Master's Thesis of Public Administration

Child labour in Bangladesh

Analyzing the role of the parents as push factor towards Child Labour

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아동 노동에 대한 추진 요인으로 부모의 역할 분석

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Abstract

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Despite numerous efforts from the government, civil society, INGOs, and NGOs most of the time the efforts to eliminate child labour from Bangladesh have seems like have no use because of the unwillingness and irresponsible behavior of the family members and most of the time those are the parents, in particular, the household head who is the decision maker at the end of the day. We live in a society where according to the citizen's platform for SDGs it also gets pointed out that the family thinks that 'maybe marrying off their girl child as soon as possible and sending the boy child to work is a coping mechanism'. It was inevitable that poverty played a huge role in the children getting involved in child labour or in another way parents were bound to send their children to work to fight extreme poverty. But the studies from the '90s onwards show that because of the rapid economic growth child labour reduced drastically but after a period of nearly one and half decades that reduction got stopped or not moving forward as expected although the economic growth is still marching upwards.

This study focuses on the role of parents especially scrutinizing if there is any role in parents' education level with child labour. Whereas the data is available only in terms of household head education level, therefore, this study focused

on the education level of the household head, who is apparently the decision maker of the house, and crossed checked if there are any influential factors like the main source of income and area; like urban or rural playing a vital role as an obstacle to eliminate child labour.

This paper was prepared based on the 'household production model' as it assumes to maximize utility in terms of quantity and quality of children to frame the choices of a child's activities and schooling as a reduced-form or opposite function in line with individual literacy, household income, area, and divisions. This study focused to analyzed what is the driving factor that pushes or allows parents to engage their children in child labour and secondarily it also searches if the existing legal provision in Bangladesh is adequate to eliminate child labour.

In light of the Bangladesh labor force and child labour survey 2013, which main report and microdata were published in March 2016; this paper examined more than 40000 households that are associated with children aged grouped in between 5-17 years old. This study pointed out that still there are some issues related to the main source of income that indicates economic factors and in terms of area the urban factor and some metropolitan cities that are very much commercially active also play a role, but apart from that this study finds that the household head education (not literate) is also playing a significant role which pushing children for work or doing neither study nor work instead of involving in the study.

This study came up with an example of Singapore where the government and entire setup came up with enhancing education and school setup along with awareness raising which has helped them to eliminate child labour in an exemplary way. The government of Bangladesh can take that example into account and an updated and free from political influence ‘social safety-net program’ can actually help reduce the challenges. Side by side this paper also encourage the government to come up with more awareness raising program and use its administrative wings and authorities to ensure child rights across the country without any hesitation.

Keywords: Study only, Work only, Student and employed, Neither, Household head literacy, Main source of income, Area

국문초록

방글라데시의 아동 노동

아동 노동에 대한 추진 요인으로 부모의 역할 분석

정부, 시민 사회, INGO 및 NGO 의 수많은 노력에도 불구하고 대부분의 경우 방글라데시에서 아동 노동을 근절하려는 노력은 가족 구성원의 내키지 않고 무책임한 행동 때문에 소용이 없는 것처럼 보입니다. 부모, 특히 하루가 끝날 때 결정권자인 세대주. 우리는 SDGs 에 대한 시민 플랫폼에 따르면 가족이 '어쩌면 가능한 한 빨리 여자 아이를 결혼시키고 남자 아이를 직장에 보내는 것이 대처 메커니즘'이라고 생각하는 사회에 살고 있습니다. 빈곤은 아이들이 아동 노동에 가담하는 데 큰 역할을 하거나 다른 방식으로 부모가 극심한 빈곤과 싸우기 위해 자녀를 일에 보내야 하는 것은 불가피했습니다. 그러나 90 년대 이후의 연구에 따르면 급속한 경제 성장으로 인해 아동 노동이 급격히 감소했지만 거의 15 년이 지난 후 경제 성장이 여전히 상승하고 있음에도 불구하고 감소가 예상대로 진행되지 않거나 중단되었습니다.

본 연구는 아동 노동과 함께 부모의 교육 수준에 어떤 역할이 있는지 특히 면밀히 조사한 부모의 역할에 초점을 맞췄다. 가구주 학력만을 대상으로 한 자료이므로 본 연구에서는 가정의 의사결정자인 것으로 보이는 가장의 학력에 주목하여 주와 같은 영향요인이 있는지 교차확인하였다. 소득원 및 면적; 도시나 농촌이 아동 노동을 근절하는 데 걸림돌이 되는 중요한 역할을 하는 것처럼 말입니다.

본 논문은 개인의 문해력에 맞춰 아동의 활동과 학교교육의 선택을 축소형 또는 반대기능으로 틀을 짜는 것이 아동의 양적 질적 효용을 극대화한다고 가정하여 '가정생산모형'에 입각하여 작성되었으며, 가계 소득, 지역 및 부문. 본 연구는 부모가 자녀를 아동 노동에 참여시키거나 허용하는 동인이 무엇인지 분석하는 데 중점을 두었고, 이차적으로 방글라데시의 기존 법률 조항이 아동 노동을 근절하기에 적합한지 여부를 탐색했습니다.

2016 년 3 월에 주요 보고서와 마이크로데이터가 발표된 2013 년 방글라데시 노동력 및 아동 노동 조사에 비추어, 이 논문은 5-17 세 사이에 그룹화된 아동과 관련된 40,000 개 이상의 가구를 조사했습니다. 본 연구는 여전히 경제적인 요인을 나타내는 주요 소득원과 관련된 몇 가지 문제가 있고 면적 측면에서 도시적 요인과 상업적으로 매우 활발한 일부 대도시도 역할을 한다고 지적했지만, 본 연구는 이와 별개로 본 연구 가장 교육(비문해)도 아이들을 일에 몰두하게 하거나 공부를 하지

않고 일도 하지 않고 공부에 참여하게 하는 중요한 역할을 하고 있음을 발견했습니다.

이 연구는 정부와 전체 조직이 모범적인 방식으로 아동 노동을 근절하는 데 도움이 된 인식 제고와 함께 교육 및 학교 환경을 개선하는 싱가포르의 예를 제시했습니다. 방글라데시 정부는 그 예를 고려할 수 있으며 업데이트되고 정치적 영향이 없는 '사회 안전망 프로그램'이 실제로 문제를 줄이는 데 도움이 될 수 있습니다. 또한 이 문서는 정부가 더 많은 인식 제고 프로그램을 마련하고 행정 기관과 권한을 사용하여 주저 없이 전국의 아동 권리를 보장하도록 장려합니다.

키워드: 학업만, 직장만, 학생 및 취업자, 둘 다, 가구주, 주요 소득원, 면적

CONTENTS

List of acronyms

SSNP = Social Safety-net Program

MICS = Multiple Indicators Cluster Survey

LFS = Labour Force Survey

PSU = Primary Sample Units

IMPS = Integrated Multipurpose Sample

HHBS = Household Based Survey

MJF = Manusher Jonno Foundation

CHAPTER 1. INTRODUCTION

1.1 Background

Bangladesh is a country in Southern Asia which lies on the Bay of Bengal and is surrounded on all sides by India, apart from a small border with Myanmar. Bangladesh's plains are flat, and the majority of the country is built on the deltas of large rivers that flow down from the Himalayas. The government is a parliamentary democracy, with the president as the chief of state and the prime minister as the head of government.

Bangladesh has a traditional economic system in which available resources are allocated using primitive methods and inheritance. Despite of a 148,460 km² area small country burdened with a huge population like 170 million Bangladesh has made a remarkable progress in last two decades specially in elimination of poverty, food production, industrialization and readymade garment sector. In citizen service and social sector Bangladesh also made noticeable progress where government, civil societies and NGOs are playing a vital role to address issues like health and nutrition, education, disaster management, income and gender equality, women empowerment etc.

Since of the country’s independence in 1971, the government of Bangladesh have also shown keen sincerity and willingness to address issues related to Children and their rights. There are 5 fundamental principal of the ‘National Children Policy’ in Bangladesh. They are: 1) Ensuring Child Rights

in the light of the constitution of Bangladesh, Child Act and International Charters/ Conventions, 2) Poverty alleviation of the children, 3) Elimination of all forms of Child abuse and discrimination, 4) Elimination of all forms of abuse of and discrimination to female child and 5) Participation of the children and accepting their views into consideration in overall protection and, in the best interest of the children (ILO, 1995).

1.2 Statement of the problem:

Child labour is a violation of basic human rights and a deprivation of health, safety, bodily integrity, and self-determination, as set out in international law[1]. In accordance with SDGs target 8.7 it says that 'Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms'. From the independence of Bangladesh since 1971 child labour has been considered as a very sensitive issue and delicate in nature to handle. Delicate in a sense that a marginal abnormality in the society could demolish all the hard-earned achievement in the issue (GPS Team, 2002).

Child labour and child marriages have surged in Bangladesh amid the pandemic, found a recent study by Manusher Jonno Foundation ('MJF' –

[1] https://www.unicef.org/rosa/reports/relationship-between-child-labour-and-child-marriage-discourse-analysis.

in English it means Foundation for the people - a non-government and non-profit organization, MJF is dedicated to mainstreaming gender and disability in its operation within the country in terms of participation, capacity and programmatic focus) -unravelling the decades of progress made on bringing down the two social ills. For example, according to the renowned English daily newspaper 'the daily star' 13,886 girls aged 10 to 17 were forced for child marriage and 8,140 children were forced for child labour in such area where NGOs and INGOs are working relentlessly to improve lives of the children and protecting them from this types of harms[2]. According to a core group member of Citizen's Platform for SDGs in Bangladesh stated that 'Maybe, the parents thought of marrying off their girl child and sending their boy child to work as a coping mechanism'. Family is the last and the foremost place to protect children from all type of misuses but in Bangladesh, sadly but true that despite of numerous efforts from the Government, Civil Society, INGOs and NGOs most of the time those efforts comes out inoperable because of the unwillingness and irresponsible behavior of the family member and most of the times maybe those are the parents (MJF, 2022).

