0, otherwise

4.2. Econometric Model

The dependent variable child labor is a binary variable, it takes a value of 1 (for working child who are involved in economic activity) and 0 (for non-working child who are not involved in child labor). The child labor in relation to age, gender, child enrollment, child years of education, head's years of education, head's wages, head occupation, household size, province and urban.

$$\begin{aligned} \text{Child Labor} = & \beta_0 + \beta_1 \text{Age} + \beta_2 \text{Gender} + \beta_3 \text{Enrollment} + \beta_4 \text{EDU}_{\text{CHILD}} + \beta_5 \text{EDU}_{\text{H}} \\ & + \beta_6 \text{Wages}_{\text{H}} + \beta_7 \text{Sales Work} + \beta_8 \text{Agriculture Work} + \beta_9 \text{Elementary} \\ & + \beta_{10} \text{Household type} + \beta_{11} \text{Province} + \beta_{12} \text{Region} + \mu_i \end{aligned}$$

For briefness of term, it is write as:

$$\text{Child Labor} = BX + \mu_i$$

Where BX is the right-hand side of equation.

4.2.1. Logit Model

The logit model was explained by Gujarati (2003). The child labor is a prime purpose to approximate the probability of working of a child, specified the values of the descriptive variables. In raising such a probability function, keep two requirements in mind.

- (1) That like X_i the value of the explanatory variable alters the expected likelihood at all times lies into the 0 to 1 interval.
- (2) That association between P_i and X_i is nonlinear, which is, one that come close toward zero at slower rates as X_i acquires small as well as moved one which come close to zero at slower rates as X_i obtains extremely large. The logit and probit models persuade these requirements. First, consider the logit model for the motive that of its comparative mathematical straightforwardness. Suppose that, in the assessment of an individual to child labor or not depend lying on an un-observable utility indicator or index I_i^* which depends on descriptive variables such as age, gender, enrollment, child education, head education, wages, work hours, child occupation, head occupation, household size, province and locality.

This index state as:

$$I_i^* = BX + \mu_i$$

Where $i = \text{ith}$ individual,

μ_i = error term

Although how is the unobservable index associated to the definite conclusion of child labor or not? It is realistic to suppose that:

$$Y_i = 1 \text{ (for child labor) if } I_i^* \geq 0$$

$$Y_i = 0 \text{ (for child labor) if } I_i^* \leq 0$$

That is, if a person utility index I go above the threshold level I^* , he or she will child labor but if it is fewer than that I^* , that individual will not child labor. To formulate this selection prepared, I am being able to assume in expressions of the likelihood of making a choice, declare the choice of child labor (i.e. $Y = 1$):

$$\begin{aligned} P_r(Y_i = 1) &= P_r(I \geq 0) \\ &= P_r[(BX + \mu_i) \geq 0] \\ &= P_r(\mu_i \geq -BX) \end{aligned}$$

At present this likelihood depends on the (likelihood) distribution of Y_i , which in turn depends on the likelihood allocation of the error term μ_i . If this likelihood allocation is symmetric approximately to its (zero) mean value, then it can be written as:

$$P_r(\mu_i \geq -BX) = P_r(\mu_i \leq BX)$$

Therefore

$$P_i = P_r(Y_i = 1) = P_r(\mu_i \leq BX)$$

Clearly P_i depends on the particular likelihood distribution of μ_i . The likelihood that a random variable takes a value fewer than several particular values is specified by the cumulative distribution function (CDF) of that variable. The logit model assumes that the likelihood distribution of μ_i follows the logistic likelihood distribution, which can be written as follows;

$$P_i = \frac{1}{1 + e^{-Z_i}}$$

where P_i is probability of child labor and

$$Z_i = BX + \mu_i$$

The probability that $Y = 0$, that is, the child who is not a child labor, is specified by

$$1 - P_i = \frac{1}{1 + e^{-Z_i}}$$

It can be simply demonstrated that like Z_i ranges from $-\infty$ to $+\infty$ and P_i ranges between 0 to 1 as well as P_i is non-linearly associated toward Z_i , therefore satisfying the requirements.

How do approximate model, for it is non-linear not only into variables Xs however as well into the parameters, β s? The model can be predictable an easy alteration to make the model linear in the Xs and the coefficients. Taking the proportion of equation that is the possibility that a child is a child labor against the possibility that he or she is not, I find:

$$\frac{P_i}{1 - P_i} = \frac{1 + e^{Z_i}}{1 + e^{-Z_i}} = e^{Z_i}$$

Now $\frac{P_i}{1 - P_i}$ is basically the odds ratio in support of working the percentage of the likelihood that a child is a child labor to the likelihood that he or she is not a child labor. Taking the log of equation find a very exciting result, specifically

$$L_i = \ln\left(\frac{P_i}{1 - P_i}\right) = Z_i = BX_i + \mu_i$$

In terms equation states that the log of odds percentage is a liner function of the β s as well as the Xs. The L_i is identified as the logit and therefore the name of logit model for models similar to in above equation. It is remarkable to examine that the linear probability model (LPM) discussed earlier presumes that P_i is linearly correlated toward X_i where the logit model supposes that the lot of odds proportion is linearly interrelated toward X_i .

