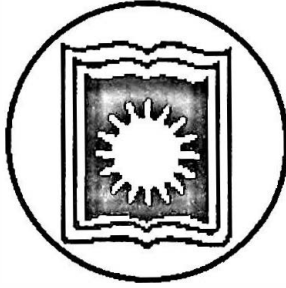


Determinants of Health Condition and Estimation of Demographic Parameters of Street Children in Dhaka City, Bangladesh



**Thesis Submitted in Fulfillment of the Requirements for the Degree of Doctor
of Philosophy in the Department of Population Science and Human Resource
Development of the University of Rajshahi, Bangladesh**

**Submitted by
Md. Shahiduzzaman**

**Department of Population Science and Human Resource Development
University of Rajshahi, Rajshahi-6205
Bangladesh**

January, 2021

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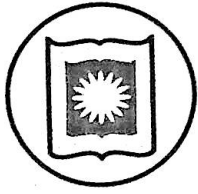
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Session: 2012-2013

**Department of Population Science and Human Resource Development
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Bangladesh**

January, 2021

Dedicated
to
My Beloved Parents



University of Rajshahi
Department of Population Science and
Human Resource Development

Supervisors' Certificate
Submission of Thesis for Ph.D. Degree

We, the undersigned, hereby certify that:

1. the thesis work of the under mentioned student has been completed to our satisfaction and the thesis is prepared for examination, and
2. the requisite seminars on the thesis have been completed in accordance with the ordinance of University of Rajshahi for Ph.D. Degree.

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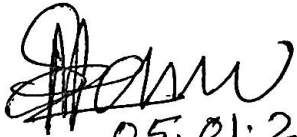
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Declaration

I hereby declare that the thesis entitled “**Determinants of Heath Condition and Estimation of Demographic Parameters of Street Children in Dhaka City, Bangladesh**” is my own research work carried out by me in the Department of Population Science and Human Recourse Development at University of Rajshahi for the degree of Doctor of Philosophy.

I also state that, to the best of my knowledge, this research work has not been submitted in this University or any other University for the award of any degree.



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University of Rajshahi
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Abstract

Health and demographic condition of street children are important issues for the development of any country. Several researchers estimated that a substantial percent of total street children in Bangladesh are living in the Capital City, Dhaka, Bangladesh. But no study is available which concentrated to in-depth study of health condition and estimation of demographic parameters for the street children. So the aim of this study is to identify the determinants of health condition and estimation of demographic parameters of street children in Dhaka city, Bangladesh. We have used convenient sampling for selection of samples. The data were collected from 1108 street children in different places of Dhaka City using a comprehensive questionnaire. In this study, χ^2 statistic was used to test the significance of the association between the dependent and independent variables of the street children. Binary logistic regression model was also employed to identify the effect of the some important independent variables on dependent variable. To have a smooth pattern of age 3 years moving average technique and “4253H twice” smoothing technique were applied in this study. It was found that among total sample data 84.9% were male and only 15.1% were female. Age structure of street children followed a polynomial function of degree four. Probability of dying (q_x) calculated for street children showed an expected pattern. The migration rate from rural to urban of male street children was higher than that of female street children. Migration rate of street working children was the highest among four types of street children. Migration rate of street children of illiterate fathers was higher than that of street children of literate fathers. Migration rate of street children of illiterate mothers was higher than that of street children of literate mothers. The rate of currently attending school of the street children who collected their food from home and institutions was 1.837 times and 10.130 times

respectively more likely than the street children who collected their food from street shops. Saving money of street children who were engaged in tokai, coolie/minti and labour was 0.478 times, 0.505 times, and 0.518 times respectively less likely than the street children who were engaged in small business. Overall sickness of the respondents during interviewing time was 18.2% whereas the sickness of street children at mazar and railway station/bus stand/launch terminal was 24.5% and 23.4% respectively. Sickness among underweight street children was 31.0%. Sickness of smoker and drug addicted street children was 27.1% and 35.2% respectively. Ever injury of street children was 32.2% whereas among them ever injury of street living children was 40.6%. The ever injury of street children who were interviewed at mazar and railway station/bus stand/launch terminal was 37.7% and 38.7% respectively. The ever injury of the respondents who became street children due to step parents/none was 44.2%. Overall smoking practice of the street children was 19.7% but smoking practice of “street living children” was 47.6%. Smoking practice of street children who were interviewed at mazar was 43.4% and at railway station/bus stand/launch terminal was 35.3%. Smoking practice of the street children who were in the age group 15-18 years was 47.6%. On average drug addiction among the survey data was 7.9% but the drug addiction of “street living children” was 20.7%. Drug addiction of street children who were interviewed at mazar was 37.7% and at railway station/bus stand/launch terminal was 13.0%. The study observed that the drug addiction of the street children who had step parents was 20.3%. The study also observed that the drug addiction among smoker street children was 33.9%. Sickness among normal weight and overweight/obese street children was 0.343 times and 0.348 times respectively less likely than the underweight street children. Sickness of drug addicted street children was 1.699 times more likely than the non-drug addicted street

children. The ever injury of street children who were in the age group 10-14 years was 1.405 times more likely than the street children who were in the age group 5-9 years. The ever injury of street children who had step parents was 1.901 times more likely than that of the street children who had both father and mother. The ever injury of smoker street children was 1.771 times more likely than the non-smoker street children. Street working children and children from street families were 0.545 times and 0.345 times respectively less likely smoker than the street living children. Female street children were 0.111 times less likely smoker than male street children. The street children who were interviewed at railway station/bus stand/launch terminal, kachabazar and park/institution were 0.128 times, 0.099 times and 0.065 times respectively less likely smoker than the street children who were interviewed at mazar. Smoking practice of the street children who were in the age group 10-14 years and 15-18 years was 3.363 times and 19.765 times respectively more likely than the street children who were in the age group 5-9 years. Smoking practice of the street children who were engaged in tokai and coolie/minti was 2.970 times and 2.261 times respectively more likely than the street children who were engaged in small business. Smoking practice of the street children who collected their food from begging and home was 0.469 times and 0.253 times respectively less likely smoker than the street children who collected their food from street shop. Street working children and children from street families were 0.431 times and 0.267 times respectively less likely drug addicted than street living children. Drug addiction of street children who were interviewed at railway station/bus stand/launch terminal, kachabazar and park/institution respectively was 0.047 times, 0.028 times and 0.052 times respectively less likely than the street children who were staying at mazar. The study revealed that the drug addiction of street children who were born in urban area was 1.706 times more likely than the street

children who were born in rural area. The study also revealed that smoker street children were 13.613 times more likely drug addicted than non-smoker street children. In view of the above findings it can be suggested to the Government and Non-Government Organizations to take initiative to build up institutions to take over the street children into the institutional care. Moreover the street children may be involved into some petty business to more earnings and increase their savings money for the change of their life style and also to reduce smoking practice. It can also be recommended to the Government to take necessary initiatives so that the street children can avoid smoking and taking drug as well as getting sufficient food to maintain normal weight for their healthy lives. The Government should take necessary steps to keep them away from the vulnerable places like mazar, railway station/bus stand/launch terminal etc. and to control the movement of street children to reduce the ever injury with increasing of their age. Along with these it can also be suggested to improve social relation between the partners of the parents to reduce divorces and parents should provide food to their children. A multidimensional measures may be undertaken to reduce the injury/ever injury due to smoking and drug addiction. Considering the findings it may be suggested to the planners and policy makers to draw special attention to the street children who were born at urban, living in the street, in age group 10-18 years, staying at mazar, railway station/bus stand/launch terminal, earnings BDT 100+ and male so that the street children can avoid smoking and drug. As almost all drug addicted are smoker, so the policy maker should take proper initiatives to reduce the smoking practice of street children for reducing drug addiction.

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List of Abbreviations

ASDRs	Age Specific Death Rates
BBS	Bangladesh Bureau of Statistics
BDT	Bangladeshi Taka
BMI	Body Mass Index
CBR	Crude Birth Rate
CDR	Crude Death Rate
CI	Confidence Interval
CVPP	Cross Validity Prediction Power
IMR	Infant Mortality Rate
MR	Migration Rate
NGO	Non-Governmental Organization
OR	Odds Ratio
SE	Standard Error
SPSS	Statistical Package for the Social Sciences
UNDP	United Nations Development Programme
UNICEF	United Nations International Children's Emergency Fund
USD	United States dollar
WHO	World Health Organization

Chapter 1

Introduction

Chapter 1

Introduction

1.1 Background of the study

The children are the most valuable asset for a country. They will play a vital role in different activities for the development of a country after certain period of time. The development of children is very much essential for the future development of a nation. Street children are the part of total children of a country. So the development of a country strongly related with the development of life style of street children. But unexpectedly the street children are deprived of all types of facilities. They are involved in different type of street based work such as Tokai, cooli/minti, small business and day laborer etc. Majority of street children work almost every day in a week on the street and they get some amount of money for their works. But they do not use their earning properly.

Maximum number of the street children came in the Capital City, Dhaka from different rural area and the main reason of becoming street children is poverty. An international organization estimated that 1.2 million children are on the streets of major cities and urban centers of Bangladesh. These information include “runaway” children who live or work on the street plus those who return to the family (Pagare, 2004). Another published report estimated that the number of street children in Bangladesh was 4,45,226 of which 75% were in Dhaka city (UNDP, 2001). According to Wikipedia, there are more than 6,00,000 street children are living in Bangladesh, 75% of them are living in the capital city, Dhaka. A baseline survey of street children in Bangladesh found that overwhelming majority of the street children were living in Dhaka City (Ahmed et al., 2003). In the section 1.3 an attempt has been made to review as many as 30 studies regarding street

children but almost all of the studies concentrated to calculate the proportions and percentages street children for various categories of their background characteristics. They did not study even the association of the background characteristics of the street children. No study attempted to study the impact of some Characteristics on others.

So, it is needed to conduct an in-depth study regarding street children. For doing that, the association between Characteristics of the street children has to be studied and has to identify the Characteristics which are significantly associated. Next works have to be done to study the inter relationship among the important Characteristics and to identify the significant Characteristics of the street children. Again some attempts should be made to determine the significant Characteristics which are the determinants of the important Characteristics.

Again the studies reviewed in section 1.3 concentrated in social and economic Characteristics only. But the health and demographic factors which are vital one for the street children is ignored. So, some efforts should be made to study the health and demographic characteristics. An attempt should be made to study association of health and demographics with the social and economic characteristics of the street children. Interrelation among the Characteristics should also be studied. Again to identify the determinants of health and demographic Characteristics some important models should be fitted.

1.2 Concept and terminology

Street children:

There are various types of street children. To cover all relevant types, street children may be divided into four categories based on the criteria set by UNICEF and WHO (UNICEF, 2003; WHO, 1993): (i) Street Living Children: children who ran away from their families

and live alone on the streets. (ii) Street Working Children: children who spend most of their time on the streets, fending for themselves, but returning home on a regular basis. (iii) Children from Street Families: children who live on the streets with their families. (iv) Children who were in institutional care: children, who have come from a situation of homelessness and are at risk of returning to a homeless existence.

Age of Entrance: Age at which the children are entering into the street.

Tokai: A child who moves in different places to collect various used items like papers, bottles, shoes, cloths, etc is known as tokai.

Coolie /Minti: Registered persons who earn their livelihood by carrying baggage of others in the railway station, ferry terminal, bus terminal are called coolie whereas minti do the same job as that of a coolie but they are not registered.

Mazar: It is a graveyard of some religious people where a large number of people are visiting for their mental satisfaction.

Ever Attending School: Children who attended school at least once in his/her life.

Ever Sickness: Children who were sick at least once in his/her life.

Ever Injury: Children who were injured at least once in his/her life.

Kachabazar: Market of vegetables, fish, fruits, etc. is called kachabazar.

1.3 Importance of the study

The issues of street children are the greatest problem in the countries like Bangladesh. If these issues are not addressed properly, these may be a danger for the nation. Health and socio-demographic condition of children are very much important for a nation. But the street children are deprived from all types of health and social facilities. The street children are facing different types of problems like sickness, injury, education, residence, jobs and working facilities etc. If the country does not take necessary initiatives to solve

their problem, they will burden for the country. Several researchers estimated that maximum street children of Bangladesh are living in the capital City, Dhaka, Bangladesh. Therefore, an attempt has been made here to study the socio-economic characteristics, determinants of health condition and estimation of demographic parameters of street children in Dhaka City, Bangladesh.

1.4 Review of literature

It is essential to study the relevant literature to find out the research gap, so that the research will be fruitful. Considering this, some previous relevant studies have been reviewed in the present study and those are as follows:

Ikoh et al. (2019) studied the “Factors Affecting Entry Into Drug Abuse Among Youths in Lafia Metropolis of Nigeria: Implications on Security” and they found that the children who were not controlled by their parents were more likely to abuse drugs than the children who were controlled by their parents. It was also found that the children who were involved in cigarette and alcohol were more likely to abuse drugs. The findings of this study indicated that male respondents were more likely to abuse drugs than female respondents.

Eshita (2018) conducted a study on health problems and health care seeking behavior of street children in Dhaka city, Bangladesh and she observed that 54% of the street children were illiterate where as 19.3% were attended non formal education and 26.7% were attended formal school. It was also found that 94.7% of the street children were muslim and only 5.3% were hindu. It was revealed that 19.3%, 36.7 %, 19.3 % and 24.7 % of the respondents were engaged in begging, shopkeeper, day labor and others respectively. The study revealed that 2.7% of the street children were taking drug regularly, 16.7% were taking sometimes and 80.7% never taken any drug. The study also revealed that 14.7% of

the respondents were regular smoker, 25.3% were occasionally and 60% never smoke. It was seen that 66.7% of the street children were male and 33.7% were female. It was also seen that 59.8%, 50.7%, 47%, 27.3%, 24.2% and 21.2% of the respondents suffered from fever, dysentery, cough, accident, skin problems and others different type of disease respectively. It was found that 77.3% of the street children taken treatment during sickness and 22.7% did not take any treatment during their sickness. It was also found that 68.1%, 12.9%, 33.6%, 11.2%, 28.4%, 8.6%, 3.4% and 4.3% of the respondents were taken treatment from medicine shop, faith-healer, homeopathy, kabiraj, hospital, MBBS doctor, private clinic and from others sources respectively.

Tahmina et al. (2018) presented a paper on Risk Behaviors of Street Children in Dhaka City, Bangladesh: A Cross Sectional Study and they found that 70% of the respondents were male and 30% were female. It was also found that 83 respondents out of 100 respondents were living alone in Dhaka city and the reason of living alone of 15.7%, 14.5%, 15.7%, 1.1%, 4.8%, 6%, 15.7%, 19.3%, 3.6% and 3.6% of the respondents were poverty, earn money, step parents, came with relative, came with friends, came with unknown person, no one to take care, beaten in house, dislike school and others respectively. It was revealed that 44% of the respondents were regular smoker, 23% were occasional smoker and 33% never smoking. It was also revealed that 27%, 7%, 10%, 7%, 3% of the respondents were involved in paper/garbage collection, coolie, cleaner in WASA, pick pocketing and rest were involving in begging and selling flowers.

Chowdhury et al. (2017) conducted a study on Life Style and Risk Behavior of Street Children in Bangladesh: A Health Perspective and they identified that majority of the street children were in the age between 8 to 10 years and mean age was 11.22 years. The study also found that 87.2% of the respondents were male and 12.8% were female. It was revealed that 50.4% of street children were attending in formal or non-formal school

where as 49.6% had never attend any school. It was revealed that the earning per day of 65.6% of the street children were less than BDT 100 and mean earning was BDT 94.26. It was found that the reason of becoming street children of 41%, 13.1%, 11.5%, 11.5%, 9.8%, 8.2%, 3.3% and 1.6% were poverty, physical abuse by family members, unaccepted insistence of step mother/father in their personal life, brought by unknown person, came with relative, to earn money, ran away with friends and no one to look after. From their study, it was observed that father's occupation of 21.5%, 20.4%, 17.2%, 8%, 4.3%, 2.2%, 3.2% and 22.6% of respondents were micro business, daily laborer, rickshaw puller, farmer, private job, Government job, unemployed, and in other different jobs where as mother's occupation of 40.4%, 32.1%, 19.3%, 4.6% and 3.7% were house wives, part time housemaids, daily laborers, private job and micro business. It was also observed that 22.4% of respondents stayed at different streets at day time, 23.2% at railway station, 9.6% at park, 7.2% in university area, another 7.2% in bus station, 6.4% at launch terminal, 4.8% in market places, and 4.8% in footpath. According to their data analysis, it was seen that 32.8%, 9.6%, 8.8%, 8%, 3.2%, 10.4% and 19.2% of respondents were engaged as coolie/minti, beggars, flower sellers, chocolate/cigarette sellers, newspaper sellers, multiple job and collected discarded plastic bottle. During the study time, they found that 87.2% of the respondents were suffering from different diseases and 12.85% did not mention about existence of any disease. Respondents also reported that 44.0% were suffering from accidental injury, 17.4% from skin disease, 13.8% from gastrointestinal (GIT) problem, 10.1% from fever, and 5.5% from hearing problem, 5.5% from respiratory tract infection and 21.1% from fever with respiratory tract infection. It was found that 47.7% of respondents depended on salesman of the pharmacy, 12.8% on NGO workers, 4.6% on traditional healer, 2.8% on Kabiraj (herbal medicine), 1.8% on homeopath and 28.4% did not take any type of treatment for their sickness/injury.

Hakim and Rahman (2016) conducted a study on Health and Nutritional Condition of Street Children of Dhaka City: An Empirical Study in Bangladesh and they found that 90% of the street children were boys and 10% were gamines. It was also found that 37.5% and 62.5% of the respondents were in the age group 7-11 and 12-16 years respectively. It was revealed that earning per month of 10%, 52.5%, 20%, 17.5% of street children were < Bangladeshi Taka (BDT) 1000, 1000-1500, 1501-2000 and >2000 respectively. It was also revealed that 65% of the street children were underweight. It was observed that 61.3% of the street children suffered from different diseases during the last 3 months prior to conducting the study.

Hossain and Alam (2016) conducted a study on Socio-Economic Status of the Street Children in Bangladesh and they reported that highest percent (35.5%) of the street children were in the age between 13-14 years. It was also found that 88% of the street children were male and only 12% were female. It was revealed that 32.5% of the street children came to Dhaka due to search of work and 27.5% came for biting of poverty, 40.9% of the respondents came for their want and 18.18% came willingly fleeing. It was also revealed that 37.5% of the respondents were habituated to take drug. It was observed from their study that the earning of 17.5% of the street children were BDT 51-60 and rest part were <BDT 30 per day. It was also observed that 27% of the respondents were begging and flower selling and 20% were labour and tokai.

Amiruddin et al. (2015) conducted a study on Smoking Behaviors of Street Children in Makassar Indonesia and they observed that 80.1% of the street children were male. It was also observed that the average age of the respondents was 12 years. Their study found that 58.5% of the street children had not completed primary school. The study also found that majority (71.1%) of the children became street due to earn money. That is poverty was the main reason of becoming street children. Majority of the respondents (62%) were

non-smoker where as 38% were smoker. It was seen that the respondents who were attended school were more smokers (37.5%) than who did not attend school.

Farid and Mostari (2015) studied the Lives and Livelihoods of Children Living in Street Situation in Dhaka City of Bangladesh and they found that 53.97% of the respondents were in the age group 8-12 and 33.33% were in the age group 13-18 years. It was also found that 82.84% of the respondents were male and only 17.16% were female. It was revealed that 23.81%, 14.28%, 12.70%, 12.70%, 17.46%, 07.94% and 11.11% were tokai, beggar, working in small shop, cooli, van/ rickshaw puller, hawker, flower seller respectively. It was also revealed that working hours per day of 01.59%, 28.57%, 47.62% and 22.22% were 01-03, 04-06, 07-09 and 10-12 hours respectively. It was observed that the earning per day of 12.70%, 22.22%, 34.92%, 19.05% and 11.11% were BDT 20-39, 40-59, 60-79, 80-99 and 100-above respectively. Findings of the study revealed that all respondents were suffered from cold fever/ influenza, 82.54% from stomach upset 88.89% from skin disease and 61.90% from others (water borne diseases and headache, back pain, respiratory problem, accident). It was also found that 23.81%, 11.11%, 19.05% and 31.35% of the respondents went to Government hospital, Private doctors, Homeopathy, Kabiraji, Pharmacy respectively for their treatment and 14.28% took treatment own way. It was seen that 73.02% of the respondents were got assistance from others during illness where as 26.98% did not get assistance from others during illness. It was also seen that 49.21%, 14.29%, 12.70%, 06.35% and 17.46% of the respondents got assistance during illness from friends, co-workers, owner, family and volunteer respectively.

Hakim and Talukder (2015) conducted a study on An Assessment of Health Status of Street Children in Tangail, Bangladesh and they identified that 29.17% of the respondents were in the age group 6-10 years and 70.83% were in the age group 11-15 years. It was

also identified that 4.2%, 31.8%, 28.5 and 35.5%, of the respondents who were earned per month < BDT 1000, 1000-1500, 1501-2000 and above 2000 respectively. It was found that 59.8% of the respondents suffered from different type of sickness in last 3 months and 40.2% were not sick. Based on BMI it was also found that 33.33% of the respondents were maintained normal weight and 66.67% were maintained underweight. The study was revealed that 10%, 5.8%, 12.5% and 6.67% of the respondents were engaged in street hawker, garbage picker, buss helper and others respectively whereas 65% of the respondents were not engaged in any type of working activities. It was observed that 59.8% of the street children suffered from different diseases during the last 3 months preceding the study.

Islam (2015) studied the Educational Conditions of Street Children in Dhaka City, Bangladesh and he found that 77.92% of the street children were boys and 22.08% were girls among the total samples. It was also found that the poorest children migrated to Dhaka metropolitan city from the different regions of Bangladesh. The study revealed that fathers of 37.08% street children's were engaged with non-agricultural labor, 32.06% with agricultural labor, 12% with small business and rest of them were unemployed whereas mothers of 62.01% of the street children were housewives and more than 21.04% street children's mothers were maidservant. The study also revealed that mainly due to economic reasons (83.70%) the process of their becoming street children in the cities it means that poverty was the main reason of becoming street children. It was found that 57% of the respondents reported that they feel sick. It was revealed that 65.22% street children never attended at any school whereas 23.65% attended at formal school, 8.58% at non-formal school and 2.55% at both formal and non-formal school respectively. It was also revealed 91.60% of the street children were not currently attending any school whereas only 7.30% and 1.10% were currently attending at non-formal school and at formal school respectively.

Kipyegon and Nyachwaya (2015) conducted a study on Factors Influencing Rising Number of Street Children in Urban Centers in Kenya: A Survey of Eldoret Municipality, Kenya and they found that 77.3% of the respondents were male and only 22.7% were female. Their study also found that 4%, 9.3%, 40% and 46.7% of the respondents were in the age group 5-8, 9-11, 12 -15 and 16-18 years respectively. Findings of this study showed that poverty is a major cause that has led to the mass increase in street children in urban centres.

Rahman et al. (2015) conducted a study on Street Children: Survival on the Extreme Margins of Human Life? in Sylhet metropolitan city, Bangladesh and they found that 78% of the respondents were male and 22% were female. It was also found that 85% of the street children were in the age group 12-14 years. It was revealed that 51% girls and 39% boys had no education. It was observed that 22%, 17%, 16%, 13%, 8%, 7%, 7% and 20% of the street children were engaged in rickshaw puller, begging from door to door , pottering goods , rag picking , hotel labor , tempo helper (an assistant of three wheelers vehicle), and tailors' assistant and hawking small goods/small business,/welding assistant/ prostitution respectively. It was also observed that the average income per day of the respondents were BDT 43.33. The study mentioned that father's remarriages, lack of care, negligence and cruel tortures of the step mothers were responsible for becoming street children. It was also mentioned that 78% of the street children were suffering from different type of diseases and 22% were not suffering.

Talukder et al. (2015) conducted a Study on the Nutritional Status of the Street Children at Shabagh Area of Dhaka City in Bangladesh and they found that 21.7%, 56.7% and 21.7% of the respondents were in the age group 6-10, 11-15 and >15 respectively. It was also found that monthly earning of 30.5%, 31.7% and 37.8% of the respondents were BDT 1000-1500, 1501-2000 and above 2000 respectively. It was revealed that 61.7% of

the respondents were underweight and 38.3% were healthy. It was also revealed that 60.8% of the respondents suffered from a disease in the last 3 months proceeding to the study, while 39.2% of the respondents did not suffer.

Subarna et al. (2014) studied the Social Life of Street Children in Khulna City of Bangladesh: A Socio-Psychological Analysis and they found that the average age of the street children was 12.05 years. They also found that 76.7% and 23.3% of the street children were males and females respectively and 85.3% of the street children did not ever go to school. They also found that 20.0%, 47.3% and 32.7 % of the street children were in the age group 6-9, 10-13 and 14-17 years respectively. The study revealed that 18.7%, 13.3%, 38.7% and 21.3% of the street children were engaged in begging, selling flowers and newspapers, the road collect things from dustbin and sell and collect old papers respectively. The study also revealed that the average working time in a day was 10.62 hours and average weekly earning was BDT 362.

Abari et al. (2013) conducted a study on street children in Kaduna metropolis, Nigeria and they observed that the parents of all street children were not wealthy people that is poverty is the main reason of becoming street children. Although orphans, parental neglect, and desire to be independent were the other reasons of becoming street children. It was also indicated that maximum street children's parents had no formal education. It was found that the street children were engaged in shoe shining, begging, hawking yoghurts, assorted drinks, boxers, recharge cards, cigarettes, lighters, groundnuts, pears, oranges, mangoes, vendors of magazines and newspapers, car washing etc.

Khatun and Jamil (2013) studied the Life Style of the Street Children in Khulna City and they found that the average age of the street children was 12.1 years. They also found that 85% of the street children were boys and only 15% of the street children were girls. It was indicated that 44% of the street children were tokai, 10% of the street children were

coolie and 18% of the street children were petty traders. It was also indicated that the street children were working 6.5 hours in a day and the average daily earning was 44.9 taka. It was observed the reasons of becoming street children of 89%, 4%, 3%, 3% and 1% of the respondents were poverty/hunger, absence of father, absence of mother, exploitation of step mother and to earn money respectively.

Nasrin and Rashed (2013) conducted a study on Life and Livelihood Issues of Street Children: Evidence from Dhaka City, Bangladesh they identified that 13.3%, 42.0% and 44.7% of the street children were in the age group < 10, 10-14 and 15-18 years respectively. It was also found that 65.3% of the respondents had no education whereas 18.7%, 12.7% and 3.3% of the respondents were completed Class I-III, Class IV-V and Class VI-VIII respectively. It was revealed that 9.3%, 34.7%, 35.3% 14.7% and 6.0% of the respondents were involved in begging, flower/paper selling, scavenging, sex worker and day labor respectively. It was also revealed that 73.3% of the respondents suffered from illness and 26.7% were not suffered from illness. It was observed that 20.0%, 18.6%, 18.0%, 3.3% and 13.3% of the respondents suffered from fever, cold, diarrhoea, gastric and others different type of diseases respectively. It was also observed that 25.3% of the respondents took treatment and 74.7% did not take treatment during their sickness. It was indicated that the street children who took treatment, among them 60.52% got treatment from pharmacy, 7.89% got from government hospital and 23.68% got from NGOs/clinic.

Barkat et al. (2012) studied the Situational Analysis of the Street Children involved in Begging in Dhaka City, Bangladesh and they found that the majority (66%) of the child beggars were boys. The average age of child beggars 11.1 years for boys and 11.4 years for girls. It was also found that only around one-third of the child beggars (Boy 36%; Girl 35%) were attending school. It was observed that 75% of the child beggars felt sick in last

three months preceding the survey. Among them 76%, 46%, 20% 18%, 6%, 6%, 5%, 4%, 2%, 1% and 1% suffered from fever, cough and cold, headache, diarrhea and dysentery, hepatitis (jaundis), skin disease, back pain, any accident, respiratory problem, pox and measles respectively. Among the sick child beggars 80% sought some kind of treatment for their sickness. The child beggars who sought any type of treatment, 14% went to hospital/medical centre, 83% went to pharmacy and 2% each went to homeopath and traditional healer. It was also observed that the average income per day of a child beggar was BDT 172.

In a conference it was reported that the average income per day of street children in Bangladesh was approx. USD \$0.55. It was estimated that 46% of the street children in Nepal were illiterate. (CSF Colombo Conference, 2001).

Moura et al. (2012) conducted a study on Drug use among street children and adolescents: what helps? in Brazilian state capital cities and they found that that 47.7% of the respondents were used frequent or heavy drug. It was also identified that 37.9% of the respondents were used tobacco, 23.3% were used inhalants, 22% were used alcohol and 19.5% were used marijuana. The study found that the street children who were in the aged between 10-11 years and 12-14 years up to 90% and 50% respectively less likely used frequent or heavy drug than the street children who were in the aged between 15 and 18 years. It was indicated that the drug addiction of street children was increasing with the increasing of their age.

Naik et al. (2011) studied the street children of Mumbai, India and found that 113 out of 217 respondents studied who were boys and 114 out of 217 came from Hindu families. The mean age of male street children was 11.3 years and 8.83 years for female street children. It was also found that the present locations of 69.1%, 9.2%, 12.4%, 5.5% and 3.7% of the street children were pavement, railway station, chowpatties, dargah and

under bridge respectively. It was observed that 29.1% of the street children never enrolled in school 44.2% were school drop-outs and 26.7% were continuing their education.

Kamal et al. (2010) conducted a study on Smoking Behavior of Secondary School Students in Kushtia District, Bangladesh: Prevalence and Determinants and they found that the respondents who were in the age group 15-16 and 17-18 years 3.1 and 3.4 times more smoker than the respondents 13-14. It was also found that rural respondents were 2.2 times more smoker urban respondents. It was revealed that respondents whose mother had junior level of schooling were less likely to smoke than the respondents whose mothers were illiterate.

Reiss et al. (2010) conducted a study on Cigarette smoking prevalence in Dhaka (Bangladesh) and they found that that over all smokers were 21.6%. It was also identified that among men 35.7% were smoker whereas among women 4.9% were smoker. It was observed that smoking practice among men about seven times higher than women.

Owoaje et al. (2009) conducted a study on Socio-Demographic Characteristics of Street Children in Rural Communities Undergoing Urbanization in the Kajola Local Government area of Oyo State in the South-Western region of Nigeria and they found that the majority of the street children (88.9%) were in the age group 15-17 years. It was also found that male street children (58.3%) were more than the female street children (41.7%). The study observed that 61.4% of the respondents were still attending school. The study also observed that 16.4%, 15.0%, 9.5%, 5.0%, 4.5%, 2.7% and 1.4% of the respondents were apprentice, trading, part-time driving, car washing, hawking, illegal mining and others respectively.

Chowdhury et al. (2009) conducted a study on 351651 children of Bangladesh, among them 5577 had one or more injuries in the past one year. Study findings observed that the boys were more injured than girls. It was also observed that rural children were more

injured than urban children.

McAlpine et al. (2009) conducted a study on 1,923 youth on the street in the Arusha and Kilimanjaro regions of Tanzania. Among total samples, 938 were children and youth who were not self-identified as street children, 776 were part-time street children, and 209 were full-time street children that means majority of the respondents were street working children. It was found that 80% of the respondents were male and 20% were female.

Thapa et al. (2009) conducted a study on Health problems among the street children of Dharan municipality in Nepal and they found that 68.8% of the respondents were in the age group 11-15 years and 95.8% were male street children. Among total samples 81.2% were involved in rag pickers. Study findings revealed that 100% of the respondents had at least one or more health problems. The study also found that 87.5% were cigarette smoker, 50% had the habit of consuming alcohol and 72.9% were drug addicted. Respondents of this study were used only dendrite (glue sniffing) as drug.

Pinzon-Rondon et al. (2009) conducted a study on Work-related injuries among child street-laborers in Latin America: prevalence and predictors and they observed in their study that 68.3% of the children were boys and 31.7% were girls. The study also observed that the average age of the respondents was 11.8 years. It was found that 52.7% of the respondents were involved in selling products, 10.1% were begging, 10.8% were cleaning/guarding cars, 3.3% were street performers and 23.1% were engaged in a variety of other occupations (e.g., garbage collection, recycling, shoe shining). Their average working hours per week in day time was 38.7 hours and at night time was 7.3 hours. It was found that the children who were working more daytime hours per week, were male and older had a higher incidence of injury while those who attended school had less risk. It was found that the children who spent more daytime hours working on the streets were

more likely risk of injury than the children who spent fewer day time hours working on the street.

Singh et al. (2008) conducted a study among the 200 street children of Udaipur in India who were between 8-14 years of age. It was found that 71% of the street children were males. It was also found that 76% were living in joint families and only 24% in nuclear families, 6% of the street children had stepparents. It was revealed that 30% child were abused, among them 26% were physically abused, 3% were sexually abused, 1% were other abused. It was also revealed that fathers of 98% and mothers of 70% of the respondents were addicted. It was also revealed that among the street children 92% were addicted to gutakha, 65.5% to tobacco, 33.5% to smoking and 01% to alcohol. It was observed that only 21% of the street children were attended school. It was also observed that working hours per day of 55% of the respondents were 12- 14 hours, 32% were 8-12 hours and only 13% were less than 8 hours. It was indicated that dental caries were common disease in the children. It was indicated that 26% of the street children suffered from fungal infection of skin and nails while 14% were injured in hand and feet.