1.3 What is Child Labour?

According to UNICEF, 'Child labour is work that is likely to interfere with a child's education and development; Labour that exceeds a minimum number of hours, labour that is hazardous; and/or labour performed by a child who is

[2] https://www.thedailystar.net/news/bangladesh/news/eradicating-child-labour-marriage-pandemic-pushes-goals-further-away-2206346

underage according to state legislation. A child is considered a person under the age of 18 years' (UNICEF, ILO, World Bank Group 2009). ILO signifies some activities as the worst form of labour. It defines, 'The worst forms of child labour include trafficking, armed conflict, slavery, debt bondage, sexual exploitation and hazardous work'. In the context of Bangladesh both the forms are found as the main barrier on ensuring children's basic rights (ILO, 1999).

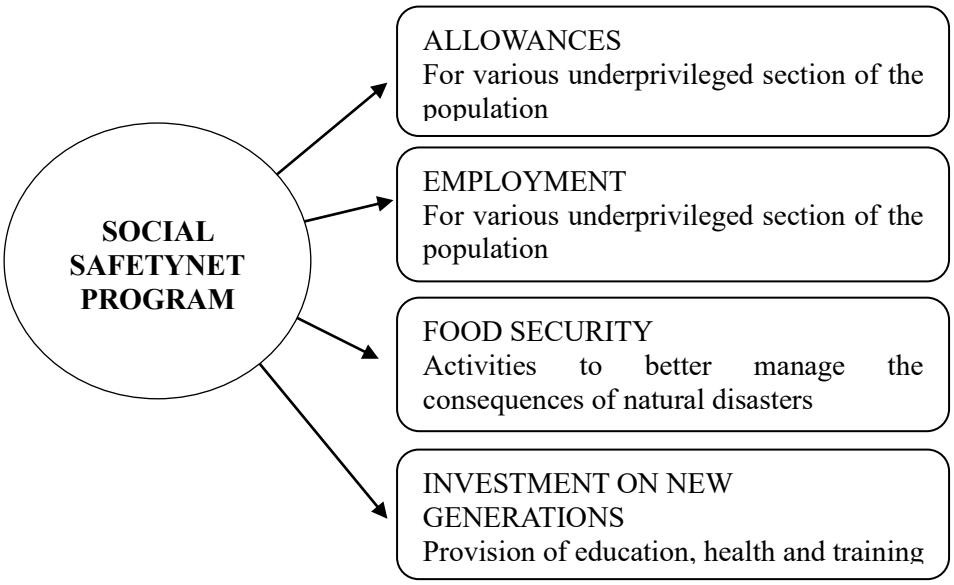
1.4 Purpose of the research:

To eliminate Child labour Bangladesh, have two main policies to address the issues: 1) National Child labour Elimination Policy 2010 which aims to withdraw and safeguard children from different forms of occupation including hazardous work, offer stipend to get children back to school, ensuring coordination among family and stakeholder and help families to get rid of poverty level through 'Social SafetyNet Program', 2) National Domestic Labour Policy 2015 that aims to protect and rescue the children those are already involved in domestic labour or are in a risk to be into it. But despite of so many initiatives and interventions two major issues, child labour and child marriage are still seeming challenging to get rid of (Anker & Melkas, 1995)

Bangladesh is rapidly urbanizing largely due to the 'pull' factors (increasing landlessness, natural calamities, river erosion, etc.), forcing people to migrate to urban areas, especially to Dhaka city, in search of employment opportunities. The present government has placed elimination of poverty and

inequity at the forefront of its development strategy. The aim is to bring down the poverty rate from 40 per cent in 2005 to 15 per cent by 2021 (7th five-year plan 2016-2021). Investment in infrastructure, creation of employment opportunities during slack seasons, and increased coverage of 'Social Safety Net Programs' will lead to improvement in poverty situation; and priority will be given to activities targeting the extreme poor, women in poverty, landless poor and other disadvantaged groups and as a result children would be benefitted (Alam & Khuda, 2005).

A strong and expanded 'Social SafetyNet' is the main emphasis of the present government's vision to protect the poor from all types of social, economic and natural shocks (GoB 2009b). The major social safety net programs (SSNPs) in Bangladesh can be divided under four broad categories: (i) employment generation programs; (ii) programs to cope with natural disasters and other shocks; (iii) incentives provided to parents for their children's education; and (iv) incentives provided to families to improve their health status.



SSNPs in Bangladesh have led to increased school enrolment and attendance especially among girls in secondary schools and closing the gender gap; additional employment generation; provision of food during crisis; building infrastructure; and increased access to and utilization of maternal health care services (Barkat 2011). It is also evident that SSNPs also made significant impact in the socioeconomic life mainly in rural and urban setting. In a nutshell SSNPs program operated in two dimension or group namely food transfer and cash transfer where government and its entities are involved in distributing services among the beneficiaries and the civil societies and NGOs are involved in awareness raising, motivation, following up the progress and address the gaps in the program (Khuda, 2011).

But despite of having such initiatives child labour remains alarming since there are lack of political commitment, weak program management, wrong identification of beneficiary group, weakness in minimize linkage between gaps, weak financial and delayed payment system and most importantly weak monitoring and supervision system. While addressing the weakness of the program, the gaps can result some delay in process but that could not be the overall reason of failure of addressing child labour in an expected level (Zaman, Matin, Mahmud, & Kibria, 2014).

Some marginal progress have been done but according to the Multiple Indicator Cluster Survey (MICS 2019) it says that still 6.8% children aged grouped between 5-17 years are still engaged in child labour. Although

Bangladesh has high child labour participation rate, this issue has only recently attracted academic attention following the 1995 implementation of the Child labour Deterrence Act (Harkin Bill 1993). A small number of papers have focused on the issue of Child labour in Bangladesh since the mid-1990s. Rahman 1999, Ravallion and Wodon 2000, Delap 2001, Amin and Rives 2004, 2006a and 2006b, Salmon 2005, Khanam 2004 and 2006, and Khanam and Rahman 2007 are among the most mentionable. However, not all of these studies have looked at all the factors that influence child labour in Bangladesh (Delap, 2001)

1.5 The Harkin Bill:

The Harkin Bill is the Child Labor Deterrence Act was created by Senator Tom Harkin (Democrat - Iowa) and was first proposed in the United States Congress in 1992, with subsequent propositions in 1993, 1995, 1997 and 1999. The final proposal for the bill, called 'Child Labor Deterrence Act of 1999', was bill number S. 1551 in the U.S. Senate. Harkin was the lead sponsor calling for a bill that would prohibit the importation of manufactured and mined goods into the U.S. which are produced by children under the age of 15 (Quddus, 2009).

1.6 Harm caused by implementing the Harkin Bill:

Manufacturing and agriculture sectors are the main employers of children in Bangladesh. Since the implementation of the Harkin Bill in 1993, child labour,

couldn't any longer exist in the garment sector of Bangladesh, as USA banned imports of products made with child labour. Since the Harkin Bill was implemented, as a consequence over 50,000 children have been displaced from garment factories overnight; and these children were later found in more hazardous informal jobs, such as begging, drug paddling and in prostitution. This immediate action from the Government of Bangladesh led children towards uncertainty and has also indicated that without having proper alternative this kinds of action might come out with bad consequences than good (Rahman, Khanam, & Absar, 1999).

1.7 Significance of the study

Bangladesh government has always showed its willingness to address child rights issues. If we observe the trajectory of Bangladesh's child policies and acts with international policies, we can see that the government never wasted any time to implement that laws/acts in Bangladeshi's perspective. For example, convention on the rights of children approved by UN in 1989 and Bangladesh ratified compulsory primary education act in the following year 1990 and such thing happened with Salamanca Declaration 1994 'policies for disabled', Dakar Framework for Action 2000 'disability welfare act' and so on. Despite these policies are made for the betterment of the children but sometime some of these policies may cause catastrophe and 'The Harkin Bill' is one of the brightest example from Bangladesh (unicef, 2021).

To counter the damage done by the implementation of the Harkin Bill without any alternative, schooling program has been arranged under the MOU for child laborers removed from the garment industry. The interesting characteristics of this program are (l) each child who regularly attends school will receive a stipend of Tk. 300 per month, (2) Bangladesh Garment and Manufacturing and Export Association (BGMEA) will offer employment to qualified family members as a replacement of the terminated child workers, and (3) the child workers will get an opportunity to work in the garment firm where they were previously employed after they reach 14 years of age, etc. Unfortunately, the schooling program for terminated child laborers has been proven inadequate. According to statistics of BGMEA, the number of terminated child workers totaled 61,000 by 1996. Out of this huge number of child workers, only 1,464 were placed in 110 schools by September 1996. Moreover, the average income of these terminated child workers was Tk. 500 (Khanam, Child Labour in Bangladesh: Trends, Patterns and Policy Options, 2006).

Payment of Tk. 300 as a stipend only partially makes up for the lost income. As a result, the sufferings of these children's families are gradually increasing, and their futures are also remains uncertain as there is no guarantee clause in the MOU that these children will be provided with a job in their previous firm. The survey conducted by Khan (Khan 1993) on child labor in Bangladesh also reveals that this schooling program may not be viable. Although 63 percent of the surveyed child workers gave poverty as their reason for not attending

school, 21 percent reported that they had no interest at all in formal education in spite of available economic support. According to these children, formal education means wasting time; they want to learn through work, as work provides efficiency, food, and shelter for them (Maitra & Ray, 2002).