The several features of the logit model are as follows:

- (1) As P_i the probability goes from 0 to 1, the logit L_i goes from $-\infty$ to $+\infty$. That is while the probabilities recline between 0 to 1 and the logits are boundless.
- (2) Though L_i is linear into X_i , the probabilities itself are not. This is distinction to by the linear probability model wherever the probabilities rise linearly by X_i .
- (3) If L_i the logit is positive it means that while the value of explanatory variable enlarges, the odds of child labor increases, while it if is negative, the odds of child labor decreases.
- (4) The interpretation of the logit model is as follows: every slope coefficient shows how the log of the odds in favors of child labor changes as the value of the X variable changes by a unit.
- (5) Once the coefficients of the logit model are predictable, we can simply calculate the probabilities of the child labor, not immediately the odds of the child labor.

(6) The slope coefficient measures the marginal cause of a unit change in the explanatory variable on the chance of child labor, holding further variables constant. This is not the case with the logit model, for the marginal cause of a unit change in the descriptive variable not just depends on the coefficient of that variable however also on the level of likelihood from which the alteration is calculated. However the end depends on the values of entire the descriptive variables into the model.

4.2.2. Probit Model

Probit model was explained by Gujarati (2003). In order to use the socio-economic determinants of the child labor, binary experimental variable is engaged into probit model. The binary experimental variable signified the child labor as well as non-child labor of the respondent.

In the Linear Probability model the random error has non-normal distribution into the logit and the random error has the logistic distribution. An additional opponent model is the probit model in which the random error has the normal distribution known the statement of normality, the likelihood that I_i^* is less than or equal to I_i can be calculated from the standard normal Cumulative Distribution Function (CDF) like;

$$P_i = P_r (Y = 1 | X) = P_r (I_i^* \leq I_i) = P_r (Z_i \leq BX) = F (BX)$$

where $P_r (Y/X)$ means the likelihood that an event occurs known the values of X variables and wherever Z is the standard normal variable and F is the standard normal CDF, that in the current circumstance can be written as follows;

$$F (BX) = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^{BX} e^{-z^2/2} dz$$

As P represents the probability of a child labor, it is calculated through the area of the standard CDF curve from $-\infty$ to I_i . In the current circumstance, $F (I_i)$ is called the probit function, while the evaluation of the utility index BX and B_s is moderately complex in the probit model, the method of maximum probability can be used to approximate them. While the statistical standards of the probit as well as logit coefficients are dissimilar, qualitatively the outcome are alike the

coefficients of age, child's gender, child's enrollment, child's years of education, head's years of education, head's wages, head's work hours, head's occupation, household type, province and region are individually important at least at the 10% level. The wage coefficient, however, is not important.

There is a method of evaluating the both logit as well as probit coefficients, while the ordinary logistic distribution along with the standard normal distribution both of these has the mean value of zero and their variances are dissimilar: 1 for the standard normal distribution and $\pi^2/3$ for the probit distribution, where $\pi= 22/7$, which is about 3.14.

4.2.3. Logit vs probit

The logit vs probit model was described by Gujarati (2003). The logit and probit models commonly give alike outcome, the major distinction between the two models is that the logistic distribution has somewhat fatter tails, remember that the variance of a logistically distributed random variable is regarding $\pi^2/3$ while that of a normally distributed variable is 1. Which is to state the restricted probability P_i come close to 0 or 1 at the slower rate in probit than in logit. However in practice there is no convincing motive on the way to prefer one above the other. The several researchers prefer the logit model over the probit model due to its relative statistical straight forwardness.

CHAPTER 5

RESULTS AND DISCUSSION

5.1. Introduction

This chapter describes results and discussion of study. The results of Logit model as well as Probit model are presented in the chapter. The marginal effects are also presented in the chapter.

5.2. Results of Logit Model

Child labor as a dependent variable is the function of (age of children, gender of children, enrolment, child's education, head's education, head's wages, head's occupation, household type, province and region). The results are divided in four groups of characteristics like personal characteristics, social characteristics, economic characteristics and household characteristics.

The results indicate that signs and significance of the variables given in all the models are correct. This indicates that all these variables play important role in determining the child labor. These results are further confirmed by the value of R^2 which is quite reasonable in all models.

5.2.1. Model 1: Estimates of Social Characteristics and Child Labor

Table 5.1 describes the results of logit model for social characteristics and child labor.

The results show that the coefficient and z value of constant indicate that there may be other variables which are not present in model but they have strong negative impacts on child labor.

The age of children has positive and significant relation with the child labor. The result is significant at 1% level. This indicates that children are more likely to participate in child labor with age.

Similarly, male children also have significant and positive probability to participate in labor market than female children and result is significant at 1% level. The results indicate that male children 16.5 percentage points more likely to participate than female child. The estimates by World Bank (2005) provide the same results.

It is found that enrollment of children in school has strong negative impact on child labor and the result is statically significant at 1% level. This reveals that children enrolled in school are not willing to work in the labor market. The estimates by Ravallion & Wodon (2000) provide the same results.

The educational years of children have negative impact on child labor. This shows that educational level reduces the probability of child labor. This indicates that the child labor decreases with increase in educational level. The result is significant at 1% level. The estimates by Diallo *et al* (2010) provide the same results.