Habib et al. (2007) conducted a study on Occupational Health Hazards among Street Children of Karachi, Pakistan and they found that 54% of the children were in the age group 5 to 10 years and 46% in the age range of 11 to 15 years. It was found that 90% of street children were males while 10% were females. It was revealed that 46% of the respondents were injured while working on the street and 30% did not get any treatment during injury time. It was also revealed that 40% of street children were car cleaners.

Kalimbira and Chipwatali (2007) conducted a nutrition related study among 36 street children in Lilongwe, Malawi and they observed that most (91.7%) of the street children were male and 8.3% were female. It was also observed that 11.1%, 47.2%, 27.8% and 13.9% were in the age group <10, 10-12, 13-15 and >15 years respectively. It was

revealed that 41.7% of the respondents had some literacy and 58.3% were illiterate. It was also revealed that majority of the respondents (55.6%) had father and mother both alive, whereas 19.4%, 11.1% and 13.9% of the respondents, mother only alive, father only alive and none alive respectively. It was seen that 61.1% of the street children earned between US\$0.55 and US\$1.09 per day from begging.

Conticini (2005) conducted a study on urban livelihoods from children's perspectives: protecting and promoting assets on the streets of Dhaka, Bangladesh and he found that 35%, 27%, 20%, 8% and 10% of the street children had very little or no savings, less than 30 taka per day, between 30 and 100 taka per day, between 100 and 200 taka per day and don't know respectively. The findings of this study revealed that the working hours per day of many street children were more than ten hours. It was also revealed that common diseases were diarrhoea, physical injuries, anorexia, stomach and respiratory infections, skin diseases and sexually transmitted diseases.

Ahmed et al. (2003) conducted a Baseline Survey of Street Children in Bangladesh and they found their study that 97.56% of respondents were boys and 2.44% were girls. It was also found that 25%, 48.7%, 26% of the respondents were in the age group 5-11, 11-14 years respectively and the average age of female children was 11.5 years which was younger than male street children (12.2 years) whereas average age of both sex was 12.1 years. The study seen that 70% of their fathers and 76% of their mothers were illiterate. It was also seen that 33.78% children were involved in street related job and 66.22% involved themselves in other jobs before starting to be street children. Among total samples 82% of the street children stopped their schooling while 18% of the street children were attending school and working simultaneously. More than 57% of the respondents were sick. Findings of this study revealed that 53.9% of the sick street

children had no caring person during sickness while 25.8% of the sick street children had some friends who looked after them during their sickness.

UNICEF (2001) reported about Zimbabwean study that 56.9% of the street children were children of the street while 31.4% were street working children. It was also reported that the average age of sample was 13 years. It was found that 45.7% of street children were involve in beggars, 14.7% were in vendors, 21.2% were in guarded cars and 4.1% were in escorting blind parents. It was also found that 62.3% of the respondents bought their own food from their income, 18.2% collected food from restaurants' leftovers and bins, 8.2% collected their food from a drop-in centre and 9.1% collected food from home. It was revealed that the duration on street of 39.5%, 23.9%, 18.5%, 11.9%, 4.1% and 2.1% of the respondents were three years, one-half to one year, under half a year, four to six years, seven to ten years and over eleven years respectively. It was also revealed that the occupation of 13%, 18.5%, 19.6%, 21.2% and 12% children's guardians or parents were domestic workers, vendors, peasant farmers, self-employed, and industrial workers respectively. It was observed that 25.5% of the respondents never attend school where as 21.9%, 38.2%, 38.2%, 8.8% and 4.8 % of the respondents were completed lower primary education (Grades 1 to 3), higher primary education (Grades 4 to 7), one to two years of secondary education and three to four years of secondary education respectively. The study also observed that reason of becoming street children of 35.3%, 30.7%, 18.3%, 7.3% and 6.4% of the respondents were earning income for their families, orphan hood, abused by parent(s) /guardians/care-givers, employment and committed an offence and ran away from home. The findings of this study indicate that poverty was the main reason of becoming street children.

1.5 Objectives of the study

The review works indicate some important issues regarding street children of the universe including Bangladesh. An attempt has been made to study on some specific issues in this study. The main objective of this is to know the overall conditions of the street children of Dhaka City, Bangladesh.

The specific objectives of this study are as follows:

- (i) To observe the distribution of street children for various categories of social, demographic, economic and health Characteristics.
- (ii) To estimate the demographic characteristics of street children of Dhaka City in Bangladesh.
- (iii) To determine the associated factors of social, demographic, economic and health status of street children of Dhaka City in Bangladesh.
- (iv) To find out the effect of the social, economic and health factors on some of their important characteristics of street children of Dhaka City in Bangladesh.

1.6 Organization the study

The whole research work has been organized into seven chapters. The first chapter of the study is introduction which contains background of the study, concept and terminology, importance of the study, review of literature, objectives of the study and organization of the study.

Data and methodology is described in the second chapter. This chapter includes the sources of data and its collection procedures, sample size determination and methodology. The names of statistical software are mentioned which have been used in this study. In third chapter, social characteristics of the respondents have been discussed. Bivariate analysis of different social characteristics of street children by their background

characteristics have also described in this chapter. Results of logistic regression model for finding the effect of different social characteristics of the street children have been presented in this chapter.

The distributions of street children by their demographic characteristics have been discussed in chapter four. In this chapter age specific death rates (ASDRs) and probability of dying have been estimated. A mathematical model has been fitted to the age structure for street children. Besides these, migration rates of street children have also been estimated and presented in this chapter.

In chapter five, the distributions of the street children by their economic characteristics have been discussed. Bivariate analysis of different economic characteristics of street children by their background characteristics have also been discussed in this chapter. Results of logistic regression model for finding the effect of the different economic characteristics of street children have also been presented in this chapter.

The distributions of street children by their health characteristics have been discussed in chapter six. In which bivariate analysis of different health characteristics of street children by their background characteristics have also been presented. For finding the effect of different health characteristics of the street children using logistic regression model have been presented in this chapter.

Finally, conclusions and recommendations of this study have been presented in chapter seven. In this chapter, major findings of the study, policy implications, scope of future research and limitations of this study have been discussed.

Chapter 2

Data and Methodology

Chapter 2

Data and Methodology

2.1 Sources of data

Primary data were used in this study. A questionnaire consist of 73 different questions was prepared after pretesting it. A number of interviewers were recruited for collecting data. Before going to field the interviewers were trained about data collection procedure. The objectives of the study were also explained to them so that they can conduct the survey successfully. The fieldwork was conducted during May to September, 2014. The interview method was used for collecting data. According to some previous studies mentioned in chapter 1 that majority of the street children in Bangladesh were living in Dhaka City and for this reason Dhaka city was selected purposively in this study. Besides this the street children are concentrated in various places of Dhaka city. So we have made an attempt to select the places like mazar, railway station, bus stand, park and institution. We have visited these selected places and available street children were interviewed. Data were scrutinized and coding was used for qualitative and grouped information. For meaningful analysis sometimes recoding technique was used.

2.2 Sample size determination

As per the information of section 1.1 of Chapter 1 the number of street children in Dhaka City is about 3,33,920 (UNDP, 2001). The following formula has been used for determination of sample size of this study:

$$n = \frac{N}{1 + Nd^2} \text{ (Cochran, 1977)}$$

Where n=require sample size, N=population size (3,33,920), d=marginal error (0.05) and 95% confidence level has been considered. The formula provided that the minimum

sample size was 400. But, for better results, data have been collected from 1108 street children in this study.

2.3 Methodology

In this study, χ^2 statistic was used to test the significance of the association between two attributes of the street children. Moreover, binary logistic regression was also employed to find out the effect of determinants of the dependent variables among the explanatory variables.

Age distribution of the street children is fluctuating in nature. To have a smooth pattern 3 years moving average technique was used. Moreover, in this study “4253H twice” smoothing technique was also used in the age data of street children for minimizing the distortion of the data set.

The Body Mass Index (BMI) was calculated using the formula: $BMI = \text{weight (kg)} / [\text{height (meter)}]^2$. According to Barlow and the Expert Committee (2007) the BMI was classified as

- (i) Underweight (BMI less than the 5th percentile).
- (ii) Normal weight (BMI 5th percentile to less than 85th percentile).
- (iii) Over weight (BMI 85th to less than the 95th percentile).
- (iv) Obese (BMI greater than or equal 95th percentile).

Furthermore, the Cross Validity Prediction Power (CVPP), ρ_{cv}^2 , is applied in this case to check how much the model is stable over the population. The mathematical formula is

$$\rho_{cv}^2 = 1 - \frac{(n-1)(n-2)(n+1)}{n(n-k-1)(n-k-2)} (1 - R^2); \text{ where, } n \text{ is the number of cases, } k$$

is the number of predictors in the model and the cross validated R is the correlation between observed and predicted values of the dependent variable (Stevens, 1996). The

shrinkage coefficient of the model is the positive value of $(\rho_{cv}^2 - R^2)$; where ρ_{cv}^2 is CVPP and R^2 is the coefficient of determination of the model. 1-shrinkage is the stability of R^2 of the model. The information on model fitting and estimated CVPP has been demonstrated at the bottom of the respective table. Some authors used this technique as model validation technique (Islam, 2007; 2008; 2011; 2012a; 2012b; 2013; Islam & Hossain, 2013a; 2013b; 2014a; 2014b; Hossain & Islam, 2013; Islam et al., 2013; 2014; Islam and Hoque, 2015, Shahiduzzaman et al., 2017).

To verify the measure of overall significance of the model as well as the significance of R^2 , the F-test is applied in this study. The F -test is given as follows:

$$F = \frac{R^2 / (k-1)}{(1-R^2) / (n-k)} \quad \text{with } (k-1, n-k) \text{ degrees of freedom (d.f.)}$$

where k is the number of parameters to be estimated, n is the number of cases and R^2 is the coefficient of determination of the model (Gujarati, 1998).

It is also mentioned here that SPSS, Excel, Minitab Release, STATISTICA, Ms Word were also used for analysis in this study.

Chapter 3

Social Characteristics of the Street Children

Chapter 3

Social Characteristics of the Street Children

Social characteristics are important issues among the other issues for the street children.

In this chapter, some selected social characteristics of street children such as reasons of becoming street children, currently attending school and ever attending school have been discussed. Associations of these characteristics with other important factors have also been studied. Using logistic regression model, the determinants of a particular character have been identified. Therefore the specific objectives of this chapter are as follows:

- i) To observe the distribution of street children for various categories of social Characteristics.
- ii) To identify the associated factors for reasons of becoming street children, currently attending school and ever attending school.
- iii) To determine the effect of the associated factors on the above three Characteristics of the respondents.

3.1 Distribution of street children by their social characteristics

The distributions of street children by social characteristic have been presented in Table 3.1. It was found that 24.5%, 44.9%, 9.9% and 20.8% of the street children were street living children, street working children, children from street families and Children who were in institutional care respectively. It is evident that among four types of street children, street working children (children who spend most of their time on the streets, fending for themselves, but returning home on a regular basis.) were highest of the sample data and it supports the findings of McAlpine et al. (2009). It was found that

the majority of the respondents (89.8%) became street children for poverty and only 10.2% became street children for step parents/none for caring. This result follows the findings of Amiruddin et al. (2015), Kipyegon and Nyachwaya (2015), Islam (2015), Abari et al. (2013) and UNICEF (2001). It was revealed that around all number of respondents (99.5%) of the street children were Muslim and only 0.5% were Hindu. It was also revealed that the majority of the respondents (73.8%) had father and mother whereas 11.6% and 14.6% of the respondents had step parents and only father or mother/none alive respectively. It is almost similar findings of Kalimbira and Chipwatali (2007). It was seen that more than half (52.3%) of the respondents' fathers were illiterate whereas the fathers' education level of 35.6% of the respondents was primary and 12.1% was secondary. It was also seen that more than half (56.8%) of the respondents' mothers were illiterate while the mothers' education level of 36.4% of the respondents was primary and 6.9% was secondary. From these findings it is evident that majority of the street children's parents were illiterate and it is supported by the study of Abari et al. (2013). It was observed that 44.5% of the street children were able to read and 55.5% were not able to read. It was also observed that 50.5% of the street children were able to write and 49.5% were not able to write. It was found that 41.8% of the street children were currently attending school and 58.2% were not currently attending school. It was also found that 75.4% of the street children ever attending school and 24.6% never go to school and it is almost same as the estimate of UNICEF (2001). It was revealed that 18.6% of the street children were used in political program and 81.4% were not used in political program. It was also revealed that 54.5% of the street children were used in political program for money and 45.6% were used for food. It was found that 14.3% of the street children were arrested by police and 85.7% were not arrested. It was also found

that 7.6%, 59.5% and 32.9% of the street children were arrested by police for stealing, for harassment by police and for foul activities respectively.

Table 3.1 Percentage distribution of the respondents by their social characteristics

Background characteristics	Number of respondents (%)	Background characteristics	Number of respondents (%)
Types of street children		Writing ability	
Street living children	271 (24.5)	Yes	560 (50.5)
Street working children	497 (44.9)	No	548 (49.5)
Children from street families	110 (9.9)	Currently attending school	
Children who were in institutional care	230 (20.8)	Yes	463 (41.8)
Reasons of becoming street children		No	645 (58.2)
Poverty	995 (89.8)	Ever attending school	
Step parents/none for caring	113 (10.2)	Yes	835 (75.4)
Religion		No	273 (24.6)
Islam	1103 (99.5)	Political use	
Hindu	5 (0.5)	Yes	206 (18.6)
Parents' compositions		No	902 (81.4)
Father and mother	818 (73.8)	Reasons of political use	
Step parents	128 (11.6)	For money	112 (54.4)
Only father or mother/ none	162 (14.6)	For food	94 (45.6)
Fathers' education levels		Arrested by police	
Illiterate	580 (52.3)	Yes	158 (14.3)
Primary	394 (35.6)	No	950 (85.7)
Secondary+	134 (12.1)	Reasons of arrest	
Mothers' education levels		For stealing	12 (7.6)
Illiterate	629 (56.8)	For harassment	94 (59.5)
Primary	403 (36.4)	Foul activities	52 (32.9)
Secondary+	76 (6.9)		
Reading ability			
Yes	493 (44.5)		
No	615 (55.5)		

Note: () indicates percentage of respondents

3.2 Reasons of becoming street children

There are various reasons of becoming street children. Poverty, step parents and none for caring are main reasons have been identified in this studies. The 'reasons of becoming

street children' has been considered as dependent variable which has been classified in the following way:

Y= Reasons of becoming street children

$$= \begin{cases} 1, & \text{due to poverty} \\ 0, & \text{due to step parents / none for caring} \end{cases}$$

3.2.1 Bivariate distribution of the reasons of becoming street children by their background characteristics

The bivariate distribution of reason of becoming street children with their background characteristics have been presented in Table 3.2. It was found that the rate of becoming street children due to poverty of "street living children", "street working children", "children from street families" and "Children who were in institutional care " respectively was 77.5%, 93.8%, 92.7% and 94.3%. It was also found that the rate of becoming street children due to poverty for male and female children was 88.7% and 95.8% respectively. It was observed that the rate of becoming street children due to poverty of the children who were interviewed at mazar, railway station/bus stand/launch terminal, kachabazar, park/institution respectively was 86.8%, 82.3%, 92.6% and 95.1%. It was revealed that the rate of becoming street children due to poverty of the children who were in the age group 5-9, 10-14, 15-18 years respectively was 93.7%, 88.5% and 91.1%. It was also revealed that the rate of becoming street children due to poverty of the children who were engaged in small business, tokai, coolie /minti, labour and begging respectively was 94.4%, 88.1%, 88.8%, 91.7% and 82.7%. It was seen that the rate of becoming street children due to poverty of the children whose working hours per day were <5, 5-7, 8+ hours respectively was 94.8%, 90.3% and 87.4%. It was also seen that the rate of becoming street children due to poverty of the children whose working days per week were <7 days and 7 days respectively was 91.9% and 89.2%. It was revealed that the rate of becoming street children due to poverty of the children who saved money was 91.5%

and did not save money was 88.9%. It was observed that the rate of becoming street children due to poverty of the children whose places of birth were rural and urban area respectively was 90.7% and 87.2%. It was also observed that the rate of becoming street children due to poverty of the children who were attending school during interview was 91.4% and not attending school during interview was 88.7%. It was seen that the rate of becoming street children due to poverty of the children who attended school at least once in their lives was 90.1% and never attended school in their lives was 89.0%. It was found that the rate of becoming street children due to poverty of the children whose fathers' education levels were illiterate, primary and secondary+ respectively was 90.3%, 88.6% and 91.0%. It was also found that the rate of becoming street children due to poverty of the children whose mothers' education levels were illiterate, primary and secondary+ respectively was 90.0%, 89.6% and 89.5%. It was observed that the rate of becoming street children due to poverty of the children whose fathers' occupations were farming, labour, small business, rickshaw/van puller/ driving and others respectively was 90.1%, 90.8%, 92.8%, 92.6% and 81.3%. It was also observed that the rate of becoming street children due to poverty of the children whose mothers' occupations were labour, small business, maid servant, housewife and others respectively was 90.2%, 87.3%, 91.4%, 92.5% and 70.1%. It was seen that the rate of becoming street children due to poverty of the children whose fathers' income per day was <BDT 300 was and BDT 300+ respectively was 91.8% and 91.5%. It was also seen that the rate of becoming street children due to poverty of the children whose mothers' income per day was <BDT 200 and BDT 200+ respectively was 92.0% and 90.0%.

The χ^2 - test demonstrated that the association between reason of becoming street children and types of street children ($p<0.01$), gender of street children ($p<0.01$), places of interview ($p<0.01$), types of work ($p<0.05$), working hours per day ($p<0.01$), fathers'

occupations ($p < 0.01$) and mothers' occupations ($p < 0.01$) were statistically significant and current age, working days per week, saving money, places of birth, currently attending school, ever attending school, fathers' education levels, mothers' education levels, fathers' income per day and mothers' income per day was not statistically significant.

Table 3.2 Bivariate distribution of the reasons of becoming street children by their background characteristics

Background characteristics	Reasons of becoming street children		χ^2 - values (p-values)
	Poverty	Step parents/None for caring	
Types of street children			59.578 (0.000)
Street living children	210 (77.5)	61 (22.5)	
Street working children	466 (93.8)	31 (6.2)	
Children from street families	102 (92.7)	8 (7.3)	
Children who were in institutional care	217 (94.3)	13 (5.7)	
Gender of street children			7.747 (0.005)
Male	835 (88.7)	106 (11.3)	
Female	160 (95.8)	7 (4.2)	
Places of interview			39.949 (0.000)
Mazar	46 (86.8)	7 (13.2)	
Railway station/bus stand/launch terminal	317 (82.3)	68 (17.7)	
Kachabazar	201 (92.6)	16 (7.4)	
Park/institution	431 (95.1)	22 (4.9)	
Current age (in years)			4.617 (0.099)
5-9	197 (93.4)	14 (6.6)	
10-14	645 (88.5)	84 (11.5)	
15-18	153 (91.1)	15 (8.9)	
Types of work			9.585 (0.048)
Small business	168 (94.4)	10 (5.6)	
Tokai	303 (88.1)	41 (11.9)	
Coolie /minti	174 (88.8)	22 (11.2)	
Labour	276 (91.7)	25 (8.3)	
Begging	43 (82.7)	9 (17.3)	
Working hours per day			9.588 (0.008)
<5	221 (94.8)	12 (5.2)	
5-7	325 (90.3)	35 (9.7)	
8+	418 (87.4)	60 (12.6)	
Working days per week			1.823 (0.177)
<7	295 (91.9)	26 (8.1)	
7	669 (89.2)	81 (10.8)	
Saving money			1.983 (0.159)
Yes	429 (91.5)	40 (8.5)	
No	535 (88.9)	67 (11.1)	
Places of birth			2.981 (0.084)
Rural	744 (90.7)	76 (9.3)	
Urban	251 (87.2)	37 (12.8)	

Currently attending school			2.111
Yes	423 (91.4)	40 (8.6)	(0.146)
No	572 (88.7)	73 (11.3)	
Ever attending school			0.247
Yes	752 (90.1)	83 (9.9)	(0.619)
No	243 (89.0)	30 (11.0)	
Fathers' education levels			1.056
Illiterate	524 (90.3)	56 (9.7)	(0.590)
Primary	349 (88.6)	45 (11.4)	
Secondary+	122 (91.0)	12 (9.0)	
Mothers' education levels			0.054
Illiterate	566 (90.0)	63 (10.0)	(0.973)
Primary	361 (89.6)	42 (10.4)	
Secondary+	68 (89.5)	8 (10.5)	
Fathers' occupations			20.692
Farming	64 (90.1)	7 (9.9)	(0.000)
Labour	336 (90.8)	34 (9.2)	
Small business	154 (92.8)	12 (7.2)	
Rickshaw/van puller/ driving	276 (92.6)	22 (7.4)	
Others (Begging, kabiraji, jobless, etc.)	165 (81.3)	38 (18.7)	
Mothers' occupations			41.947
Labour	119 (90.2)	13 (9.8)	(0.000)
Small business	55 (87.3)	8 (12.7)	
Maid servant	351 (91.4)	33 (8.6)	
Housewife	409 (92.5)	33 (7.5)	
Others (Begging, singer, tokai etc.)	61 (70.1)	26 (29.9)	
Fathers' income per day			0.022
Below BDT 300	323 (91.8)	29 (8.2)	(0.883)
BDT 300+	494 (91.5)	46 (8.5)	
Mothers' income per day			0.914
Below BDT 200	715 (92.0)	62 (8.0)	(0.339)
BDT 200+	188 (90.0)	21 (10.0)	

Note: () indicates percentage of respondents

3.2.2 Determinants of becoming street children

The effects of different characteristics on reason of becoming street children have been presented in Table 3.3. The information of model fitting is shown at the bottom of the Table. It was observed that the model was better fit due to smallest shrinkage coefficient (0.0035). It was found that becoming street children due to poverty of street working children (OR=3.166, CI: 1.864-5.376), children from street families (OR=3.536, CI: 1.519-8.235) and Children who were in institutional care (OR=3.220, CI: 1.057-9.806)

respectively was more likely than the street living children. It was also found that becoming street children due to poverty of the children who were interviewed at park/institution (OR=3.028, CI: 1.172-7.823) was more likely than the children who were interviewed at mazar. It was observed that becoming street children due to poverty of the children whose mothers' occupation was housewife (OR=2.241, CI: 1.202-4.175) was more likely than the children whose mothers' occupation was labour.

Table 3.3 Effects of selected background characteristics on reasons of becoming street children

Explanatory variables	Coefficients(β)	S.E of β	P-values	Odds ratio (OR)	95.0% C.I. for OR	
					Lower	Upper
Types of street children						
Street living children (r)	.....	.....	.....	1.000	.....	.....
Street working children	1.152	0.270	0.000	3.166	1.864	5.376
Children from street families	1.263	0.431	0.003	3.536	1.519	8.235
Children who were in institutional care	1.169	0.568	0.040	3.220	1.057	9.806
Gender of street children						
Male (r)	.....	.....	.....	1.000	.....	.....
Female	0.773	0.470	0.100	2.165	0.863	5.435
Places of interview						
Mazar (r)	.....	.....	.....	1.000	.....	.....
Railway station/bus stand/launch terminal	0.084	0.375	0.823	1.088	0.522	2.266
Kachabazar	0.555	0.460	0.228	1.741	0.707	4.291
Park/Institution	1.108	0.484	0.022	3.028	1.172	7.823
Types of work						
Small Business (r)	.....	.....	.....	1.000	.....	.....
Tokai	-0.128	0.331	0.700	0.880	0.460	1.683
Coolie/minti	0.253	0.385	0.512	1.287	0.605	2.741
Labour	0.082	0.353	0.816	1.086	0.544	2.167
Begging	0.001	0.503	0.998	1.001	0.373	2.686
Working hours per day						
<5 (r)	.....	.....	.....	1.000	.....	.....
5-7	0.140	0.338	0.679	1.150	0.593	2.228
8+	0.261	0.336	0.436	1.299	0.672	2.509
Fathers' occupations						
Farming (r)	.....	.....	.....	1.000	.....	.....
Labour	0.423	.374	0.258	1.526	0.733	3.176
Small Business	0.653	0.444	0.141	1.922	0.805	4.590
Rickshaw/van puller/ Driving	0.513	0.402	0.202	1.671	0.760	3.675
Others (Begging, kabiraji, jobless, etc.)	0.102	0.391	0.793	1.108	0.515	2.383

Mothers' occupations						
Labour (r)	.....	.....	.....	1.000	.....	.....
Small business	-0.437	0.490	0.373	0.646	0.247	1.689
Maid servant	0.531	0.325	0.102	1.700	0.900	3.214
Housewife	0.807	0.318	0.011	2.241	1.202	4.175
Others (Begging, singer, tokai etc.)	-0.473	0.369	0.200	0.623	0.302	1.285

Model summary: Model $\chi^2 = 879.589$ (0.000), -2 Log likelihood =605.132

Nagelkerke R square =0.747, ρ^2_{cv} =0.744, Shrinkage coefficient=0.0035

Stability of R square = 0.997

Note: r represents the reference category, CI represents the confidence interval

3.3 Schooling of street children

Education is the backbone of a nation and education is a fundamental right of every people in a country. But street children are deprived from this right. Despite that some of the street children were attending school during the time of interview. For currently attending school and ever attending school have been taken into consideration in this section.

3.3.1 Currently attending school of street children

The street children who were currently attending school have been distributed by their background characteristics. The determinants of currently attending school have been identified by using logistic regression model. Currently attending school of street children has been considered as dependent variable which has been classified in the following way:

$$Y=\text{Currently attending school} = \begin{cases} 1, & \text{yes} \\ 0, & \text{no} \end{cases}$$

3.3.1.1 Bivariate distribution of currently attending school of street children by their background characteristics

The bivariate distribution of currently attending school of street children with their background characteristics have been presented in Table 3.4. It was found that the rate of

currently attending school of “street living children”, “street working children”, “children from street families” and “Children who were in institutional care ” was 21.4%, 27.8%, 35.5% and 99.1% respectively. It was also found that the rate of currently attending school of male and female street children was 35.7% and 76.0% respectively. It was observed that the rate of currently attending school of the street children who were interviewed at mazar, railway station/bus stand/launch terminal, kachabazar, park/institution respectively was 47.2% 20.0%, 21.7% and 69.3%. It was also observed that the rate of currently attending school of the children who came on the street due to poverty was 42.5% and due to step parents/none for caring was 35.4%. It was revealed that the rate of currently attending school of the street children who were in the age group 5-9, 10-14, 15-18 years respectively was 48.3%, 42.2% and 31.5%. It was also revealed that the rate of currently attending school of the street children who were engaged in small business, tokai, coolie /minti, labour and begging respectively was 41.0%, 47.4%, 18.9%, 44.5% and 42.3%. It was seen that the rate of currently attending school of the street children whose working hours per day were <5, 5-7 and 8+ hours respectively was 73.4%, 39.7% and 24.1%. It was also seen that the rate of currently attending school of the street children whose working days per week were <7 days per week was 43.0% and 7 days per week was 38.8%. It was revealed that the rate of rate of currently attending school of the street children whose earnings per day were <BDT 100 was 48.8% and BDT 100+ was 25.3%. It was also revealed that the rate of currently attending school of the street children who saved money was 46.3% and did not save money was 35.2%. It was seen that the rate of currently attending school of the street children whose places of birth were rural and urban area respectively was 39.8% and 47.6%. It was found that the rate of currently the attending school of the street children whose fathers’ education levels were illiterate, primary and secondary+ respectively was 37.9%, 45.9% and 46.3%. It was also

found that the rate of currently attending school of the street children whose mothers' education levels were illiterate, primary and secondary+ respectively was 39.9%, 44.7% and 42.1%. It was observed that the rate of currently attending school of the street children whose fathers' occupations were farming, labour, small business, rickshaw/van puller/ driving and others respectively was 31.0%, 43.8%, 38.0%, 44.3% and 41.4%. It was also observed that the rate of currently attending school of the street children whose mothers' occupations were labour, small business, maid servant, housewife and others respectively was 45.5%, 41.3%, 47.9%, 36.4% and 36.8%. It was seen that the rate of currently attending school of the street children whose parents' compositions were both father and mother, step parents and only father or mother/none respectively was 43.2%, 31.2% and 43.2%. It was also seen that the rate of currently attending school of the street children whose fathers' income per day was <BDT 300 and BDT 300+ respectively was 42.3% and 43.1%. It was revealed that the rate of currently attending school of the street children whose mothers' income per day was <BDT 200 and BDT 200+ respectively was 40.8% and 48.3%. It was also revealed that the rate of currently attending school of the street children who collected their food from street shop, begging, home and institution respectively was 20.0%, 20.0%, 43.3% and 90.6%. Based on BMI it was found that the rate of currently attending school of the street children who were under weight, normal weight and overweight/obese respectively was 41.4%, 42.3% and 39.2%. It was also found that the rate of currently attending school of the street children who were smoker was 26.6% and non-smoker was 45.5%. It was observed that the rate of currently attending school of the street children who were addicted was 36.4% and not addicted was 42.3%. It was also observed that the rate of currently attending school of the street children who were sick was 46.5% and not sick was 40.7%. It was revealed that the rate of currently attending school of the street children who suffered from sickness at least

once in their lives and never suffered from sickness in their lives was 44.2% and 32.1% respectively. It was also revealed that the rate of currently attending school of the street children who were injured during the interview was 45.5% and not injured during the interview was 41.4%. It was found that the rate of currently attending school of the street children who were injured at least once in their lives was 42.6% and never injured in their lives was 41.4%. It was also found that the rate of currently attending school of the street children who went to recognized physicians during their sickness/injury was 46.2% and did not go to recognized physicians during their sickness/injury was 29.7%.

The χ^2 - test demonstrated that the association between currently attending school of street children and types of street children ($p<0.01$), gender of street children ($p<0.01$), place of interview ($p<0.01$), current age ($p<0.01$), types of work ($p<0.01$), working hours per day ($p<0.01$), earnings per day ($p<0.01$), saving money ($p<0.01$), places of birth ($p<0.05$), fathers' education levels ($p<0.05$), mothers' occupations ($p<0.05$), parents' compositions ($p<0.05$), mothers' income per day($p<0.06$), food collection ($p<0.01$), smoking practice ($p<0.01$), ever sickness ($p<0.01$), and going to recognized physicians ($p<0.01$) were statistically significant and reasons of becoming street children, working days per week, mothers' education levels, fathers' occupations, fathers' income per day, BMI, drug addiction, sickness, injury and ever injury were not statistically significant.