Throughout assessing the background and government intervention and also intensive literature review, one thing is getting clearer that there might be multiple factors that are affecting the process of elimination child labour in Bangladesh. Through this study I am looking forward, focusing to other influencing factors that might be working as a barrier to ensuring child rights in Bangladesh especially in the form of child labour.

CHAPTER 2: THEORETICAL BACKGROUND & LITERATURE REVIEW

2.1: Household Production Model: The theoretical framework would be followed by 'Household Production Model (HPM)' as it assume to maximize utility in terms of the quantity and quality of children and also the consumption of other household produced goods and services, and leisure (Becker & Lewis, 1973).

Almost any human activity could be characterized in terms of the household production model. Even a good night's rest could be viewed as household production. A good night's requires purchased inputs (shelter, a bed, linens,

and possibly sleeping pills). It requires an investment in time (normally 6 to 8 hours). Finally, it might require some human capital (the ability to clear one's mind of the pressures of the day and relax into sleep). Similarly, a sporting event, like a football game, could be characterized as another household produced good. This requires purchased inputs (tickets, television, cable or satellite subscription, snacks), time (several hours), and human capital (some knowledge of the rules and strategies of the game). The point being made here is that the household production idea is broadly applicable to human activities. Since with this study I will be looking to classify influence of the children's activities with their family's functions such as education and income level therefore, I have chosen to follow up with this theory (Thomsen, 2021).

Child labour is now a global concern and as such attracted attention of people in various sectors. In fact, it is the product of an unequal society. It shows up, in exaggerated form, a labour problem deeply woven into the fabric of an unequal society. In a nutshell the term 'child labour' refers to the engagement of children in any work that takes away all or most of their rights as children, i.e., right to attend regular school, uninterrupted mental and physical development (Salmon, 2005).

The most decisive objective of this thesis is to focus on the exact role of family where children's are engaged in child labour and examine mainly the role of the parents by focusing household head's education level and

scrutinized the data to figure out if there is any relation which is triggering the factor that forcing children to engage into child labour.

2.2 Literature Review:

An article on child labour in Bangladesh[3] revealed that boys make a larger contribution to household income than girls. While children's earnings account for a small percentage of total household income, they account for a significant portion of income in households that employ children. The share of child income in total household income reaches nearly 50% in the poorest quintile of such households. As a result, the poorest families in the country rely heavily on their children's earnings to help them escape poverty (Detray, 1973).

In 2004 a survey conducted in rural Bangladesh to investigate the relationship between child labour and school attendance and achievement among children aged 5–17 years. The study's main finding is that child labour has a negative impact on a child's education, as evidenced by lower school attendance and grade attainment. The study was concentrated on child labour trends, patterns, and policy options in Bangladesh, particularly in the 1990s (Khanam, 2008).

A limited number of publications have looked at the factors that influence child labour. For example, Household Expenditure Survey (HIES) 2011-12 looked at the role of poverty as a determining factor of child labour in Bangladesh. Their findings revealed that poverty in the home is a significant

[3] https://journals.sagepub.com/doi/10.1177/0169796X05053066

factor in explaining child labour in Bangladesh. Consequently, it also examined the household situation particularly in terms of nutrition, hygiene and sanitation (Guarcello, Lyon, & Rosati, 2004).

Another survey investigated the impact of market and household work on a child's continuous school attendance and discovered that child labour reduces the likelihood of Bangladeshi children continuing their education. In the family labor supply decision, it was found that whether a child and a parent are substitutes or complements. Fathers and children are substitutes or complements for market work, whereas mothers and children are complements in the family labor supply decision (Arends & Amin, 2004)

Using the Bangladesh Labour Force Survey from 2000 to support previous studies finding that poverty forces children to work in Bangladesh and that children are the household's last economic resource. On the other hand, using data collected from Dhaka slums another study came up with a conclusion that socio-cultural factors are more important than economic rationality in explaining child labour in urban Bangladesh (Amin, Quayes, & Rives, 2004).

In 2007 a study published in journal of Biosocial Science, Vol. 39 where it investigated the role of a child's birth position in explaining child work and schooling in Bangladesh and discovered that being the first-born child increases the likelihood of working. The current study adds to the small but growing body of knowledge about the factors that influence child labour in

Bangladesh. This study stated that a thorough understanding of the key determinants of child labour is necessary for developing policies that will reduce child Labour. (Khanam and Rahman 2007)

While analyzing the impact of the Harkin's Bill namely 'A Critical Appraisal of Harkin Bill' the authors mentioned that there is a wide range of factors that have complex roots in the country's overall socioeconomic conditions, which include mass poverty, rapid growth of population, especially among the poor' and lack of access to quality primary education. They also mentioned that there is a lack of awareness about the long-term consequences of child labour and easy and unrestricted access of the children to the job market because of poor implementation of labor laws and profit maximizing motives of the employers (Rahman, Khanam, & Absar, 1999).

CHAPTER 3: RESEARCH DESIGN

3.1 Analytical framework:

Push Factors:

Absence of quality education, a lack of relevance in lessons which are hard to comprehend and non-contemporary, the language used, physical accessibility issues, and the absence of a school in the child's community are all factors that 'push' children out of school. Children who join gangs are frequently forced to engage in petty crime, sometimes for their own safety. Stealing and selling

drugs are examples of these crimes, which increase the risk of exposure and addiction to harmful substances.

Now a day, government is coming up with compulsory education system in the country. But question remain as in traditional settings, parents reap the benefits of their children's labor. When parents are required to send their children to secondary school, children become more expensive to them, which is likely to lead to a decrease in fertility as well as a new calculus that prioritizes child quality: the tendency for parents to invest more in the education of fewer children. As a result, it is likely that the enforcement of compulsory education will play a significant role in reducing the incidence of child labor. How can the implied increase in educational enrolment be achieved most effectively? It is eminent that actions to improve educational quality, improve the school environment, or defray the direct and indirect costs of school attendance will be required to increase demand for education (Gavin, 2003).

Pull Factors:

Economic and other issues associated with poverty are pull factors that ‘pull’ children out of school. Families frequently rely on their children for additional income and, as a result, accept Child labour when it is unavoidable. Other common factors that drive children to work as children include non-payment of minimum wages to parents, high adult unemployment, the need to pay off family debt, and the need to meet their own survival needs if they are on their own (Shituma, Sabrina, Ashiq 2014).

As mentioned earlier, Social SafetyNet Program offers different types of monetary support from the government, but it appears that the program is mostly urban centric and inadequately distributed to support a family which is relatively poor and large in number in terms of family member (Ferdousi & Dehai, 2014).

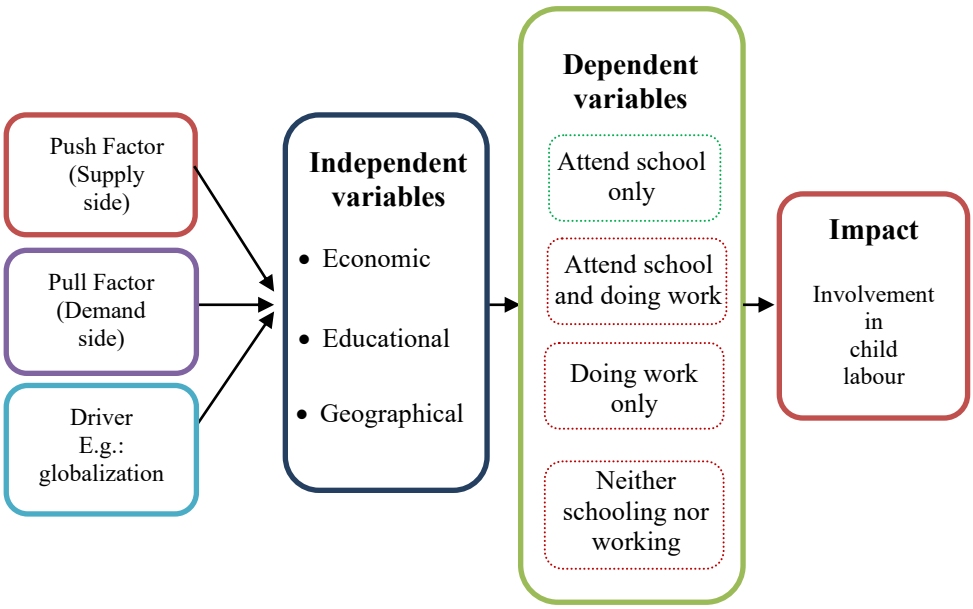


Figure 1 Flowchart shows the selection determinants that forces children possibly to engaged in child labour

3.2: Research question and hypothesis

Bangladesh has already been graduated from least developing country to developing country and the trend of economic growth especially GDP and GNI shows the pattern. Poverty is no longer is the main reason of child labour

as it was happened to be 20 years back. The informal sector employs the massive majority of working children, namely 95% in 2013. More recently, the Multiple Indicators Cluster Survey (MICS) indicates that in 2018, 6.8% of children aged 5-17% are engaged in child labour which has already been mentioned and discussed. Although there are multiple intervention by Government, Non-Government and Civil Society but still the elimination of child labour in all settings seems far away to be achieved. According to the literature review one of the most determinants that had been indicated before was family economic status. But since we discussed earlier that over the period of countries economic prosperity the income situation has been changed in a positive way therefore, I am focusing to the other probable factor that have been mentioned on the literatures earlier the following questions are proposed:

1. Primary question: What are driving factor that pushing or allowing parents to engage their children for child labour?
2. Secondary question: Is the existing legal provision in Bangladesh is adequate to eliminate child labour in comparison with a developed country like Singapore?[4].