Similarly the head educational status also has negative impact on child labor. This shows the probability of child labor reduces as head educational level increases. The result is significant at 1% level. This indicates that child goes aged (10-14) years are less likely to participate in labor market with increase in the education level of family head. This is so because educated heads are more likely to earn reasonable wage rate and therefore the probability of child labor decline. The estimates by Emerson & Souza (2002) provide the same results.

The household type of children shows the negative and significant impact on child labor. This is may be due to the reason that there may be other workers present in the large families which reduces probability of children to work in the labor market. The estimates by Ahmad (2011) provide the same results.

The results indicate that child labor exists in all provinces of Pakistan. All the provinces have positive and significant impact on child labor as compared to that in Baluchistan (the base category). The results show the child labor in three provinces such as Punjab, Sindh and Khyber Pakhtunkhwa is higher than in Baluchistan. The probability of the child labor is higher in Punjab but this probability is even higher in Sindh and KPK as compared to that in Baluchistan. Since the Punjab is larger province in population and economic activities, more children are involved in labor market. Similarly the child labor is found to be higher in other two provinces like Sindh and KPK as compared to that in Baluchistan. This may be because of higher population and low family income due to weak economic activities available in these provinces than in Baluchistan.

So, more finances are required to finance the financial requirements of their families. The estimates by Khalid and Shahnaz (2004) provide the same results.

The probability of child labor is found to be lower in urban areas than in rural areas (base category). This is so because social and economic conditions are better in urban areas than in rural areas. That is higher economic opportunities are present in urban areas. However, in rural areas people are mainly involved in family occupations and so the children are involved in labor market activities. The result is insignificant at 1% level. The estimates by Shujaat and Qindeel (2007) provide the same results.

Table 5.1 Estimates of Logit Model for Social Characteristics and Child Labor

Variables	Coefficient	z	P> z
Constant	-2.232*	-4.26	0.000
Personal Characteristics of Children			
AGE	0.339*	11.25	0.000
MALE	0.699*	7.19	0.000
Social Characteristics			
ENR	-0.862*	-22.40	0.000
EDU _{CHILD}	-0.244*	-3.35	0.001
EDU _H	-0.493*	-2.88	0.004
Household Characteristics of Children			
HHT	-0.394*	-3.84	0.000
PUNJ	1.364*	13.18	0.000
SIND	3.052*	19.56	0.000
KPK	3.161*	14.59	0.000
URBAN	-1.465*	-13.06	0.000
Number of Observations	= 5,803		
Pseudo R ²	= 0.4087		
Log likelihood	= -2363.794		

Note: Statistics which are significant at 1%, 5% and 10% are indicated by (*), (**) and (***) respectively.

Table 5.2 Marginal effects for Social Characteristics and Child Labor

Variables	dx/dy	z	P> z
Personal Characteristics of Children			
AGE	0.084	11.25	0.000
MALE	0.165	7.30	0.000
Social Characteristics			
ENR	-0.214	-22.47	0.000
EDU _{CHILD}	-0.060	-3.35	0.001
EDU _H	-0.122	-2.88	0.004
Household Characteristics of Children			
HHT	-0.097	-3.84	0.000
PUNJ	0.318	14.50	0.000
SIND	0.521	36.09	0.000
KPK	0.456	32.59	0.000
URBAN	-0.364	-12.94	0.000

Note: dx/dy is for separate alteration of dummy variables from 0 to 1

5.2.2. Model 2: Estimates of Economic Characteristics and Child Labor

Table 5.3 describes the estimates of logit model for economic characteristics and child labor.

The results show that the coefficient and z value of constant indicate that there may be other variables which are not present in model but they have strong negative impacts on child labor.

The age of children has positive and significant relation with the child labor. The result is significant at 1% level. This indicates that children are more likely to participate in child labor with age. This is so because children can earn more with age.

Similarly male children also have significant and positive probability to participate in labor market than female children and result is significant at 1% level. The results indicate that

male children are 5 percentage points more likely to participate than female child. The estimates by World Bank (2005) provide the same results.

It is found that wages of head have the negative impacts on child labor. This shows that the probability of working children decreases with increase in wages of head. The result is significant at 1% level. The estimates by Hussain *et al* (2017) provide the same results.

The results show that children of the sale workers, agriculture workers and elementary workers are more likely to be in child labor than these of professionals and assistant professional (base category). This is due to the reason that family head's belonging to these profession have generally low earning than professional workers and so are likely to work in labor market. The estimates by Malik *et al* (2012) provide the same results.

The household type of children shows the negative and significant impact on child labor. This is may be due to the reason that there may be other workers present in the large families which reduces probability of children to work in the labor market. The estimates by Ahmad (2011) provide the same results.

The results indicate that child labor exists in all provinces of Pakistan. All the provinces have positive and significant impact on child labor as compared to Baluchistan (the base category). The results show the child labor in three provinces such as Punjab, Sindh and Khyber Pakhtunkhwa is higher than in Baluchistan. The probability of the child labor is higher in Punjab but this probability is even higher in Sindh and KPK as compared to that in Baluchistan. Since the Punjab is larger province in population and economic activities, more children are involved in labor market. Similarly the child labor is found to be higher in other two provinces like Sindh and KPK as compared to that in Baluchistan. This may be because of higher population and low family income due to weak economic activities available in these provinces then in Baluchistan. So, more finances are required to finance the financial requirements of their families. The estimates by Khalid and Shahnaz (2004) provide the same results.