Table 3.4 Bivariate distribution of currently attending school of street children by their background characteristics

Background characteristics	Currently attending school		χ^2 – values (p-values)
	Yes	No	
Types of street children			399.178
Street living children	58 (21.4)	213 (78.6)	(0.000)
Street working children	138 (27.8)	359 (72.2)	
Children from street families	39 (35.5)	71 (64.5)	
Children who were in institutional care	228 (99.1)	2 (0.9)	
Gender of street children			94.886
Male	336 (35.7)	605 (64.3)	(0.000)
Female	127 (76.0)	40 (24.0)	

Places of interview			253.025
Mazar	25 (47.2)	28 (52.8)	(0.000)
Railway station/bus stand/launch terminal	77 (20.0)	308 (80.0)	
Kachabazar	47 (21.7)	170 (78.3)	
Park/Institution	314 (69.3)	139 (30.7)	
Reasons of becoming street children			2.111
Poverty	423 (42.5)	572 (57.5)	(0.146)
Step Parents/none for Caring	40 (35.4)	73 (64.6)	
Current age (in years)			11.031
5-9	102 (48.3)	109 (51.7)	(0.004)
10-14	308 (42.2)	421 (57.8)	
15-18	53 (31.5)	115 (68.5)	
Types of work			46.979
Small business	73 (41.0)	105 (59.0)	(0.000)
Tokai	163 (47.4)	181 (52.6)	
Coolie/minti	37 (18.9)	159 (81.1)	
Labour	134 (44.5)	167 (55.5)	
Begging	22 (42.3)	30 (57.7)	
Working hours per day			158.791
<5	171 (73.4)	62 (26.6)	(0.000)
5-7	143 (39.7)	217 (60.3)	
8+	115 (24.1)	363 (75.9)	
Working days per week			1.644
<7	138 (43.0)	183 (57.0)	(0.200)
7	291 (38.8)	459 (61.2)	
Earnings per day			57.562
BDT < 100	328 (48.8)	344 (51.2)	(0.000)
BDT 100+	101 (25.3)	298 (74.7)	
Saving money			13.412
Yes	217 (46.3)	252 (53.7)	(0.000)
No	212 (35.2)	390 (64.8)	
Places of birth			5.349
Rural	326 (39.8)	494 (60.2)	(0.021)
Urban	137 (47.6)	151 (52.4)	
Fathers' education levels			7.444
Illiterate	220 (37.9)	360 (62.1)	(0.024)
Primary	181 (45.9)	213 (54.1)	
Secondary+	62 (46.3)	72 (53.7)	
Mothers' education levels			2.292
Illiterate	251 (39.9)	378 (60.1)	(0.318)
Primary	180 (44.7)	223 (55.3)	
Secondary+	32 (42.1)	44 (57.9)	
Fathers' occupations			5.800
Farming	22 (31.0)	49 (69.0)	(0.215)
Labour	162 (43.8)	208 (56.2)	
Small business	63 (38.0)	103 (62.0)	
Rickshaw/van puller/ driving	132 (44.3)	166 (55.7)	
Others (begging, kabiraji, jobless, etc.)	84 (41.4)	119 (58.6)	

Mothers' occupations			12.788
Labour	60 (45.5)	72 (54.5)	(0.012)
Small business	26 (41.3)	37 (58.7)	
Maid servant	184 (47.9)	200 (52.1)	
Housewife	161 (36.4)	281 (63.6)	
Others (Begging, singer, tokai etc.)	32 (36.8)	55 (63.2)	
Parent's compositions			6.606
Father and mother	353 (43.2)	465 (56.8)	(0.037)
Step parents	40 (31.2)	88 (68.8)	
Only father or mother/ none	70 (43.2)	92 (56.8)	
Fathers' income per day			0.058
Below BDT 300	149 (42.3)	203 (57.7)	(0.809)
BDT 300+	233 (43.1)	307 (56.9)	
Mothers' income per day			3.821
Below BDT 200	317 (40.8)	460 (59.2)	(0.051)
BDT 200+	101 (48.3)	108 (51.7)	
Food collection			250.254
Street shop	66 (20.0)	264 (80.0)	(0.000)
Begging	18 (20.0)	72 (80.0)	
Home made	224 (43.3)	293 (56.7)	
Institution	155 (90.6)	16 (9.4)	
BMI			0.575
Underweight	24 (41.4)	34 (58.6)	(0.750)
Normal	374 (42.3)	510 (57.7)	
Overweight/ obese	65 (39.2)	101 (60.8)	
Smoking practice			25.714
Yes	58 (26.6)	160 (73.4)	(0.000)
No	405 (45.5)	485 (54.5)	
Drug addiction			1.156
Yes	32 (36.4)	56 (63.6)	(0.282)
No	431 (42.3)	589 (57.7)	
Sickness			2.289
Yes	94 (46.5)	108 (53.5)	(0.130)
No	369 (40.7)	537 (59.3)	
Ever sickness			10.591
Yes	392 (44.2)	495 (55.8)	(0.001)
No	71 (32.1)	150 (67.9)	
Injury			0.601
Yes	45 (45.5)	54 (54.5)	(0.438)
No	418 (41.4)	591 (58.6)	
Ever injury			0.135
Yes	152 (42.6)	205 (57.4)	(0.713)
No	311 (41.4)	440 (58.6)	
Going to recognized physicians			13.610
Yes	368 (46.2)	429 (53.8)	(0.000)
No	43 (29.7)	102 (70.3)	

Note: () indicates percentage of respondents

3.3.1.2 Determinants of currently attending school of street children

The effects of different characteristics on currently attending school of street children have been presented in Table 3.5. The information of model fitting is shown at the bottom of the Table. It was seen that the model was better fit due to smallest shrinkage coefficient (0.0168). It was found that the currently attending school of street working children (OR=0.587, CI: 0.320-1.076) was less likely than street living children. It was also found that the currently attending school of female street children (OR=1.873, CI: 1.077-3.257) was more likely than male street children. It was revealed that the currently attending school of street children who were interviewed at railway station/bus stand/launch terminal (OR=0.287, CI: 0.126-0.658) and kachabazar (OR=0.260, CI: 0.105-0.642) respectively was less likely than the street children who were interviewed at mazar. It was also revealed that the currently attending school of street children whose working hours per day were 5-7 hours (OR=0.342, CI: 0.209-0.560) and 8+ hours (OR=0.288, CI: 0.173-0.480) respectively was less likely than the street children whose working hours per day were <5 hours. It was observed that the currently attending school of street children who saved money (OR=1.468, CI: 1.010-2.133) was more likely than the street children who did not save money. It was also observed that the currently attending school of street children whose fathers' education level was secondary+ (OR=1.729, CI: 0.919-3.252) was more likely than the street children whose fathers' education level was illiterate. It was seen that the currently attending school of street children who collected their food from home (OR=1.837, CI: 1.019-3.311) and institution (OR=10.130, CI: 4.189-24.496) respectively was more likely than the street children who collected their food from street shop.

Table 3.5 Effects of selected background characteristics on currently attending school of street children

Explanatory variables	Coefficients(β)	S.E of β	P-values	Odds ratio (OR)	95.0% C.I. for OR	
					Lower	Upper
Types of street children						
Street living children (r)	.....	.....	.....	1.000	.....	.....
Street working children	-0.533	0.309	0.085	0.587	0.320	1.076
Children from street families/institution	0.349	0.347	0.315	1.418	0.718	2.801
Gender of street children						
Male (r)	.....	.....	.....	1.000	.....	.....
Female	0.627	0.282	0.026	1.873	1.077	3.257
Places of interview						
Mazar (r)	.....	.....	.....	1.000	.....	.....
Railway station/bus stand/launch terminal	-1.247	0.423	0.003	0.287	0.126	0.658
Kachabazar	-1.347	0.461	0.003	0.260	0.105	0.642
Park/Institution	-0.259	0.421	0.538	0.772	0.338	1.760
Current age (in years)						
5-9 (r)	.....	.....	.....	1.000	.....	.....
10-14	0.224	0.245	0.362	1.250	0.773	2.023
15-18	-0.576	0.384	0.134	0.562	0.265	1.193
Types of work						
Small business (r)	.....	.....	.....	1.000	.....	.....
Tokai	0.085	0.286	0.767	1.089	0.621	1.908
Coolie/Minti	-0.092	0.351	0.793	0.912	0.458	1.815
Labour	0.357	0.285	0.211	1.429	0.817	2.498
Begging	0.254	0.466	0.586	1.289	0.517	3.215
Working hours per day						
<5 (r)	.....	.....	.....	1.000	.....	.....
5-7	-1.073	0.251	0.000	0.342	0.209	0.560
8+	-1.245	0.261	0.000	0.288	0.173	0.480
Earnings per day						
< BDT 100 (r)	.....	.....	.....	1.000	.....	.....
BDT 100+	-0.154	0.217	0.476	0.857	0.561	1.310
Saving money						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.384	0.191	0.044	1.468	1.010	2.133
Places of birth						
Rural (r)	.....	.....	.....	1.000	.....	.....
Urban	0.015	0.212	0.942	1.016	0.670	1.540
Fathers' education levels						
Illiterate (r)	.....	.....	.....	1.000	.....	.....
Primary	0.291	0.200	0.145	1.338	0.905	1.979
Secondary+	0.547	0.322	0.090	1.729	0.919	3.252

Mothers' occupations						
Labour (r)	.....	.....	.....	1.000	.....	.....
Small business	0.036	0.424	0.932	1.037	0.452	2.380
Maid servant	0.077	0.284	0.786	1.080	0.619	1.884
Housewife	-0.259	0.302	0.391	0.772	0.427	1.395
Others (Begging, singer, tokai etc.)	-0.625	0.558	0.262	0.535	0.179	1.597
Parents' compositions						
Father and mother (r)	.....	.....	.....	1.000	.....	.....
Step parents	0.246	0.329	0.455	1.279	0.671	2.440
Only father or mother/ none	-0.103	0.292	0.724	0.902	0.510	1.597
Mothers' income per day						
Below Tk.200 (r)	.....	.....	.....	1.000	.....	.....
Tk.200+	0.132	0.248	0.594	1.142	0.702	1.858
Food collection						
Street Shop (r)	.....	.....	.....	1.000	.....	.....
Begging	-0.304	0.416	0.466	0.738	0.326	1.669
Home made	0.608	0.300	0.043	1.837	1.019	3.311
Institution	2.316	0.451	0.000	10.130	4.189	24.496
Smoking practice						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.230	0.284	0.418	1.258	0.722	2.193
Ever sickness						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.396	0.348	0.255	1.486	0.751	2.943
Going to recognized physicians						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	-0.014	0.257	0.958	0.987	0.597	1.632

Model summary: Model $\chi^2=362.412$ (0.000), -2 Log likelihood =760.486

Nagelkerke R square =0.481, $\rho^2_{cv}=0.464$, Shrinkage coefficient=0.0168

Stability of R square = 0.983

Note: r represents the reference category, CI represents the confidence interval

3.3.2 Ever attending school of street children

Sustainable development of any country is not possible without education. Some street children were not attending school at the time of interview but some of them were attended school in past. This schooling has an impact behavior in the street. Therefore ever attending school is an important factor for this study. Ever attending school of street children has been considered as dependent variable which has been classified in the following way:

$$Y=\text{Ever attending school} = \begin{cases} 1, & \text{yes} \\ 0, & \text{no} \end{cases}$$

3.3.2.1 Bivariate distribution of ever attending school of street children by their background characteristics

The bivariate distribution of ever attending school of street children with their background characteristics have been presented in Table 3.6. It was found that the rate of ever attending school of “street living children”, “street working children”, “children from street families” and “Children who were in institutional care ” respectively was 70.5%, 68.0%, 69.1% and 100%. It was also found that the rate of ever attending school male street children was 73.1% and female street children was 88.0%. It was observed that the rate of ever attending school of street children who were interviewed at mazar, railway station/bus stand/launch terminal, kachabazar, park/institution respectively was 77.4% 66.2%, 69.1% and 85.9%. It was also observed that the rate of ever attending school of the children who became street children due to poverty and step parents/none for caring respectively was 75.6% and 73.5%. It was revealed that the rate of ever attending school of the street children who were in the age group 5-9, 10-14, and 15-18 years respectively was 66.8%, 78.6% and 72.0%. It was also revealed that the rate of ever attending school of the street children who were engaged in small business, tokai, coolie/minti, labour and begging respectively was 76.4%, 71.8%, 69.4%, 81.4% and 67.3%. It was seen that the rate of ever attending school of the street children whose working hours per day were <5, 5-7 and 8+ hours respectively was 85.8%, 72.5% and 70.7%. It was also seen that the rate of ever attending school of street children whose working days per week were <7 days and 7 days per week respectively was 72.3% and 75.6%. It was revealed that the rate of ever attending school of the street children whose earnings per day were < BDT 100 and BDT 100+ respectively was 76.9% and 70.7%. It was also revealed that the rate of ever attending school of the street children who saved

money and did not save money respectively was 78.9% and 71.3%. It was seen that the rate of ever attending school of the street children whose place of birth were rural and urban area respectively was 73.3% and 80.2%. It was found that the rate of ever attending school of the street children whose fathers' education levels were illiterate, primary and secondary+ respectively was 69.1%, 81.7% and 83.6. It was also found that the rate of ever attending school of the street children whose mothers' education levels were illiterate, primary and secondary+ respectively was 70.7%, 80.1% and 88.2%. It was observed that the rate of ever attending school of the street children whose fathers' occupations were farming, labour, small business, rickshaw/van puller/ driving and others respectively was 71.8%, 76.2%, 78.9%, 76.5% and 70.4%. It was also observed that the rate of ever attending school of the street children whose mothers' occupations were labour, small business, maid servant, housewife and others respectively was 75.8%, 73.0%, 78.4%, 73.8% and 71.3%. It was seen that the rate of ever attending school of the street children whose parents' compositions were both father and mother, step parents and only father or mother/none respectively was 75.6%, 78.1% and 72.2%. It was also seen that the rate of ever attending school of the street children whose fathers' income per day was <BDT 300 and BDT 300+ respectively was 73.9% and 78.3%. It was revealed that the rate of ever attending school of the street children whose mothers' income per day was <BDT 200 and BDT 200+ respectively was 74.0% and 78.5%. It was also revealed that the rate of ever attending school of the street children who collected their food from street shop, begging, home and institution respectively was 71.2%, 61.1%, 73.5% and 96.5%. Based on BMI it was found that the rate of ever attending school of the street children who were underweight, normal weight and overweight/obese respectively was 70.7%, 75.2% and 77.7%. It was also found that the rate of ever attending school of smoker and non-smoker street children was 72.0% and 76.2% respectively. It was

observed that the rate of ever attending school of the street children who were addicted and not addicted respectively was 75.0% and 75.4%. It was also observed that the rate of ever attending school of the street children who were sick and not sick respectively was 76.2% and 75.2%. It was revealed that the rate of ever attending school of the street children who suffered from sickness at least once in their lives and never suffered from sickness in their lives respectively was 78.4% and 63.3%. It was also revealed that the rate of ever attending school of the street children who were injured and not injured during the interview respectively was 76.8% and 75.2%. It was found that the rate of ever attending school of the street children who were injured at least once in their lives and never injured was 76.8% and 74.7%. It was also found that the rate of ever attending school of the street children who went to recognized physicians during their sickness/injury and did not go to recognized physicians during their sickness/injury respectively was 80.4% and 64.8%.

The χ^2 - test demonstrated that the association between ever attending school of street children and types of street children ($p<0.01$), gender of street children ($p<0.01$), places of interview ($p<0.01$), current age ($p<0.01$), types of work ($p<0.05$), working hours per day ($p<0.01$), earnings per day ($p<0.05$), saving money ($p<0.01$), places of birth ($p<0.05$), fathers' education levels ($p<0.01$), mothers' education levels ($p<0.01$), food collection ($p<0.01$), ever sickness ($p<0.01$), and going to recognized physicians ($p<0.01$) were statistically significant and reason of becoming street children, working days per week, fathers' occupations, mothers' occupations, parents' compositions, fathers' income per day, mothers' income per day, BMI, smoking practice, drug addiction, sickness, injury and ever injury were not statistically significant.

Table 3.6 Bivariate distribution of ever attending school of street children by their background characteristics

Background Characteristics	Ever Attending School		χ^2 – values (p-values)
	Yes	No	
Types of street children			95.476 (0.000)
Street living children	191 (70.5)	80 (29.5)	
Street working children	338 (68.0)	159 (32.0)	
Children from street families	76 (69.1)	34 (30.9)	
Children who were in institutional care	230 (100.0)	0 (0.0)	
Gender of street children			16.981 (0.000)
Male	688 (73.1)	253 (26.9)	
Female	147 (88.0)	20 (12.0)	
Places of interview			48.886 (0.000)
Mazar	41 (77.4)	12 (22.6)	
Railway station/bus stand/launch terminal	255 (66.2)	130 (33.8)	
Kachabazar	150 (69.1)	67 (30.9)	
Park/Institution	389 (85.9)	64 (14.1)	
Reasons of becoming street children			0.247 (0.619)
Poverty	752 (75.6)	243 (24.4)	
Step parents/none for caring	83 (73.5)	30 (26.5)	
Current age (in years)			13.409 (0.001)
5-9	141 (66.8)	70 (33.2)	
10-14	573 (78.6)	156 (21.4)	
15-18	121 (72.0)	47 (28.0)	
Types of work			13.333 (0.010)
Small Business	136 (76.4)	42 (23.6)	
Tokai	247 (71.8)	97 (28.2)	
Coolie/minti	136 (69.4)	60 (30.6)	
Labour	245 (81.4)	56 (18.6)	
Begging	35 (67.3)	17 (32.7)	
Working hours per day			20.181 (0.000)
<5	200 (85.8)	33 (14.2)	
5-7	261 (72.5)	99 (27.5)	
8+	338 (70.7)	140 (29.3)	
Working days per week			1.312 0.252
<7	232 (72.3)	89 (27.7)	
7	567 (75.6)	183 (24.4)	
Earnings per day			5.174 (0.023)
< BDT 100	517 (76.9)	155 (23.1)	
BDT 100+	282 (70.7)	117 (29.3)	
Saving money			8.098 (0.004)
Yes	370 (78.9)	99 (21.1)	
No	429 (71.3)	173 (28.7)	
Places of birth			4.924 0.026
Rural	604 (73.7)	216 (26.3)	
Urban	231 (80.2)	57 (19.8)	
Fathers' education levels			25.570 (0.000)
Illiterate	401 (69.1)	179 (30.9)	
Primary	322 (81.7)	72 (18.3)	

Secondary+	112 (83.6)	22 (16.4)	
Mothers' education levels			18.889
Illiterate	445 (70.7)	184 (29.3)	(0.000)
Primary	323 (80.1)	80 (19.9)	
Secondary+	67 (88.2)	9 (11.8)	
Fathers' occupations			4.608
Farming	51 (71.8)	20 (28.2)	(0.330)
Labour	282 (76.2)	88 (23.8)	
Small business	131 (78.9)	35 (21.1)	
Rickshaw/van puller/ driving	228 (76.5)	70 (23.5)	
Others (Begging, kabiraji, jobless, etc.)	143 (70.4)	60 (29.6)	
Mothers' occupations			3.489
Labour	100 (75.8)	32 (24.2)	(0.480)
Small business	46 (73.0)	17 (27.0)	
Maid servant	301 (78.4)	83 (21.6)	
Housewife	326 (73.8)	116 (26.2)	
Others (Begging, singer, tokai etc.)	62 (71.3)	25 (28.7)	
Parents' compositions			1.402
Father and mother	618 (75.6)	200 (24.4)	(0.496)
Step parents	100 (78.1)	28 (21.9)	
Only father or mother/ none	117 (72.2)	45 (27.8)	
Fathers' income per day			2.373
Below BDT 300	260 (73.9)	92 (26.1)	(0.123)
BDT 300+	423 (78.3)	117 (21.7)	
Mothers' income per day			1.750
Below BDT 200	575 (74.0)	202 (26.0)	(0.186)
BDT 200+	164 (78.5)	45 (21.5)	
Food collection			54.983
Street Shop	235 (71.2)	95 (28.8)	(0.000)
Begging	55 (61.1)	35 (38.9)	
Home made	380 (73.5)	137 (26.5)	
Institution	165 (96.5)	6 (3.5)	
BMI			1.184
Underweight	41 (70.7)	17 (29.3)	(0.553)
Normal weight	665 (75.2)	219 (24.8)	
Overweight/ obese	129 (77.7)	37 (22.3)	
Smoking practice			1.633
Yes	157 (72.0)	61 (28.0)	(0.201)
No	678 (76.2)	212 (23.8)	
Drug addiction			0.007
Yes	66 (75.0)	22 (25.0)	(0.935)
No	769 (75.4)	251 (24.6)	
Sickness			0.102
Yes	154 (76.2)	48 (23.8)	(0.749)
No	681 (75.2)	225 (24.8)	
Ever sickness			21.454
Yes	695 (78.4)	192 (21.6)	(0.000)
No	140 (63.3)	81 (36.7)	

Injury			0.116
Yes	76 (76.8)	23 (23.2)	(0.734)
No	759 (75.2)	250 (24.8)	
Ever injury			0.548
Yes	274 (76.8)	83 (23.2)	(0.459)
No	561 (74.7)	190 (25.3)	
Going to recognized physicians			17.411
Yes	641 (80.4)	156 (19.6)	(0.000)
No	94 (64.8)	51 (35.2)	

Note: () indicates percentage of respondents

3.3.2.2 Determinants of ever attending school of street children

The effects of different characteristics on ever attending school of street children have been presented in Table 3.7. The information of model fitting is shown at the bottom of the Table. It was revealed that the model was better fit due to smallest shrinkage coefficient (0.0135). It was found that ever attending school of street working children (OR=0.543, CI: 0.327-0.902) was less likely than street living children. It was also found that ever attending school of female street children (OR=1.783, CI: 0.926-3.433) was more likely than male street children. It was revealed that ever attending school of the street children who were interviewed at railway station/bus stand/launch terminal (OR=0.434, CI: 0.208-0.907) was less likely than the street children who were interviewed at mazar. It was also revealed that ever attending school of street children who were in the age group 10-14 years (OR=1.889, CI: 1.198-2.980) was more likely than the street children who were in the age group 5-9 years. It was observed that ever attending school street children who were engaged in labour (OR=1.784, CI: 1.037-3.069) was more likely than the street children who were engaged in small business. It was also observed that ever attending school of street children whose fathers' education levels were primary (OR=2.143, CI: 1.424-3.224) and secondary+ (OR=2.079, CI: 1.064-4.062) was more likely than the street children whose fathers' education level was illiterate. It was seen that ever attending school of street children whose mothers' education level was

secondary+ (OR=2.419, CI: 0.985-5.937) was more likely than the street children whose mothers' education level was illiterate. It was also seen that ever attending school of street children who collected their food from institution (OR=4.512, CI: 1.451-14.029) was more likely than the street children who collected their food from street shop. It was found that ever attending school of street children who were sick at least once in their lives (OR=1.826, CI: 1.005-3.317) was more likely than the street children who were never sick. It was also found that ever attending school of street children who went to recognized physicians during their sickness/injury (OR=1.759, CI: 1.149-2.693) was more likely than the street children who did not go to recognized physicians.

Table 3.7 Effect of selected background characteristics on ever attending school of street children

Explanatory variables	Coefficients(β)	S.E of β	P-values	Odds ratio (OR)	95.0% C.I. for OR	
					Lower	Upper
Types of street children						
Street living children (r)	.....	.....	.....	1.000	.....	.....
Street working children	-0.611	0.259	0.018	0.543	0.327	0.902
Children from street families/institution	0.052	0.331	0.876	1.053	0.550	2.015
Gender of street children						
Male (r)	.....	.....	.....	1.000	.....	.....
Female	0.578	0.334	0.084	1.783	0.926	3.433
Places of interview						
Mazar (r)	.....	.....	.....	1.000	.....	.....
Railway station/bus stand/launch terminal	-0.835	0.376	0.027	0.434	0.208	0.907
Kachabazar	-0.283	0.427	0.507	0.754	0.326	1.739
Park/Institution	-0.003	0.387	0.994	0.997	0.467	2.130
Current age (in years)						
5-9 (r)	.....	.....	.....	1.000	.....	.....
10-14	0.636	0.233	0.006	1.889	1.198	2.980
15-18	0.394	0.320	0.218	1.483	0.792	2.777
Types of work						
Small Business (r)	.....	.....	.....	1.000	.....	.....
Tokai	0.047	0.259	0.857	1.048	0.631	1.739
Coolie/minti	0.257	0.295	0.385	1.292	0.725	2.306
Labour	0.579	0.277	0.036	1.784	1.037	3.069
Begging	-0.278	0.420	0.508	0.757	0.332	1.725
Working hours per day						
<5 (r)	.....	.....	.....	1.000	.....	.....
5-7	-0.303	0.270	0.261	0.738	0.435	1.254
8+	-0.359	0.274	0.189	0.698	0.408	1.194

Earnings per day						
< BDT 100 (r)	.....	.....	.....	1.000	.....	.....
BDT 100+	-0.109	0.202	0.592	0.897	0.603	1.334
Saving money						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.144	0.182	0.428	1.155	0.809	1.650
Places of birth						
Rural (r)	.....	.....	.....	1.000	.....	.....
Urban	0.227	0.207	0.271	1.255	0.837	1.883
Fathers' education levels						
Illiterate (r)	.....	.....	.....	1.000	.....	.....
Primary	0.762	0.208	0.000	2.143	1.424	3.224
Secondary+	0.732	0.342	0.032	2.079	1.064	4.062
Mothers' education levels						
Illiterate (r)	.....	.....	.....	1.000	.....	.....
Primary	0.059	0.203	0.773	1.060	0.712	1.579
Secondary+	0.883	0.458	0.054	2.419	0.985	5.937
Food collection						
Street Shop (r)	.....	.....	.....	1.000	.....	.....
Begging	-0.471	0.314	0.134	0.625	0.337	1.156
Home made	-0.136	0.264	0.607	0.873	0.520	1.466
Institution	1.507	0.579	0.009	4.512	1.451	14.029
Ever sickness						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.602	0.305	0.048	1.826	1.005	3.317
Going to recognized physicians						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.565	0.217	0.009	1.759	1.149	2.693

Model summary: Model $\chi^2 = 419.390$ (0.000), -2 Log likelihood = 839.365

Nagelkerke R square = 0.493, $\rho^2_{cv} = 0.479$, Shrinkage coefficient = 0.0135

Stability of R square = 0.986

Note: r represents the reference category, CI represents the confidence interval

Chapter 4

Demographic Characteristics of the Street Children

Chapter 4

Demographic Characteristics of the Street Children

One of the important factors of the street children is demographic characteristics. Age specific death rates (ASDRs) and q_x (probability of dying) of street children have been calculated. Migration rates of street children have also been calculated in this chapter. Thus the specific objectives of this chapter are as follows:

- i) To observe the distribution of street children for various categories of demographic Characteristics.
- ii) To estimate the age specific death rates (ASDRs) and probability of dying (q_x) of street children.
- iii) To fit mathematical model for age structure of street children.
- iv) To determine the migration rates and its differentials for street children.

4.1 Distribution of street children by their demographic characteristics

The distributions of street children by their demographic characteristic have been presented in Table 4.1. It was found that 4.8%, 34.7%, 19.6% and 40.9% of the street children were interviewed at mazar, railway station/bus stand/launch terminal, kachabazar and park/institution respectively. It is a closer estimate with some categories of the study of Chowdhury et al. (2017). It was also found that the maximum number of street children (84.9%) were male and only 15.1% were female which is a closer estimate of Chowdhury et al. (2017), Hossain and Alam (2016), Hakim and Rahman (2016), Amiruddin et. al (2015), Farid and Mostari (2015), Khatun and Jamil (2013), McAlpine et al. (2009) and Habib et al.

(2007). It is mentionable that maximum study found that the number of male street children were more than the number of female street children. It was observed that 19.0%, 65.8% and 15.2% of the street children were in the age group 5-9, 10-14 and 15-18 years respectively which gives the average age was 11.68 years. It is also nearest estimate of Chowdhury et al. (2017), Amiruddin et. al (2015), Subarna et al. (2014), Khatun and Jamil (2013), Pinzon-Rondon et at. (2009), Kalimbira and Chipwatali (2007) and Ahmed et al. (2003). It was also observed that 59.0%, 31.3% and 9.7% of the street children's starting age at street were 5-9 years, 10-12 years and 13+ years respectively. It was seen that 74.0% of the street children came from rural area and 26% came from urban area. It was also seen that 37.7%, 21.7%, 13.4%, 8.4%, 8.1% and 10.6% of the street children were on street ≤ 12 , 13-24, 25-36, 37-48, 49-60 and 61+ months respectively.

Table 4.1 Percentage distribution of the respondents by their demographic characteristics

Background characteristics	Number of respondents (%)	Background characteristics	Number of respondents (%)
Place of interview		Age of entrance (in years)	
Mazar	53 (4.8)	5-9	654 (59.0)
Railway station/bus stand/launch terminal	385 (34.7)	10-12	347 (31.3)
Kachabazar	217 (19.6)	13+	107 (9.7)
Park/ Institution	453 (40.9)	Place of birth	
Gender of street children		Rural	820 (74.0)
Male	941 (84.9)	Urban	288 (26.0)
Female	167 (15.1)	Duration on street (in months)	
Current age (year) at the street		≤ 12	418 (37.7)
5-9	211 (19.0)	13-24	240 (21.7)
10-14	729 (65.8)	25-36	149 (13.4)
15-18	168 (15.2)	37-48	93 (8.4)
		49-60	90 (8.1)
		61+	118 (10.6)

Note: () indicates percentage of respondents

4.2 Estimation of age specific death rates and probability of dying (q_x) of street children

To estimate age specific death rates (ASDRs) a standard formula $\frac{D_x}{C_x}$ is used. Here D_x is the number of deaths at age x of the total population and C_x is the total midyear population at age x . So this rate needs the information of total death at age x of population. But the present data provide the information of death at age x of the street children only. So, to have a meaningful rate these information of deaths of street children was converted to their corresponding information of death of population.

At first proportion of sample street children has been calculated as $P_x = \frac{c_x}{c}$ where P_x is the proportion of street children at age x , c_x is the number of street children at age x in the sample and c is the total number of street children in the age 5-18 years in the sample. The total children in the population corresponding to the sample proportion was estimated as $C_x = p_x \times C$, where C is the total children in the age 5-18 years of census year 2011.

In the same fashion the death information of population has been estimated. The death information of street children in the sample was fluctuating in nature. To remove this fluctuations initially 3 years moving average technique has been used to get $\hat{d}_x$. Then the resulting information of death ($\hat{d}_x$) has been smoothed using '4253H twice' and extrapolation technique to get $\hat{\hat{d}}_x$ which has been shown in the column 7 of Table 4.2.

Now Proportion has been calculated as $p_{\hat{\hat{d}}}(x) = \frac{\hat{\hat{d}}_x}{\hat{\hat{d}}}$. Then the information of estimated death of population corresponding to sample deaths have been calculated as $D_x = p_{\hat{\hat{d}}}(x) \times D$ where D is the total death in the age 5-18 years of population which is

obtained from census 2011. Finally the ASDRs and q_x have been calculated from our standard formula ASDRs= $\frac{D_x}{C_x}$ and $q_x = \frac{2_n m_x}{2+_n m_x}$.

Table 4.2 Estimation of age specific death rates and probability of dying

1	2	3	4	5	6	7	8	9	10	11
Age x	No. of street children c_x	Proportion $p_x = \frac{c_x}{c}$	Estimated Children $C_x = p_x \times C$	No. of death street children d_x	Moving average of d_x $\hat{d}_x$	Smoothing of $\hat{d}_x$ $\hat{\hat{d}}_x$	Proportion $p_{\hat{d}}(x) = \frac{\hat{\hat{d}}_x}{\hat{d}}$	Estimated Death $D_x =$ $p_{\hat{d}}(x) \times D$	ASDRs, $m_x =$ $\frac{D_x}{C_x}$	$q_x =$ $\frac{2m_x}{2 + m_x}$
5	2	0.001805	81424.86101	4		2.5851	0.034	1225.222	0.015047	0.014935
6	21	0.018953	854961.0406	3	4.33	4.33000	0.057	2052.228	0.002400	0.002397
7	50	0.045126	2035621.525	6	4.67	4.91000	0.064	2327.122	0.001143	0.001143
8	65	0.058664	2646307.983	5	4.67	6.58312	0.086	3120.106	0.001179	0.001178
9	73	0.065884	2972007.427	3	9.67	8.63562	0.113	4092.900	0.001377	0.001376
10	170	0.153430	6921113.186	21	9.67	9.46750	0.124	4487.174	0.000648	0.000648
11	129	0.116426	5251903.535	5	12	9.01867	0.118	4274.449	0.000814	0.000814
12	193	0.174188	7857499.088	10	6.67	7.71926	0.101	3658.586	0.000466	0.000466
13	134	0.120939	5455465.688	5	6.33	6.21246	0.081	2944.43	0.000540	0.000540
14	103	0.092960	4193380.342	4	4.66	5.10184	0.067	2418.045	0.000577	0.000576
15	75	0.067690	3053432.288	5	4.33	4.28184	0.056	2029.402	0.000665	0.000664
16	56	0.050542	2279896.108	4	3.67	3.52188	0.046	1669.215	0.000732	0.000732
17	23	0.020758	936385.9016	2	2.67	2.67000	0.035	1265.461	0.001351	0.001351
18	14	0.012635	569974.0271	2		1.3665	0.018	647.6603	0.001136	0.001136
Total c=1108			C=4510937*	79		$\hat{\hat{d}}=76.40379$		D=36212*		

*BBS (2011)

4.3 Pattern of probability of dying of street children of Dhaka City in Bangladesh

The graph of probability of dying shown in the Figure 4.1 indicates the pattern of probability of dying of street children of Dhaka City in Bangladesh. It is seen that the probability of dying at age 5 years is the highest. The probability of dying for the subsequent ages declined drastically. The probability of dying at age 6 to 18 years are more or less same but fluctuating in nature. This is an expected pattern of probability of dying of Bangladesh population.

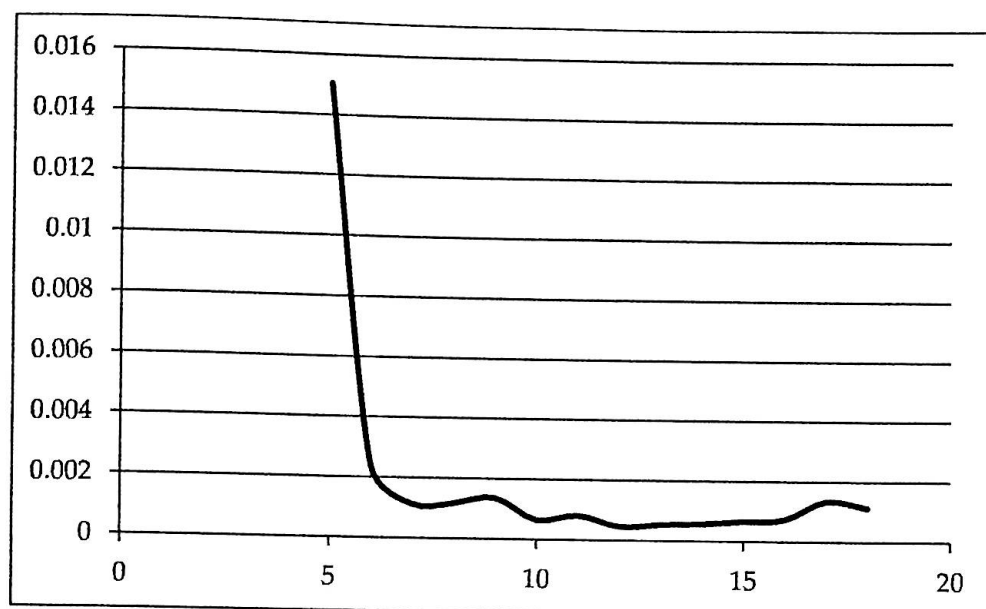


Figure 4.1 The graph of probability of dying. X: Age in years and Y: Probability of dying.

4.4 Model fitting of age structure of street children of Dhaka City in Bangladesh

It seems from the scattered plot for the street children by age in years (Figure 4.2) that it can be distributed by polynomial model for different ages. Therefore, an n^{th} degree polynomial model is selected and the structural formula of this model is given by

$$y = a_0 + \sum_{i=1}^n a_i x^i + u \quad (\text{Montgomery and Peck, 1982}),$$

where, x is the mid value of the age group; y is the number of street children; a_0 is the constant; a_i is the coefficient of x^i ($i = 1, 2, 3, \dots, n$) and u is the error term of the model.