3.3 Hypotheses

In accordance with the literature review and the previous framework provided, the following hypotheses are proposed (Amin, M, & Rives, 2004):

[4] https://ustr.gov/archive/assets/Trade_Agreements/Bilateral/Singapore_FTA/Reports/asset_upload_file926_3208.pdf

Hypothesis (H_1): Education among parents has a significant negative relationship with child labour in Bangladesh.

Hypothesis (H_2): Economic growth (income) has not significantly helped to reduce child labour in Bangladesh.

3.4: Research Methodology

3.4.1: Methodological steps

In order to answer to the proposed research question, the study applied a 3-step methodology:

Step 1) Literature review:

Extensive literature search and review of high quality and most recent sources about the prominent aspects that have been considered as determinant in the variation of child labour. More than 50 sources were routinely evaluated and skimmed for the first literature review, including theoretical and empirical literature, manuals, publications, and indexes from reputable NGOs, international organizations, and official government websites.

Step 2) Selection of variables and data collection:

According to Bickman, L., & Rog, D. J. (Eds.) it suggests that 'Descriptive studies' can answer questions such as 'what is' or 'what was'. Descriptive studies are usually the best methods for collecting information that will demonstrate relationships and describe the world as it exists. Through the

literature review the most prominent aspects, actors and roles that can affect the variation of child labour were identified (Bickman & Rog, 1998).

Independent variables: The analysis lead to selecting carefully 4 categorical independent variable which are Household head literacy (literate/not literate), Area (urban/rural), Main source of income (income recipient, industry, agriculture, remittance, service) and Division (Chittagong, Dhaka, Khulna, Rajshahi, Rongpur, Sylhet)

Dependent variable: 1 categorical dependent variable is Child activities (study only, student and employed, neither, work only) (Cragg, 1971).

Once the variables are selected the secondary data set from Bangladesh - Labour Force and Child Labour Survey, which report have been published on March 2nd, 2016, have been used for this study. This survey was conducted jointly by the Bangladesh Bureau of Statistics, Ministry of Planning and International Labour Organization (ILO) covering wide range of topics on

- Household basic information, Household roster (members basic information), Education (for person aged 5 years and older), training within the past 12 months (outside general education system and for persons aged 10 or older), current activities, secondary activities, occupational safety and health within the previous 12 months, income information for wages earners only, underemployment, unemployment,

non-economic activities, participation in the production of goods for use by own household, migration, access and use of ICT.

- The geographical coverage of this survey was all over the country. Metadata were produced by ILO's department of statistics on 23rd of June 2015 and the data file downloaded to analyze was in STATA format ref: (DDI_BGD_2013_LFS_CLS_v01_M) (ILO, 2015).
- For Labour Force Survey (LFS), a two-stage cluster sampling strategy was used.
- The PSUs (Primary Sample Units) from the "Integrated Multipurpose Sample (IMPS)"design serve as the first stage sampling units (IMPS is commonly developed for conducting different HH based surveys).
- The households make up the second stage sampling units. A sample of 378 PSUs will be chosen at random for each quarter, for a total of 1512 PSUs throughout the course of the four quarters.
- A sample of 24 houses had been chosen from each PSU using a system of systematic random sampling.
- An age group of the children in between 5-17 has been selected to draw the pattern in between independent and dependent variables which included rural and urban setup and those ended up being 40072 data for each variables. The objective of survey is to give advice on how to analyze the labor market, formulate policies, and plan, carry out and monitor human resource development programs. According to the government these data are crucial for tracking changes in the nation's labor market and employment situation (Shituma, Matin, & Kibria, 2014).

Step 3) Selection of method and data analysis:

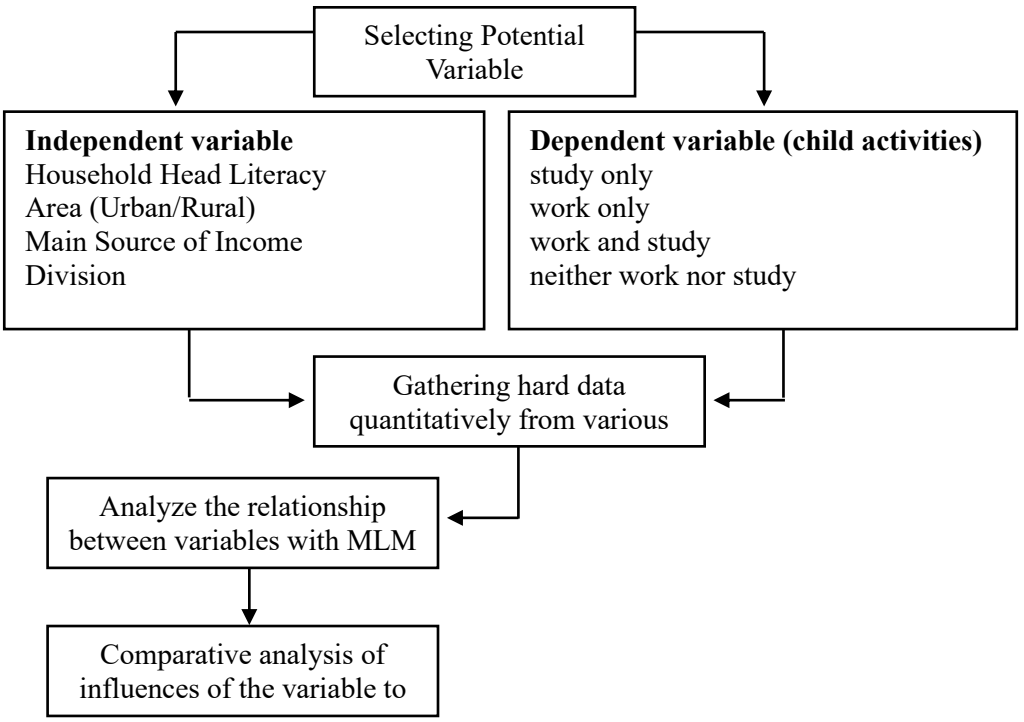
I used multinominal logistic regression to estimate whether a child works, based on information about the child and his or her family specially focused on children's parent's educational and economical status to determine if there is any significant relation in between those dependent and independent variables. The four dependent variables have been distributed in binary way where study only is analyzed the variable was indicated as "1" and other there as otherwise or "0" and thus process followed for the rest of the variables also followed by the same procedure (Jiangzhuo, Bryan, Achla, & Madhav, 2017).

To analyze the secondary data first of all I used Pearson correlation analysis for 'main source of income, area, division and household head literacy' to determine whether there are significant role exists among the variable and once the variables shows correlations among them, I used 'a multinomial logit model' to measure the probability of category on a dependent variable on multiple independent variable (Browning, 1992).

This study is focused on children aged from 5-17 year and estimate determinants of categories are: (1) 'study only', (2) 'student and employed', (3) neither (neither work nor study) and (4) work only where study only category has been used as base category.

Below figure shows the process of categorical selection and data analysis

Figure 2 Flowchart shows categorical selection and analysis process of data



3.4.2 Study Design

Continuing in this tradition and motivated by the Becker-type household models, I used this study as general utility maximizing framework to model the choices of a child's activities and schooling as a reduced-form function of individual, household, parental and community characteristics (Basu, 2006).

The household demand for i^{th} child's activity (W_i) can be specified as

$W_i = w(X_i, X_h, X_c, v_i)$

where X_i, is a vector of child's characteristics such as the child's age, gender, X_h is a vector household characteristics such as the parents "education and

occupation", family size, X_c is a vector of community characteristics, and v_i is a vector of any individual, household or community specific unobservable characteristics that may affect child's activity.

3.4.3 Data Analysis method:

The data analysis of this study undertaken through preparing and organizing the data (i.e., text data as in transcript, or image data as in photographs) for analysis, then reducing the data into themes through a process of coding and aggregating the codes (mostly using *SAS ODA, SAS VIYA and STATA*), and finally representing the data in figures, tables, or a discussion (Creswell, 2007). My data assessment framework can is in the figure below

3.4.4 Calculation:

Here polytomous variable with multiple unordered categories represent by *Yi* and *j* represents mutually exclusive categories and P_{i1}, P_{i2}……P_{ij} would be representing probabilities associates with *j* categories.
Since we have 4 categories therefore

J = 1 If the child attends school only

J = 21 If the child works and attends school only

J = 3 If the child neither works nor studies

J = 4 If the child works only

Here, β_1 β_2 and β_3 are the covariate effects of the observed categories study and work

3.4.5 Probability equation:

$$P_r(y_i = 0|x_i)=P_{io}= \frac{1}{1+exp(x'_i\beta_1)+exp(x'_i\beta_2)+exp(x'_i\beta_3)} = Probability\ of\ study\ (not\ working)$$

$$P_r(y_i = 0|x_i)=P_{i1}= \frac{exp(x'_i\beta_1)}{1+exp(x'_i\beta_1)+exp(x'_i\beta_2)+exp(x'_i\beta_3)} = Probability\ of\ study\ and\ employed$$

$$P_r(y_i = 0|x_i)=P_{i1}= \frac{exp(x'_i\beta_2)}{1+exp(x'_i\beta_1)+exp(x'_i\beta_2)+exp(x'_i\beta_3)} = Probability\ of\ Neither\ (neither\ work\ nor\ study)$$

$$P_r(y_i = 0|x_i)=P_{i1}= \frac{exp(x'_i\beta_3)}{1+exp(x'_i\beta_1)+exp(x'_i\beta_2)+exp(x'_i\beta_3)} = Probability\ of\ work\ (not\ studying)$$

For outcome variable, Y_i with j categories, the probability can be modelled as (where $j=0$ and $\beta_0=0$)

$$P_r(y_i = j|x_i)=P_{ij}= \frac{exp(x'_i\beta_3)}{1+\sum_{j=1}^{j-1} exp(x'_i\beta_j)} \quad for\ j \approx 0$$

and

$$P_r(y_i = j|x_i)=P_{i0}= \frac{exp(x'_i\beta_3)}{1+\sum_{j=1}^{j-1} exp(x'_i\beta_j)}$$

Now, as estimate the above model for the sample size n. Each of n individuals falls into one of the j categories, with the probabilities given by (2). Let x_i be the vector of explanatory variables, such as child, family and earning characteristics.