The probability of child labor is found to be lower in urban areas than in rural areas (base category). This is so because in urban areas social and economic conditions are better than in rural areas. That is higher economic opportunities are present in urban areas. However, in rural

areas people are mainly involved in family occupations and so the children are involved in labor market activities. The result is insignificant at 1% level. The estimates by Shujaat and Qindeel (2007) provide the same results.

Table 5.3 Estimates of Logit Model for Economic Characteristics and Child Labor

Variables	Coefficient	z	P> z
Constant	-5.841*	-13.02	0.000
Personal Characteristics of Children			
AGE	0.442*	16.73	0.462
MALE	0.198*	2.60	0.000
Economic Characteristics			
WAGE _H	-0.002*	-3.05	0.002
Head Occupation			
SALE	0.371*	3.34	0.000
AGRI	0.642*	5.23	0.000
ELEM	0.963*	7.41	0.000
Household Characteristics of Children			
HHT	-0.323*	-3.56	0.000
PUNJ	1.711*	17.40	0.000
SIND	3.076*	20.96	0.000
KPK	2.908*	13.32	0.000
URBAN	-1.114*	-11.22	0.000
Number of Observations	= 5,803		
Pseudo R ²	= 0.4087		
Log likelihood	= -2363.794		

Note: Statistics which are significant at 1%, 5% and 10% are indicated by (*), (**) and (***) respectively.

Table 5.4 Marginal effects for Economic Characteristics and Child Labor

Variables	dy/dx	Z	P> z
Personal Characteristics of Children			
AGE	0.110	16.73	0.462

MALE	0.049	2.60	0.000
Economic Characteristics			0.000
WAGE _H	-0.006	-3.05	0.002
Head Occupation			
SALE	0.271	3.31	0.000
AGRI	0.534	5.13	0.000
ELEM	0.756	7.21	0.009
Household Characteristics of Children			
HHT	-0.080	-3.56	0.000
PUNJ	0.391	20.60	0.000
SIND	0.534	40.06	0.000
KPK	0.456	30.44	0.000
URBAN	-0.287	-11.15	0.000

Note: dx/dy is for separate alteration of dummy variables from 0 to 1

5.2.3. Model 3: Estimates of Social and Economic Characteristics and Child Labor

Table 5.5 describes the results of logit model for social and economic characteristics and child labor.

The results show that the coefficient and z value of constant indicate that there may be other variables which are not present in model but they have strong negative impacts on child labor.

The age of children has positive and significant relation with the child labor. The result is significant at 1% level. This indicates that children are more likely to participate in child labor with age. This is so because children can earn more with age.

Similarly male children also have significant and positive probability to participate in labor market than female children and result is significant at 1% level. The results indicate that male children 18.5 percentage points more likely to participate than female child. The estimates by the World Bank (2005) provide the same results.

It is found that enrollment of children in school has strong negative impact on child labor and the result is statically significant at 1% level. This reveals that children enrolled in school are not willing to work in the labor market. The estimates by Ravallion & Wodon (2000) provide the same results.

The educational years of children have negative impact on child labor. This shows that educational level reduces the probability of child labor. This indicates that the child labor decreases with increase in educational level. The result is significant at 1% level. The estimates by Diallo *et al* (2010) provide the same results.

Similarly the head educational status also has negative impact on child labor. This shows the probability of child labor reduces as head educational level increases. The result is significant at 1% level. This indicates that child goes aged (10-14) years are less likely to participate in labor market with increase in the education level of family head. This is so because educated heads are more likely to earn reasonable wage rate and therefore the probability of child labor decline. The estimates by Emerson & Souza (2002) provide the same results.

It is found that wages of head have the negative impacts on child labor. This shows that the probability of working children decreases with increase in wages of head. The result is significant at 1% level. The estimates by Hussain *at el* (2017) provide the same results.

The results show that children of the sale workers, agriculture workers and elementary workers are more likely to be in child labor than these of professionals and assistant professional (base category). This is due to the reason that family head's belonging to these profession have generally low earning than professional workers and so are likely to work in labor market. The estimates by Malik *et al* (2010) provide the same results.

The household type of children shows the negative and significant impact on child labor. This is may be due to the reason that there may be other workers present in the large families which reduces probability of children to work in the labor market. The estimates by Ahmad & Mustafa (2011) provide the same results.

The results indicate that child labor exists in all provinces of Pakistan. All the provinces have positive and significant impact on child labor as compared to Baluchistan (the base

category). The results show the child labor in three provinces such as Punjab, Sindh and Khyber Pakhtunkhwa is higher than in Baluchistan. The probability of the child labor is higher in Punjab but this probability is even higher in Sindh and KPK as compared to that in Baluchistan. Since the Punjab is larger province in population and economic activities, more children are involved in labor market. Similarly the child labor is found to be higher in other two provinces like Sindh and KPK as compared to that in Baluchistan. This may be because of higher population and low family income due to weak economic activities available in these provinces then in Baluchistan. So, more finances are required to finance the financial requirements of their families. The estimates by Khalid and Shahnaz (2004) provide the same results.