In this case, an appropriate n is chosen such that the error sum of square is minimum.

Note that this model is fitted using the software STATISTICA.

The fitted polynomial model of the street children of Dhaka City in Bangladesh is as follows.

$y=544.450-278.030x+47.843x^2-3.092x^3+0.067x^4.....(i)$

providing $R^2= 0.9933$ and ρ_{cv}^2 is 0.9845.

The estimated CVPP corresponding to R^2 is shown in Table 4.3. From this table it is seen that the fitted model is highly cross-validated with their large proportion of variance explained. Moreover, from this table, it is shown that the parameters of the fitted model are statistically significant. Furthermore, from the last column of Table 4.3, it is found that the model and its corresponding R^2 are highly statistically significant in accordance with F-statistics. In addition, the shrinkage coefficient of the model is very small (0.008853571) and the stability of R^2 of the model is very large (0.991146) which indicating the better fit of the model. So, the model is well fitted.

Table 4.3 The results of CVPP and information on model fittings

Models	Estimated parameters	t-value	P-value of the parameters	R^2	ρ_{cv}^2	Cal. F	Tab. F at 1% level
(i)				0.9933	0.9845	953.54	6.42 with (4, 9) d.f.
	a_0	5.53917	0.000361				
	a_1	-6.93277	0.000068				
	a_2	8.29379	0.000017				
	a_3	-8.85090	0.000010				
	a_4	8.81463	0.000010				

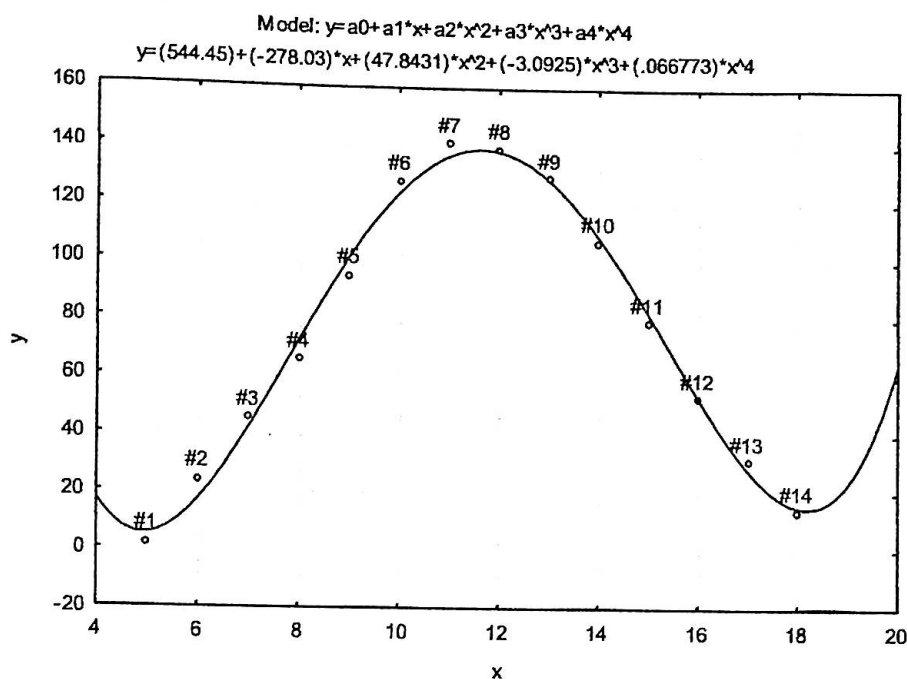


Figure 4.2 The graph of observed and fitted street children. X: Age in years and Y: Number of street children.

4.5 Migration rate of street children for both sexes

Migration is one of the most important components of demographic analysis. The word migration we mean that a person changes his usual place of residence or working place for a certain period of time. The migration is classified as internal and international migration. Again the internal migration may be classified as (i) Urban to Urban (ii) Urban to Rural (iii) Rural to Urban (iv) Rural to Rural. In our study we were considering the internal migration only. Since the study was carried out in the urban area (Dhaka city) and the information about the urban place of birth other than Dhaka city was not specified. So, the incidence of migration from rural to urban is available. To find out this migration rate Table 4.3 has been constructed. The Table 4.3 exhibits the four types of internal migration. It is evident from the table that there exists a migration of street children from rural to urban.

Table 4.4 Migration of street children for both sexes

		Place of birth		Total
		Urban	Rural	
Place of residence	Urban	288	820	1108
	Rural	0	0	0
Total		288	820	1108

It is seen from the above table that out of 1108 street children 820 came from the rural area and they were living in the Dhaka city. So, the migration rate of street children for

both sexes is $MR = \frac{820}{1108} \times 100 = 74\%$

4.5.1 Sex differential in migration

To study the sex differential in migration we have to calculate the migration rates for male street children and for female street children and then the difference between these two migration rates will exhibit the sex differential in migration rate.

To calculate the migration rate of male street children Table 4.5 has been constructed.

Table 4.5 Migration for male street children

		Place of birth		Total
		Urban	Rural	
Place of residence	Urban	234	707	941
	Rural	0	0	0
Total		234	707	941

It is seen from Table 4.5 that out of 941 male street children 707 came from rural area.

So, the migration rate for male street children has been calculated as:

$MR = \frac{707}{941} \times 100 = 75.13\%$

To calculate the migration rate of female street children Table 4.6 has been constructed.

Table 4.6 Migration for female street children

		Place of birth		Total
		Urban	Rural	
Place of residence	Urban	54	113	167
	Rural	0	0	0
Total		54	113	167

It is seen from Table 4.6 that out of 167 female street children 113 came from rural area.

So, the migration rate of female street children is $MR = \frac{113}{167} \times 100 = 67.66\%$

As the migration rate of male and female are not equal, so there exists a sex differential.

The migration rate of male street children is 7.47% higher than that of female street children.

4.5.2 Differential in migration rates for types of street children

To study the differential in migration rates of different types of street children, migration rates for four types of children have been calculated and then the difference among these migration rates will exhibit the differential in migration rates for four types of children.

To calculate the migration rate of the street living children Table 4.7 has been constructed.

Table 4.7 Migration of street living children

		Place of birth		Total
		Urban	Rural	
Place of residence	Urban	75	196	271
	Rural	0	0	0
Total		75	196	271

It is seen from Table 4.7 that out of 271 street living children 196 came from rural area.

So, the migration rate of street living children is $MR = \frac{196}{271} \times 100 = 72.32\%$

To calculate the migration rate of the street working children Table- 4.8 has been constructed.

Table 4.8 Migration of street working children

		Place of birth		Total
		Urban	Rural	
Place of residence	Urban	109	388	497
	Rural	0	0	0
Total		109	388	497

It is seen from Table 4.8 that out of 497 street working children 388 came from rural area.

So, the migration rate of street working children is $MR = \frac{388}{497} \times 100 = 78.08\%$

To calculate the migration rate of the children from street family Table 4.9 has been constructed.

Table 4.9 Migration of street children from street families

		Place of birth		Total
		Urban	Rural	
Place of residence	Urban	33	77	110
	Rural	0	0	0
Total		33	77	110

It is seen from Table 4.9 that out of 110 street children from street families 77 came from rural area.

So, the migration rate of children from street families is $MR = \frac{77}{110} \times 100 = 70.00\%$

To calculate the migration rate of the children who were in institutional care Table 4.10 has been constructed.

Table 4.10 Migration of Children who were in institutional care

		Place of birth		Total
		Urban	Rural	
Place of residence	Urban	71	159	230
	Rural	0	0	0
Total		71	159	230

It is seen from Table 4.10 that out of 230 children from institutional care 159 came from rural area.

So, the migration rate of children from institutional care is

$$MR = \frac{159}{230} \times 100 = 69.13\%$$

The above four tables provide the following migration rates:

- (i) The migration rate of street children for street living children is 72.32%
- (ii) The migration rate of street working children is 78.08%
- (iii) The migration rate of street children from street families is 70.00%
- (iv) The migration rate of street Children who were in institutional care is 69.13%

The above results show that the rural to urban migration for different types of children are different. Migration rate for street working children is highest (78.08%) followed by street living children (72.32%), then children from street living families (70.00%) and Children who were in institutional care (69.13%).

4.5.3 Differential in migration rates for fathers’ education

To study the differential in migration rates of fathers’ education of street children, migration rates for literate and illiterate fathers have been calculated and then the difference between these migration rates will exhibit the differential in migration rates for fathers’ education of children.

To calculate the migration rate of the street children of illiterate fathers Table 4.11 has been constructed.

Table 4.11 Migration of street children of illiterate fathers

		Place of birth		Total
		Urban	Rural	
Place of residence	Urban	142	438	580
	Rural	0	0	0
Total		142	438	580

It is seen from Table 4.11 that out of 580 street children of illiterate fathers 438 came from rural area.

So, the migration rate of street children of illiterate fathers is $MR = \frac{438}{580} \times 100 = 75.52\%$

To calculate the migration rate of the street children of literate fathers Table 4.12 has been constructed.

Table 4.12 Migration of street children of literate fathers

		Place of birth		Total
		Urban	Rural	
Place of residence	Urban	146	382	528
	Rural	0	0	0
Total		146	382	528

It is seen from Table 4.12 that out of 528 street children of literate father 382 came from rural area.

So, the migration rate of street children of literate fathers is $MR = \frac{382}{528} \times 100 = 72.35\%$

As the migration rate of street children of literate father and illiterate father are not equal, so there exists a differential in fathers' education. The migration rate of the street children of illiterate father is 3.17% higher than that of the literate father

4.5.4 Differential in migration rates for mothers' education

To study the differential in migration rates of mothers' education of street children, migration rates for literate and illiterate mothers have been calculated and then the difference between these migration rates will exhibit the differential in migration rates for mothers' education of children.

To calculate the migration rate of the street children of illiterate mothers Table 4.13 has been constructed.

Table 4.13 Migration of street children of illiterate mothers

		Place of birth		Total
		Urban	Rural	
Place of residence	Urban	149	480	629
	Rural	0	0	0
Total		149	480	629

It is seen from Table 4.13 that out of 629 street children of illiterate mothers 480 came from rural area.

So, the migration rate of street children of illiterate mothers is $MR = \frac{480}{629} \times 100 = 76.31\%$

To calculate the migration rate of the street children of literate mothers Table 4.14 has been constructed.

Table 4.14 Migration of street children of literate mothers

		Place of birth		Total
		Urban	Rural	
Place of residence	Urban	139	340	479
	Rural	0	0	0
Total		139	340	479

It is seen from Table 4.14 that out of 479 street children of literate mothers 340 were from rural area.

So, the migration rate of street children of literate mothers is $MR = \frac{340}{479} \times 100 = 71.00\%$

As the migration rate of street children of literate mother and illiterate mother are different, so there exists a differential in mothers' education. The migration rate of the street children of illiterate mothers is 5.31% higher than that of the literate mothers.

4.5.5 Differential in migration rates for ever injury and never injury of street children

To study the differential in migration rates of injured street children, migration rates for ever injured and never injured street children have been calculated and then the difference between these migration rates will exhibit the differential in migration rates for ever injured street children.

To calculate the migration rate of the street children who were ever injured Table 4.15 has been constructed.

Table 4.15 Migration of the street children who were ever injured

		Place of birth		Total
		Urban	Rural	
Place of residence	Urban	104	253	357
	Rural	0	0	0
Total		104	253	357

It is seen from Table 4.15 that out of 357 street children who were ever injured, 253 came from rural area.

So, the migration rate of street children who were ever injured is

$$MR = \frac{253}{357} \times 100 = 70.87\%$$

To calculate the migration rate of the street children who were never injured Table 4.16 has been constructed.

Table 4.16 Migration of street children who were never injured

		Place of birth		Total
		Urban	Rural	
Place of residence	Urban	184	567	751
	Rural	0	0	0
Total		184	567	751

It is seen from Table 4.16 that out of 751 never injured street children, 567 came from rural area.

So, the migration rate of street children were never injured is $MR = \frac{567}{751} \times 100 = 75.50\%$

As the migration rate of ever injured street children and never injured street children are different, so there exists a differential in ever injured street children. The migration rate of the never injured street children is 4.63% higher than that of the ever injured street children.

4.5.6 Differential in migration rates for ever sickness and never sickness of street children

To study the differential in migration rates of sickness of the street children, migration rates for ever sickness and never sickness of the street children have been calculated and then the difference between these migration rates will exhibit the differential in migration rates for ever sickness of the street children.

To calculate the migration rate of the street children who were ever sick Table 4.17 has been constructed.

Table 4.17 Migration of the street children who were ever sick

		Place of birth		Total
		Urban	Rural	
Place of residence	Urban	238	649	887
	Rural	0	0	0
Total		238	649	887

It is seen from Table 4.17 that out of 887 street children who were ever sick, 649 came from rural area.

So, the migration rate of street children who were ever sick is $MR = \frac{649}{887} \times 100 = 73.17\%$

To calculate the migration rate of the street children who were never sick Table 4.18 has been constructed.

Table 4.18 Migration of street children who were never sick

		Place of birth		Total
		Urban	Rural	
Place of residence	Urban	50	171	221
	Rural	0	0	0
Total		50	171	221

It is seen from Table 4.18 that out of 221 street children who were never sick, 171 came from rural area.

So, the migration rate of street children were never sick is $MR = \frac{171}{221} \times 100 = 77.38\%$

As the migration rate of ever sickness of street children and never sickness of street children are different, so there exists a differential in ever sickness of the street children. The migration rate of the never injured street children is 4.21% higher than that of the ever injured street children.

Chapter 5

Economic Characteristics of the Street Children

Chapter 5

Economic Characteristics of the Street Children

Economic activities are important for a particular group of people. The street children are involved in different types of economic activities. Some of these activities are very risky for them. Some selected characteristics such as saving money, earning per day, Ability to meet up required expenses and working hours per day have been studied in this chapter. The determinants of a particular character have also been identified using logistic regression model. Therefore the specific objectives of this chapter are as follows:

- i) To observe the distribution of street children for various categories of economic Characteristics.
- ii) To identify the associated factors for saving money, earnings per day, ability to meet up their required expenses and working hours per day of street children.
- iii) To find out the effect of the associated factors on the above four Characteristics of street children.

5.1 Distribution of the street children by their economic characteristics

The distributions of street children by economic characteristics have been presented in Table 3.2. It was found that 6.4% , 33.4% , 15.0% and 26.9% of the street children's fathers' occupations were farming, labour, small business and rickshaw/van puller/driving respectively. It was also found that 11.9%, 5.7%, 34.7% and 39.9% of the street children's mothers' occupations were labour, small business, maid servant and housewife respectively. It was observed that the 16.6%, 32.1%, 18.3%, 28.1% and 4.9%

of the street children were involved in small business, tokai, coolie/minti, labour and begging respectively which is almost similar estimate of the study of Khatun and Jamil (2013). It was seen that 21.8%, 33.6% and 44.6% of the street children whose working hours per day were <5, 5-7 and 8+ hours respectively and the average working hours per week was 51.59 hours which is also closer estimate of Pinzon-Rondon et al. (2009). The average working hours per day was 7.37 hours. It was also seen that 30.0% and 70% of the street children whose working days per week were <7 days and 7 days respectively. It was revealed that 62.7% and 37.3% of the street children whose earnings per day were <BDT 100 and BDT 100+ per day which gave the approximate average income BDT 118.08 per day. It is a closer estimate of Kalimbira and Chipwatali (2007), Chowdhury et al. (2017) and nearly double amount found by Khatun and Jamil (2013) and Subarna et al. (2014), it may be achievable due to the working of the children in the capital city. It was also revealed that 43.8% of the street children saved money and 56.2% did not save money which is the closer estimate of Conticini (2005). It was found that 9.6% of the street children saved all of earnings and 90.4% saved part of their earnings. It was observed that 51.6% of the street children had ability to meet up their required expenses and 48.4% had no ability. It was also observed that 3.4%, 14.9%, 39.4% and 42.4% of the street children managed their expenditure on loan, begging, parents and institution respectively. It was seen that fathers' income per day of 39.5% and 60.5% of the street children were < BDT 300 and BDT 300+ respectively. It was also seen that mothers' income per day of 78.8% and 21.2% of the street children's were < BDT 200 and BDT 200+ respectively.

Table 5.1 Percentage distribution of economic characteristic of the street children

Background characteristics	Number of respondents (%)	Background characteristics	Number of respondents (%)
Father's occupations		Earnings per day	
Farming	71 (6.4)	<BDT 100	672 (62.7)
Labour	370 (33.4)	BDT 100+	399 (37.3)
Small business	166 (15.0)	Saving money	
Rickshaw/van puller/ driving	298 (26.9)	Yes	469 (43.8)
Others (Begging, kabiraji, jobless, etc.)	203 (18.3)	No	602 (56.2)
Mother's occupations		Saving amount	
Labour	132 (11.9)	Saving all of earning	45 (9.6)
Small business	63 (5.7)	Saving some of earning	424 (90.4)
Maid servant	384 (34.7)	Ability to meet up required expenses	
Housewife	442 (39.9)	Yes	572 (51.6)
Others (begging, singer, tokai etc.)	87 (7.9)	No	536 (48.4)
Types of work		Managing expenditure	
Small business	178 (16.6)	Loan	18 (3.4)
Tokai	344 (32.1)	Begging	80 (14.9)
Coolie/mini	196 (18.3)	Parents give	211 (39.4)
Labour	301 (28.1)	Institution give	227 (42.4)
Begging	52 (4.9)	Fathers' income per day	
Working hours per day		< BDT 300	352 (39.5)
<5	233 (21.8)	BDT 300+	540 (60.5)
5-7	360 (33.6)	Mothers' income per day	
8+	478 (44.6)	< BDT 200	777 (78.8)
Working days per week		BDT 200+	209 (21.2)
<7	321 (30.0)		
7	750 (70.0)		

Note: () indicates percentage of respondents

5.2 Saving money of street children

In the economic activities saving money is very important for the development of every person. The nature of saving of street children has been studied in this section. It was found that some street children saved money from their earnings and some of them did not save money. The saving money of street children has been considered as dependent variable which has been classified in the following way:

$$Y = \text{Saving money} = \begin{cases} 1, & \text{yes} \\ 0, & \text{no} \end{cases}$$

5.2.1 Bivariate distribution of saving money of street children by their background characteristics

The bivariate distribution of saving money of street children with their background characteristics have been presented in Table 5.2. It was found that 40.6%, 41.3%, 29.4% and 62.4% of “street living children”, “street working children”, “children from street families” and “Children who were in institutional care ” respectively saved money. It was also found that 43.5% of the male street children and 45.5% of the female street children saved money. It was observed that 39.6%, 43.5%, 38.8% and 47.1% of street children who were interviewed at mazar, railway station/bus stand/launch ghat, kachabazar, park and institution respectively saved money. It was also observed that 44.5% and 37.5% of the street children whose reasons of become street children were poverty and step parents/none for caring respectively saved money. It was revealed that 29.8%, 45.5% and 54.1% of the street children who were in the age group 5-9, 10-14, 15-18 years respectively saved money. It was also revealed that 60.7%, 39.0%, 39.3%, 43.2% and 38.5% of the street children who were engaged in small business, tokai, coolie/minti, labour and begging respectively saved money. It was seen that 45.1%, 46.9% and 40.8% of the street children whose working hours per day were <5, 5-7, 8+ hours respectively saved money. It was also seen that 37.7% and 46.4% of street children whose working days per week were <7 and 7 days respectively saved money. It was revealed that 39.7% and 50.6% of the street children whose earnings per day were < BDT 100 and BDT 100+ respectively saved money. It was seen that 44.0% and 43.1% of the street children whose places of birth were rural and urban respectively saved money. It was also seen that 50.6% and 39.3% of the street children who were attending school and not attending school respectively saved money. It was also revealed that 46.3% and 36.4% of the street children who were ever attending school and never attending

respectively saved money. It was found that 39.3%, 47.9% and 51.2% of the street children whose fathers' education levels were illiterate, primary and secondary+ respectively saved money. It was also found that 40.4%, 46.7% and 56.9% of the street children whose mothers' education levels were illiterate, primary and secondary+ respectively saved money. It was observed that 61.5%, 41.9%, 44.1%, 42.7% and 42.6% of the street children whose fathers' occupations were farming, labour, small business, rickshaw/van puller/ driving and others respectively saved money. It was also observed that 38.6%, 42.9%, 43.3%, 46.5% and 40.5% of the street children whose mothers' occupations were labour, small business, maid servant, housewife and others respectively saved money. It was seen that 42.6%, 45.5% and 48.7% of the street children whose parents' compositions were both father and mother, step parents and only father or mother/none respectively saved money. It was also seen that 43.2% and 43.7% of the street children whose fathers' income per day was <BDT 300 and BDT 300+ respectively saved money. It was revealed that 43.6% and 45.0% of the street children whose mothers' income per day was <BDT 200 and BDT 200+ respectively saved money. It was also revealed that 46.8%, 40.0%, 37.0% and 63.2% of the street children who collected their food from street shop, begging, home and institution respectively saved money. Based on BMI it was found that 31.5%, 43.9% and 47.7% of the street children who were under weight, normal weight and overweight/obese respectively saved money. It was also found that 44.2% and 43.7% of the street children who were smoker and non-smoker respectively saved money. It was observed that 40.9% and 44.0% of the street children who were addicted and not addicted respectively saved money. It was also observed that 44.0% and 43.7% of the street children who were sick and not sick respectively saved money. It was revealed that 43.7% of the street children who were suffered from sickness at least once in their lives and 44.0% who were never suffered saved money. It was also

revealed that 49.5% of the street children who were injured during the interview and 43.2% who were not injured saved money. It was found that 49.7% of the street children who were injured at least once in their lives and 40.9% who were never injured saved money. It was also found that 46.5% of the street children who went to recognized physicians during their sickness/injury and 29.1% who did not go to recognized physicians during their sickness/injury saved money. It was observed that 47.2% of the street children who took allopathic treatment and 37.0% who took others treatment saved money.

The χ^2 -test demonstrated that the association between money saving of street children and types of street children ($p < 0.01$), current age ($p < 0.01$), types of work ($p < 0.01$), working days per week ($p < 0.01$), earnings per day ($p < 0.01$), currently attending school ($p < 0.01$), ever attending school ($p < 0.01$), fathers' education levels ($p < 0.01$), mothers' education levels ($p < 0.05$), fathers' occupations ($p < 0.06$), food collection ($p < 0.01$), ever injury ($p < 0.01$) and going to recognized physicians ($p < 0.01$) were statistically significant whereas gender of street children, places of interview, reasons of becoming street children, working hours per day, place of birth, mothers' occupations, parents' compositions, fathers' income per day, mothers' income per day, BMI, smoking practice, drug addiction, sickness, ever sickness, injury, types of treatment were not statistically significant.

Table 5.2 Bivariate distribution of money savings of street children by their background characteristics

Background characteristics	Money savings		χ^2 - values (p-values)
	Yes	No	
Types of street children			39.427 (0.000)
Street living children	110 (40.6)	161 (59.4)	
Street working children	204 (41.3)	290 (58.7)	
Children from street families	32 (29.4)	77 (70.6)	
Children who are institutional care	123 (62.4)	74 (37.6)	

Gender of street children			
Male			0.202
Female	399 (43.5)	518 (56.5)	(0.653)
Places of interview	70 (45.5)	84 (54.5)	
Mazar			4.484
Railway station/bus stand/launch terminal	21 (39.6)	32 (60.4)	(0.214)
Kachabazar	167 (43.5)	217 (56.5)	
Park/institution	83 (38.8)	131 (61.2)	
Reasons of becoming street children	198 (47.1)	222 (52.9)	
Poverty			1.983
Step parents/none for caring	429 (44.5)	535 (55.5)	(0.159)
Current age (in years)	40 (37.4)	67 (62.6)	
5-9			24.138
10-14	61 (29.8)	144 (70.2)	(0.000)
15-18	322 (45.5)	385 (54.5)	
Types of work	86 (54.1)	73 (45.9)	
Small business			26.144
Tokai	108 (60.7)	70 (39.3)	(0.000)
Coolie/minti	134 (39.0)	210 (61.0)	
Labour	77 (39.3)	119 (60.7)	
Begging	130 (43.2)	171 (56.8)	
Working hours per day	20 (38.5)	32 (61.5)	
<5	105 (45.1)	128 (54.9)	3.351
5-7	169 (46.9)	191 (53.1)	(0.187)
8+	195 (40.8)	283 (59.2)	
Working days per week			6.921
<7	121 (37.7)	200 (62.3)	(0.009)
7	348 (46.4)	402 (53.6)	
Earnings per day			12.072
<BDT 100	267 (39.7)	405 (60.3)	(0.001)
BDT 100+	202 (50.6)	197 (49.4)	
Places of birth			0.069
Rural	350 (44.0)	445 (56.0)	(0.793)
Urban	119 (43.1)	157 (56.9)	
Currently attending school			13.412
Yes	217 (50.6)	212 (49.4)	(0.000)
No	252 (39.3)	390 (60.7)	
Ever attending school			8.098
Yes	370 (46.3)	429 (53.7)	(0.004)
No	99 (36.4)	173 (63.6)	
Fathers' education levels			10.089
Illiterate	220 (39.3)	340 (60.7)	(0.006)
Primary	185 (47.9)	201 (52.1)	
Secondary+	64 (51.2)	61 (48.8)	
Mothers' education levels			9.226
Illiterate	246 (40.4)	363 (59.6)	(0.010)
Primary	182 (46.7)	208 (53.3)	
Secondary+	41 (56.9)	31 (43.1)	
Fathers' occupations			9.066
Farming	40 (61.5)	25 (38.5)	(0.059)
Labour	151 (41.9)	209 (58.1)	
Small business	71 (44.1)	90 (55.9)	

Rickshaw/van puller/ driving	123 (42.7)	165 (57.3)	
Others (Begging, kabiraji, jobless, etc.)	84 (42.6)	113 (57.4)	
Mothers' occupations			3.122
Labour			(0.538)
Small Business	49 (38.6)	78 (61.4)	
Maid Servant	27 (42.9)	36 (57.1)	
Housewife	159 (43.3)	208 (56.7)	
Others (Begging, singer, tokai etc.)	200 (46.5)	230 (53.5)	
	34 (40.5)	50 (59.5)	
Parents' compositions			2.184
Father and mother			(0.335)
Step Parents	337 (42.6)	455 (57.4)	
Only father or mother/ none	56 (45.5)	67 (54.5)	
	76 (48.7)	80 (51.3)	
Fathers' income per day			0.024
<BDT 300			(0.878)
BDT 300+	146 (43.2)	192 (56.8)	
	230 (43.7)	296 (56.3)	
Mothers' income per day			0.133
<BDT 200			(0.716)
BDT 200+	328 (43.6)	424 (56.4)	
	91 (45.0)	111 (55.0)	
Food collection			33.264
Street Shop			(0.000)
Begging	154 (46.8)	175 (53.2)	
Home made	36 (40.0)	54 (60.0)	
Institution	188 (37.0)	320 (63.0)	
	91 (63.2)	53 (36.8)	
BMI			4.308
Underweight			(0.116)
Normal weight	17 (31.5)	37 (68.5)	
Overweight/obese	378 (43.9)	484 (56.1)	
	74 (47.7)	81 (52.3)	
Smoking practice			0.022
Yes			(0.881)
No	96 (44.2)	121 (55.8)	
	373 (43.7)	481 (56.3)	
Drug addiction			0.323
Yes			(0.570)
No	36 (40.9)	52 (59.1)	
	433 (44.0)	550 (56.0)	
Sickness			0.006
Yes			(0.938)
No	85 (44.0)	108 (56.0)	
	384 (43.7)	494 (56.3)	
Ever sickness			0.007
Yes			(0.935)
No	373 (43.7)	480 (56.3)	
	96 (44.0)	122 (56.0)	
Injury			1.442
Yes			(0.230)
No	49 (49.5)	50 (50.5)	
	420 (43.2)	552 (56.8)	
Ever injury			7.546
Yes			(0.006)
No	176 (49.7)	178 (50.3)	
	293 (40.9)	424 (59.1)	
Going to recognized physicians			14.760
Yes			(0.000)
No	357 (46.5)	410 (53.5)	
	41 (29.1)	100 (70.9)	
Types of treatment			1.808
Allopathic			(0.179)
Others	340 (47.2)	381 (52.8)	
	17 (37.0)	29 (63.0)	

Note: () indicates percentage of respondents

5.2.2 Determinants of saving money of street children

The effects of different characteristics on saving money of street children have been presented in Table 5.3. The information of model fitting is shown at the bottom of the Table. It was indicated that the model was better fit due to smallest shrinkage coefficient (0.0206). It was found that the saving money of street working children (OR=1.444, CI: 0.940-2.218) and the children who were in institutional care (OR=2.617, CI: 1.377-4.975) was more likely than that of street living children. It was also found that the saving money of street children who were engaged as tokai (OR=0.478, CI: 0.318-0.720), coolie/minti (OR=0.505, CI: 0.317-0.805) and labour (OR=0.518, CI: 0.343-0.783) was less likely than the street children who were engaged in small business. It was revealed that the saving money of street children whose earnings per day were BDT 100+ (OR=1.411, CI: 1.026-1.940) was more likely than the street children whose earnings per day were <BDT 100. It was also revealed that the saving money of street children whose fathers' occupations were labour (OR=0.400, CI: 0.225-0.710), small business (OR=0.380, CI: 0.200-0.724), rickshaw/van puller/driver (OR=0.435, CI: 0.239-0.789) and others (OR=0.400, CI: 0.216-0.714) respectively was less likely than the street children whose fathers' occupation was farming. It was observed that the saving money of street children who collected their food from home (OR=0.540, CI: 0.352-0.828) was less likely than the street children who collected their food from street shop. It was also observed that the saving money of street children who were injured at least once in their life (OR=1.341, CI: 0.999-1.800) was more likely than the street children who never suffered from injury. It was seen that the saving money of street children who went to recognized physicians (OR=1.731, CI: 1.146-2.614) was more likely than the street children who never go to recognized physicians.

Table 5.3 Effects of selected background characteristics on saving money of street children

Explanatory variables	Coefficients(β)	S.E of β	P-values	Odds ratio (OR)	95.0% C.I. for OR	
					Lower	Upper
Types of street children						
Street living children (r)	.....	.....	.....	1.000	.....	.....
Street working children	0.368	0.219	0.093	1.444	0.940	2.218
Children from street families	-0.014	0.306	0.963	0.986	0.542	1.794
Children who were in institutional care	0.962	0.328	0.003	2.617	1.377	4.975
Current age (in years)						
5-9(r)	.....	.....	.....	1.000	.....	.....
10-14	0.257	0.205	0.211	1.292	0.865	1.931
15-18	0.309	0.272	0.256	1.362	0.799	2.322
Types of work						
Small Business (r)	.....	.....	.....	1.000	.....	.....
Tokai	-0.737	0.209	0.000	0.478	0.318	0.720
Coolie/Minti	-0.684	0.238	0.004	0.505	0.317	0.805
Labour	-0.657	0.211	0.002	0.518	0.343	0.783
Begging	-0.308	0.380	0.417	0.735	0.349	1.547
Working days per week						
<7 (r)	.....	.....	.....	1.000	.....	.....
7	-0.007	0.157	0.963	0.993	0.729	1.352
Earnings per day						
< BDT 100 (r)	.....	.....	.....	1.000	.....	.....
BDT 100+	0.344	0.162	0.034	1.411	1.026	1.940
Currently attending school						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.266	0.200	0.185	1.304	0.881	1.932
Ever attending school						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	-0.066	0.197	0.737	0.936	0.637	1.376
Fathers' education levels						
Illiterate (r)	.....	.....	.....	1.000	.....	.....
Primary	0.231	0.167	0.166	1.260	0.908	1.748
Secondary+	0.086	0.255	0.736	1.090	0.660	1.798
Mothers' education levels						
Illiterate (r)	.....	.....	.....	1.000	.....	.....
Primary	0.087	0.165	0.597	1.091	0.790	1.506
Secondary+	0.513	0.312	0.100	1.670	0.906	3.078
Fathers' occupations						
Farming (r)	.....	.....	.....	1.000	.....	.....
Labour	-0.917	0.293	0.002	0.400	0.225	0.710
Small business	-0.967	0.329	0.003	0.380	0.200	0.724
Rickshaw/van puller/ driving	-0.833	0.305	0.006	0.435	0.239	0.789
Others (Begging, kabiraji, jobless, etc.)	-0.917	0.315	0.004	0.400	0.216	0.741

Food collection						
Street Shop (r)	.....	.....	.....	1.000	.....	.....
Begging	-0.312	0.294	0.289	0.732	0.411	1.304
Home made	-0.617	0.218	0.005	0.540	0.352	0.828
Institution	-0.214	0.317	0.500	0.808	0.434	1.503
Ever injury						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.294	0.150	0.050	1.341	0.999	1.800
Going to recognized physicians						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.548	0.210	0.009	1.731	1.146	2.614

Model summary: Model $\chi^2 = 122.996$ (0.000), -2 Log likelihood = 1135.759
Nagelkerke R square =0.169, ρ^2_{cv} =0.148, Shrinkage coefficient=0.0206
Stability of R square = 0.979

Note: r represents the reference category, CI represents the confidence interval

5.3 Earnings per day of street children

The earnings of the street children were critically examined in this section. It was found that the majority of street children were actively involved in various types of work and from these work they were earning money. These earnings have been estimated per day for our analysis. The ‘earnings per day’ of street children has been considered as dependent variable which has been classified in the following way:

Y= Earnings per day of street children

$$= \begin{cases} 1, \text{whose earnings per day were BDT 100+} \\ 0, \text{whose earnings per day were < BDT 100} \end{cases}$$

5.3.1 Bivariate distribution of earnings per day of street children by their background characteristics

The bivariate distribution of earnings per day of street children with their background characteristics have been presented in Table 5.4. It was found that the earnings per day of 48.0%, 41.9%, 25.7% and 17.3% of “street living children”, “street working children”, “children from street families” and “Children who were in institutional care ” respectively were BDT 100+. It was also found that earnings per day of 41.2% and 13.6%

of the street children who were male and female respectively were BDT 100+. It was observed that the earnings per day of 30.2%, 46.4%, 50.9% and 22% of street children who were interviewed at mazar, railway station/bus stand/launch terminal, kachabazar, park/institution respectively were BDT 100+. It was also observed that the earnings per day of 36.5% and 39.5% of the street children whose places of birth were rural and urban area respectively were BDT 100+. It was revealed that the earnings per day of 12.5%, 38.0% and 65.4% of the street children who were in the age group 5-9, 10-14, 15-18 years respectively were BDT 100+. It was also revealed that the earnings per day of 47.8%, 24.4%, 60.2%, 22.6% and 21.2% of the street children who were engaged in small business, tokai, coolie/minti, labour and begging respectively were BDT 100+. It was seen that the earnings per day of 12.0%, 34.4% and 51.7% of the street children whose working hours per day were <5, 5-7, 8+ hours respectively were BDT100+. It was also seen that the earnings per day of 32.7% and 39.2% of street children whose working days per week were <7 and 7 days respectively were BDT 100+. It was revealed that the earnings per day of 43.1% and 32.7% of the street children who saved money and did not save money respectively were BDT 100+. It was seen that the earnings per day of 56.5% and 15.2% of the street children who were able and not able to maintain their own expenditure respectively were BDT 100+. It was also seen that the earnings per day of 23.5% and 46.4% of the street children who were currently attending and not attending school respectively were BDT 100+. It was shown that the earnings per day of 35.3% and 43.0% of the street children who were ever and never attending school respectively were BDT 100+. It was found that the earnings per day of 37.9%, 33.2% and 47.2% of the street children whose fathers' education levels were illiterate, primary and secondary+ respectively were BDT 100+. It was also found that the earnings per day of 34.8%, 37.9% and 54.2% of the street children whose mother's education levels were illiterate, primary

and secondary+ respectively were BDT 100+. It was observed that the earnings of 52.3%, 33.9%, 39.1%, 37.5% and 36.5% of the street children whose father's occupations were farming, labour, small business, rickshaw/van puller/ driving and others respectively were BDT 100+. It was also observed that the earnings per day of 30.7%, 41.3%, 32.4%, 44.2% and 29.8% of the street children whose mother's occupations were labour, small business, maid servant, housewife and others respectively were BDT 100+. It was seen that the earnings per day of 37.4%, 40.7% and 34.0% of the street children whose parents' compositions were both father and mother, step parents and only father or mother/none respectively were BDT 100+. It was also seen that the earnings per day of 31.1% and 39.5% of the street children whose fathers' incomes were < BDT 300 and BDT 300+ respectively were BDT 100+. It was revealed that the earnings per day of 37.2% and 38.1% of the street children whose mothers' income per day was < BDT 200 and BDT 200+ respectively were BDT 100+. Based on BMI it was revealed that the earnings per day of 14.8%, 36.8% and 47.7% of the street children who were under weight, normal weight and overweight/obese respectively were BDT 100+. It was found that the earnings per day of 59.0% and 31.7% of the street children who were smoker and non-smoker respectively were BDT 100+. It was also found that the earnings per day of 56.8% and 35.5% of the street children who were addicted and not addicted respectively were BDT 100+.