Thus, for a model of k covariates, a total of (k+1)×(j-1) parameters are to be estimated. Then x_i to see the propensity of i towards j.

SAS VIYA and STATA software have been used to calculate/measure sampling probability/co-relation analysis and multinomial logistic regression analysis.

CHAPTER 4: RESULTS AND DISCUSSION

4.1: Descriptive Statistics:

From the microdata labour force and child labour survey 2013 The most frequently observed category of Division was Dhaka (n = 9279, 23.16%). The most frequently observed category of Area was Rural (n = 21984, 54.86%). The most frequently observed category of Household head literacy was Literate (n = 24377, 60.83%). The most frequently observed category of Main source of income was Service (n = 21226, 52.97%). Frequencies and percentages are presented in Table.1.

Table 1: Frequency Table for Nominal Variables

Area	**Frequency**	**Percent**	**Cum**
Rural	21,984	54.86	54.86
Urban	18,088	45.14	100.00

Missing	0	0.00	0.00
Total	40072	100.00	
Main source of income	**Frequency**	**Percent**	**Cum**
Agriculture	12,681	31.65	31.65
Income recipient	1,129	2.82	34.46
Industry	1,721	4.29	38.76
Others	1,283	3.20	41.96
Remittance	2,032	5.07	47.03
Service	21,226	52.97	100.00
Total	40072	100.00	
Household head literacy			
Literate	24,377	60.83	60.83
Not literate	15,695	39.17	100.00
Total	40072	100.00	
Child activity			
Study only	20,583	51.37	66.19
Work only	13,548	33.81	100.00
Student and employed	1,410	3.52	14.83
Neither	4,531	11.31	11.31
Total	40072	100.00	
Division			

Barisal	3,967	9.90	9.90
Chittagong	7,393	18.45	28.35
Dhaka	9,279	23.16	51.50
Khulna	4,545	11.34	62.85
Rajshahi	4,949	12.35	75.20
Rongpur	4,884	12.19	87.39
Sylhet	5,055	12.61	100.00
Total	40072	100.00	

4.2: Summary Statistics

The observations for Child activities had an average of 1.28 (SD = 1.38, SEM = 0.007, Min = 0.00, Max = 3.00, Skewness = 0.27, Kurtosis = -1.79). When the skewness is greater than 2 in absolute value, the variable is considered to be asymmetrical about its mean. When the kurtosis is greater than or equal to 3, then the variable's distribution is markedly different than a normal distribution in its tendency to produce outliers (Westfall & Henning, 2013). The summary statistics can be found in Table 2

Table 2: Summary Statistics Table for Interval and Ratio Variables

Variable	*M*	*SD*	*n*	SE_M	Min	Max	Skewness	Kurtosis
Child activities	1.28	1.38	40072	0.007	0.00	3.00	0.27	-1.79

4.3 Results:

4.3.1: Correlation analysis (complementary):

Since the variables are measured on a scale of ordinal level (child activities: study only, employed and student, neither and work only) therefore I choose to run Pearson correlation analysis to see the linearity among the variables through results and scatterplots and Spearman rank correlation to avoid any assumption about the distribution (Conover & Eman, 1999).

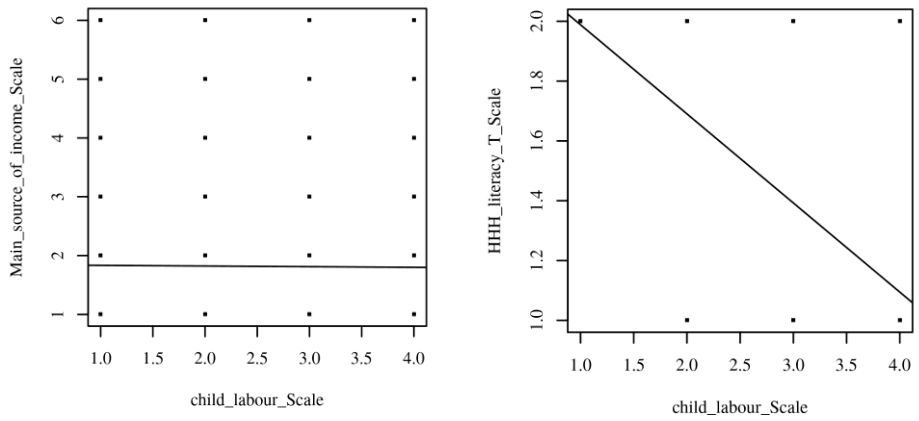


Figure 3: Scatterplots with the regression line added for Child activities and Main source of income (left), Child activities and Household head literacy (right)

The result of the correlations was examined using the Holm correction to adjust for multiple comparisons based on an alpha value of .05. A significant negative correlation was observed between Child activities and Main source of income, with a correlation of -.01, indicating a small effect size ($p = .038$, 95.00% CI = [-.02, -.00]). This suggests that as Child activities increases, Main source of income tends to decrease. *A significant negative correlation was observed between Child activities and Household head literacy, with a*

correlation of -.84, indicating a large effect size (p < .001, 95.00% CI = [-.84, -.84]). This suggests that as Child activities increases, Household head literacy tends to decrease.

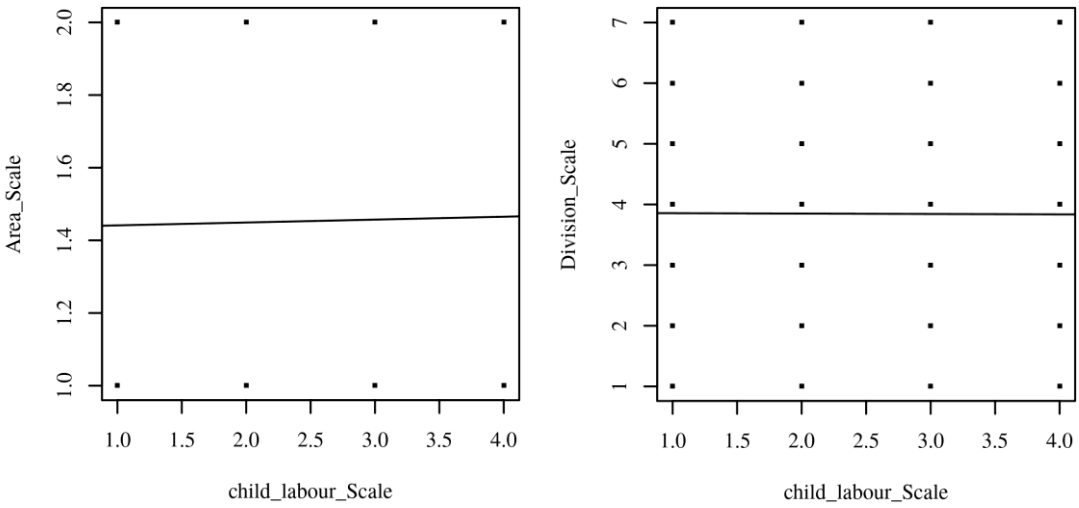


Figure 4: Scatterplots with the regression line added for Child activities and Area (left), Child activities and Division (right)

A significant positive correlation was observed between Child activities and Area, with a correlation of .02, indicating a small effect size (p < .001, 95.00% CI = [.01, .03]). This suggests that as Child activities increases, Area tends to increase. A significant negative correlation was observed between Main source of income and Area, with a correlation of -.10, indicating a small effect size (p < .001, 95.00% CI = [-.11, -.09]). This suggests that as Main source of income increases, Area tends to decrease.

A significant negative correlation was observed between Main source of income and Division, with a correlation of -.05, indicating a small effect size (p < .001, 95.00% CI = [-.06, -.04]). This suggests that as Main source of

income increases, Division tends to decrease. A significant negative correlation was observed between Household head literacy and Area, with a correlation of -.02, indicating a small effect size ($p < .001$, 95.00% CI = [-.03, -.01]). This suggests that as Household head literacy increases, Area tends to decrease.

A significant negative correlation was observed between Household head literacy and Division, with a correlation of -.02, indicating a small effect size ($p < .001$, 95.00% CI = [-.03, -.01]). This suggests that as Household head literacy increases, Division tends to decrease. A significant positive correlation was observed between Area and Division, with a correlation of .04, indicating a small effect size ($p < .001$, 95.00% CI = [.03, .05]). This suggests that as Area increases, Division tends to increase. No other significant correlations were found. Table 3 presents the results of the correlations.

Table 3 correlation result:

Combination	*r*	95.00% CI	*n*	*p*
Child activities (child labour)-Main source of income	-.01	[-.02, -.00]	40072	.038
Child activities (child labour)-Household head literacy	.84	[.84, .84]	40072	< .001
Child activities (child labour)-Area	.02	[.01, .03]	40072	< .001
Child activities (child labour)-Division	-.00	[-.01, .01]	40072	.349

Note. *p*-values adjusted using the Holm correction.