The probability of child labor is found to be lower in urban areas than in rural areas (base category). This is so because in urban areas social and economic conditions are better than in rural areas. That is higher economic opportunities are present in urban areas. However, in rural areas people are mainly involved in family occupations and so the children are involved in labor market activities. The result is insignificant at 1% level. The estimates by Shujaat and Qindeel (2007) provide the same results.

Table 5.5 Estimates of Logit Model for Social and Economic Characteristics and Child Labor

Variables	Coefficient	z	P> z
Constant	-3.031*	-4.87	0.000
Personal Characteristics of Children			
AGE	0.349*	10.96	0.000
MALE	0.899*	8.18	0.000
Social Characteristics			
ENR	-0.882*	-20.40	0.000
EDU _{CHILD}	-0.274*	-3.85	0.001
EDU _H	-0.493*	-3.18	0.004
Economic Characteristics			
WAGE _H	-0.009*	-3.55	0.002

Head Occupation			
SALE	0.366*	3.14	0.000
AGRI	0.622*	5.33	0.000
ELEM	0.931*	7.11	0.000
Household Characteristics of Children			
HHT	-0.364*	-3.34	0.000
PUNJ	1.044*	8.28	0.000
SIND	2.652*	15.06	0.000
KPK	2.460*	10.19	0.000
URBAN	-0.965*	-8.26	0.000
Number of Observations	= 5,803		
Pseudo R ²	= 0.5579		
Log likelihood	= -1767.3336		

Note: Statistics which are significant at 1%, 5% and 10% are indicated by (*), (**) and (***) respectively.

Table 5.6 Marginal effects for Social and Economic Characteristics and Child Labor

Variables	Coefficient	z	P> z
Personal Characteristics of Children			
AGE	0.089	10.76	0.000
MALE	0.191	8.38	0.000
Social Characteristics			
ENR	-0.237	-21.71	0.000
EDU _{CHILD}	-0.074	-3.75	0.001
EDU _H	-0.133	-3.10	0.004
Economic Characteristics			
WAGE _H	-0.002	-3.72	0.002
Head Occupation			
SALE	0.287	3.28	0.000
AGRI	0.431	4.83	0.000
ELEM	0.648	6.71	0.000

Household Characteristics of Children			
HHT	-0.094	-3.44	0.000
PUNJ	0.244	8.78	0.000
SIND	0.489	24.76	0.000
KPK	0.411	19.41	0.000
URBAN	-0.265	-8.41	0.000

Note: dx/dy is for separate alteration of dummy variables from 0 to 1

5.3. Results of Probit Model

Child labor as a dependent variable is the function of (age of children, gender of children, enrolment, child's education, head's education, head's wages, head's occupation, household type, province and region). The results are divided in four groups of characteristics like personal characteristics, social characteristics, economic characteristics and household characteristics.

The results indicate that signs and significance of the variables given in all the models are correct. This indicates that all these variables play important role in determining the child labor. These results are further confirmed by the value of R^2 which is quite reasonable in all models.

5.3.1. Model 1: Estimates of Social Characteristics and Child Labor

Table 5.7 describes the results of probit model for social characteristics and child labor.

The results show that the coefficient and z value of constant indicate that there may be other variables which are not present in model but they have strong negative impacts on child labor.

The age of children has positive and significant relation with the child labor. The result is significant at 1% level. This indicates that children are more likely to participate in child labor with age.

Similarly, male children also have significant and positive probability to participate in labor market than female children and result is significant at 1% level. The results indicate that male children 13.5 percentage points more likely to participate than female child. The estimates by World Bank (2005) provide the same results.

It is found that enrollment of children in school has strong negative impact on child labor and the result is statically significant at 1% level. This reveals that children enrolled in school are not willing to work in the labor market. The estimates by Ravallion and Wodon (2000) provide the same results.

The educational years of children have negative impact on child labor. This shows that educational level reduces the probability of child labor. This indicates that the child labor decreases with increase in educational level. The result is significant at 1% level. The estimates by Diallo *et al* (2010) provide the same results.

Similarly the head educational status also has negative impact on child labor. This shows the probability of child labor reduces as head educational level increases. The result is significant at 1% level. This indicates that child goes aged (10-14) years are less likely to participate in labor market with increase in the education level of family head. This is so because educated heads are more likely to earn reasonable wage rate and therefore the probability of child labor decline. The estimates by Emerson and Sozuza (2002) provide the same results.

The household type of children shows the negative and significant impact on child labor. This is may be due to the reason that there may be other workers present in the large families which reduces probability of children to work in the labor market. The estimates by Ahmad (2011) provide the same results.

The results indicate that child labor exists in all provinces of Pakistan. All the provinces have positive and significant impact on child labor as compared to that in Baluchistan (the base category). The results show the child labor in three provinces such as Punjab, Sindh and Khyber Pakhtunkhwa is higher than in Baluchistan. The probability of the child labor is higher in Punjab but this probability is even higher in Sindh and KPK as compared to that in Baluchistan. Since the Punjab is larger province in population and economic activities, more children are involved in labor market. Similarly the child labor is found to be higher in other two provinces like Sindh and KPK as compared to that in Baluchistan. This may be because of higher population and low family income due to weak economic activities available in these provinces than in Baluchistan. So, more finances are required to finance the financial requirements of their families. The estimates by Khalid and Shahnaz (2004) provide the same results.