The χ^2 - test demonstrated that the association between earning per day of street children and types of street children ($p < 0.01$), gender of street children ($p < 0.01$), places of interview ($p < 0.01$), current age ($p < 0.01$), types of work ($p < 0.01$), working hours per week ($p < 0.01$), working days per week ($p < 0.01$), saving money ($p < 0.01$), Ability to meet up required expenses ($p < 0.01$), currently attending school ($p < 0.01$), ever attending school ($p < 0.05$), fathers' education levels ($p < 0.05$), mothers' education levels ($p < 0.01$),

mothers' occupations ($p < 0.01$), fathers' income per day ($p < 0.05$), BMI ($p < 0.01$), smoking practice ($p < 0.01$) and drug addiction ($p < 0.01$) were statistically significant. On other hand places of birth, fathers' occupations, parents' compositions and mothers' income per day was not statistically significant

Table 5.4 Bivariate distribution of earnings per day of street children by their background characteristics

Background characteristics	Earnings Per Day		χ^2 - values (p values)
	<BDT 100	BDT 100+	
Types of street children			57.813
Street living children	141 (52.0)	130 (48.0)	(0.000)
Street working children	287 (58.1)	207 (41.9)	
Children from street families	81 (74.3)	28 (25.7)	
Children who were in institutional care	163 (82.7)	34 (17.3)	
Gender of street children			42.922
Male	539 (58.8)	378 (41.2)	(0.000)
Female	133 (86.4)	21 (13.6)	
Places of interview			69.111
Mazar	37 (69.8)	16 (30.2)	(0.000)
Railway station/bus stand/launch terminal	206 (53.6)	178 (46.4)	
Kachabazar	105 (49.1)	109 (50.9)	
Park/Institution	324 (77.1)	96 (22.9)	
Places of birth			0.797
Rural	505 (63.5)	290 (36.5)	(0.372)
Urban	167 (60.5)	109 (39.5)	
Current age (in years)			107.056
5-9	179 (87.3)	26 (12.7)	(0.000)
10-14	438 (62.0)	269 (38.0)	
15-18	55 (34.6)	104 (65.4)	
Types of work			84.330
Small Business	93 (52.2)	85 (47.8)	(0.000)
Tokai	260 (75.6)	84 (24.4)	
Coolie/Minti	78 (39.8)	118 (60.2)	
Labour	200 (66.4)	101 (33.6)	
Begging	41 (78.8)	11 (21.2)	
Working hours per day			107.217
<5	205 (88.0)	28 (12.0)	(0.000)
5-7	236 (65.6)	124 (34.4)	
8+	231 (48.3)	247 (51.7)	
Working days per week			4.050
<7	216 (67.3)	105 (32.7)	(0.044)
7	456 (60.8)	294 (39.2)	
Saving money			12.072
Yes	267 (56.9)	202 (43.1)	(0.000)
No	405 (67.3)	197 (32.7)	

Ability to meet up required expenses			193.883
Yes	249 (43.5)	323 (56.5)	(0.000)
No	423 (84.8)	76 (15.2)	
Currently attending school			57.562
Yes	328 (76.5)	101 (23.5)	(0.000)
No	344 (53.6)	298 (46.4)	
Ever attending school			5.174
Yes	517 (64.7)	282 (35.3)	(0.023)
No	155 (57.0)	117 (43.0)	
Fathers' education levels			8.144
Illiterate	348 (62.1)	212 (37.9)	(0.017)
Primary	258 (66.8)	128 (33.2)	
Secondary+	66 (52.8)	59 (47.2)	
Mothers' education levels			10.446
Illiterate	397 (65.2)	212 (34.8)	(0.005)
Primary	242 (62.1)	148 (37.9)	
Secondary+	33 (45.8)	39 (54.2)	
Fathers' occupations			8.337
Farming	31 (47.7)	34 (52.3)	(0.080)
Labour	238 (66.1)	122 (33.9)	
Small business	98 (60.9)	63 (39.1)	
Rickshaw/van puller/ driving	180 (62.5)	108 (37.5)	
Others (Begging, kabiraji, jobless, etc.)	125 (63.5)	72 (36.5)	
Mothers' occupations			17.280
Labour	88 (69.3)	39 (30.7)	(0.002)
Small Business	37 (58.7)	26 (41.3)	
Maid Servant	248 (67.6)	119 (32.4)	
Housewife	240 (55.8)	190 (44.2)	
Others (Begging, singer, tokai etc.)	59 (70.2)	25 (29.8)	
Parents' compositions			1.330
Father and mother	496 (62.6)	296 (37.4)	(0.514)
Step Parents	73 (59.3)	50 (40.7)	
Only father or mother/ none	103 (66.0)	53 (34.0)	
Fathers' income per day			6.403
Below BDT 300	233 (68.9)	105 (31.1)	(0.011)
BDT 300+	318 (60.5)	208 (39.5)	
Mothers' income per day			0.053
Below BDT 200	472 (62.8)	280 (37.2)	(0.818)
BDT 200+	125 (61.9)	77 (38.1)	
BMI			19.010
Underweight	46 (85.2)	8 (14.8)	(0.000)
Normal weight	545 (63.2)	317 (36.8)	
Overweight/ obese	81 (52.3)	74 (47.7)	
Smoking practice			54.979
Yes	89 (41.0)	128 (59.0)	(0.000)
No	583 (68.3)	271 (31.7)	
Drug addiction			15.698
Yes	38 (43.2)	50 (56.8)	(0.000)
No	634 (64.5)	349 (35.5)	

Note: () indicates percentage of respondents

5.3.2 Determinants of earnings per day of street children

The effects of different characteristics on earning per day of street children have been presented in Table 5.5. The information of model fitting was shown at the bottom of the Table. It was revealed that the model was better fit due to smallest shrinkage coefficient (0.01902). Correlates of street children whose earnings per day were BDT 100+ have been discussed below:

It was found that the female street children (OR=0.522, CI: 0.271-1.008) were less likely than the male street children. It was also found that the street children who were interviewed at railway station/bus stand/launch terminal (OR=0.326, CI: 0.147-0.725) were less likely than the street children who were interviewed at mazar. It was revealed that the street children who were in the age group 15-18 years (OR=2.519, CI: 1.250-5.076) were more likely than the street children who were in the age group 5-9 years. It was also revealed that the street children who were engaged as tokai (OR=0.300, CI: 0.177-0.507), labour (OR=0.352, CI: 0.211-0.587) and begging (OR=0.253, CI: 0.093-0.690) respectively were less likely than the street children who were engaged in small business. It was observed that the street children whose working hours per day were 5-7 hours (OR=1.942, CI: 1.128-3.342) and 8+ hours (OR=2.482, CI: 1.429-4.310) respectively were more likely than the street children whose working hours per day were <5 hours. It was also observed that the street children whose working days per week were 7 days (OR=0.609, CI: 0.413-0.898) were less likely than the street children whose working days per week were <7 days. It was seen that the street children who were able to maintain their required expenditure (OR=4.238, CI: 2.843-6.316) were more likely than the street children who were not able to maintain their own expenditure. It was also seen that the street children whose mothers' education level was secondary+ (OR=2.046, CI: 1.014-4.129) were more likely than the street children whose mothers' education level

were illiterate. It was found that the street children whose mothers' occupations were others (Begging, singer, tokai etc.) (OR=0.443, CI: 0.175-1.118) were less likely than the street children whose mothers' occupation was labour. It was also found that the smoker street children (OR=1.568, CI: 0.946-2.600) were more likely than the non-smoker street children.

Table 5.5 Effects of selected background characteristics on earnings per day of street children

Explanatory variables	Coeffici- ents(β)	S.E of β	P- values	Odds ratio (OR)	95.0% C.I. for OR	
					Lower	Upper
Types of street children						
Street living children (r)	.....	.....	.....	1.000	.....	.....
Street working children	-0.373	0.243	0.124	0.689	0.428	1.108
Children from street families	-0.588	0.365	0.107	0.555	0.272	1.135
Children who were in institutional care	-0.427	0.415	0.304	0.652	0.289	1.473
Gender of street children						
Male (r)	.....	.....	.....	1.000	.....	.....
Female	-0.649	0.335	0.053	0.522	0.271	1.008
Places of interview						
Mazar (r)	.....	.....	.....	1.000	.....	.....
railway station/bus stand/launch terminal	-1.121	0.408	0.006	0.326	0.147	0.725
Kachabazar	-0.175	0.450	0.697	0.839	0.347	2.029
Park/Institution	-0.676	0.426	0.112	0.509	0.221	1.172
Current age (in years)						
5-9 (r)	.....	.....	.....	1.000	.....	.....
10-14	0.311	0.278	0.263	1.365	0.792	2.351
15-18	0.924	0.357	0.010	2.519	1.250	5.076
Types of work						
Small Business (r)	.....	.....	.....	1.000	.....	.....
Tokai	-1.205	0.268	0.000	0.300	0.177	0.507
Coolie/Minti	-0.343	0.296	0.247	0.710	0.397	1.269
Labour	-1.045	0.261	0.000	0.352	0.211	0.587
Begging	-1.375	0.512	0.007	0.253	0.093	0.690
Working hours per day						
<5 (r)	.....	.....	.....	1.000	.....	.....
5-7	0.664	0.277	0.017	1.942	1.128	3.342
8+	0.909	0.282	0.001	2.482	1.429	4.310
Working days per week						
<7 (r)	.....	.....	.....	1.000	.....	.....
7	-0.495	0.198	0.012	0.609	0.413	0.898
Saving money						
No	.....	.....	.....	1.000	.....	.....
Yes	0.224	0.180	0.215	1.250	0.879	1.780

Ability to meet up required expenses

No (r)	.....	.....	.....	1.000	.....	.....
Yes	1.444	0.204	0.000	4.238	2.843	6.316

Currently attending school

No (r)	.....	.....	.....	1.000	.....	.....
Yes	-0.119	0.241	0.621	0.888	0.554	1.423

Ever attending school

No (r)	.....	.....	.....	1.000	.....	.....
Yes	-0.261	0.220	0.234	0.770	0.501	1.184

Fathers' education levels

Illiterate (r)	.....	.....	.....	1.000	.....	.....
Primary	-0.300	0.204	0.140	0.741	0.497	1.104
Secondary+	0.214	0.298	0.471	1.239	0.692	2.220

Mothers' education levels

Illiterate (r)	.....	.....	.....	1.000	.....	.....
Primary	0.113	0.199	0.572	1.119	0.757	1.654
Secondary+	0.716	0.358	0.046	2.046	1.014	4.129

Mothers' occupations

Labour (r)	.....	.....	.....	1.000	.....	.....
Small Business	0.046	0.450	0.919	1.047	0.434	2.526
Maid Servant	-0.403	0.295	0.171	0.668	0.375	1.191
Housewife	-0.262	0.294	0.373	0.770	0.433	1.369
Others (Begging, singer, tokai etc.)	-0.815	0.472	0.085	0.443	0.175	1.118

Fathers' income per day

< BDT 300 (r)	.....	.....	.....	1.000	.....	.....
BDT 300+	0.145	0.179	0.418	1.157	0.814	1.644

BMI

Underweight (r)	.....	.....	.....	1.000	.....	.....
Normal weight	0.025	0.374	0.946	1.026	0.493	2.133
Overweight/ obese	-0.048	0.438	0.912	0.953	0.404	2.249

Smoking practice

No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.450	0.258	0.081	1.568	0.946	2.600

Drug addiction

No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.156	0.354	0.660	1.169	0.584	2.339

Model summary: Model $\chi^2 = 350.487$ (0.000), -2 Log likelihood = 847.271

Nagelkerke R square = 0.445, $\rho^2_{cv} = 0.426$, Shrinkage coefficient = 0.01902

Stability of R square = 0.9809

Note: r represents the reference category, CI represents the confidence interval

5.4 Ability to meet up required expenses of street children

In the economic activities expenditure of a person is an important factor. The street children were involved in spending their earning in various heads. It was observed that some of the street children were able to meet up their required expenses and some of them were not. The ability to meet up their required expenses of street children has been considered as dependent variable which has been classified in the following way:

$$Y = \text{Ability to meet up required expenses of street children} = \begin{cases} 1, & \text{yes} \\ 0, & \text{no} \end{cases}$$

5.4.1 Bivariate distribution of ability to meet up required expenses of street children by their background characteristics

The bivariate distribution of ability to meet up required expenses of street children with their background characteristics have been presented in Table 5.6. It was found that 76.8%, 54.9%, 36.4% and 22.2% of “street living children”, “street working children”, “children from street families” and “Children who were in institutional care ” respectively were able to maintain their required expenditure. It was also found that 57.4% and 19.2% of the street children who were male and female respectively were able to maintain their required expenditure. It was observed that 52.8%, 74.3%, 57.6% and 29.4% of street children who were interviewed at mazar, railway station/bus stand/launch terminal, kachabazar, park/institution respectively were able to bear their required expenditure. It was also observed that 51.5% and 52.1% of the street children whose places of birth were rural and urban respectively were able to maintain their required expenditure. It was revealed that 26.1%, 54.0% and 73.2% of the street children who were in the age group 5-9, 10-14, 15-18 years respectively were able to maintain their required expenditure. It was also revealed that 60.7%, 44.2%, 74.0%, 49.8% and 32.7% of the street children who were engaged in small business, tokai, coolie/minti, labour and begging respectively were able to maintain their required expenditure. It was seen that

24.5%, 50.0% and 70.1% of the street children whose working hours per day were <5, 5-7, 8+ hours respectively were able to maintain their required expenditure. It was also seen that 38.0% and 60.0% of street children whose working days per week were <7 and 7 days respectively were able to maintain their required expenditure. It was shown that 37.1% and 81.0% of the street children whose earnings per day were <BDT 100 and BDT 100+ respectively were able to maintain their required expenditure. It was revealed that 60.3% and 48.0% of the street children who saved money and did not save money respectively were able to maintain their required expenditure. It was seen that 31.3% and 66.2% of the street children who were currently attending and not currently attending school respectively were able to maintain their required expenditure. It was also seen that 48.1% and 62.3% of the street children who were ever and never attending school respectively were able to maintain their required expenditure. It was found that 50.0%, 52.0% and 57.5% of the street children whose fathers' education levels were illiterate, primary and secondary+ respectively were able to maintain their required expenditure. It was also found that 48.0%, 55.1% and 63.2% of the street children whose mothers' education levels were illiterate, primary and secondary+ respectively were able to maintain their required expenditure. It was observed that 76.1%, 49.5%, 55.4%, 45.3% and 53.2% of the street children whose fathers' occupations were farming, labour, small business, rickshaw/van puller/ driving and others respectively were able to maintain their required expenditure. It was also observed that 42.4%, 46.0%, 46.9%, 58.1% and 57.5% of the street children whose mothers' occupations were labour, small business, maid servant, housewife and others respectively were able to maintain their required expenditure. It was seen that 47.6%, 76.6% and 52.5% of the street children whose parents' compositions were both father and mother, step parents and only father or mother/none respectively were able to maintain their required expenditure. It was also

seen that 46.0% and 52.4% of the street children whose fathers' income per day was <BDT 300 and BDT 300+ respectively were able to maintain their required expenditure. It was revealed that 52.0% and 41.6% of the street children whose mothers' income were <BDT 200 and BDT 200+ respectively were able to maintain their required expenditure. Based on BMI it was revealed that 36.2%, 50.9% and 60.8% of the street children who were under weight, normal weight and Overweight/ obese respectively were able to maintain their required expenditure. It was found that 80.3% and 44.6% of the street children who were smoker and non-smoker respectively were able to maintain their required expenditure. It was also found that 75.0% and 49.6% of the street children who were addicted and were not addicted respectively were able to maintain their required expenditure.

The χ^2 - test demonstrated that the association between Ability to meet up required expenses of street children and types of street children ($p<0.01$), gender of street children ($p<0.01$), places of interview ($p<0.01$), current age ($p<0.01$), types of work ($p<0.01$), working days per week ($p<0.01$), earnings per day ($p<0.05$), saving money ($p<0.01$), currently attending school ($p<0.01$), ever attending school ($p<0.01$), mothers' education levels ($p<0.05$), fathers' occupations ($p<0.01$), mothers' occupations ($p<0.01$), parents' compositions ($p<0.01$), mothers' income per day ($p<0.01$), BMI ($p<0.01$), smoking practice ($p<0.01$) and drug addiction ($p<0.01$) were statistically significant. On the other hand places of birth, fathers' education level, and fathers' income per day were not statistically significant

Table 5.6 Bivariate distribution of ability to meet up required expenses of street children by their background characteristics

Background characteristics	Ability to meet up required expenses		χ^2 - values (p values)
	Yes	No	
Types of street children			160.830
Street living children	208 (76.8)	63 (23.2)	(0.000)
Street working children	273 (54.9)	224 (45.1)	
Children from street families	40 (36.4)	70 (63.6)	
Children who were in institutional care	51 (22.2)	179 (77.8)	
Gender of street children			82.977
Male	540 (57.4)	401 (42.6)	(0.000)
Female	32 (19.2)	135 (80.8)	
Places of interview			172.223
Mazar			(0.000)
Railway station/bus stand/launch terminal	28 (52.8)	25 (47.2)	
Kachabazar	286 (74.3)	99 (25.7)	
Park/institution	125 (57.6)	92 (42.4)	
	133 (29.4)	320 (70.6)	
Places of birth			0.033
Rural	422 (51.5)	398 (48.5)	(0.856)
Urban	150 (52.1)	138 (47.9)	
Current age (in years)			88.259
5-9	55 (26.1)	156 (73.9)	(0.000)
10-14	394 (54.0)	335 (46.0)	
15-18	123 (73.2)	45 (26.8)	
Types of work			59.379
Small business	108 (60.7)	70 (39.3)	(0.000)
Tokai	152 (44.2)	192 (55.8)	
Coolie/minti	145 (74.0)	51 (26.0)	
Labour	150 (49.8)	151 (50.2)	
Begging	17 (32.7)	35 (67.3)	
Working hours per day			133.543
<5	57 (24.5)	176 (75.5)	(0.000)
5-7	180 (50.0)	180 (50.0)	
8+	335 (70.1)	143 (29.9)	
Working days per week			43.698
<7	122 (38.0)	199 (62.0)	(0.000)
7	450 (60.0)	300 (40.0)	
Earnings per day			193.883
<BDT 100	249 (37.1)	423 (62.9)	(0.000)
BDT 100+	323 (81.0)	76 (19.0)	
Saving money			16.118
Yes	283 (60.3)	186 (39.7)	(0.000)
No	289 (48.0)	313 (52.0)	
Currently attending school			131.3329
Yes	145 (31.3)	318 (68.7)	(0.000)
No	427 (66.2)	218 (33.8)	

Ever attending school			16.442
Yes	402 (48.1)	433 (51.9)	(0.000)
No	170 (62.3)	103 (37.7)	
Fathers' education levels			2.468
Illiterate	290 (50.0)	290 (50.0)	(0.291)
Primary	205 (52.0)	189 (48.0)	
Secondary+	77 (57.5)	57 (42.5)	
Mothers' education levels			9.268
Illiterate	302 (48.0)	327 (52.0)	(0.010)
Primary	222 (55.1)	181 (44.9)	
Secondary+	48 (63.2)	28 (36.8)	
Fathers' occupations			23.595
Farming	54 (76.1)	17 (23.9)	(0.000)
Labour	183 (49.5)	187 (50.5)	
Small business	92 (55.4)	74 (44.6)	
Rickshaw/van puller/ driving	135 (45.3)	163 (54.7)	
Others (Begging, kabiraji, jobless, etc.)	108 (53.2)	95 (46.8)	
Mothers' occupations			17.447
Labour	56 (42.4)	76 (57.6)	(0.002)
Small business	29 (46.0)	34 (54.0)	
Maid servant	180 (46.9)	204 (53.1)	
Housewife	257 (58.1)	185 (41.9)	
Others (Begging, singer, tokai etc.)	50 (57.5)	37 (42.5)	
Parents' compositions			37.346
Father and mother	389 (47.6)	429 (52.4)	(0.000)
Step Parents	98 (76.6)	30 (23.4)	
Only father or mother/ none	85 (52.5)	77 (47.5)	
Fathers' income per day			3.475
< BDT 300	162 (46.0)	190 (54.0)	(0.062)
BDT 300+	283 (52.4)	257 (47.6)	
Mothers' income per day			7.082
< BDT 200	404 (52.0)	373 (48.0)	(0.008)
BDT 200+	87 (41.6)	122 (58.4)	
BMI			11.353
Underweight	21 (36.2)	37 (63.8)	(0.003)
Normal weight	450 (50.9)	434 (49.1)	
Overweight/ obese	101 (60.8)	65 (39.2)	
Smoking practice			89.206
Yes	175 (80.3)	43 (19.7)	(0.000)
No	397 (44.6)	493 (55.4)	
Drug addiction			20.915
Yes	66 (75.0)	22 (25.0)	(0.000)
No	506 (49.6)	514 (50.4)	

Note: () indicates percentage of respondents

5.4.2 Determinants of ability to meet up required expenses of street children

The effects of different characteristics on ability to meet up required expenses of street children have been presented in Table 5.7. The information of model fitting was shown at the bottom of the Table. It was observed that the model was better fit due to smallest shrinkage coefficient (0.0182). Correlates of street children who were able to meet up required expenses have been discussed below:

It was found that the female street children (OR=0.491, CI: 0.288-0.837) were less likely than the male street children. It was also found that the street children who were interviewed at park/institution (OR=0.437, CI: 0.194-0.983) were less likely than the street children who were interviewed at mazar. It was revealed that the street children who were in the age group 10-14 years (OR=1.685, CI: 1.022-2.690) and 15-18 years (OR=2.200, CI: 1.084-4.463) respectively were more likely than the street children who were in the age group 5-9 years. It was also revealed that the street children who were engaged in (OR=0.349, CI: 0.135-0.899) were less likely than the street children who were engaged in small business. It was observed that the street children whose working hours per day were 5-7 hours (OR=1.840, CI: 1.128-3.003) and 8+ hours (OR=2.102, CI: 1.258-3.512) respectively were more likely than the street children whose working hours per day were <5 hours. It was also observed that the street children whose working days per week were 7 days (OR=2.441, CI: 1.673-3.563) were more likely than the street children whose working days per week were <7 days. It was seen that the street children whose earnings per day were BDT 100+ (OR=4.632, CI: 3.164-6.780) were more likely than the street children whose earnings per day were <BDT 100+. It was also seen that the street children who saved money (OR=1.650, CI: 1.164-2.338) were more likely than the street children who did not save money. It was found that the street children who were currently attending school (OR=0.582, CI: 0.362-0.937) were less likely than the street

children who were not currently attending school. It was also found that the street children whose fathers' occupations were labour (OR=0.296, CI: 0.137-0.642), small business (OR=0.406, CI: 0.177-0.932), rickshaw/van puller/ driving (OR=0.287, CI: 0.129-0.637) and others (OR=0.294, CI: 0.104-0.832) were less likely than the street children whose fathers' occupation was farming. It was revealed that the street children whose parents' composition was step parents (OR=2.468, CI: 1.307-4.662) were more likely than the street children whose parents' composition was both father and mother. It was also revealed that the street children whose mothers' income per day was BDT 200+ (OR=0.624, CI: 0.389-0.999) were less likely than the street children whose mothers' income per day was < BDT 200. It was observed that the smoker street children (OR=1.867, CI: 1.054-3.307) were more likely than the non-smoker street children.

Table 5.7 Effects of selected background characteristics on ability to meet up required expenses of street children

Explanatory variables	Coefficients(β)	S.E of β	P-values	Odds ratio (OR)	95.0% C.I. for OR	
					Lower	Upper
Types of street children						
Street living children (r)	.....	.....	.....	1.000	.....	.....
Street working children	-0.291	0.272	0.284	0.747	0.439	1.273
Children from street families	-0.383	0.347	0.269	0.682	0.345	1.345
Children who were in institutional care	-0.322	0.409	0.430	0.724	0.325	1.615
Gender of street children						
Male (r)	.....	.....	.....	1.000	.....	.....
Female	-0.711	0.272	0.009	0.491	0.288	0.837
Places of interview						
Mazar (r)	.....	.....	.....	1.000	.....	.....
railway station/bus stand/launch terminal	-0.110	0.392	0.779	0.896	0.416	1.931
Kachabazar	-0.647	0.444	0.145	0.523	0.219	1.250
Park/Institution	-0.829	0.414	0.045	0.437	0.194	0.983
Current age (in years)						
5-9 (r)	.....	.....	.....	1.000	.....	.....
10-14	0.506	0.247	0.041	1.658	1.022	2.690
15-18	0.788	0.361	0.029	2.200	1.084	4.463

Types of work**Small Business (r)**

Small Business (?)	.....	.....	.....	1.000	.....	.....
Tokai	-0.210	0.267	0.430	0.810	0.481	1.366
Coolie/Minti	-0.058	0.322	0.856	0.943	0.502	1.772
Labour	-0.157	0.264	0.551	0.854	0.509	1.433
Begging	-1.053	0.483	0.029	0.349	0.135	0.899

Working hours per day

<5 (r)	.....	.....	.....	1.000	.....	.....
5-7	0.610	0.250	0.015	1.840	1.128	3.003
8+	0.743	0.262	0.005	2.102	1.258	3.512

Working days per week

<7 (r)	.....	.....	.....	1.000	.....	.....
7	0.893	0.193	0.000	2.441	1.673	3.563

Earnings per day

<BDT 100 (r)	.....	.....	.....	1.000	.....	.....
BDT 100+	1.533	0.194	0.000	4.632	3.164	6.780

Saving money

No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.501	0.178	0.005	1.650	1.164	2.338

Currently attending school

No (r)	.....	.....	.....	1.000	.....	.....
Yes	-0.541	0.243	0.026	0.582	0.362	0.937

Ever attending school

No (r)	.....	.....	.....	1.000	.....	.....
Yes	-0.186	0.224	0.407	0.830	0.535	1.288

Mothers' education levels

Illiterate (r)	.....	.....	.....	1.000	.....	.....
Primary	0.168	0.183	0.359	1.183	0.826	1.693
Secondary+	0.099	0.380	0.794	1.104	0.525	2.324

Fathers' occupations

Farming (r)	.....	.....	.....	1.000	.....	.....
Labour	-1.217	0.395	0.002	0.296	0.137	0.642
Small business	-0.901	0.424	0.034	0.406	0.177	0.932
Rickshaw/van puller/ driving	-1.248	0.406	0.002	0.287	0.129	0.637
Others (Begging, kabiraji, jobless, etc.)	-1.223	0.530	0.021	0.294	0.104	0.832

Mothers' occupations

Labour (r)	.....	.....	.....	1.000	.....	.....
Small business	-0.130	0.416	0.754	0.878	0.389	1.982
Maid servant	0.053	0.280	0.850	1.054	0.609	1.826
Housewife	-0.167	0.289	0.564	0.846	0.480	1.492
Others (Begging, singer, tokai etc.)	-0.159	0.522	0.761	0.853	0.306	2.374

Parents' compositions

Father and mother (r)	.....	.....	.....	1.000	.....	.....
Step Parents	0.904	0.324	0.005	2.468	1.307	4.662
Only father or mother/ none	0.081	0.436	0.852	1.085	0.461	2.549

Mothers' income per day

< BDT 200 (r)	.....	.....	.....	1.000	.....	.....
TBDT 200+	-0.472	0.240	0.049	0.624	0.389	0.999

BMI						
Underweight (r)	.....	.....	.....	1.000	.....	.....
Normal weight	0.098	0.358	0.784	1.103	0.547	2.227
Overweight/ obese	0.216	0.437	0.621	1.241	0.527	2.924
Smoking practice						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.624	0.292	0.032	1.867	1.054	3.307
Drug addiction						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	-0.250	0.380	0.511	0.779	0.370	1.640

Model summary: Model $\chi^2 = 443.399$ (0.000), -2 Log likelihood = 879.126

Nagelkerke R square = 0.496, $\rho^2_{cv} = 0.478$, Shrinkage coefficient = 0.0182

Stability of R square = 0.9817

Note: r represents the reference category, CI represents the confidence interval

5.5 Working hours per day of street children

The amount of earning of street children depends on the working hours per day. It was observed that 31.7% of street children were worked more than 8 hours per day. Working hours per day also related with the health of a person. Most of the people maintain a regular working time for their healthy life. But majority of the street children cannot maintain any schedule of working time. Working hours per day of street children has been considered as dependent variable which has been classified in the following way:

$$Y = \text{Working hours per day of street children} = \begin{cases} 1, & \text{More than 8 hours} \\ 0, & \leq 8 \text{ hours} \end{cases}$$

5.5.1 Bivariate distribution of working hours per day of street children by their background characteristics

The bivariate distributions of working hour per day of street children with their background characteristics have been presented in Table 5.8. It was found that the working hours per day of 53.9%, 31.4%, 25.7% and 5.6% of "street living children", "street working children", "children from street families" and "children who were in institutional care" respectively were more than 8 hours. It was also found that the working hours per day of 35.6% and 9.1% of the street children who were male and

female respectively were more than 8 hours. It was observed that the working hours per day of 41.5%, 47.7%, 37.9% and 12.9% of street children who were interviewed at mazar, railway station/bus stand/launch terminal, kachabazar, park/institution respectively were more than 8 hours. It was also observed that the working hours per day of 30.7% and 34.8% of the street children whose places of birth were rural and urban respectively were more than 8 hours. It was revealed that the working hours per day of 16.1%, 34.7% and 39.0% of the street children who were in the age group 5-9, 10-14, 15-18 years respectively were more than 8 hours. It was also revealed that the working hours per day of 18.5%, 21.2%, 51.5%, 36.5% and 42.2% of the street children who were engaged in small business, tokai, coolie/minti, labour and begging respectively were more than 8 hours. It was shown that the working hours per day of 24.6% and 43.9% of the street children whose earnings per day were <BDT 100 and BDT 100+ respectively were more than 8 hours. It was revealed that the working hours per day of 28.4% and 34.4% of the street children who saved money and did not save money respectively were more than 8 hours. It was shown that the working hours per day of 42.3% and 19.6% of the street children who were able and not able to maintain their own expenditure respectively were more than 8 hours. It was seen that working hours per day of 17.0% and 41.6% of the street children who were currently attending and not attending school respectively were more than 8 hours. It was also seen that the working hours per day of 30.2% and 36.4% of the street children who were ever and never attending school respectively were more than 8 hours. It was found that the working hours per day of 30.5%, 30.3% and 41.6% of the street children whose fathers' education levels were illiterate, primary and secondary+ respectively were more than 8 hours. It was also found that the working hours per day of 30.5%, 31.8% and 41.7% of the street children whose mothers' education levels were illiterate, primary and secondary+ respectively were more than 8 hours. It was observed

that the working hours per day of 43.1%, 27.2%, 34.2%, 32.6% and 33.0% of the street children whose fathers' occupations were farming, labour, small business, rickshaw/van puller/ driving and others respectively were more than 8 hours. It was also observed that the working hours per day of 23.6%, 33.3%, 26.7%, 36.5% and 40.5% of the street children whose mothers' occupations were labour, small business, maid servant, housewife and others respectively were more than 8 hours. It was seen that the working hours per day of 29.3%, 46.3% and 32.7% of the street children whose parents' compositions were both father and mother, step parents and only father or mother/none respectively were more than 8 hours. It was also seen that the working hours per day of 25.7% and 34.2% of the street children whose fathers' income per day was <BDT 300 and BDT 300+ respectively were more than 8 hours. It was revealed that the working hours per day of 30.2% and 31.2% of the street children whose mothers' income per day was <BDT 200 and BDT 200+ respectively were more than 8 hours. It was also revealed that the working hours per day of 52.3%, 46.7%, 21.1% and 13.2% of the street children who collected their food from street shop, begging, home and institution respectively were more than 8 hours. Based on BMI it was observed that the working hours of 20.4%, 31.8% and 35.5% of the street children who were under weight, normal weight and Overweight/ obese respectively were more than 8 hours. It was found that the working hours per day of 41.5% and 29.6% of the street children who were sick and not sick respectively were more than 8 hours. It was also found that the working hours per day of 31.5% and 32.6% of the street children who were ever sick and never sick respectively were more than 8 hours. It was revealed that the working hours per day of 42.4 % and 30.7% of the street children who were injured and not injured respectively were more than 8 hours. It was also revealed that the working hours per day of 35.6% and 29.8% of the street children who were ever injured and never injured respectively were more than 8

hours. It was observed that the working hours per day of 50.2% and 27.0% of the street children who were smoker and non-smoker respectively were more than 8 hours. It was also observed that the working hours per day of 52.3% and 29.9% of the street children who were addicted and were not addicted respectively were more than 8 hours.