4.3.2: Multinomial Logistic Regression

Dependent (observed) variable Child activity:

Where study only =1, student and employed =2, work only=3 and neither = 4. Base category of dependent variable is 'study only' since this category tend to be in less risk to be involved in child labour compared to other three categories.

Analysis at glance: Among dependent variable's three observed categories 'neither, student and employed and work only' corresponding to the independent variables 'division, area, household head literacy and main source of income' comes up with observation that the result is supporting the hypothesis and coming up with some other observations too (Menard, 1998).

For example, observed category 'neither (children those neither study nor work)' has a significant correlation with the observed category like area (coef. 0.166, P>z = < .001, household head literacy (coef. 5.565, P>z = < .001) and negatively correlated to main source of income as a whole (coef. -0.064, P>z = < .001).

While examining observed category 'student and employed' with the observed categories it is only shows a significant correlation with observed category household head literacy (coef. 4.342, P>z = < .001).

Observed category 'work only (children who are already involved in child

labour) shows significant negative correlation with the observed category 'division (coef. -0.079, P>z = < .001)', positive correlation with household head literacy (coef. 6.750, P>z = < .001) and main source of income (coef. 0.016, P>z = < .001). With this results one thing comes to under observation that every observed categories have significant correlation with household head literacy category, which this study is trying to focus on. Table 3 shows the multinomial correlation at a glance among the observed and respond variables.

Detail analysis: While examining the results in more details the following observations comes out of that. The entire data sheet contains 40,072 observations that comes up with a 0.4331 Pseudo R squared value.

Correlation analysis of observed category 'neither':

Neither category shows significant correlation with observed category 'division' which contains 6 divisional districts of Bangladesh and among them Chittagong (coef. 0.344, P>z = < .001), Dhaka (coef. 0.545, P>z = < .001) and Sylhet (coef. 0.510, P>z = < .001) districts have positive significant correlation where other 3 districts shows non-significant correlation. Among these 3 cities Dhaka city shows more impact on this category.

Neither category shows positive correlation with observed category 'area (urban and rural)'. But only with 'urban category (coef. 0.435, P>z = < .001)' it shows significant positive correlation. Rural category has a positive correlation with 'neither' category but not significant.

While examining observed category household head literacy with response category ‘neither’ it shows positive correlation but not significant.

Observed variable’s ‘neither’ category shows both positive and negative significant correlation with independent variable ’s ‘main source of income’ category. Negatively correlated categories like Income recipients (coef. -0.546, P>z = < .001), remittance (coef. -0.398, P>z = < .001) are significantly correlated with neither on the other hand service category ((coef. 0.250, P>z = < .001) is positively correlated and is significant.

Correlation analysis of observed category ‘Student and employed’:

Under the independent variable division; Chittagong (coef. 0.837, P>z = < .001), Sylhet (coef. 0.512, P>z = < .001) shows significant positive correlation where Khulna city (coef. -0.663, P>z = < .001) shows a negative significant correlation with observed variable ‘student and employed.

Independent variable area (urban and rural) along with observed variable household head literacy does shows negative and positive relationship but none of them are significant with the dependent variable’s ‘student and employed’ category.

But under independent variable’s ‘main source of income’; one category ‘remittance’ (coef. -0.599, P>z = < .001) has significant negative correlation with student and employed category.

Correlation analysis of observed category 'Work only':

The most correlated issue with child labour is the children who are engaged in 'work only activity as I mentioned earlier. While comparing this variable with independent variable 'division', the data shows that 3 prominent cities in Bangladesh, Dhaka (coef. -0.851, P>z = < .001), Chittagong (coef. 0.737, P>z = < .001) and Sylhet (coef. 0.373, P>z = < .001) have significant positive correlation.

On the other hand, under the independent variable - 'area', rural area shows positive correlation with work only category but not fully significant.

Household head variable's 'non-literate' category shows significant positive correlation (coef. 0.448, P>z = < .001) compared to the other category 'literate' with the 'work only' category.

And under the independent variable 'main source of income' – industry shows a positive significant correlation (coef. 0.472, P>z = < .001) while remittance shows a negative significant correlation (coef. -0.433, P>z = < .001) with the response category 'work only'.

Table 4 and 5 shows the detail observation of the data analysis.

Table 4: Multinomial regression at a glance.

Child activities	Coef.	Std. Err.	z	P>z	[95% Conf.	Interval]
Neither						
Division	0.014	0.011	1.310	0.191	-0.0071	0.0357
Area	0.166	0.032	5.160	< .001	0.1032	0.2295
Household head literacy	5.565	0.085	65.470	< .001	5.3987	5.7319
Main source of income	-0.064	0.009	-7.010	< .001	-0.0813	-0.0458
_cons	-13.898	0.200	-69.640	< .001	-14.2896	-13.5072
Student and employed						
Division	-0.038	0.015	-2.530	0.012	-0.0678	-0.0086
Area	0.047	0.044	1.080	0.279	-0.0383	0.1325
Household head literacy	4.342	0.096	45.420	< .001	4.1545	4.5292
Main source of income	-0.022	0.012	-1.740	0.082	-0.0462	0.0027
_cons	-11.657	0.235	-49.550	< .001	-12.1183	-11.1960
Work only						
Division	-0.079	0.010	-7.570	< .001	-0.0992	-0.0584
Area	0.042	0.030	1.420	0.155	-0.0160	0.1010
Household head literacy	6.750	0.083	81.310	< .001	6.5871	6.9125
Main source of income	0.016	0.009	1.830	0.068	-0.0012	0.0328
_cons	-15.796	0.192	-82.450	< .001	-16.1716	-15.4206

Table 5: Multinomial regression category wise in details.

MULTINOMIAL LOGISTIC REGRESSION

		Number of obs	= 40,072.00
		Prob > chi2	= 0.0000
Log likelihood = -24378.053		Pseudo R2	= 0.4331

Child activities category	Coef.	Std. Err.	z	P>z	[95% Conf.	Interval]
Neither						
Division						
Chittagong	0.344	0.091	3.780	< .001	0.1659	0.5229
Dhaka	0.545	0.087	6.260	< .001	0.3746	0.7160
Khulna	0.249	0.101	2.480	0.013	0.0522	0.4461
Rajshahi	0.272	0.099	2.740	0.006	0.0776	0.4671
Rongpur	0.078	0.101	0.780	0.438	-0.1193	0.2756
Sylhet	0.510	0.095	5.360	< .001	0.3234	0.6961
Area						
Rural	0.012	0.064	0.190	0.852	-0.1140	0.1381
Urban	0.435	0.068	6.380	< .001	0.3016	0.5691

Household head literacy						
Literate	0.203	0.140	1.450	0.147	-0.0712	0.4769
Not literate	23.231	444.921	0.050	0.958	-848.7981	895.2609
Main source of income						
Income recipient	-0.546	0.146	-3.740	< .001	-0.8322	-0.2600
Industry	0.159	0.104	1.530	0.125	-0.0442	0.3624
Agriculture	0.096	0.127	0.760	0.448	-0.1524	0.3450
Remittance	-0.398	0.107	-3.720	< .001	-0.6077	-0.1881
Service	0.250	0.052	-4.800	< .001	-0.3520	-0.1478
_cons	-3.470	0.167	-20.810	< .001	-3.7963	-3.1427
Student and employed						
Division						
Chittagong	0.837	0.113	7.440	< .001	0.6168	1.0578
Dhaka	0.361	0.116	3.130	0.002	0.1348	0.5879
Khulna	-0.663	0.158	-4.190	< .001	-0.9737	-0.3532
Rajshahi	-0.577	0.148	-3.900	< .001	-0.8665	-0.2866
Rongpur	0.267	0.124	2.160	0.031	0.0243	0.5104
Sylhet	0.512	0.122	4.200	< .001	0.2731	0.7516
Area						
Rural	-0.028	0.086	-0.320	0.748	-0.1957	0.1406

Urban	-0.027	0.091	-0.300	0.768	-0.2049	0.1513
Household head literacy						
Literate	-0.003	0.177	-0.020	0.987	-0.3507	0.3449
Not literate	21.861	444.921	0.050	0.961	-850.1683	893.8908
Main source of income						
Income recipient	0.463	0.192	-2.410	0.016	-0.8387	-0.0864
Industry	0.054	0.154	0.350	0.726	-0.2479	0.3560
Agriculture	-0.343	0.145	-2.360	0.018	-0.6275	-0.0586
Remittance	-0.599	0.147	-4.080	< .001	-0.8868	-0.3114
Service	-0.144	0.070	-2.050	0.041	-0.2818	-0.0061
_cons	-3.378	0.209	-16.150	< .001	-3.7880	-2.9682
Study Only	**(base outcome)**					
Work Only						
Division						
Chittagong	0.737	0.086	8.600	< .001	0.5691	0.9053
Dhaka	0.851	0.083	10.270	< .001	0.6889	1.0138
Khulna	0.244	0.097	2.500	0.012	0.0531	0.4349
Rajshahi	0.033	0.098	0.340	0.735	-0.1581	0.2243
Rongpur	-0.194	0.099	-1.960	0.049	-0.3872	-0.0005

Sylhet	0.373	0.092	4.040	< .001	0.1922	0.5540
Area						
Rural	0.042	0.015	2.730	0.006	0.0716	0.0117
Urban	0.042	0.030	1.420	0.155	-0.0160	0.1010
Household head literacy						
Literate	-24.252	444.929	-0.050	0.957	-896.2963	847.7914
Not literate	0.448	0.072	6.240	< .001	0.3072	0.5885
Main source of income						
Income recipient	0.432	0.140	-3.100	0.002	-0.7056	-0.1587
Industry	0.472	0.096	4.910	< .001	0.2839	0.6604
Agriculture	0.081	0.123	0.660	0.512	-0.1604	0.3218
Remittance	-0.433	0.105	-4.140	< .001	-0.6382	-0.2284
Service	0.047	0.050	0.930	0.352	-0.0517	0.1455
_cons	-3.113	0.153	-20.360	< .001	-3.4123	-2.8131

CHAPTER 5 DISCUSSIONS:

The following topics are the subject of my discussion, as well as consider some potential explanations for the main findings. (1) Under the independent variable 'household head literacy' – 'non-literate category' has the positive relationship and increase the probability of their children to be more engaged in child labour; (2) the mixed relationship (positive and negative) relationship among main source of income and children activity related to the children those work only or student and employed at the same time or children who does nothing (neither) and (3) the role of the area (urban and rural) that influence child activity that could tend to influence children towards child labour and (4) the influence of the cities under independent variable 'division' have strong positive significant correlation which assumably drags children as pull factor towards child labour (Bequele, 1991).