The probability of child labor is found to be lower in urban areas than in rural areas (base category). This is so because social and economic conditions are better in urban areas than in rural areas. That is higher economic opportunities are present in urban areas. However, in rural areas people are mainly involved in family occupations and so the children are involved in labor market activities. The result is insignificant at 1% level. The estimates by Shujaat and Qindeel (2007) provide the same results.

Table 5.7 Estimates of Probit Model for Social Characteristics and Child Labor

Variables	Coefficient	z	P> z
Constant	-1.163*	-4.06	0.000
Personal Characteristics of Children			
AGE	0.189*	11.21	0.000
MALE	0.343*	6.93	0.000
Social Characteristics			
ENR	-0.862*	-22.40	0.000
EDU _{CHILD}	-0.244*	-3.35	0.001
EDU _H	-0.493*	-2.88	0.004
Household Characteristics of Children			
HHT	-0.216*	-3.94	0.000
PUNJ	0.777*	13.58	0.000
SIND	1.524*	20.06	0.000
KPK	1.751*	14.79	0.000
URBAN	-0.818*	-13.36	0.000
Number of Observations	= 5,803		
Pseudo R ²	= 0.4087		
Log likelihood	= -2363.794		

Note: Statistics which are significant at 1%, 5% and 10% are indicated by (*), (**) and (***) respectively.

Table 5.8 Marginal effects for Social Characteristics and Child Labor

Variables	dx/dy	z	P> z
Personal Characteristics of Children			
AGE	0.074	11.25	0.000
MALE	0.135	7.30	0.000
Social Characteristics			
ENR	-0.190	-23.97	0.000
EDU _{CHILD}	-0.050	-3.32	0.001
EDU _H	-0.102	-2.78	0.005
Household Characteristics of Children			
HHT	-0.087	-3.94	0.000
PUNJ	0.298	14.47	0.000
SIND	0.483	30.99	0.000
KPK	0.470	32.49	0.000
URBAN	-0.326	-13.24	0.000

Note: dx/dy is for separate alteration of dummy variables from 0 to 1

5.3.2. Model 2: Estimates of Economic Characteristics and Child Labor

Table 5.9 describes the estimates of probit model for economic characteristics and child labor.

The results show that the coefficient and z value of constant indicate that there may be other variables which are not present in model but they have strong negative impacts on child labor.

The age of children has positive and significant relation with the child labor. The result is significant at 1% level. This indicates that children are more likely to participate in child labor with age. This is so because children can earn more with age.

Similarly male children also have significant and positive probability to participate in labor market than female children and result is significant at 1% level. The results indicate that

male children are 4 percentage points more likely to participate than female child. The estimates by World Bank (2005) provide the same results.

It is found that wages of head have the negative impacts on child labor. This shows that the probability of working children decreases with increase in wages of head. The result is significant at 1% level. The estimates by Hussain et al (2017) provide the same results.

The results show that children of the sale workers, agriculture workers and elementary workers are more likely to be in child labor than these of professionals and assistant professional (base category). This is due to the reason that family head's belonging to these profession have generally low earning than professional workers and so are likely to work in labor market. The estimates by Malik *et al* (2012) provide the same results.

The household type of children shows the negative and significant impact on child labor. This is may be due to the reason that there may be other workers present in the large families which reduces probability of children to work in the labor market. The estimates by Ahmad and Mustafa (2011) provide the same results.

The results indicate that child labor exists in all provinces of Pakistan. All the provinces have positive and significant impact on child labor as compared to Baluchistan (the base category). The results show the child labor in three provinces such as Punjab, Sindh and Khyber Pakhtunkhwa is higher than in Baluchistan. The probability of the child labor is higher in Punjab but this probability is even higher in Sindh and KPK as compared to that in Baluchistan. Since the Punjab is larger province in population and economic activities, more children are involved in labor market. Similarly the child labor is found to be higher in other two provinces like Sindh and KPK as compared to that in Baluchistan. This may be because of higher population and low family income due to weak economic activities available in these provinces then in Baluchistan. So, more finances are required to finance the financial requirements of their families. The estimates by Khalid and Shahnaz (2004) provide the same results.

The probability of child labor is found to be lower in urban areas than in rural areas (base category). This is so because in urban areas social and economic conditions are better than in rural areas. That is higher economic opportunities are present in urban areas. However, in rural areas people are mainly involved in family occupations and so the children are involved in labor

market activities. The result is insignificant at 1% level. The estimates by Shujaat and Qindeel (2007) provide the same results.