The χ^2 - test demonstrated that the association between working hours per day of street children and types of street children ($p < 0.01$), gender of street children ($p < 0.01$), places of interview ($p < 0.01$), current age ($p < 0.01$), types of work ($p < 0.01$), earnings per day ($p < 0.05$), saving money Ability to meet up required expenses ($p < 0.01$) currently attending school ($p < 0.01$), ever attending school ($p < 0.06$), fathers' education levels ($p < 0.05$), mothers' occupations ($p < 0.01$), parents' compositions ($p < 0.01$), fathers' income per day ($p < 0.01$), food collection ($p < 0.05$), sickness ($p < 0.01$) injury ($p < 0.01$) ever injury ($p < 0.06$), smoking practice ($p < 0.01$) and drug addiction ($p < 0.01$) were statistically significant whereas places of birth, mothers' education levels, fathers' occupations, mothers' income per day, BMI, ever sickness were not statistically significant.

Table 5.8 Bivariate distribution of working hours per day of street children by their background characteristics

Background characteristics	Working hour/day		χ^2 - values (p values)
	≤ 8	More than 8	
Types of street children			125.350
Street living children	125 (46.1)	146 (53.9)	(0.000)
Street working children	339 (68.6)	155 (31.4)	
Children from street families	81 (74.3)	28 (25.7)	
Children who were in institutional care	186 (94.4)	11 (5.6)	
Gender of street children			42.605
Male	591 (64.4)	326 (35.6)	(0.000)
Female	140 (90.9)	14 (9.1)	
Places of interview			120.031
Mazar	31 (58.5)	22 (41.5)	(0.000)
Railway station/bus stand/launch terminal	201 (52.3)	183 (47.7)	
Kachabazar	133 (62.1)	81 (37.9)	
Park/institution	366 (87.1)	54 (12.9)	
Places of birth			1.582
Rural	551 (69.3)	244 (30.7)	(0.208)
Urban	180 (65.2)	96 (34.8)	

Current age (in years)			
5-9			29.780
10-14	172 (83.9)	33 (16.1)	(0.000)
15-18	462 (65.3)	245 (34.7)	
Types of work	97 (61.0)	62 (39.0)	
Small business			74.262
Tokai	145 (81.5)	33 (18.5)	(0.000)
Coolie/minti	271 (78.8)	73 (21.2)	
Labour	95 (48.5)	101 (51.5)	
Begging	191 (63.5)	110 (36.5)	
Earnings per day	29 (55.8)	23 (44.2)	
<BDT 100			43.065
BDT 100+	507 (75.4)	165 (24.6)	(0.000)
Saving money	224 (56.1)	175 (43.9)	
Yes			4.420
No	336 (71.6)	133 (28.4)	(0.036)
Ability to meet up required expenses	395 (65.6)	207 (34.4)	
Yes			63.202
No	330 (57.7)	242 (42.3)	(0.000)
Currently attending school	401 (80.4)	98 (19.6)	
Yes			71.661
No	356 (83.0)	73 (17.0)	(0.000)
Ever attending school	375 (58.4)	267 (41.6)	
Yes			3.640
No	558 (69.8)	241 (30.2)	(0.056)
Fathers' education levels	173 (63.6)	99 (36.4)	
Illiterate			6.347
Primary	389 (69.5)	171 (30.5)	(0.042)
Secondary+	269 (69.7)	117 (30.3)	
Mothers' education levels	73 (58.4)	52 (41.6)	
Illiterate			3.678
Primary	423 (69.5)	186 (30.5)	(0.159)
Secondary+	266 (68.2)	124 (31.8)	
Fathers' occupations	42 (58.3)	30 (41.7)	
Farming			7.933
labour	37 (56.9)	28 (43.1)	(0.094)
Small business	262 (72.8)	98 (27.2)	
Rickshaw/van puller/ driving	106 (65.8)	55 (34.2)	
Others (Begging, kabiraji, jobless, etc.)	194 (67.4)	94 (32.6)	
Mothers' occupations	132 (67.0)	65 (33.0)	
Labour			15.711
Small business	97 (76.4)	30 (23.6)	(0.003)
Maid servant	42 (66.7)	21 (33.3)	
Housewife	269 (73.3)	98 (26.7)	
Others (Begging, singer, tokai etc.)	273 (63.5)	157 (36.5)	
Parents' compositions	50 (59.5)	34 (40.5)	
Father and mother			14.357
Step parents	560 (70.7)	232 (29.3)	(0.001)
Only father or mother/ none	66 (53.7)	57 (46.3)	
Fathers' income per day	105 (67.3)	51 (32.7)	
	251 (74.3)	87 (25.7)	6.931

Below BDT 300	346 (65.8)	180 (34.2)	(0.008)
BDT 300+			
Mothers' income per day			0.076
Below BDT 200	525 (69.8)	227 (30.2)	(0.783)
BDT 200+	139 (68.8)	63 (31.2)	
Food collection			122.895
Street shop	157 (47.7)	172 (52.3)	(0.000)
Begging	48 (53.3)	42 (46.7)	
Home made	401 (78.9)	107 (21.1)	
Institution	125 (86.8)	19 (13.2)	
BMI			4.225
Underweight	43 (79.6)	11 (20.4)	(0.121)
Normal weight	588 (68.2)	274 (31.8)	
Overweight/ obese	100 (64.5)	55 (35.5)	
Sickness			10.233
Yes	113 (58.5)	80 (41.5)	(0.001)
No	618 (70.4)	260 (29.6)	
Ever sickness			0.086
Yes	584 (68.5)	269 (31.5)	(0.770)
No	147 (67.4)	71 (32.6)	
Injury			5.740
Yes	57 (57.6)	42 (42.4)	(0.017)
No	674 (69.3)	298 (30.7)	
Ever injury			3.612
Yes	228 (64.4)	126 (35.6)	(0.057)
No	503 (70.2)	214 (29.8)	
Smoking practice			42.913
Yes	108 (49.8)	109 (50.2)	(0.000)
No	623 (73.0)	231 (27.0)	
Drug addiction			18.644
Yes	42 (47.7)	46 (52.3)	(0.000)
No	689 (70.1)	294 (29.9)	

Note: () indicates percentage of respondents

5.5.2 Determinants of working hours per day of street children

The effects of different characteristics on working hours per day have been presented in Table 5.9. The information of model fitting was shown at the bottom of the Table It was revealed that the model was fit better due to smallest shrinkage coefficient (0.0211). Correlates of street children whose working hours per day were above 8 hours are discussed below:

It was found that the street children who were in institutional care (OR=0.191, CI: 0.067-0.544) were less likely than the street children who were street living children. It was also

found that the female street children (OR=0.459, CI: 0.221-0.953) were less likely than the male street children. It was revealed that the street children who were interviewed at railway station/bus stand/launch terminal (OR=0.452, CI: 0.225-0.907) and park/institution (OR=0.406, CI: 0.186-0.887) respectively were less likely than the street children who were interviewed at mazar. It was also revealed that the street children who were in the age group 10-14 years (OR=2.131, CI: 1.252-3.627) were more likely than the street children who were in the age group 5-9 years. It was observed that the street children who were engaged as coolie/minti (OR=1.885, CI: 1.043-3.409) and labour (OR=2.176, CI: 1.282-3.694) were more likely than the street children who were engaged in small business. It was also observed that the street children who saved money (OR=0.670, CI: 0.470-0.957) were less likely than the street children who did not save money. It was seen that the street children who collected their food from home (OR=0.418, CI: 0.246-0.712) were less likely than the street children who collected their food from street shop. It was also seen that the street children who were sick (OR=1.552, CI: 0.990-2.433) were more likely than the street who were not sick.

Table 5.9 Effect of selected background characteristics on working hours per day of street children

Explanatory variables	Coefficients(β)	S.E of β	P-values	Odds ratio (OR)	95.0% C.I. for OR	
					Lower	Upper
Types of street children						
Street living children (r)	.....	.....	.....	1.000	.....	.....
Street working children	-0.340	0.257	0.185	0.712	0.431	1.177
Children from street families	-0.272	0.352	0.441	0.762	0.382	1.520
Children who were in institutional care	-1.655	0.534	0.002	0.191	0.067	0.544
Gender of street children						
Male (r)	.....	.....	.....	1.000	.....	.....
Female	-0.779	0.373	0.037	0.459	0.221	0.953
Places of interview						
Mazar (r)	.....	.....	.....	1.000	.....	.....
Railway station/bus stand/ terminal	-0.794	0.355	0.025	0.452	0.225	0.907
Kachabazar	-0.499	0.410	0.223	0.607	0.272	1.356
Park/institution	-0.901	0.399	0.024	0.406	0.186	0.887

Current age (in years)						
5-9 (r)	.....	.....	.....	1.000	.....	.....
10-14	0.757	0.271	0.005	2.131	1.252	3.627
15-18	0.484	0.348	0.164	1.623	0.820	3.212
Types of work						
Small business (r)	.....	.....	.....	1.000	.....	.....
Tokai	0.005	0.288	0.985	1.005	0.571	1.769
Coolie/mini	0.634	0.302	0.036	1.885	1.043	3.409
Labour	0.778	0.270	0.004	2.176	1.282	3.694
Begging	0.356	0.453	0.432	1.428	0.587	3.471
Earnings per day						
<BDT 100 (r)	.....	.....	.....	1.000	.....	.....
BDT 100+	0.120	0.200	0.548	1.128	0.762	1.669
Saving money						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	-0.400	0.181	0.027	0.670	0.470	0.957
Ability to meet up required expenses						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	-0.293	0.217	0.177	0.746	0.488	1.141
Currently attending school						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	-0.263	0.236	0.265	0.769	0.484	1.221
Ever attending school						
No	.....	.....	.....	1.000	.....	.....
Yes	-0.046	0.209	0.825	0.955	0.634	1.437
Fathers' education levels						
Illiterate (r)	.....	.....	.....	1.000	.....	.....
Primary	0.032	0.192	0.869	1.032	0.708	1.505
Secondary+	0.464	0.283	0.101	1.590	0.913	2.768
Mothers' occupations						
Labour (r)	.....	.....	.....	1.000	.....	.....
Small business	0.309	0.467	0.509	1.362	0.545	3.401
Maid servant	-0.149	0.291	0.609	0.862	0.488	1.523
Housewife	0.017	0.287	0.953	1.017	0.580	1.785
Others (Begging, singer, tokai etc.)	-0.238	0.500	0.635	0.789	0.296	2.103
Parents' compositions						
Father and mother (r)	.....	.....	.....	1.000	.....	.....
Step parents	-0.103	0.271	0.703	0.902	0.530	1.535
Only father or mother/ none	-0.169	0.562	0.763	0.844	0.281	2.537
Fathers' income per day						
Below BDT 300 (r)	.....	.....	.....	1.000	.....	.....
BDT 300+	0.135	0.181	0.453	1.145	0.804	1.631
Food collection						
Street shop (r)	.....	.....	.....	1.000	.....	.....
Begging	0.165	0.328	0.615	1.179	0.620	2.241
Home made	-0.872	0.271	0.001	0.418	0.246	0.712
Institution	-0.166	0.451	0.712	0.847	0.350	2.050

Sickness

No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.440	0.229	0.055	1.552	0.990	2.433

Injury

No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.437	0.343	0.202	1.548	0.791	3.032

Ever injury

No (r)	.....	.....	.....	1.000	.....	.....
Yes	-0.099	0.214	0.643	0.906	0.595	1.378

Smoking practice

No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.030	0.261	0.909	1.030	0.617	1.720

Drug addiction

No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.377	0.346	0.276	1.458	0.740	2.870

Model summary: Model $\chi^2 = 351.087$ (0.000), -2 Log likelihood = 846.672

Nagelkerke R square = 0.445, $\rho^2_{cv} = 0.424$, Shrinkage coefficient = 0.0211

Stability of R square = 0.9788

Note: r represents the reference category, CI represents the confidence interval

Chapter 6

Health Characteristics of the Street Children

Chapter 6

Health Characteristics of the Street Children

Health condition of street children is an important component for the socio economic development of a country. Some health related characteristics such as sickness, ever sickness, injury, ever injury, going to recognize physicians, smoking practice and drug addiction have been discussed in this study. Relation of these characteristics with other important factors has also been studied. Using logistic regression model, the effects of determinants of above Characteristics were identified. Thus the specific objectives of this chapter are as follows:

- i) To know the distribution of street children for various categories of health Characteristics.
- ii) To identify the associated factors for sickness, ever sickness, injury, ever injury, going to recognized physicians, smoking practice and drug addiction of street children.
- iii) To find out the effect of the associated factors on the above Characteristics of the respondents.

6.1 Percentage distribution of the street children by their health characteristics

The distribution of street children by health characteristics have been presented in Table 6.1. Based on BMI it was found that 5.2%, 79.8% and 15.0% of the street children were under weight, normal weight and overweight/obese respectively. It was also found that 29.8%, 8.1%, 46.7% and 15.4% of the street children collected their food from street shop, begging, home and institution respectively. It was seen that 18.2% of the street

children were sick during interview and 81.8% were not sick during interview. Among the sick children it was also seen that 38.1%, 19.8% and 17.8% of the street children were suffering from fever/headache, cough and stomach pain respectively. It was revealed that 80.1% of the street children suffered from sickness at least once in their lives and 19.9% never suffered in their lives. It was also revealed that 8.9% of the street children were injured during the interview and 91.1% were not injured. Among the injured children it was found that 85.9% of the street children were suffering from cuts/wounds/fractures and 14.1% were suffering from muscle injury. It was also found that 32.2% of the street children were injured at least once in their lives and 67.8% were never injured. It was observed that 19.7% of the street children were smoker and 80.3% were non-smoker which is closer estimate of the study of Reiss et al. (2010). It was also observed that 7.9% of the street children were addicted and 92.1% were not addicted. It was seen that 85.0% of the street children were suffering from either sickness or injury at least once in their lives and 15.0% were not suffering from either sickness or injury. It was also seen that 81.7% of the street children got care during sickness/injury and 18.3% did not get care during sickness/injury which is closer estimate of the study of Farid and Mostari (2015). It was revealed that 16.4%, 70.3%, 8.3% and 5.1% of the street children got caring from friends/relatives, parents, institution/centre and local people respectively. It was found that 84.6% of the street children went to recognized physicians during their sickness/injury and 15.4% did not go to recognized physicians during their sickness/injury. It was also found that 48.1%, 48.6% and 3.4% of the recognized physicians who treated the street children were doctors, persons in the shop and traditional healers respectively. It was observed that 94.2% of the street children took allopathic treatment and 5.8% took others treatment. It was also observed that 45.5% of the street children did not consult with recognized physicians for the lack of money and

54.5% of the street children's sickness/injury was not so serious. It was seen that 32.5% of the street children were financially able for treatment and 67.5% were not. It was also seen that 17.6% of the street children wear protection during the working time and 82.4% did not wear any protection. It was revealed that 16.9%, 8.4% and 74.6% of the street children wore boots/shoes, gloves/cloth on hand and pad/cloth on the head respectively. It was also revealed that 5.9% of the street children did not wear protection during working hours for lack of money and 94.1% did not feel necessity of protection.

Table 6.1 Percentage distribution of the respondents by their health characteristics

Background characteristics	Number of respondents (%)	Background characteristics	Number of respondents (%)
BMI		Caring during sickness/injury	
Underweight	58 (5.2)	Yes	770 (81.7)
Normal weight	884 (79.8)	No	172 (18.3)
Overweight/ obese	166 (15.0)	Caring person during sickness/injury	
Food collection		Friends/relatives	126 (16.4)
Street shop	330 (29.8)	Parents	541 (70.3)
Begging	90 (8.1)	Institution/centre	64 (8.3)
Home	517 (46.7)	Local people	39 (5.1)
Institution	171 (15.4)	Going to recognized to physicians	
Sickness		Yes	797 (84.6)
Yes	202 (18.2)	No	145 (15.4)
No	906 (81.8)	Types of medical person	
Types of sickness		Doctor	383 (48.1)
Fever/headache	77 (38.1)	Person in the shop	387 (48.6)
Cough	40 (19.8)	Traditional healer	27 (3.4)
Stomach pain	36 (17.8)	Types of treatment	
Others (jondis, tumor, respiratory problem etc.)	49 (24.3)	Allopathic	751 (94.2)
Ever sickness		Others	46 (5.8)
Yes	887 (80.1)	Reasons of not consulting	
No	221 (19.9)	Lack of money	66 (45.5)
Injured		Sickness/injury was not so serious	79 (54.5)
Yes	99 (8.9)	Financial ability for treatment	
No	1009 (91.1)	Yes	306 (32.5)
Types of injury		No	636 (67.5)
Cuts/wounds/fractures	85 (85.9)	Protection during working	
Muscle injury	14 (14.1)	Yes	189 (17.6)
Ever injured		No	882 (82.4)
Yes	357 (32.2)	Types of protection	
No	751 (67.8)	Boots/shoes while working	32 (16.9)
Ever sickness/ever injury		Gloves/cloth on hand	16 (8.5)

Yes	942 (85.0)	Pad/cloth on the head	141 (74.6)
No	166 (15.0)	Reasons of not protecting	
Smoking practice		Lack of money	52 (5.9)
Yes	218 (19.7)	No need	830 (94.1)
No	890 (80.3)		
Drug addiction			
Yes	88 (7.9)		
No	1020 (92.1)		

Note: () indicates percentage of respondents

6.2 Sickness of street children

Studying health related factors is important for street children. They were suffering from sickness of various types. The distribution of sickness by their background characteristics have been discussed below. Sickness of street children has been considered as dependent variable which has been classified in the following way:

$$Y = \text{Sickness of street children} = \begin{cases} 1, \text{ yes} \\ 0, \text{ no} \end{cases}$$

6.2.1 Bivariate distribution of the sickness of the street children by their background characteristics

The bivariate distribution of sickness of street children with their background characteristics have been presented in Table 6.2. It was found that 22.5%, 16.5%, 20.9% and 15.7% of "street living children", "street working children", "children from street families" and "Children who were in institutional care " respectively were sick. It was also found that 18.4% of the male street children and 17.4% of the female street children were sick. It was observed that 24.5% 23.4%, 19.4%, 12.6% of street children who were interviewed at mazar, railway station/bus stand/launch terminal, kachabazar, park/institution respectively were sick. It was also observed that 17.0% and 29.2% of the street children whose reasons of becoming street children were poverty and step parents/none for caring respectively were sick. It was revealed that 16.1%, 18.9% and 17.9% of the street children who were in the age group. 5-9, 10-14, 15-18 years

respectively were sick. It was also revealed that 17.4%, 16.3%, 19.9%, 18.3% and 23.1% of the street children who were engaged in small business, tokai, coolie/minti, labour and begging respectively were sick. It was seen that 16.7%, 13.6% and 22.0% of the street children whose working hours per day were <5, 5-7, 8+ hours respectively were sick. It was also seen that 18.1% and 18.0% of street children whose working days per week were <7 and 7 days respectively were sick. It was revealed that 18.2% and 17.8% of the street children whose earnings per day were < BDT 100 and BDT 100+ respectively were sick. It was also revealed that 18.1% and 17.9% of the street children who saved money and did not save money respectively were sick. It was found that 16.6%, 19.8% and 20.9% of the street children whose fathers' education levels were illiterate, primary and secondary+ respectively were sick. It was also found that 16.5%, 21.3% and 15.8% of the street children whose mothers' education levels were illiterate, primary and secondary+ respectively were sick. It was observed that 15.5%, 15.7%, 19.3%, 18.8% and 22.2% of the street children whose fathers' occupations were farming, labour, small business, rickshaw/van puller/ driving and others respectively were sick. It was also observed that 16.7%, 23.8%, 18.5%, 17.0% and 21.8% of the street children whose mothers' occupations were labour, small business, maid servant, housewife and others respectively were sick. It was seen that 15.6%, 29.7% and 22.2% of the street children whose parents' compositions were both father and mother, step parents and only father or mother/ none respectively were sick. It was also seen that 17.0% and 16.9% of the street children whose fathers' income per day was <BDT 300 and BDT 300+ respectively were sick. It was revealed that 17.2% and 17.7% of the street children whose mothers' income per day was <BDT 200 and BDT 200+ respectively were sick. It was also revealed that 22.7%, 23.3%, 13.5% and 21.1% of the street children who collected their food from street shop, begging, home and institution respectively were sick. Based on BMI it was found that

31.0%, 17.4% and 18.1% of the street children who were underweight, normal weight and Overweight/ obese respectively were sick. It was also found that 27.1% and 16.1% of the street children who were smoker and non-smoker respectively were sick. It was observed that 35.2% and 16.8% of the street children who were addicted and were not addicted respectively were sick.

The χ^2 - test demonstrated that the association between sickness of street children and place of interview ($p<0.01$), reasons of becoming street children ($p<0.01$), working hours per day ($p<0.01$), parents' composition ($p<0.01$), food collection ($p<0.01$), BMI ($p<0.05$), smoking practice ($p<0.01$) and drug addiction ($p<0.01$) were statistically significant. On the other hand types of street children, gender of street children, current age, types of work, working days per week, earnings per day, saving money, fathers' education levels, mothers' education levels fathers' occupations, mothers' occupations, fathers' income per day and mothers' income per day was statistically insignificant with sickness of street children.

Table 6.2 Bivariate distribution of sickness of the street children by their background characteristics

Background characteristics	Sickness		χ^2 - values (p -values)
	Yes (%)	No (%)	
Types of street children			5.883 (0.117)
Street living children	61 (22.5)	210 (77.5)	
Street working children	82 (16.5)	415 (83.5)	
Children from street families	23 (20.9)	87 (79.1)	
Children who were in institutional care	36 (15.7)	194 (84.3)	
Gender of street children			0.099 (0.753)
Male	173 (18.4)	768 (81.6)	
Female	29 (17.4)	138 (82.6)	
Places of interview			18.126 (0.000)
Mazar	13 (24.5)	40 (75.5)	
Railway station/bus stand/launch terminal	90 (23.4)	295 (76.6)	
Kachabazar	42 (19.4)	175 (80.6)	
Park/ institution	57 (12.6)	396 (87.4)	
Reasons of becoming street children			10.163 (0.001)
Poverty	169 (17.0)	826 (83.0)	
Step parents/none for caring	33 (29.2)	80 (70.8)	

Current age (in years)			0.889
5-9	34 (16.1)	177 (83.9)	0.641)
10-14	138 (18.9)	591 (81.1)	
15-18	30 (17.9)	138 (82.1)	
Types of work			2.131
Small business	31 (17.4)	147 (82.6)	(0.712)
Tokai	56 (16.3)	288 (83.7)	
Coolie/minti	39 (19.9)	157 (80.1)	
Labour	55 (18.3)	246 (81.7)	
Begging	12 (23.1)	40 (76.9)	
Working hours per day			10.035
<5	39 (16.7)	194 (83.3)	(0.007)
5-7	49 (13.6)	311 (86.4)	
8+	105 (22.0)	373 (78.0)	
Working days per week			0.001
<7	58 (18.1)	263 (81.9)	(0.979)
7	135 (18.0)	615 (82.0)	
Earnings per day			0.022
<BDT 100	122 (18.2)	550 (81.8)	(0.882)
BDT 100+	71 (17.8)	328 (82.2)	
Saving money			0.006
Yes	85 (18.1)	384 (81.9)	(0.938)
No	108 (17.9)	494 (82.1)	
Fathers' education levels			2.383
Illiterate	96 (16.6)	484 (83.4)	(0.304)
Primary	78 (19.8)	316 (80.2)	
Secondary+	28 (20.9)	106 (79.1)	
Mothers' education levels			4.132
Illiterate	104 (16.5)	525 (83.5)	(0.127)
Primary	86 (21.3)	317 (78.7)	
Secondary+	12 (15.8)	64 (84.2)	
Fathers' occupations			4.273
Farming	11 (15.5)	60 (84.5)	(0.370)
Labour	58 (15.7)	312 (84.3)	
Small business	32 (19.3)	134 (80.7)	
Rickshaw/van puller/ driving	56 (18.8)	242 (81.2)	
Others (Begging, kabiraji, jobless, etc.)	45 (22.2)	158 (77.8)	
Mothers' occupations			2.782
Labour	22 (16.7)	110 (83.3)	(0.595)
Small business	15 (23.8)	48 (76.2)	
Maid servant	71 (18.5)	313 (81.5)	
Housewife	75 (17.0)	367 (83.0)	
Others (Begging, singer, tokai etc.)	19 (21.8)	68 (78.2)	
Parents' compositions			16.662
Father and mother	128 (15.6)	690 (84.4)	(0.000)
Step parents	38 (29.7)	90 (70.3)	
Only father or mother/ none	36 (22.2)	126 (77.8)	
Fathers' income per day			0.006
Below BDT 300	60 (17.0)	292 (83.0)	(0.940)
BDT 300+	91 (16.9)	449 (83.1)	

Mothers' income per day			
Below BDT 200	134 (17.2)	643 (82.8)	0.024
BDT 200+	37 (17.7)	172 (82.3)	(0.877)
Food collection			
Street shop	75 (22.7)	255 (77.3)	14.593
Begging	21 (23.3)	69 (76.7)	(0.002)
Home	70 (13.5)	447 (86.5)	
Institution	36 (21.1)	135 (78.9)	
BMI			
Underweight	18 (31.0)	40 (69.0)	6.770
Normal weight	154 (17.4)	730 (82.6)	(0.034)
Overweight/obese	30 (18.1)	136 (81.9)	
Smoking practice			
Yes	59 (27.1)	159 (72.9)	14.205
No	143 (16.1)	747 (83.9)	(0.000)
Drug addiction			
Yes	31 (35.2)	57 (64.8)	18.524
No	171 (16.8)	849 (83.2)	(0.000)

Note: () indicates percentage of respondents

6.2.2 Determinants of sickness of the street children

The effects of different characteristics on sickness of street children have been presented in Table 6.3. The information of model fitting was shown at the bottom of the Table. It was observed that the model was better fit due to smallest shrinkage coefficient (0.0075). It was found that the prevalence of sickness of street children who were interviewed at park/institution (OR=0.407, CI: 0.225-0.739) was less likely than the street children who were interviewed at mazar. It was also found that the street children who working hours per day 5-7 hours (OR=0.579, CI: 0.361-0.928) was less sick than those whose working hours per day <5 hours. It was revealed that the street children whose body mass index belongs to normal weight (OR=0.343, CI: 0.204-0.576) and overweight/obese (OR=0.348, CI: 0.182-0.664) respectively were less sick than the street children who belongs to underweight. The addicted street children (OR=1.699, CI: 0.964-2.996) were more likely sick compared to street children who were not addicted.

Table 6.3 Effects of selected background characteristics on the sickness of the street children

Explanatory variables	Coefficients(β)	S.E of β	P-values	Odds ratio (OR)	95.0% C.I. for OR	
					Lower	Upper
Places of interview						
Mazar (r)	.....	.....	.....	1.000	.....	.....
Railway station/bus stand/launch terminal	-0.199	0.280	0.477	0.819	0.473	1.418
Kachabazar	-0.078	0.325	0.811	0.925	0.489	1.749
Park/ Institution	-0.898	0.304	0.003	0.407	0.225	0.739
Reasons of becoming street children						
Poverty(r)	.....	.....	.....	1.000	.....	.....
Step parents/None for caring	0.264	0.289	0.360	1.302	0.739	2.294
Working hour per day						
<5 (r)	.....	.....	.....	1.000	.....	.....
5-7	-0.547	0.241	0.023	0.579	0.361	0.928
8+	-0.170	0.231	0.461	0.843	0.536	1.326
Parents' compositions						
Father and mother (r)	.....	.....	.....	1.000	.....	.....
Step parents	0.323	0.282	0.253	1.381	0.794	2.401
Only father or mother/ none	0.191	0.235	0.416	1.211	0.764	1.919
Food collection						
Street shop (r)	.....	.....	.....	1.000	.....	.....
Begging	-0.090	0.294	0.760	0.914	0.514	1.627
Home made	-0.222	0.224	0.323	0.801	0.516	1.243
Institution	0.342	0.299	0.253	1.407	0.783	2.530
BMI						
Underweight (r)	.....	.....	.....	1.000	.....	.....
Normal weight	-1.069	0.264	0.000	0.343	0.204	0.576
Overweight/ obese	-1.057	0.330	0.001	0.348	0.182	0.664
Smoking practice						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.139	0.230	0.544	1.149	0.733	1.803
Drug addiction						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.530	0.289	0.067	1.699	0.964	2.996

Model summary: Model $\chi^2 = 526.680$ (0.000), -2 Log likelihood = 958.041

Nagelkerke R square = 0.518, $\rho^2_{cv} = 0.510$, Shrinkage coefficient = 0.0075

Stability of R square = 0.993

Note: r represents the reference category, CI represents the confidence interval

6.3 Ever sickness of street children

Today's children are future of any nation. Majority of street children were sick at least once in their life. So studying ever sickness is an important factor in this study.

Ever sickness of street children has been considered as dependent variable which has been classified in the following way:

$$Y = \text{Ever sickness of street children} = \begin{cases} 1, & \text{yes} \\ 0, & \text{no} \end{cases}$$

6.3.1 Bivariate distribution of ever sickness of the street children by their background characteristics

The bivariate distribution of ever sickness of street children with their background characteristics have been presented in Table 6.4. It was found that 74.5%, 79.1%, 83.6% and 87.0% of “street living children”, “street working children”, “children from street families” and “children who were in institutional care” respectively were ever sick. It was also found that 79.8% of the male street children and 81.4% of the female street children were ever sick. It was observed that 83.0%, 75.6%, 76.5%, 82.2% of street children who were interviewed at mazar, railway station/bus stand/launch terminal, kachabazar, park/institution respectively were ever sick. It was also observed that 79.7% and 83.2% of the street children whose reasons of becoming street children were poverty and step parents/none for caring respectively were ever sick. It was revealed that 78.2%, 80.2% and 81.5% of the street children who were in the age group 5-9, 10-14, 15-18 years respectively were ever sick. It was also revealed that 83.7%, 77.3%, 78.6%, 79.7% and 84.6% the street children who were engaged in small business, tokai, coolie/minti, labour and begging respectively were ever sick. . It was seen that 85.0%, 75.8% and 79.9% of the street children whose working hours per day were <5, 5-7, 8+ hours respectively were ever sick. It was also seen that 82.6% and 78.4% of street children who working days per day were <7 and 7 days respectively were ever sick. It was revealed that 80.5% and 78.2% of the street children whose earnings per day < BDT 100 and BDT 100+ respectively were ever sick. It was also revealed that 79.5% and 79.7% of the street children who saved money and did not save money respectively were ever sick. It was

found that 80.9%, 78.9% and 79.9% of the street children whose fathers' education levels were illiterate, primary and secondary+ respectively were ever sick. It was also found that 80.8%, 79.4% and 77.6% of the street children whose mothers' education levels were illiterate, primary and secondary+ respectively were ever sick. It was observed that 70.4%, 80.8%, 74.7%, 81.9% and 83.7% of the street children whose fathers' occupations were farming, labour, small business, rickshaw/van puller/ driving and others respectively were ever sick. It was also observed that 83.3%, 82.5%, 82.0%, 77.4% and 78.2% of the street children whose mothers' occupation were labour, small business, maid servant, housewife and others respectively were ever sick. It was seen that 79.0%, 82.0% and 84.0% of the street children whose parents' compositions were both father and mother, step parents and only father or mother/ none respectively were ever sick. It was also seen that 82.4% and 77.2% of the street children whose fathers' income per day was <BDT 300 and BDT 300+ respectively were ever sick. It was revealed that 80.3% and 78.5% of the street children whose mothers' income per day was <BDT 200 and BDT 200+ respectively were ever sick. It was also revealed that 78.8%, 78.9%, 79.1% and 86.0% of the street children who collected their food from street shop, begging, home and institution respectively were ever sick. Based on BMI it was found that 81.0%, 79.4% and 83.1% of the street children who were underweight, normal weight and overweight/obese respectively were ever sick. It was also found that 80.3% and 80.0% of the street children who were smoker and non-smoker respectively were ever sick. It was observed that 80.7% and 80.0% of the street children who were addicted and were not addicted respectively were ever sick.