In the case of the finding the first model in correlation analysis this model verifies that household head literacy and area that have been selected as independent variables are significantly correlated to the dependent variable that means household head education level (literate or non-literate and area have influence in child activities. The correlation analysis shows that the 'child activities' are positively correlated with the factor of household head literacy and area which come up with the assumption that urban centric household tend to increase their household income and push their children to contribute to family income and illiterate household head also plays role to

their children to be involved in child labour (Boyden, 1994). But main source of income negatively correlated which supports my second hypothesis that 'economic growth (income) has not significantly helped to reduce child labour'.

Since economic growth does not ensure or influence household head's literacy level, there is a chance remains where household head influence their children to push for get involved into activities that ensure family's financial income. I assume that the family head more tends to invest their time to ensure their family's financial securities rather than enhancing their own level of education that might bring a progressive future for their families and for the society as a whole (Salmon, 2005).

5.1: Household head literacy analysis:

Literate or Non-literate are the factors that have been analyzed here. In Bangladesh we live in society where the household head is the decision maker for all. While analyzing independent variable 'household head literacy' in two sections as 'literate and non-literate' with the dependent variable 'child activity' that contains four categories; and selecting 'study only' category as the base (with the assumption that the children are in study tend to have less chance to get involved into child labour) and analyzing three other categories 'neither, student and employed and work only' it shows significant positive correlation with the independent variable mainly with the 'not-literate' category. The data shows positively significant correlation with the work only

category, which explains that the increase of one unit of ‘not literate household head’ can increase 0.448-unit possibility of the children to get involved in work only category (Ravallion & Wodon, 2000).

5.2: Main source of income analysis:

When analyzing dependent variable’s ‘neither’ category of the children with household income it shows negative significant correlation with two categories ‘income recipient’ and ‘remittance’ where it can be predicted that if the family income is secured or steadily fixed then the children has a tendency to remain inactive but service category shows a significant positive correlation with neither category where it also be assumed that if the service category increases then family income remain fixed and assured and children can also remain inactive.

Student and employed category shows negative significant correlation with remittance category which can be directed towards to the assumption that if a family receive remittance from abroad the chance of their children involved both in economic activities and studying decreases and increases the children to get into the study only group because of their family’s income security.

While comparing ‘work only’ category children the data indicates that the industry has a significant positive correlation related to the children who works only. It has already been pointed out (Bangladesh, 2020) that industrial sectors is the main source of child labour, whether in formal or informal way

and this data analysis also indicates that part too (Maitra & Ray, 2002).

5.3: Area analysis:

Urban category only shows significant positive correlation with the dependent variable's 'neither' category. But when the data analyzed more in terms of the division it shows that urban factor plays role to other child activities too (Burra, 1995).

5.4: Division analysis:

While comparing independent variable 'division' with three categories of the dependent variable it shows that metropolitan city Chittagong, Dhaka and Sylhet influence 'neither' category children. On the other side Chittagong, and Sylhet cities are positively correlated which is significant and Khulna city showing negative significant correlation with 'student and employed' category. And for the work only children Chittagong, Dhaka and Sylhet city are positively significant. So, the data shows that three mega cities - Chittagong, Dhaka and Sylhet are influencing all three categories of the dependent variable that we are examining here and with the result we can assume that those business and economic centric mega cities are actually acting as a pull factor to get children involved into activities that can lead to child labour (Grootaert & Kanbur, 1995).

This analysis showed all the independent variables that are chosen and selected are very much correlated with the dependent variable which is child activity and among them household head literacy showed prominent

correlation. An increase of one unit of 'not literate' tend to increase the chance of the children to push children to get involved to income related activities.

This study indicates that along with economic and geographical factors household head education level is an important criterion to include in the analysis while policy maker are developing policies to eliminate child labour from Bangladesh. Ensuring a children's schooling decreases the chance of being involved in child labour undoubtedly and of course household choice in children's education one of the main platforms of government education policy in Bangladesh (S. Ball, 1996).

CHAPTER 6: RECOMMENDATION, LIMITATION AND CONCLUSION:

6.1 Recommendations:

This study provides a basic idea for further research which needs to be conducted. Analyzing child labour situation in Bangladesh through the lens of parental education is still a loophole that needs to be address. This study also confronts some obstacle to come to a concrete conclusion because a robust and through survey on child labour is missing. Integration child labour and household survey can be very useful to explore more potential influences that encourage child labour. A contemporary and updated 'social safety net program' needs to be introduced (Barkat, 2011).

It has always been observed that social safety-net program is mostly rural centric and sometimes this program is very much politically motivated which needs to address. As discussed earlier the cash transfer program provides less

amount that a children earn as daily labour therefore, an illiterate parent find these discrepancies and force their children to earn money rather than study. Free schooling is not also enough because education also come up with some opportunity costs. Policy makers need to scrutinize that part very carefully too. Example of Singapore to eliminate the worst forms of child labour can be a good direction and learning for Bangladesh (Amin & M, 2006).

6.1.1 Example of Singapore as lesson learnt to eliminate child labour:

In 1993, the Ministry of Education of Singapore launched the Edusave program, which provides direct subsidies to students aged 6 to 16 to assist with school fees and extracurricular activities. The program shows the government of Singapore's strong commitment to children's rights and has a well-funded equal access system of public education and medical care for all children. Activities at schools as well as subsidies given to all primary and secondary schools to set up shared enrichment programs and buy more supplies for the schools.

Based on academic accomplishment and financial need, the Edusave program grants scholarships, merit bursaries, and good progress prizes to students. Government money allows nonprofit organizations to run homes for underprivileged kids that meet their specific educational, medical, and supervision needs. Through initiatives that support stable families, stop child abuse, and keep fathers actively involved in their children's lives, the Ministry of Community Development and Sports advocates for causes that benefit children. A school social work program is managed by the National Council

for Social Services' Office of Children, Youth, and Families, which offers children counseling, support, and advice in order to improve their learning. As a whole the entire system is collaborating and working cross cutting way to make schooling appropriate and raising proper awareness among household so that the children can keep going on to the school which ultimately set them away from getting involved into any form of child labour (ILAB, 2003).

6.2 Limitation of the study:

The main variable that used here to scrutinized is household head literacy. If the data came up with father's and mother education level separately including drop out children's data, it would have been better to analyze parents role as individual towards children's activities. Separate data about parent's education is available in household income and expenditure survey but since the number of household are different so it was not possible to marge two data set together. Moreover, if any of the following variables like 'mother's and father's education level, school dropout age, and reason behind drop-out' could have been utilized as a control variable the result would have been more pragmatic (Conover & R, 1981).

6.3 Conclusion:

This study supports the household production model where the individual choice (mainly household head here) has a direct influence on children's activities. Bangladesh can cherish its achievement in terms of economic growth, but it is also evident that this rapid growth also comes up with some human and environmental damage. Economic growth creates formal and non-formal service and industrial sectors, these sectors create job opportunities, and this opportunity works as a pull factor where people tend to move in for ensuring their earnings and financial security. Bangladesh's government at least can try using the lesson learnt from Singapore as a pilot project in some districts to observe the outcome in the country's context since the existing legal provision seems adequate to eliminate child labour. Perhaps the only thing missing is proper implementation and management of the legal system.

This study has positively supported the probability that I have aimed to test and showed that parents' education level has a direct connection related to their children's involvement in child labour. Questions remain that how to improve the education level of the parents. It is understandable that they might not be in a position or in willingness to go to school or to any learning institution all of a sudden, therefore, awareness raising among parents, the community and society as a whole can be a good approach all the initiatives that government is undertaking (5 years plan for eradicating child labour, role distribution among ministries, revising children act etc.). Smart uses of electronic and mass media can be handy to let the people know the policies

government has undertaken and how to get the benefits out of that. Most importantly it is imminent that today's children are tomorrow's future, and they are not the sole property of the parents but an asset for the country too. Therefore, ensuring proper education can help them flourish in their potential and guarantee the livelihood that they deserve to live as human beings (ILO, 2009).

Furthermore, more extensive study needs to be done so that other influential factors that go beyond our understanding, can come into the light which is not allowing eliminate child labour as a whole.

7. References

Alam, N., & Khuda, B. (2005). Rural-urban Migration in Bangladesh: Causes and Consequences. *Fifth Annual Research Conference Proceedings of the Population Association of Pakistan.* Karachi.

Amin, S. Q., & M, S. R. (2006). Market work and household work as deterrents to schooling in Bangladesh. *World Development 34(7)*, 1271-1286.