Table 5.9 Estimates of Probit Model for Economic Characteristics and Child Labor

Variables	Coefficient	Z	P> z
Constant	-3.301*	-13.18	0.000
Personal Characteristics of Children			
AGE	0.248*	16.73	0.462
MALE	0.118*	2.60	0.000
Economic Characteristics			
WAGE _H	-0.003*	-3.45	0.005
Head Occupation			
SALE	0.421*	4.14	0.000
AGRI	0.741*	6.31	0.000
ELEM	0.898*	8.48	0.000
Household Characteristics of Children			
HHT	-0.183*	-3.57	0.000
PUNJ	1.021*	18.16	0.000
SIND	1.726*	23.26	0.000
KPK	1.608*	14.16	0.000
URBAN	-1.954*	-11.56	0.000
Number of Observations	= 5,803		
Pseudo R ²	= 0.4087		
Log likelihood	= -2363.794		

Note: Statistics which are significant at 1%, 5% and 10% are indicated by (*), (**) and (***) respectively.

Table 5.10 Marginal effects for Economic Characteristics and Child Labor

Variables	dy/dx	Z	P> z
Personal Characteristics of Children			
AGE	0.099	16.73	0.462
MALE	0.047	2.70	0.000

Economic Characteristics			
WAGE _H	-0.007	-3.11	0.004
Head Occupation			
SALE	0.221	4.03	0.000
AGRI	0.543	5.93	0.000
ELEM	0.722	6.91	0.000
Household Characteristics of Children			
HHT	-0.072	-3.57	0.000
PUNJ	0.384	20.23	0.000
SIND	0.527	39.06	0.000
KPK	0.464	30.48	0.000
URBAN	-0.263	-11.55	0.000

Note: dx/dy is for separate alteration of dummy variables from 0 to 1

5.3.3. Model 3: Estimates of Social and Economic Characteristics and Child Labor

Table 5.11 describes the results of probit model for social and economic characteristics and child labor.

The results show that the coefficient and z value of constant indicate that there may be other variables which are not present in model but they have strong negative impacts on child labor.

The age of children has positive and significant relation with the child labor. The result is significant at 1% level. This indicates that children are more likely to participate in child labor with age. This is so because children can earn more with age.

Similarly male children also have significant and positive probability to participate in labor market than female children and result is significant at 1% level. The results indicate that male children 16.4 percentage points more likely to participate than female child. The estimates by World Bank (2005) provide the same results.

It is found that enrollment of children in school has strong negative impact on child labor and the result is statically significant at 1% level. This reveals that children enrolled in school are

not willing to work in the labor market. The estimates by Ravallion and Wodon (2000) provide the same results.

The educational years of children have negative impact on child labor. This shows that educational level reduces the probability of child labor. This indicates that the child labor decreases with increase in educational level. The result is significant at 1% level. The estimates by Diallo et al (2010) provide the same results.

Similarly the head educational status also has negative impact on child labor. This shows the probability of child labor reduces as head educational level increases. The result is significant at 1% level. This indicates that child goes aged (10-14) years are less likely to participate in labor market with increase in the education level of family head. This is so because educated heads are more likely to earn reasonable wage rate and therefore the probability of child labor decline. The estimates by Emerson and Souza (2002) provide the same results.

It is found that wages of head have the negative impacts on child labor. This shows that the probability of working children decreases with increase in wages of head. The result is significant at 1% level. The estimates by Hussain *et al* (2017) provide the same results.

The results show that children of the sale workers, agriculture workers and elementary workers are more likely to be in child labor than these of professionals and assistant professional (base category). This is due to the reason that family head's belonging to these profession have generally low earning than professional workers and so are likely to work in labor market. The estimates by Malik *et al* (2012) provide the same results.

The household type of children shows the negative and significant impact on child labor. This is may be due to the reason that there may be other workers present in the large families which reduces probability of children to work in the labor market. The estimates by Ahmad and Mustafa (2011) provide the same results.

The results indicate that child labor exists in all provinces of Pakistan. All the provinces have positive and significant impact on child labor as compared to Baluchistan (the base category). The results show the child labor in three provinces such as Punjab, Sindh and Khyber Pakhtunkhwa is higher than in Baluchistan. The probability of the child labor is higher in Punjab but this probability is even higher in Sindh and KPK as compared to that in Baluchistan. Since

the Punjab is larger province in population and economic activities, more children are involved in labor market. Similarly the child labor is found to be higher in other two provinces like Sindh and KPK as compared to that in Baluchistan. This may be because of higher population and low family income due to weak economic activities available in these provinces then in Baluchistan. So, more finances are required to finance the financial requirements of their families. The estimates by Khalid and Shahnaz (2004) provide the same results.

The probability of child labor is found to be lower in urban areas than in rural areas (base category). This is so because in urban areas social and economic conditions are better than in rural areas. That is higher economic opportunities are present in urban areas. However, in rural areas people are mainly involved in family occupations and so the children are involved in labor market activities. The result is insignificant at 1% level. The estimates by Shujaat and Qindeel (2007) provide the same results.

Table 5.11 Estimates of Probit Model for Social and Economic Characteristics and Child Labor

Variables	Coefficient	z	P> z
Constant	-1.551*	-4.46	0.000
Personal Characteristics of Children			
AGE	0.183*	10.66	0.000
MALE	0.416*	7.96	0.000
Social Characteristics			
ENR	-0.480*	-22.91	0.000
EDU _{CHILD}	-0.157*	-3.82	0.001
EDU _H	-0.298*	-2.94	0.003
Economic Characteristics			
WAGE _H	-0.006*	-3.15	0.004
Head Occupation			
SALE	0.390*	4.01	0.000
AGRI	0.681*	5.93	0.000
ELEM	0.905*	7.61	0.000

Household Characteristics of Children			
HHT	-0.188*	-3.31	0.000
PUNJ	0.571*	8.40	0.000
SIND	2.292*	15.76	0.000
KPK	1.356*	10.56	0.000
URBAN	-0.560*	-8.40	0.000
Number of Observations	= 5,803		
Pseudo R ²	= 0.5579		
Log likelihood	= -1767.3336		

Note: Statistics which are significant at 1%, 5% and 10% are indicated by (*), (**) and (***) respectively.