The χ^2 - test demonstrated that the association between ever sickness of street children and types of street children ($p<0.01$), places of interview ($p<0.01$), working hours per day ($p<0.05$) and fathers' occupations ($p<0.05$) were statistically significant whereas gender

of street children, reasons of becoming street children, current age, types of work, working days per week, earnings per day, saving money, fathers' education levels, mothers' education levels, mothers' occupations, parents' compositions, fathers' income per day, mothers' income per day, food collection, BMI, smoking practice and drug addiction were statistically insignificant with ever sickness of street children.

Table 6.4 Bivariate distribution of ever sickness of the street children by their background characteristics

Background Characteristics	Ever sickness		χ^2 - values (p values)
	Yes (%)	No (%)	
Types of street children			13.208 (0.004)
Street living children	202 (74.5)	69 (25.5)	
Street working children	393 (79.1)	104 (20.9)	
Children from street families	92 (83.6)	18 (16.4)	
Children who were in institutional care	200 (87.0)	30 (13.0)	
Gender of street children			0.236 (0.627)
Male	751 (79.8)	190 (20.2)	
Female	136 (81.4)	31 (18.6)	
Places of interview			14.369 (0.002)
Mazar	44 (83.0)	9 (17.0)	
Railway station/bus stand /launch terminal	291 (75.6)	94 (24.4)	
Kachabazar	166 (76.5)	51 (23.5)	
Park/ institution	386 (85.2)	67 (14.8)	
Reasons of becoming street children			0.773 (0.379)
Poverty	793 (79.7)	202 (20.3)	
Step parents/none for caring	94 (83.2)	19 (16.8)	
Current age (in years)			0.706 (0.702)
5-9	165 (78.2)	46 (21.8)	
10-14	585 (80.2)	144 (19.8)	
15-18	137 (81.5)	31 (18.5)	
Types of work			3.887 (0.421)
Small business	149 (83.7)	29 (16.3)	
Tokai	266 (77.3)	78 (22.7)	
Coolie/minti	154 (78.6)	42 (21.4)	
Labour	240 (79.7)	61 (20.3)	
Begging	44 (84.6)	8 (15.4)	
Working hours per day			7.336 (0.026)
<5	198 (85.0)	35 (15.0)	
5-7	273 (75.8)	87 (24.2)	
8+	382 (79.9)	96 (20.1)	
Working day per week			2.393 (0.122)
<7	265 (82.6)	56 (17.4)	
7	588 (78.4)	162 (21.6)	

Earnings per day			
< BDT 100			0.824
BDT 100+	541 (80.5)	131 (19.5)	(0.364)
Saving money			
Yes			0.007
No	373 (79.5)	96 (20.5)	(0.935)
Fathers' education levels			
Illiterate			0.550
Primary	469 (80.9)	111 (19.1)	(0.760)
Secondary+	311 (78.9)	83 (21.1)	
	107 (79.9)	27 (20.1)	
Mothers' education levels			
Illiterate			0.584
Primary	508 (80.8)	121 (19.2)	(0.747)
Secondary+	320 (79.4)	83 (20.6)	
	59 (77.6)	17 (22.4)	
Fathers' occupations			
Farming			9.592
Labour	50 (70.4)	21 (29.6)	(0.048)
Small business	299 (80.8)	71 (19.2)	
Rickshaw/van puller/ driving	124 (74.7)	42 (25.3)	
Others (Begging, kabiraji, jobless, etc.)	244 (81.9)	54 (18.1)	
	170 (83.7)	33 (16.3)	
Mothers' occupations			
Labour			4.254
Small business	110 (83.3)	22 (16.7)	(0.373)
Maid servant	52 (82.5)	11 (17.5)	
Housewife	315 (82.0)	69 (18.0)	
Others (Begging, singer, tokai etc.)	342 (77.4)	100 (22.6)	
	68 (78.2)	19 (21.8)	
Parents' compositions			
Father and mother			2.452
Step parents	646 (79.0)	172 (21.0)	(0.293)
Only father or mother/ none	105 (82.0)	23 (18.0)	
	136 (84.0)	26 (16.0)	
Fathers' income per day			
< BDT 300			3.457
BDT 300+	290 (82.4)	62 (17.6)	(0.063)
	417 (77.2)	123 (22.8)	
Mothers' income per day			
< BDT 200			0.347
BDT 200+	624 (80.3)	153 (19.7)	(0.556)
	164 (78.5)	45 (21.5)	
Food collection			
Street shop			4.438
Begging	260 (78.8)	70 (21.2)	(0.218)
Home made	71 (78.9)	19 (21.1)	
Institution	409 (79.1)	108 (20.9)	
	147 (86.0)	24 (14.0)	
BMI			
Underweight			1.249
Normal weight	47 (81.0)	11 (19.0)	(0.536)
Overweight/ obese	702 (79.4)	182 (20.6)	
	138 (83.1)	28 (16.9)	
Smoking practice			
Yes			0.008
No	175 (80.3)	43 (19.7)	(0.927)
	712 (80.0)	178 (20.0)	

Drug addiction

Yes	71 (80.7)	17 (19.3)	0.024
No	816 (80.0)	204 (20.0)	(0.878)

Note: () indicates percentage of respondents

6.3.2 Determinants of ever sickness of the street children

The effects of different characteristics on ever sickness of street children have been presented in Table 6.5. The information of model fitting was shown at the bottom of the Table. It was observed that the model was better fit due to smallest shrinkage coefficient (0.0058). It was found that the ever sickness of street working children (OR=1.494, CI: 0.937-2.382) was more likely than the street living children. It was also found that the ever sickness of street children whose fathers' occupations were labour (OR=2.323, CI: 1.346-4.010), rickshaw/van puller/ driving (OR=2.513, CI: 1.418-4.452), others (OR=2.712, CI: 1.069-6.884) respectively was more likely than the street children whose fathers' occupation was farming.

Table 6.5 Effects of selected background characteristics on the ever sickness of the street children

Explanatory variables	Coeffici -ents(β)	S.E of β	P- values	Odds ratio (OR)	95.0% C.I. for OR	
					Lower	Upper
Types of street children						
Street living children (r)	.....	.....	.....	1.000	.....	.....
Street working children	0.401	0.238	0.092	1.494	0.937	2.382
Children from street families	0.470	0.345	0.174	1.600	0.813	3.147
Children who were in institutional care	0.550	0.367	0.134	1.733	0.844	3.558
Places of interview						
Mazar (r)	.....	.....	.....	1.000	.....	.....
Railway station/bus stand/launch terminal	0.174	0.296	0.556	1.190	0.667	2.125
Kachabazar	0.114	0.352	0.746	1.120	0.562	2.233
Park/institution	0.550	0.344	0.110	1.733	0.883	3.404
Working hours per day						
<5 (r)	.....	.....	.....	1.000	.....	.....
5-7	-0.174	0.233	0.456	0.841	0.532	1.327
8+	0.316	0.242	0.193	1.371	0.853	2.205

Fathers' occupations

Farming (r)

Labour

Small business

Rickshaw/van puller/ driving

Others (Begging, kabiraji, jobless, etc.)

Fathers' income per day

< BDT 300 (r)

BDT 300+

Model summary: Model $\chi^2=330.413$ (0.000), -2 Log likelihood =867.345Nagelkerke R square = 0.424, $\rho^2_{cv}=0.418$, Shrinkage coefficient=0.0058

Stability of R square =0.994

Note: r represents the reference category, CI represents the confidence interval

6.4 Injury of street children

Street children are staying very vulnerable places. During their movement or working at those places they faced incidence of injury. These injuries affect their activities in the street. The injury of street children has been considered as dependent variable which has been classified in the following way:

$$Y = \text{Injury of street children} = \begin{cases} 1, \text{ yes} \\ 0, \text{ no} \end{cases}$$

6.4.1 Bivariate distribution of the injury of the street children by their background characteristics

The bivariate distribution of injury of street children with their background characteristics have been presented in Table 6.6. It was found that 13.7%, 8.2%, 5.5% and 6.5% of "street living children", "street working children", "children from street families" and "Children who were in institutional care" respectively were injured. It was also found that 9.7% of the male street children and 4.8% of the female street children were injured. It indicates that the male street children had higher incidence of injury which is similar to the findings of Pinzon-Rondon et al. (2009). It was observed that 11.3%, 13.8%, 6.5%, 5.7% of street children at mazar, railway station/bus stand/launch terminal, kachabazar, and park/institution respectively were injured. It was also observed that 7.9% and 17.7%

of the street children whose reasons of becoming street children were poverty and step parents/none for caring respectively were injured. It was revealed that 4.3%, 10.7% and 7.1% of the street children who were in the age group 5-9, 10-14, 15-18 years respectively were injured. It also indicates that the older street children had higher incidence of injury which is also similar of the study of Pinzon-Rondon et al. (2009). It was also revealed that 9.0%, 9.0%, 10.7%, 8.0% and 13.5% the street children who were engaged in small business, tokai, coolie/minti, labour and begging respectively were injured. It was seen that 6.9%, 7.8% and 11.5% of the street children whose working hours per day were <5, 5-7, 8+ hours respectively were injured. It shows that the street children who spent more time on the street had more incidence of injury which is the similar finding of Pinzon-Rondon et al. (2009). It was also seen that 6.2% and 7.5% of street children whose working days per week <7 and 7 days respectively were injured. It was revealed that 8.3% and 10.8% of the street children whose earnings per day were <BDT 100 and BDT 100+ respectively were injured. It was also revealed that 10.4% and 8.3% of the street children who saved money and did not save money respectively were injured. It was found that 8.8%, 9.6% and 7.5% of the street children whose fathers' education levels were illiterate, primary and secondary+ respectively were injured. It was also found that 7.6%, 11.4% and 6.6% of the street children whose mothers' education levels were illiterate, primary and secondary+ respectively were injured. It was observed that 8.5%, 7.0%, 8.4%, 10.1% and 11.3% of the street children whose fathers' occupations were farming, labour, small business, rickshaw/van puller/ driving and others respectively were injured. It was also observed that 8.3%, 15.9%, 9.4%, 7.7% and 9.2% of the street children whose mothers' occupations were labour, small business, maid servant, housewife and others respectively were injured. It was seen that 7.3%, 17.2% and 10.5% of the street children whose parents' compositions were both father and mother,

step parents and only father or mother/none respectively were injured. It was also seen that 9.1% and 7.2% of the street children whose fathers' income per day was <BDT 300 and BDT 300+ respectively were injured. It was revealed that 9.3% and 8.1% of the street children whose mothers' income per day was <BDT 200 and BDT 200+ respectively were injured. It was also revealed that 14.5%, 7.8%, 5.6% and 8.8% of the street children who collected their food from street shop, begging, home and institution respectively were injured. Based on BMI it was found that 8.6%, 9.5% and 6.0% of the street children who were underweight, normal weight and overweight/obese respectively were injured. It was also found that 17.4% and 6.9% of the street children who were smoker and non-smoker respectively were injured. It was observed that 19.3% and 8.0% of the street children who were addicted and not addicted respectively were injured.

The χ^2 - test demonstrated that the association between injury of street children and types of street children ($p<0.05$), gender of street children ($p<0.05$), places of interview ($p<0.01$), reasons of becoming street children ($p<0.01$), current age ($p<0.05$), working days per week ($p<0.05$), parents' compositions ($p<0.01$), food collection ($p<0.01$), smoking practice ($p<0.01$) and drug addiction ($p<0.01$) were statistically significant. On the other hand, types of work, working hours per day, earnings per day, saving money, fathers' education levels, mothers' education levels, mothers' occupations, father's income per day, mothers' income per day and BMI were not statistically significant with injury of street children.

Table 6.6 Bivariate distribution of the injury of the street children by their background characteristics

Background Characteristics	Injury		χ^2 - values (p values)
	Yes (%)	No (%)	
Types of street children			10.985
Street living children	37 (13.7))	234 (86.3)	(0.012)
Street working children	41 (8.2)	456 (91.8)	
Children from street families	6 (5.5)	104 (94.5)	
Children who were in institutional care	15 (6.5)	215 (93.5)	

Gender of street children			
Male			4.151
Female	91 (9.7)	850 (90.3)	(0.042)
Places of interview	8 (4.8)	159 (95.2)	
Mazar			18.745
Railway station/bus stand/launch terminal	6 (11.3)	47 (88.7)	(0.000)
Kachabazar	53 (13.8)	332 (86.2)	
Park /institution	14 (6.5)	203 (93.5)	
Reasons of becomig street children	26 (5.7)	427 (94.3)	
Poverty			11.879
Step parents/none for caring	79 (7.9)	916 (92.1)	(0.001)
Current age (in years)	20 (17.7)	93 (82.3)	
5-9			9.107
10-14	9 (4.3)	202 (95.7)	(0.011)
15-18	78 (10.7)	651 (89.3)	
Types of work	12 (7.1)	156 (92.9)	
Small business			2.223
Tokai	16 (9.0)	162 (91.0)	(0.695)
Coolie/minti	31 (9.0)	313 (91.0)	
Labour	21 (10.7)	175 (89.3)	
Begging	24 (8.0)	277 (92.0)	
Working hours per day	7 (13.5)	45 (86.5)	
<5			5.408
5-7	16 (6.9)	217 (93.1)	(0.067)
8+	28 (7.8)	332 (92.2)	
Working days per week	55 (11.5)	423 (88.5)	
<7			4.961
7	20 (6.2)	301 (93.8)	(0.026)
Earnings per day	79 (10.5)	671 (89.5)	
<BDT100			1.782
BDT100+	56 (8.3)	616 (91.7)	(0.182)
Saving money	43 (10.8)	356 (89.2)	
Yes			1.442
No	49 (10.4)	420 (89.6)	(0.230)
Fathers' education levels	50 (8.3)	552 (91.7)	
Illiterate			0.615
Primary	51 (8.8)	529 (91.2)	(0.735)
Secondary+	38 (9.6)	356 (90.4)	
Mothers' education levels	10 (7.5)	124 (92.5)	
Illiterate			4.877
Primary	48 (7.6)	581 (92.4)	(0.087)
Secondary+	46 (11.4)	357 (88.6)	
Fathers' occupations	5 (6.6)	71 (93.4)	
Farming			3.628
Labour	6 (8.5)	65 (91.5)	(0.459)
Small business	26 (7.0)	344 (93.0)	
Rickshaw/van puller/ driving	14 (8.4)	152 (91.6)	
Others (Begging. kabiraji, jobless, etc.)	30 (10.1)	268 (89.9)	
	23 (11.3)	180 (88.7)	

Mothers' occupations			
Labour			4.723
Small business	11 (8.3)	121 (91.7)	(0.317)
Maid servant	10 (15.9)	53 (84.1)	
Housewife	36 (9.4)	348 (90.6)	
Others (begging, singer, tokai etc.)	34 (7.7)	408 (92.3)	
Parents' compositions	8 (9.2)	79 (90.8)	
Father and mother			13.771
Step parents	60 (7.3)	758 (92.7)	(0.001)
Only father or mother/ none	22 (17.2)	106 (82.8)	
Fathers' income per day	17 (10.5)	145 (89.5)	
< BDT 300			1.016
BDT 300+	32 (9.1)	320 (90.9)	(0.314)
Mothers' income per day	39 (7.2)	501 (92.8)	
< BDT 200			0.257
BDT 200+	72 (9.3)	705 (90.7)	(0.612)
Food collection	17 (8.1)	192 (91.9)	
Street shop			19.948
Begging	48 (14.5)	282 (85.5)	(0.000)
Home made	7 (7.8)	83 (92.2)	
Institution	29 (5.6)	488 (94.4)	
BMI	15 (8.8)	156 (91.2)	
Underweight			2.085
Normal weight	5 (8.6)	53 (91.4)	(0.353)
Overweight/ obese	84 (9.5)	800 (90.5)	
Smoking practice	10 (6.0)	156 (94.0)	
Yes			24.077
No	38 (17.4)	180 (82.6)	(0.000)
Drug addiction	61 (6.9)	829 (93.1)	
Yes			12.666
No	17 (19.3)	71 (80.7)	(0.000)
	82 (8.0)	938 (92.0)	

Note: () indicates percentage of respondents

6.4.2 Determinants of injury of the street children

The effects of different characteristics on injury of street children have been presented in Table 6.7. The information of model fitting was shown at the bottom of the Table. It was revealed that the model was better fit due to smallest shrinkage coefficient (0.0059). It was found that the injury of street children who were interviewed at railway station/bus stand/launch terminal (OR=0.201, CI: 0.102-0.398), kachabazar (OR=0.133, CI: 0.056, 0.316) and park/institution (OR=0.130, CI: 0.054-0.312) respectively was less likely than the street children who were interviewed at mazar. It was also found that the injury of street children who were in the age group 15-18 years (OR=0.426, CI: 0.181, 1.001) was

less likely injured than the street children who were in the age group 5-9 years. It was revealed that the injury of street children who collected their food from begging (OR=0.242, CI: 0.099-0.593) and home (OR=0.434, CI: 0.231, 0.813) respectively was less likely than the street children who collected their food from street shop respectively.

Table 6.7 Effects of selected background characteristics on the injury of the street children

Explanatory variables	Coefficients(β)	S.E of β	P-values	Odds ratio (OR)	95.0% C.I. for OR	
					Lower	Upper
Types of street children						
Street living children (r)	.....	.....	.....	1.000	.....	.....
Street working children	0.217	0.298	0.466	1.242	0.693	2.225
Children from street families	-0.591	0.486	0.224	0.554	0.214	1.436
Children who were in institutional care	0.301	0.562	0.592	1.351	0.450	4.062
Gender of street children						
Male (r)	.....	.....	.....	1.000	.....	.....
Female	-0.484	0.411	0.239	0.616	0.275	1.379
Places of interview						
Mazar (r)	.....	.....	.....	1.000	.....	.....
Railway station/bus stand/launch terminal	-1.603	0.347	0.000	0.201	0.102	0.398
Kachabazar	-2.017	0.442	0.000	0.133	0.056	0.316
Park/Institution	-2.039	0.446	0.000	0.130	0.054	0.312
Reasons of becoming street children						
Poverty (r)	.....	.....	.....	1.000	.....	.....
Step parents/None for caring	0.323	0.356	0.364	1.382	0.688	2.776
Current age (in years)						
5-9 (r)	.....	.....	.....	1.000	.....	.....
10-14	0.027	0.301	0.929	1.027	0.569	1.853
15-18	-0.854	0.436	0.050	0.426	0.181	1.001
Working hours per day						
<5 (r)	.....	.....	.....	1.000	.....	.....
5-7	-0.338	0.318	0.288	0.713	0.382	1.331
8+	-0.203	0.316	0.521	0.816	0.439	1.517
Working days per week						
<7 (r)	.....	.....	.....	1.000	.....	.....
7	-0.003	0.243	0.991	0.997	0.619	1.606
Parents' compositions						
Father and mother (r)	.....	.....	.....	1.000	.....	.....
Step parents	0.185	0.360	0.608	1.203	0.594	2.435
Only father or mother/ none	0.041	0.314	0.896	1.042	0.563	1.927

Food collection

Street shop (r)	.....	.....	.....	1.000	.....	.....
Begging	-1.419	0.457	0.002	0.242	0.099	0.593
Home made	-0.835	0.320	0.009	0.434	0.231	0.813
Institution	-0.342	0.435	0.432	0.710	0.303	1.667

Smoking practice

No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.410	0.293	0.162	1.507	0.849	2.675

Drug addiction

No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.197	0.363	0.588	1.217	0.597	2.480

Model summary: Model $\chi^2 = 858.172(0.000)$, -2 Log likelihood =626.549
 Nagelkerke R square =0.735, ρ^2_{cv} =0.729, Shrinkage coefficient=0.0059, Stability of R square =0.994

Note: r represents the reference category, CI represents the confidence interval

6.5 Ever injury of street children

Studying ever injury is an important issue for street children. A significant number of street children suffered from injury at least once in their life. The relation of ever injuries has been studied in the next sub section. Ever injury of street children has been considered as dependent variable which has been classified in the following way:

$$Y = \text{Ever injury of street children} = \begin{cases} 1, \text{ yes} \\ 0, \text{ no} \end{cases}$$

6.5.1 Bivariate distribution of the ever injury of the street children by their background characteristics

The bivariate distribution of ever injury of street children with their background characteristics have been presented in Table 6.8. It was found that 40.6%, 29.6%, 31.8% and 28.3% of “street living children”, “street working children”, “children from street families” and “children who were in institutional care” respectively were ever injured. It was also found that 33.8% of the male street children and 23.4% of the female street children were ever injured. It shows that the male street children had higher incidence of injury which is the similar finding of the study of Pinzon-Rondon et al. (2009). It was observed that 37.7% 38.7%, 24.0%, 30.0% of street children at mazar, railway station/bus

stand/launch terminal, kachabazar, park/institution respectively were ever injured. It was also observed that 30.9% and 44.2% of the street children whose reasons of becoming street children were poverty and step parents/none for caring respectively were ever injured. It was revealed that 19.0%, 34.3% and 39.9% of the street children who were in the age group 5-9, 10-14, 15-18 years respectively were ever injured. It also shows that the street children who were older had higher incidence of injury which is also similar finding of the study of Pinzon-Rondon et al. (2009). It was also revealed that 37.1%, 34.0%, 30.6%, 29.9% and 40.4% the street children who were engaged in small business, tokai, coolie/minti, labour and begging respectively were ever injured. It was seen that 31.8%, 30.0% and 36.0% of the street children whose working hours per day were <5, 5-7, 8+ hours respectively were ever injured. It indicates that the street children who spent more time on the street had higher incidence of injury which is supported by the study of Pinzon-Rondon et al. (2009). It was also seen that 29.9% and 34.4% of street children whose working days per week were <7 and 7 days respectively were ever injured. It was revealed that 30.7% and 37.1% of the street children whose earnings per day were < BDT 100 and BDT 100+ respectively were ever injured. It was also revealed that 37.5% and 29.6% of the street children who saved money and did not save money respectively were ever injured. It was found that 32.4%, 31.0% and 35.1% of the street children whose fathers' education levels were illiterate, primary and secondary+ respectively were ever injured. It was also found that 30.5%, 34.5% and 34.2% of the street children whose mothers' education levels were illiterate, primary and secondary+ respectively were ever injured. It was observed that 29.6%, 28.4%, 30.7%, 33.2% and 39.9% of the street children whose fathers' occupations were farming, labour, small business, rickshaw/van puller/ driving and others respectively were ever injured. It was also observed that 30.3%, 34.9%, 30.5%, 33.5% and 34.5% of the street children whose mothers' occupations were

labour, small business, maid servant, housewife and others respectively were ever injured. It was seen that 28.1%, 51.6% and 37.7% of the street children whose parents' compositions were both father and mother, step parents and only father or mother/none respectively were ever injured. It was also seen that 30.4% and 29.4% of the street children whose fathers' income per day was <BDT 300 and BDT 300+ respectively were ever injured. It was revealed that 32.8% and 32.5% of the street children whose mothers' incomes were <BDT 200 and BDT 200+ respectively were ever injured. It was also revealed that 42.4%, 31.1%, 25.3% and 33.9% of the street children who collected their food from street shop, begging, home and institution respectively were ever injured. Based on BMI it was found that 36.2%, 32.4% and 30.1% of the street children who were under, normal and Overweight/ obese respectively were ever injured. It was also found that 52.8% and 27.2% of the street children who were smoker and non-smoker respectively were ever injured. It was observed that 58% and 30.0% of the street children who were addicted and were not addicted respectively were ever injured.

The χ^2 - test demonstrated that the association between ever injured of street children and types of street children ($p < 0.01$), gender of street children ($p < 0.01$), places of interview ($p < 0.01$), reasons of becoming street children ($p < 0.01$), current age ($p < 0.01$), earnings per day ($p < 0.05$), saving money ($p < 0.01$), parents' compositions ($p < 0.01$), food collection ($p < 0.01$), smoking practice ($p < 0.01$) and drug addiction ($p < 0.01$) were statistically significant whereas types of work, working hours per day, working days per week, fathers' education levels, mothers' education levels, fathers' occupations, mothers' occupations, fathers' income per day, mothers' income per day and BMI were statistically insignificant with ever injury of street children.

Table 6.8 Bivariate distribution of the ever injury of the street children by their background characteristics

Background Characteristics	Ever Injury		χ^2 - values (p values)
	Yes (%)	No (%)	
Types of street children			11.942
Street living children	110 (40.6)	161 (59.4)	(0.008)
Street working children	14 (29.6)	350 (70.4)	
Children from street families	35 (31.8)	75 (68.2)	
Children who were in institutional care	65 (28.3)	165 (71.7)	
Gender of street children			7.079
Male	318 (33.8)	623 (66.2)	(0.008)
Female	39 (23.4)	128 (76.6)	
Places of interview			15.920
Mazar	20 (37.7)	33 (62.3)	(0.001)
Railway station/bus stand /launch terminal	149 (38.7)	236 (61.3)	
Kachabazar	52 (24.0)	165 (76.0)	
Park/institution	136 (30.0)	317 (70.0)	
Reasons of becoming street children			8.335
Poverty	307 (30.9)	688 (69.1)	(0.004)
Step parents/none for caring	50 (44.2)	63 (55.8)	
Current age (in years)			22.945
5-9	40 (19.0)	171 (81.0)	0.000
10-14	250 (34.3)	479 (65.7)	
15-18	67 (39.9)	101 960.1)	
Types of work			4.589
Small business	66 (37.1)	112 (62.9)	(0.332)
Tokai	117 (34.0)	227 (66.0)	
Coolie/minti	60 (30.6)	136 (69.4)	
Labour	90 (29.9)	211 (70.1)	
Begging	21 (40.4)	31 (59.6)	
Working hours per day			3.547
<5	74 (31.8)	159 (68.2)	(0.170)
5-7	108 (30.0)	252 (70.0)	
8+	172 (36.0)	306 (64.0)	
Working days per week			2.051
<7	96 (29.9)	225 (70.1)	(0.152)
7	258 (34.4)	492 (65.6)	
Earnings per day			4.689
<BDT 100	206 (30.7)	466 (69.3)	(0.030)
BDT100+	148 (37.1)	251 (62.9)	
Saving money			7.546
Yes	176 (37.5)	293 (62.5)	(0.006)
No	178 (29.6)	424 (70.4)	
Fathers' education levels			0.794
Illiterate	188 (32.4)	392 (67.6)	(0.672)
Primary	122 (31.0)	272 (69.0)	
Secondary+	47 (35.1)	87 (64.9)	
Mothers' education levels			1.918

Illiterate	192 (30.5)	437 (69.5)	(0.383)
Primary	139 (34.5)	264 (65.5)	
Secondary+	26 (34.2)	50 (65.8)	
Fathers' occupations			8.519
Farming	21 (29.6)	50 (70.4)	(0.074)
Labour	105 (28.4)	265 (71.6)	
Small business	51 (30.7)	115 (69.3)	
Rickshaw/van puller/ driving	99 (33.2)	199 (66.8)	
Others (Begging, kabiraji, jobless, etc.)	81 (39.9)	122 (60.1)	
Mothers' occupations			1.499
Labour	40 (30.3)	92 (69.7)	(0.827)
Small business	22 (34.9)	41 (65.1)	
Maid servant	117 (30.5)	267 (69.5)	
Housewife	148 (33.5)	294 (66.5)	
Others (Begging, singer, tokai etc.)	30 (34.5)	57 (65.5)	
Parents' compositions			30.424
Father and mother	230 (28.1)	588 (71.9)	(0.000)
Step parents	66 (51.6)	62 (48.4)	
Only father or mother/ none	61 (37.7)	101 (62.3)	
Fathers' income per day			0.093
<BDT 300	107 (30.4)	245 (69.6)	(0.761)
BDT 300+	159 (29.4)	381 (70.6)	
Mothers' income per day			0.006
< BDT 200	255 (32.8)	522 (67.2)	(0.938)
BDT 200+	68 (32.5)	141 (67.5)	
Food collection			27.221
Street shop	140 (42.4)	190 (57.6)	(0.000)
Begging	28 (31.1)	62 (68.9)	
Home made	131 (25.3)	386 (74.7)	
Institution	58 (33.9)	113 (66.1)	
BMI			0.764
Underweight	21 (36.2)	37 (63.8)	(0.682)
Normal weight	286 (32.4)	598 (67.6)	
Overweight/ obese	50 (30.1)	116 (69.9)	
Smoking practice			52.389
Yes	115 (52.8)	103 (47.2)	(0.000)
No	242 (27.2)	648 (72.8)	
Drug addiction			28.988
Yes	51 (58.0)	37 (42.0)	(0.000)
No	306 (30.0)	714 (70.0)	

Note: () indicates percentage of respondents

6.5.2 Determinants of ever injury of the street children

The effects of different characteristics on ever injury of street children have been presented in Table 6.9. The information of model fitting was shown at the bottom of the Table. It was observed that the model was better fit due to smallest shrinkage coefficient

(0.0161). It was found that the ever injury of street children who were interviewed at railway station/bus stand/launch terminal (OR=0.332, CI: 0.219-0.504), kachabazar (OR=0.263, CI: 0.153-0.452) and (OR=0.497, CI: 0.297-0.831) park/institution respectively was less likely than the street children who were interviewed at mazar. It was also found that the ever injury of street children who were in the age group 10-14 years (OR=1.405, CI: 0.974-2.208) was more likely than the street children who were in the age group 5-9 years. It was revealed that the injury of street children who saved money (OR=1.264, CI: 0.960-1.666) was more likely than the street children who did not saved money. It was also revealed that the ever injury of street children who had step parents (OR=1.901, CI: 1.158-3.121) was more likely than the street children who had both father and mother. It was observed that the ever injury of street children who collected their food from begging (OR=0.408, CI: 0.241-0.690) and home (OR=0.577, CI: 0.384-0.867) respectively was less likely than the street children who collected their food from street shop. It was also observed that the ever injury of street children who were smoker (OR=1.771, CI: 1.189-2.637) was more likely than the street children who were non-smoker.