Amin, S. Q., M, S., & Rives, J. M. (2004). Poverty and Other Determinants of Child Labor in Bangladesh. *Southern Economic Journal,70(4)*, 876-892.

Amin, S., Quayes, M. S., & Rives, J. M. (2004). Poverty and Other Determinants of Child Labor in Bangladesh. *Southern Economic Journal,70(4)*, 876-892.

Anker, R., & Melkas, H. (1995). *Economic Incentives for Children and Families Intended to Eliminate or Reduce Child Labour.* Geneva: ILO.

Arends, K. M., & Amin, S. (2004). School Incentive Programs and Children's Activities. *The Case of Bangladesh", Comparative Education Review,48(3)*, 295-317.

Bangladesh, S. C. (2020). *Voluntary National Review s (VNR s) 2020.* Dhaka: Government of the People's Republic of Bangladesh.

Barkat, -E.-K. (2011). Social Safety Net Programmes in Bangladesh: A Review. *Bangladesh Development studies Vol: XXXIV*.

Basu, K. (2006). Gender and Say: A Model of Household Behaviour with Endogenously Determined Balance of Power. *The Economic Journal,116(511)*, 558-580.

Becker, G. S., & Lewis, H. G. (1973). On the Interaction between the Quantity and Quality of Children. *Journal of Political Economy, 81(2)*, Part 2, S279-S288.

Bequele, A. (1991). Emerging perspectives in the struggle against child labour. *Protecting working children*.

Bickman, L., & Rog, D. J. (1998). *Handbook of applied social research methods.* Washington, DC: Sage Publications, Inc.

Boyden, J. (1994). The relationship between education and child work. *Innocenti Occasional Papers, Child Rights Series, No. 9 (Florence, UNICEF International Child Development Centre)*.

Browning, M. (1992). Children and household economic behaviour. *Journal of Economic Literature, Vol. XXX*, 1434-1475.

Burra, N. (1995). *Born to work: Child labour in India.* New Delhi: Oxford University Press.

Cohen, J. (n.d.). Statistical power analysis for the behaviour sciences (2nd ed.). West Publishing Company.

Conover, W. J., & Eman, R. L. (1999). Rank transformation as a bridge between parametric and nonparametic statistics. In *The American Statistician 35(3)* (pp. 124-129).

Conover, W. J., & R, L. E. (1981). Rank transformation as a bridge between parametric and nonparametic statistics. *The American Statistician 35(3)*, 124-129.

Cragg, J. G. (1971). Some Statistical Models for Limited Dependent Variables

with Application to the Demand for Durable Goods. *Econometrica,39(5)*, 829-844.

Creswell, J. (2007). *Qualitative Inquiry and Research Design: Choosing among Five Approaches.* London: Sage.

Delap, E. (2001). Economic and cultural forces in the Child Labour debate: evidence from urban Bangladesh. *Journal of Development Studies, Vol 37*, 1-22.

Detray, D. N. (1973). *Child Quality and the Demand for Children." Journal of Political Economy, 81, S70-S95.*

Ferdousi, S., & Dehai, W. (2014). Economic Growth, Poverty and Inequality Trend in Bangladesh. *Asian Journal of Social Sciences & Humanities Vol. 3(1)*, 10-55.

Gavin, W. J. (2003). *Conceptual framework for child labour interventions in the education sector.*

GPS Team, i. B. (2002). *Facts About Child Labor in Bangladesh.* Retrieved from Global people: https://www.globalpeoplestrategist.com/title-facts-about-child-labor-in-bangladesh/

Grootaert, C., & Kanbur, R. (1995). Child labour: An economic perspective. *International Labour Review, Vol. 134, No. 2*, 187-203.

Guarcello, L., Lyon, S., & Rosati, F. (2004). *Impact of Working Time on Children's Health", Research report, Understanding Children's Work.*

ILAB. (2003). *Laws Governing Exploitative Child Labor Report - Singapore.* Singapore: Office of Economic and Labor Research, Office of Trade and Labor Affairs.

ILO. (1995). *ILO in Bangladesh.* Retrieved from International Labour Organization: https://www.ilo.org/dhaka/Areasofwork/child-labour/lang--en/index.htm

ILO. (1999, 3 2). *Convention concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour*. Retrieved from http://www.ilo.org/ilolex/cgi-lex/convde.pl?C182

ILO. (2009). *Understanding Children's Work in Bangladesh.* UNICEF ILO; World Bank Group.

ILO. (2015, 12 31). *Bangladesh National Child Labour Survey 2013 (data set)*. Retrieved from International Labour Organization: https://www.ilo.org/ipecinfo/product/download.do?type=document&id=28157

J. Louviere, H. D. (2000). *Rank transformations as a bridge betweeen parametric and nonparametric statistics. The American Statistician, 35(3), 14-19.*

Jiangzhuo, C., Bryan, L., Achla, M., & Madhav, M. (2017). *Handbook of Statistics.* ELSEVIER.

Khanam, R. (2006). Child Labour in Bangladesh: Trends, Patterns and Policy Options. *Asian Profile,34(6)*, 1-33.

Khanam, R. (2008). Child Labour and School Attendance Evidence from Bangladesh. *International Journal of Social Economics 35(1/2)*, 77-98.

Khuda, B.-E. (2011). Social Safety Net Programmes in Bangladesh: A Review . *Bangladesh Development Studies Vol. XXXIV*.

Maitra, P., & Ray, R. (2002). The Joint Estimation of Child Participation in

Schooling and Employment. *Comparative Evidence from Three Continents*, 41-62.

Maitra, P., & Ray, R. (2002). The Joint Estimation of Child Participation in Schooling and Employment: Comparative Evidence from Three Continents. *Oxford Development studies 30(1)*, 41-62.

Menard, S. (1998). Logistic regression . *From introductory to advanced concepts and applications*.

Menard, S. (n.d.). *Logistic regression: From introductory to advanced concepts and applications.* Sage Publication.

MJF. (2022). *Eradicating Child Labour, Marriage: Pandemic pushes goals further away*. Retrieved from The Daily Star: https://www.thedailystar.net/news/bangladesh/news/eradicating-child-labour-marriage-pandemic-pushes-goals-further-away-2206346?fbclid=IwAR1A20DinjgHTx8rAJfL4gUDJERbQdY0dtTJyvDWcz9xa_e7AU_32Jv6Exs

Quddus, M. (2009). *Bangladeshi Garment Industry: From the Harkin Bill to the Bangladesh Garment Manufacturers and Exporters Association.* Routledge.

Rahman, M. M., Khanam, R., & Absar, N. (1999). Child Labor in Bangladesh: A critical Appraisal of Harkin's Bill and the MOU- Type Schooling Program. *Journal of Economic issues XXX111 (4):*, 985-1003.

Rahman, M. M., Khanam, R., & Absar, N. U. (1999). Child Labor in Bangladesh: A Critical Appraisal of Harkin's Bill and the MOU-Type Schooling Program. *Journal of Economic 33*, 985–1003.

Ravallion, M., & Wodon, Q. (2000). Does Child Labor Displace Schooling? Evidence on Behavioral Responses to an Enrolment Subsidy. *Economic Journal, 110(462)*, C158-C175.

S. Ball, R. B. (1996). *School Choice, Social Class and Distinction: The REalizaiton of Social Advantage in Education.".*

Salmon, C. (2005). *Child Labor in Bangladesh: Are Children the Last Economic Resource of the Household?'.*

Shituma, Z., Matin, S., & Kibria, A. M. (2014). A Study on Present Scenario of Child Labour in Bangladesh.

Thomsen, M. R. (2021, 1 5). *Becker's (1965) Household Production Model.* Retrieved from LibreTexts Social Sciences: https://socialsci.libretexts.org/Bookshelves/Economics/Book%3A_An_Interactive_Text_for_Food_and_Agricultural_Marketing_(Thomsen)/05%3A_Consumer_Theory_and_Models/5.04%3A_Section_4-

unicef. (2021). *The Relationship between Child Labour and Child Marriage: A Discourse Analysis.* Retrieved from https://www.unicef.org/rosa/reports/relationship-between-child-labour-and-child-marriage-discourse-analysis

Zaman, S., Matin, S., Mahmud, A., & Kibria, B. G. (2014). *A Study on Present Scenario of Child Labour in Bangladesh.*

8. Annex:

Frequencies and Percentages

The most frequently observed category of Division was Dhaka (*n* = 9279, 23.16%). The most frequently observed category of Area was Rural (*n* = 21984, 54.86%). The most frequently observed category of Household head literacy was Literate (*n* = 24377, 60.83%). The most frequently observed category of Main source of income was Service (*n* = 21226, 52.97%). Frequencies and percentages are presented in Table.

Table

Frequency Table for Nominal Variables

Variable	***n***	***%***
Division		
Barisal	3967	9.90
Chittagong	7393	18.45
Dhaka	9279	23.16
Khulna	4545	11.34
Rajshahi	4949	12.35
Rongpur	4884	12.19
Sylhet	5055	12.61
Missing	0	0.00
Area		
Rural	21984	54.86
Urban	18088	45.14
Missing	0	0.00

Table

Frequency Table for Nominal Variables

Variable	*n*	*%*
Household head literacy		
Not literate	15695	39.17
Literate	24377	60.83
Missing	0	0.00
Main source of income		
Service	21226	52.97
Agriculture	12681	31.65
Remittance	2032	5.07
Industry	1721	4.29
Income recipient	1129	2.82
Others	1283	3.20
Missing	0	0.00
Total	**40072**	

The entire dataset can be found at
https://www.ilo.org/ipecinfo/product/download.do?type=document&id=28157