Table 5.12 Marginal effects for Social and Economic Characteristics and Child Labor

Variables	Coefficient	z	P> z
Personal Characteristics of Children			
AGE	0.073	10.66	0.000
MALE	0.164	8.08	0.000
Social Characteristics			
ENR	-0.191	-22.91	0.000
EDU _{CHILD}	-0.062	-3.82	0.000
EDU _H	-0.118	-2.94	0.003
Economic Characteristics			
WAGE _H	-0.002	-3.18	0.003
Head Occupation			
SALE	0.213	3.38	0.000
AGRI	0.398	5.03	0.000
ELEM	0.523	7.13	0.000
Household Characteristics of Children			
HHT	-0.075	-3.31	0.000
PUNJ	0.223	8.88	0.000
SIND	0.441	21.56	0.000

KPK	0.422	17.83	0.000
URBAN	-0.223	-8.40	0.000

Note: dx/dy is for separate alteration of dummy variables from 0 to 1

CHAPTER 6

CONCLUSION AND POLICY IMPLICATIONS

This study is an attempt to describe and highlight social as well as economic determinants of child labor in Pakistan and find out the policies adopted to address the social and economic determinants of the child labor in Pakistan. The study describes the difference between the household of working children and the household of non-working children. It also argues the labor market participation of children by using the Labor Force Survey (LFS) 2014-15.

The results indicate that signs and significance of the variables given in all the models are correct. This indicates that all these variables play important role in determining the child labor. These results are further confirmed by the value of R^2 which is quite reasonable in all models.

It is found that the coefficient and z value of constant indicate that there may be other variables which are not present in model but they have strong negative impacts on child labor.

The results of both models show that the age of children has positive and significant relation with the child labor. The result is significant at 1% level. This indicates that children are more likely to participate in child labor with age. This is so because children can earn more with age.

Similarly male children also have significant and positive probability to participate in labor market than female children and result is significant at 1% level. The results indicate that male children 16.4 percentage points more likely to participate than female child.

It is found that enrollment of children in school has strong negative impact on child labor and the result is statically significant at 1% level. This reveals that children enrolled in school are not willing to work in the labor market.

The educational years of children have negative impact on child labor. This shows that educational level reduces the probability of child labor. This indicates that the child labor decreases with increase in educational level. The result is significant at 1% level.

Similarly the head educational status also has negative impact on child labor. This shows the probability of child labor reduces as head educational level increases. The result is significant at 1% level. This indicates that child goes aged (10-14) years are less likely to participate in labor market with increase in the education level of family head. This is so because educated heads are more likely to earn reasonable wage rate and therefore the probability of child labor decline.

It is found that wages of head have the negative impacts on child labor. This shows that the probability of working children decreases with increase in wages of head. The result is significant at 1% level.

The results show that children of the sale workers, agriculture workers and elementary workers are more likely to be in child labor than these of professionals and assistant professional (base category). This is due to the reason that family head's belonging to these profession have generally low earning than professional workers and so are likely to work in labor market.

The household size of children shows the negative and significant impact on child labor. This is may be due to the reason that there may be other workers present in the large families which reduces probability of children to work in the labor market.

The results indicate that child labor exists in all provinces of Pakistan. All the provinces have positive and significant impact on child labor as compared to Baluchistan (the base category). The results show the child labor in three provinces such as Punjab, Sindh and Khyber Pakhtunkhwa is higher than in Baluchistan. The probability of the child labor is higher in Punjab but this probability is even higher in Sindh and KPK as compared to that in Baluchistan. Since the Punjab is larger province in population and economic activities, more children are involved in labor market. Similarly the child labor is found to be higher in other two provinces like Sindh and KPK as compared to that in Baluchistan. This may be because of higher population and low family income due to weak economic activities available in these provinces then in Baluchistan. So, more finances are required to finance the financial requirements of their families.

The probability of child labor is found to be lower in urban areas than in rural areas (base category). This is so because in urban areas social and economic conditions are better than in rural areas. That is higher economic opportunities are present in urban areas. However, in rural

areas people are mainly involved in family occupations and so the children are involved in labor market activities. The result is insignificant at 1% level.

As of the above discussion a number of implications for the policy developer emerges that can provide a guidelines for the eradication of child labor. There are following main policy implications which are used as strategy for the elimination of child labor and its social and economic determinants.

- There may be an easy access to education and this will not increase only the literacy rate but also decrease the prevalence of child labor in the country.
- The economic incentives may be given to the poor families to reimburse their loss of income that results from the school enrollment of their children.
- The government may establish lower education commission to increase the enrollment of children in school.
- The government may create the employment and earning opportunities for the adult household members.

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