Table 6.9 Effects of selected background characteristics on the ever injury of the street children

Explanatory variables	Coefficients(β)	S.E of β	P-values	Odds ratio (OR)	95.0% C.I. for OR	
					Lower	Upper
Types of street children						
Street living children (r)	.....	.....	.....	1.000	.....	.....
Street working children	0.068	0.212	0.748	1.071	0.706	1.624
Children from street families	0.137	0.274	0.617	1.147	0.670	1.961
Children who were in institutional care	-0.299	0.337	0.375	0.742	0.383	1.435
Gender of street children						
Male (r)	.....	.....	.....	1.000	.....	.....
Female	-0.333	0.217	0.125	0.717	0.468	1.097

Places of interview						
Mazar (r)	.....	.....	.....	1.000	.....	.....
Railway station/bus stand/launch terminal	-1.101	0.212	0.000	0.332	0.219	0.504
Kachabazar	-1.337	0.277	0.000	0.263	0.153	0.452
Park/institution	-0.700	0.263	0.008	0.497	0.297	0.831
Reasons of become street children						
Poverty (r)	.....	.....	.....	1.000	.....	.....
Step parents/none for caring	-0.017	0.263	0.948	0.983	0.587	1.647
Current age (in years)						
5-9 (r)	.....	.....	.....	1.000	.....	.....
10-14	0.340	0.187	0.069	1.405	0.974	2.028
15-18	0.134	0.260	0.606	1.143	0.687	1.904
Earnings per day						
< BDT 100 (r)	.....	.....	.....	1.000	.....	.....
BDT 100+	0.011	0.156	0.941	1.012	0.745	1.374
Saving money						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.235	0.141	0.096	1.264	0.960	1.666
Parents' compositions						
Father and mother (r)	.....	.....	.....	1.000	.....	.....
Step parents	0.642	0.253	0.011	1.901	1.158	3.121
Only father or mother/ none	0.293	0.195	0.133	1.340	0.915	1.965
Food collection						
Street shop (r)	.....	.....	.....	1.000	.....	.....
Begging	-0.897	0.269	0.001	0.408	0.241	0.690
Home made	-0.550	0.208	0.008	0.577	0.384	0.867
Institution	-0.039	0.295	0.894	.962	.539	1.715
Smoking practice						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.571	0.203	0.005	1.771	1.189	2.637
Drug addiction						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.365	0.271	0.178	1.441	.847	2.451

Model summary: Model $\chi^2 = 209.497$ (0.000), -2 Log likelihood = 1275.224

Nagelkerke R square = 0.237, $\rho^2_{cv} = 0.220$, Shrinkage coefficient = 0.0161

Stability of R square = 0.984

Note: r represents the reference category, CI represents the confidence interval

6.7 Going to recognized physicians

Getting treatment during sickness is the fundamental right of any people in a country. But most of the street children were deprived from this right due to various reasons. The relation of this factor with other has been studied in the following sub section. Going to

recognized physicians of street children has been considered as dependent variable which has been classified in the following way:

$$Y = \text{Going to recognized physicians} = \begin{cases} 1, \text{ yes} \\ 0, \text{ no} \end{cases}$$

6.7.1 Bivariate distribution of going to recognized physicians of street children with their background characteristics

The bivariate distributions of going to recognized physicians of street children with their background characteristics have been presented in Table 6.12. It was found that 70.0%, 86.5%, 84.5% and 96.6% of “street living children”, “street working children”, “children from street families” and “Children who were in institutional care ” respectively went to recognized physicians. It was also found that 83.3% of the male street children and 92.1% of the female street children went to recognized physicians. It was observed that 89.4% 74.1%, 81.5% and 93.6% of street children at mazar, railway station/bus stand/launch terminal, kachabazar, park/institution respectively went to recognized physicians. It was revealed that 79.4%, 85.9% and 85.1% of the street children who were in the age group 5-9, 10-14, 15-18 years respectively went to recognized physicians. It was also revealed that 89.7%, 82.8%, 82.9%, 84.4% and 82.6% the street children who were engaged in small business, tokai, coolie/minti, labour and begging respectively went to recognized physicians. It was seen that 87.6%, 84.6% and 82.7% of the street children whose working hours per day were <5, 5-7, 8+ hours respectively went to recognized physicians. It was also seen that 83.4% and 84.9% of street children whose working days per day were <7 and 7 days respectively went to recognized physicians. It was revealed that 83.5% and 86.1% of the street children whose earnings per day were < BDT 100 and BDT 100+ respectively went to recognized physicians. It was also revealed that 89.7% and 80.4% of the street children who saved money and did not save money respectively

went to recognized physicians. It was observed that 85.0% and 83.5% of the street children whose places of birth were rural and urban area respectively went to recognized physicians. It was also observed that 89.5% and 80.8% of the street children who were currently attending school and were not currently attending school went to recognized physicians. It was seen that 87.2% and 75.4% of the street children who went to school at least once in their lives and never went to school respectively consulted with recognized physicians. It was found that 83.6%, 85.5% and 86.6% of the street children whose fathers' education levels were illiterate, primary and secondary+ respectively went to recognized physicians. It was also found that 82.8%, 87.1% and 85.9% of the street children whose mothers' education levels were illiterate, primary and secondary+ respectively went to recognized physicians. It was observed that 78.6%, 83.1%, 88.1%, 89.2% and 80.0% of the street children whose fathers' occupations were farming, labour, small business, rickshaw/van puller/ driving and others respectively went to recognized physicians. It was also observed that 87.0%, 90.9%, 84.5%, 83.6% and 81.7% of the street children whose mothers' occupations were labour, small business, maid servant, housewife and others respectively went to recognized physicians. It was seen that 87.3%, 69.6% and 83.2% of the street children whose parents' compositions were both father and mother, step parents and only father or mother/ none respectively went to recognized physicians. It was also seen that 86.0% and 85.8% of the street children whose fathers' income per day was <BDT 300 and BDT 300+ respectively went to recognized physicians. It was revealed that 85.6% and 86.0% of the street children whose mothers' income per day was <BDT 200 and BDT 200+ respectively went to recognized physicians. It was also revealed that 75.7%, 72.6%, 88.9% and 94.3% of the street children who collected their food from street shop, begging, home and institution respectively went to recognized physicians. Based on BMI it was found that 84.9%,

84.3% and 86.3% of the street children who were underweight, normal weight and overweight/obese respectively went to recognized physicians. It was also found that 77.0% and 86.0% of the street children who were smoker and non-smoker respectively went to recognized physicians. It was observed that 82.5% and 84.8% of the street children who were addicted and were not addicted respectively went to recognized physicians.

The χ^2 - test demonstrated that the association between ever injured of street children and types of street children ($p<0.01$), gender of street children ($p<0.01$), places of interview ($p<0.05$), saving money ($p<0.01$), currently attending school ($p<0.01$), ever attending school ($p<0.01$), fathers' occupations ($p<0.05$), parents' compositions ($p<0.01$), food collection ($p<0.01$), and smoking practice ($p<0.01$), were statistically significant whereas current age, types of work, working hours per day, working days per week, earnings per day, places of birth, fathers' education levels, mothers' education levels, mothers' occupations, fathers' income per day, mothers' income per day, BMI and drug addiction were statistically insignificant with ever injury of street children.

Table 6.10 Bivariate distribution of going to going to recognized physicians of street children by their background characteristics

Background characteristics	Going to medical person		χ^2 - values (p values)
	Yes (%)	No (%)	
Types of street children			60.840 (0.000)
Street living children	156 (70.0)	67 (30.0)	
Street working children	359 (86.5)	56 (13.5)	
Children from street families	82 (84.5)	15 (15.5)	
Children who were in institutional care	200 (96.6)	7 (3.4)	
Gender of street children		1	7.170 (0.007)
Male	668 (83.3)	34 (16.7)	
Female	129 (92.1)	11 (7.9)	
Places of interview			
Mazar	42 (89.4)	5 (10.6)	
Railway station/bus stand /launch terminal	232 (74.1)	81 (25.9)	53.483 (0.000)
Kachabazar	145 (81.5)	33 (18.5)	
Park/ institution	378 (93.6)	26 (6.4)	

Current age (in years)			
5-9			4.353
10-14	135 (79.4)	35 (20.6)	(0.113)
15-18	536 (85.9)	88 (14.1)	
	126 (85.1)	22 (14.9)	
Types of work			
Small business			4.328
Tokai	140 (89.7)	16 (10.3)	(0.363)
Coolie/minti	236 (82.8)	49 (17.2)	
Labour	136 (82.9)	28 (17.1)	
Begging	217 (84.4)	40 (15.6)	
	38 (82.6)	8 (17.4)	
Working hours per day			
<5			2.544
5-7	184 (87.6)	26 (12.4)	(0.280)
8+	248 (84.6)	45 (15.4)	
	335 (82.7)	70 (17.3)	
Working days per week			
<7			0.353
7	231 (83.4)	46 (16.6)	(0.552)
	536 (84.9)	95 (15.1)	
Earnings per day			
< BDT 100			1.082
BDT 100+	476 (83.5)	94 (16.5)	(0.298)
	291 (86.1)	47 (13.9)	
Saving money			
Yes			14.760
No	357 (89.7)	41 (10.3)	(0.000)
	410 (80.4)	100 (19.6)	
Places of birth			
Rural			0.349
Urban	585 (85.0)	103 (15.0)	(0.555)
	212 (83.5)	42 (16.5)	
Currently attending school			
Yes			13.610
No	368 (89.5)	43 (10.5)	(0.000)
	429 (80.8)	102 (19.2)	
Ever attending school			
Yes			17.411
No	641 (87.2)	94 (12.8)	(0.000)
	156 (75.4)	51 (24.6)	
Fathers' education levels			
Illiterate			0.960
Primary	417 (83.6)	82 (16.4)	(0.619)
Secondary+	283 (85.5)	48 (14.5)	
	97 (86.6)	15 (13.4)	
Mothers' education levels			
Illiterate			3.056
Primary	444 (82.8)	92 (17.2)	(0.217)
Secondary+	298 (87.1)	44 (12.9)	
	55 (85.9)	9 (14.1)	
Fathers' occupations			
Farming			10.472
Labour	44 (78.6)	12 (21.4)	(0.033)
Small business	260 (83.1)	53 (16.9)	
Rickshaw/van puller/ driving	118 (88.1)	16 (11.9)	
Others (begging, kabiraji, jobless, etc.)	231 (89.2)	28 (10.8)	
	144 (80.0)	36 (20.0)	
Mothers' occupations			
Labour			2.943
Small business	100 (87.0)	13 (13.0)	(0.067)
Maid servant	50 (90.9)		
	279 (84.5)		

Housewife	310 (83.6)	61 (16.4)	
Others (begging, singer, tokai etc.)	58 (81.7)	13 (18.3)	
Parents' compositions			23.399
Father and mother	600 (87.3)	87 (12.7)	(0.000)
Step parents	78 (69.6)	34 (30.4)	
Only father or mother/ none	119 (83.2)	24 (16.8)	
Fathers' income per day			
<BDT 300	265 (86.0)	43 (14.0)	0.010
BDT 300+	380 (85.8)	63 (14.2)	(0.920)
Mothers' income per day			
<BDT 200	566 (85.6)	95 (14.4)	0.012
BDT 200+	153 (86.0)	25 (14.0)	(0.912)
Food collection			
Street shop	212 (75.7)	68 (24.3)	42.412
Begging	53 (72.6)	20 (27.4)	(0.000)
Home made	384 (88.9)	48 (11.1)	
Institution	148 (94.3)	9 (5.7)	
BMI			0.397
Underweight	45 (84.9)	8 (15.1)	(0.820)
Normal weight	626 (84.3)	117 (15.7)	
Overweight/ obese	126 (86.3)	20 (13.7)	
Smoking practice			10.748
Yes	147 (77.0)	44 (23.0)	(0.001)
No	650 (86.6)	101 (13.4)	
Taking drug			0.298
Yes	66 (82.5)	14 (17.5)	(0.585)
No	731 (84.8)	131 (15.2)	

Note: () indicates percentage of respondents

6.7.2 Determinants of going to recognized physicians of the street children

The effects of different characteristics on going to recognized physicians of street children have been presented in Table 6.11. The information of model fitting was shown at the bottom of the Table. It was observed that the model was better fit due to smallest shrinkage coefficient (0.0072). It was found that going to recognized physicians of street children who were street working children (OR=2.156, CI: 1.248-3.724), children from street families (OR=1.951, CI: 0.921-4.034) and Children who were in institutional care (OR=5.544, CI: 1.574-19.527) respectively were more likely than the street living children. It was also found that going to recognized physicians of street children who saved money (OR=2.417, CI: 1.585-3.686) was more likely than the street children who

did not save money. It was revealed that going to recognized physicians of street children who ever attended school (OR=0.564, CI: 0.353-0.901) was less likely than the street children who never attended school. It was also revealed that going to recognized physicians of the street children whose fathers' occupations were labour (OR=1.898, CI: 0.983-3.664), small business (OR=3.787, CI: 1.689-8.493) and rickshaw/van puller/driving (OR=3.228, CI: 1.590-6.552) was more likely than the street children whose fathers' occupation was farming. . It was observed that going to recognized physicians of street children who had step parents (OR=0.519, CI: 0.297-0.909) was less likely than the street children who had both father and mother.

Table 6.11 Effects of selected background characteristics on going to medical person of the street children

Explanatory variables	Coefficients(β)	S.E of β	P-values	Odds ratio (OR)	95.0% C.I. for OR	
					Lower	Upper
Types of street children						
Street living children (r)	.....	.....	.....	1.000	.....	.....
Street working children	0.768	0.279	0.006	2.156	1.248	3.724
Children from street families	0.669	0.383	0.081	1.951	0.921	4.134
Children who were in institutional care	1.713	0.642	0.008	5.544	1.574	19.527
Gender of street children						
Male(r)	.....	.....	.....	1.000	.....	.....
Female	0.076	0.371	0.837	1.079	0.522	2.233
Place of interview						
Mazar (r)	.....	.....	.....	1.000	.....	.....
Railway station/bus stand/launch terminal	-0.037	0.306	0.905	0.964	0.529	1.758
Kachabazar	-0.166	0.361	0.645	0.847	0.418	1.717
Park/Institution	0.502	0.382	0.189	1.651	0.781	3.490
Saving money						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.883	0.215	0.000	2.417	1.585	3.686
Currently attending school						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	-0.287	.257	0.264	0.750	0.453	1.242
Ever attending school						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	-0.572	0.239	0.017	0.564	0.353	0.901

Father's occupation						
Farming (r)	.....	.....	.....	1.000	.....	.....
Labour	0.641	0.336	0.056	1.898	0.983	3.664
Small business	1.332	0.412	0.001	3.787	1.689	8.493
Rickshaw/van puller/ driving	1.172	0.361	0.001	3.228	1.590	6.552
Others (Begging, kabiraji, jobless, etc.)	0.283	0.440	0.520	1.327	0.560	3.144
Parent's composition						
Father and mother (r)	.....	.....	.....	1.000	.....	.....
Step parents	-0.655	0.286	0.022	0.519	0.297	0.909
Only father or mother/ none	0.473	0.403	0.240	1.605	0.729	3.534
Food collection						
Street shop (r)	.....	.....	.....	1.000	.....	.....
Begging	-0.100	0.326	0.760	0.905	0.478	1.714
Home made	0.337	0.322	0.295	1.401	0.745	2.633
Institution	0.104	0.520	0.841	1.110	0.401	3.073
Smoking practice						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.167	0.238	0.482	1.182	0.742	1.885

Model summary: Model $\chi^2 = 576.611$ (0.000), -2 Log likelihood = 682.144

Nagelkerke RsSquare = 0.627, $\rho^2_{cv} = 0.619823$, Shrinkage coefficient = 0.0072

Stability of R square = 0.993

Note: r represents the reference category, CI represents the confidence interval

6.8 Smoking practice of street children

Smoking practice is harmful for the health of street children, not only that sometimes it is a cause of death. But a large number of street children are regularly smoking which is danger for their health. The relation of smoking practice of street children with other has been studied in the following sub section. Smoking practice of street children has been considered as dependent variable which has been classified in the following way:

$$Y = \text{smoking practice} = \begin{cases} 1, \text{yes} \\ 0, \text{no} \end{cases}$$

6.8.1 Bivariate distribution of smoking practice of street children by their background characteristics

The bivariate distributions of smoking practice of street children with their background characteristics have been presented in Table 6.12. It was found that 47.6%, 12.3%, 10.9% and 7.0% of "street living children", "street working children", "children from street families" and "Children who were in institutional care " respectively were smoker. It

was also found that 22.5% of the male street children and 3.6% of the female street children were smoker. It was observed that 43.4%, 35.3%, 13.4% and 6.6% of street children who were interviewed at mazar, railway station/bus stand/launch terminal, kachabazar, and park/institution respectively were smoker. The smoker street children at mazar which is supported by the study of Tahmina et al. (2018) and at railway station/bus stand/launch terminal support the study of Eshita (2018) and Amiruddin et al. (2015). It was also observed that 17.3% of the respondents who became street children due to poverty were smoker and 40.7% of the respondents who became street children due to step parents/none for caring were smoker which is almost same estimate of Eshita (2018). It was revealed that 3.3%, 18.0% of the street children were smoker in the age group 5-9 and 10-14 years respectively and 47.6% of the street children who were in the age group 15-18 years were smoker which is closer estimate of the study of Tahmina et al. (2018). It was also revealed that 11.8%, 20.9%, 32.1%, 17.9% and 13.5% the street children who were engaged in small business, tokai, coolie/minti, labour and begging respectively were smoker. It was seen that 11.2%, 15.6% and 28.2% of the street children whose working hours per day were <5, 5-7, 8+ hours respectively were smoker. It was also seen that 15.6% and 22.3% of the street children whose working days per week were <7 and 7 days respectively were smoker. It was revealed that 13.2% and 32.1% of the street children whose earnings per day were < BDT 100 and BDT 100+ per day respectively were smoker. It was also revealed that 20.5% and 20.1% of the street children who saved money and did not save money respectively were smoker. It was seen that the places of birth of 18.2% and 24.0% of the street children were rural and urban respectively were smoker. It was also seen that 12.5% and 24.8% of the street children were currently attending and were not currently attending school respectively were smoker. It was revealed that 18.8% and 22.3% of the street children went to school at least once in their lives and never went to school respectively were smoker. It was found that 20.5%, 19.5% and 16.4% of the street children whose fathers' education levels were illiterate, primary

and secondary+ respectively were smoker. It was also found that 18.6%, 19.9% and 27.6 % of the street children whose mothers' education levels were illiterate, primary and secondary+ respectively were smoker. It was observed that 28.2%, 18.6%, 21.1%, 16.1% and 22.7% of the street children whose fathers' occupations were farming, labour, small business, rickshaw/van puller/driving and others respectively were smoker. It was also observed that 13.6%, 15.9%, 18.5%, 22.6% and 21.8% of the street children whose mothers' occupations were labour, small business, maid servant, housewife and others respectively were smoker. It was seen that 15.0%, 48.4% and 20.4% of the street children whose parents' compositions were both father and mother, step parents and only father or mother/none respectively were smoker. It was also seen that 15.6% and 19.6% of the street children whose fathers' income per day was <BDT 300 and BDT 300+ respectively were smoker. It was revealed that 19.8% and 16.7% of the street children whose mothers' income per day was <BDT 200 and BDT 200+ respectively were smoker. It was also revealed that 42.4%, 27.8%, 6.0% and 12.9% of the street children who collected their food from street shop, begging, home and institution respectively were smoker. Based on BMI it was found that 12.1%, 19.0% and 25.9% of the street children who were underweight, normal weight and overweight/obese respectively were smoker. It was also found that 84.1% and 14.1% of the street children who were drug addicted and were not drug addicted respectively were smoker. It was revealed that 29.2% and 17.5% of the street children were sick and were not sick respectively were smoker. It was also revealed that 19.7% of the street children were suffered from sickness at least once in their lives and 19.5% were never suffered in their lives were smoker. It was seen that 38.4% and 17.8% of the street children were injured and were not injured respectively were smoker. It was also found that 32.2% of the street children were injured at least once in their lives and 13.7% were never injured were smoker. It was also found that 18.4% of the street children went to recognized physicians during their sickness/injury and 30.3% did not go to recognized physicians during their sickness/injury were smoker. It was observed that

18.5% and 17.4% of the street children who took allopathic others treatment respectively were smoker.

The χ^2 - test demonstrated that the association between smoking practice of street children and types of street children ($p<0.01$), gender of street children ($p<0.01$), places of interview ($p<0.01$), reasons of becoming street children ($p<0.01$), current age ($p<0.01$), types of work ($p<0.01$), working hours per day ($p<0.01$), working days per week ($p<0.05$), earnings per day ($p<0.01$), places of birth ($p<0.05$), currently attending school ($p<0.01$), parents' compositions ($p<0.01$), food collection ($p<0.01$), BMI ($p<0.05$), drug addiction ($p<0.01$), sickness ($p<0.01$), injury ($p<0.01$), ever injury ($p<0.01$) and going to recognized physicians ($p<0.01$) were statistically significant whereas saving money, ever attending school, fathers' education levels, mothers' education levels, fathers' occupations, mothers' occupations, fathers' income per day, mothers' income per day, ever sickness and types of treatment were insignificant with smoking practice of street children.

Table 6.12 Bivariate distribution of smoking practice of street children by their background characteristics

Background characteristics	Smoking practice		χ^2 - values (p values)
	Yes	No	
Types of street children			179.849 (0.000)
Street living children	129 (47.6)	142 (52.4)	
Street working children	61 (12.3)	436 (87.7)	
Children from street families	12 (10.9)	98 (89.1)	
Children who were in institutional care	16 (7.0)	214 (93.0)	
Gender of street children			32.181 (0.000)
Male	212 (22.5)	729 (77.5)	
Female	6 (3.6)	161 (96.4)	
Places of interview			132.836 (0.000)
Mazar	23 (43.4)	30 (56.6)	
Rail station/bus stand/launch termial	136 (35.3)	249 (64.7)	
Kachabazar	29 (13.4)	188 (86.6)	
Park/institution	30 (6.6)	423 (93.4)	
Reasons of becoming street children			35.223 (0.000)
Poverty	172 (17.3)	823 (82.7)	
Step parents/none for caring	46 (40.7)	67 (59.3)	

Current age (in years)			
5-9			120.072
10-14	7 (3.3)	204 (96.7)	(0.000)
15-18	131 (18.0)	598 (82.0)	
	80 (47.6)	88 (52.4)	
Types of work			
Small business			27.605
Tokai	21 (11.8)	157 (88.2)	(0.000)
Coolie/minti	72 (20.9)	272 (79.1)	
Labour	63 (32.1)	133 (67.9)	
Begging	54 (17.9)	247 (82.1)	
	7(13.5)	45(86.5)	
Working hours per day			
<5			35.731
5-7	26 (11.2)	207 (88.8)	(0.000)
8+	56 (15.6)	304 (84.4)	
	135 (28.2)	343 (71.8)	
Working days per week			
<7			6.228
7	50 (15.6)	271 (84.4)	(0.013)
	167 (22.3)	583 (77.7)	
Earnings per day			
<BDT100			54.979
BDT100+	89 (13.2)	583 (86.8)	(0.000)
	128 (32.1)	271 (67.9)	
Saving money			
Yes			0.022
No	96 (20.5)	373 (79.5)	(0.881)
	121 (20.1)	481 (79.9)	
Places of birth			
Rural			4.517
Urban	149 (18.2)	671 (81.8)	(0.034)
	69 (24.0)	219 (76.0)	
Currently attending school			
Yes			25.714
No	58 (12.5)	405 (87.5)	(0.000)
	160 (24.8)	485 (75.2)	
Ever attending school			
Yes			1.633
No	157 (18.8)	678 (81.2)	(0.201)
	61 (22.3)	212 (77.7)	
Fathers' education levels			
Illiterate			1.164
Primary	119 (20.5)	461 (79.5)	(0.559)
Secondary+	77 (19.5)	317 (80.5)	
	22 (16.4)	112 (83.6)	
Mothers' education levels			
Illiterate			3.511
Primary	117 (18.6)	512 (81.4)	(0.173)
Secondary+	80 (19.9)	323 (80.1)	
	21 (27.6)	55 (72.4)	
Fathers' occupations			
Farming			7.241
Labour	20 (28.2)	51 (71.8)	0.124
Small business	69 (18.6)	301 (81.4)	
Rickshaw/van puller/ driving	35 (21.1)	131 (78.9)	
Others (begging. Kabiraji, jobless, etc.)	48 (16.1)	250 (83.9)	
	46 (22.7)	157 (77.3)	
Mothers' occupations			
Labour			6.654
Small business	18 (13.6)	114 (86.4)	(0.155)
	10 (15.9)	53 (84.1)	

Maid servant	71 (18.5)	313 (81.5)	
Housewife	100 (22.6)	342 (77.4)	
Others (begging, singer, tokai etc.)	19 (21.8)	68 (78.2)	
Parents' compositions			78.188
Father and mother	123 (15.0)	695 (85.0)	(0.000)
Step parents	62 (48.4)	66 (51.6)	
Only father or mother/ none	33 (20.4)	129 (79.6)	
Fathers' income per day			2.310
< BDT.300	55 (15.6)	297 (84.4)	(0.129)
BDT300+	106 (19.6)	434 (80.4)	
Mothers' income per day			1.004
< BDT200	154 (19.8)	623 (80.2)	(0.316)
BDT200+	35 (16.7)	174 (83.3)	
Food collection			178.030
Street shop	140 (42.4)	190 (57.6)	(0.000)
Begging	25 (27.8)	65 (72.2)	
Home made	31 (6.0)	486 (94.0)	
Institution	22 (12.9)	149 (87.1)	
BMI			6.450
Underweight	7 (12.1)	51 (87.9)	(0.040)
Normal weight	168 (19.0)	716 (81.0)	
Overweight/ obese	43 (25.9)	123 (74.1)	
Drug addiction			250.980
Yes	74 (84.1)	14 (15.9)	(0.000)
No	144 (14.1)	876 (85.9)	
Sickness			14.205
Yes	59 (29.2)	143 (70.8)	(0.000)
No	159 (17.5)	747 (82.5)	
Ever sickness			0.008
Yes	175 (19.7)	712 (80.3)	(0.927)
No	43 (19.5)	178 (80.5)	
Injury			24.077
Yes	38 (38.4)	61 (61.6)	(0.000)
No	180 (17.8)	829 (82.2)	
Ever injury			52.389
Yes	115 (32.2)	242 (67.8)	(0.000)
No	103 (13.7)	648 (86.3)	
Going to recognized physicians			10.748
Yes	147 (18.4)	650 (81.6)	(0.001)
No	44 (30.3)	101 (69.7)	
Types of treatment			0.036
Allopathic	139 (18.5)	612 (81.5)	0.850
Others	8 (17.4)	38 (82.6)	

Note: () indicates percentage of respondents

6.8.2 Determinants of smoking practice of street children

The effects of different characteristics on smoking practice of street children have been presented in Table 6.13. The information of model fitting was shown at the bottom of the

Table. It was revealed that the model was better fit due to smallest shrinkage coefficient (0.0096). It was found that the smoking practice of street working children (OR=0.545, CI: 0.298-0.997) and children from street families (OR=0.345, CI: 0.123-0.968) respectively was less likely than the street living children. It was also found that the male street children (OR=0.111, CI: 0.025-0.484) were more likely smoker than female street children. It was revealed that the street children who were interviewed at railway station/bus stand/launch terminal (OR=0.128, CI: 0.046-0.355), kachabazar (OR=0.099, CI: 0.032-0.312) and park/institution (OR=0.065, CI: 0.021-0.203) respectively were less likely smoker than the street children who were interviewed at mazar. It was also revealed that the street children who were in the age group 10-14 years (OR=3.363, CI: 1.273-8.890) and 15-18 years (OR=19.765, CI: 6.537-59.757) respectively were more smoker than the street children who were in the age group 5-9 years it means the prevalence of smoking was increasing with the increasing of their age which is supported by the study of Kamal et al. (2010). It was also revealed that the street children who were engaged in tokai (OR=2.970, CI: 1.484-5.943) and coolie/minti (OR=2.261, CI: 1.063-4.813) were more likely smoker than the street children who were engaged in small business. It was observed that the street children whose working hours per day were 5-7 hours (OR=0.511, CI: 0.238-1.097) and 8+ (OR=0.436, CI: 0.203-0.937) hours respectively were less likely smoker than the street children whose working hours per day were <5 hours. It was also observed that the street children who collected their food from begging (OR=0.467, CI: 0.209-1.046) and home (OR=0.253, CI: 0.127-0.507) respectively were more likely smoker than the street children who collected their food from street shop. It was seen that the street children who were addicted (OR=15.508, CI: 6.984-34.432) were more likely smoker than the street children were not addicted. It was also seen that the street children who were injured at least once in their life (OR=2.027, CI: 1.227-3.348)

were more likely smoker than the street children who were not injured in their life. It was found that the street children who went to recognized physicians (OR=0.567, CI: 0.326-0.989) were less likely smoker than the street children who did not go to recognized physicians.

Table 6.13 Effects of selected background characteristics on smoking practice of street children

Explanatory variables	Coefficients(β)	S.E of β	P-values	Odds ratio (OR)	95.0% C.I. for OR	
					Lower	Upper
Types of street children						
Street living children (r)	.....	.....	.....	1.000	.....	.....
Street working children	-0.607	0.308	0.049	0.545	0.298	0.997
Children from street families	-1.066	0.527	0.043	0.345	0.123	0.968
Children who were in institutional care	-0.253	0.714	0.723	0.776	0.192	3.143
Gender of street children						
Male (r)	.....	.....	.....	1.000	.....	.....
Female	-2.200	0.752	0.003	0.111	0.025	0.484
Places of interview						
Mazar (r)	.....	.....	.....	1.000	.....	.....
Railway station/bus stand/launch terminal	-2.055	0.520	0.000	0.128	0.046	0.355
Kachabazar	-2.308	0.583	0.000	0.099	0.032	0.312
Park/institution	-2.735	0.580	0.000	0.065	0.021	0.203
Reasons of becoming street children						
Poverty (r)	.....	.....	.....	1.000	.....	.....
Step parents/none for caring	0.534	0.375	0.154	1.705	0.818	3.553
Current age (in years)						
5-9 (r)	.....	.....	.....	1.000	.....	.....
10-14	1.213	0.496	0.014	3.363	1.273	8.890
15-18	2.984	0.564	0.000	19.765	6.537	59.757
Types of work						
Small business (r)	.....	.....	.....	1.000	.....	.....
Tokai	1.089	0.354	0.002	2.970	1.484	5.943
Coolie/minti	0.816	0.385	0.034	2.261	1.063	4.813
Labour	0.148	0.368	0.688	1.159	0.564	2.384
Begging	-1.163	0.817	0.154	0.313	0.063	1.549
Working hours per day						
<5 (r)	.....	.....	.....	1.000	.....	.....
5-7	-0.671	0.389	0.085	0.511	0.238	1.097
8+	-0.830	0.390	0.033	0.436	0.203	0.937
Working days per week						
<7 (r)	.....	.....	.....	1.000	.....	.....
7	-0.132	0.261	0.613	0.876	0.525	1.462

Earnings per day						
< BDT 100 (r)				1.000		
BDT 100+	0.368	0.256	0.152	1.444	0.874	2.387
Places of birth						
Rural (r)				1.000		
Urban	0.257	0.251	0.305	1.293	0.791	2.114
Currently attending school						
No (r)				1.000		
Yes	-0.462	0.309	0.135	0.630	0.344	1.155
Parents' compositions						
Father and mother (r)				1.000		
Step parents	0.121	0.366	0.742	1.128	0.551	2.311
Only father or mother/ none	-0.217	0.327	0.507	0.805	0.424	1.529
Food collection						
Street shop (r)				1.000		
Begging	-0.761	0.411	0.064	0.467	0.209	1.046
Home made	-1.373	0.353	0.000	0.253	0.127	0.507
Institution	-0.787	0.538	0.144	0.455	0.158	1.308
BMI						
Underweight (r)				1.000		
Normal weight	0.305	0.550	0.580	1.356	0.461	3.987
Overweight/ obese	0.180	0.630	0.776	1.197	0.348	4.116
Drug addiction						
No (r)				1.000		
Yes	2.741	0.407	0.000	15.508	6.984	34.432
Sickness						
No (r)				1.000		
Yes	0.385	0.267	0.150	1.469	0.870	2.480
Injury						
No (r)				1.000		
Yes	0.304	0.343	0.375	1.356	0.692	2.657
Ever injury						
No (r)				1.000		
Yes	0.706	0.256	0.006	2.027	1.227	3.348
Going to recognized physicians						
No (r)				1.000		
Yes	-0.567	0.283	0.045	0.567	0.326	0.989

Model summary: Model $\chi^2=729.595$ (0.000), -2 Log likelihood =529.160

Nagelkerke R square =0.736, $\rho^2_{cv}=0.726$, Shrinkage coefficient=0.0096

Stability of R square = 0.990

Note: r represents the reference category, CI represents the confidence interval

6.9 Drug addiction of street children

Studying drug addiction of street children is an important issue. They get easily into different types of drugs in their locality but they don't know the bad effect of using drugs.

are harmful to their health. The relation of street children's drug addiction with background characteristics has been studied in the following sub section. Smoking practice of street children has been considered as dependent variable which has been classified in the following way:

$$Y = \text{drug addiction} = \begin{cases} 1, \text{ yes} \\ 0, \text{ no} \end{cases}$$

6.9.1 Bivariate distribution of drug addiction of street children by their background characteristics

The bivariate distributions of drug addiction of street children with their background characteristics have been presented in Table 6.14. It was found that 20.7%, 4.0%, 5.5% and 2.6% of "street living children", "street working children", "children from street families" and "Children who were in institutional care " respectively were drug addicted. It was also found that 8.7% of the male street children and 3.6% of the female street children were drug addicted. It was observed that 37.7% 13.0%, 3.2% and 2.4% of street children who were interviewed at mazar, railway station/bus stand/launch terminal, kachabazar, park/institution respectively were drug addicted. It was also observed that 7.5% and 11.5% of the street children whose reasons of becoming street children were poverty and step parents/none for caring respectively were drug addicted. It was revealed that 2.8%, 6.7% and 19.6% of the street children who were in the age group 5-9, 10-14, 15-18 years respectively were drug addicted. It was also revealed that 2.8%, 7.8%, 12.2%, 8.6% and 11.5% the street children who were engaged in small business, tokai, coolie/mini, labour and begging respectively were drug addicted. It was seen that 4.3%, 5.3% and 12.3% of the street children whose working hours per day were <5, 5-7, 8+ hours respectively were drug addicted. It was also seen that 4.7% and 9.7% of the street children who working days per week <7 and 7 days respectively were drug addicted. It was revealed that 5.7% and 12.5% of the street children who earnings per day were <

BDT 100 and BDT 100+ respectively were drug addicted. It was also revealed that 7.7% and 8.6% of the street children who saved money and did not save money respectively were drug addicted. It was seen that the places of birth of 6.5% and 12.2% of the street children were rural and urban respectively were drug addicted. It was also seen that 6.9% and 8.7% of the street children were attending and were not attending school respectively were drug addicted. It was revealed that 7.9% and 8.1% of the street children who went to school at least once in their lives and never went to school respectively were drug addicted. It was found that 8.3%, 7.9% and 6.7% of the street children whose fathers' education levels were illiterate, primary and secondary+ respectively were drug addicted. It was also found that 6.7%, 9.7% and 9.2% of the street children whose mothers' education levels were illiterate, primary and secondary+ respectively were drug addicted. It was observed that 8.5%, 6.8%, 9.0%, 6.7% and 10.8% of the street children whose fathers' occupation' were farming, labour, small business, rickshaw/van puller/driving and others respectively were drug addicted. It was also observed that 9.1%, 7.9%, 7.8%, 7.0% and 11.5% of the street children whose mothers' occupations were labour, small business, maid servant, housewife and others respectively were drug addicted. It was seen that 5.4%, 20.3% and 11.1% of the street children whose parents' compositions were both father and mother, step parents and only father or mother/ none respectively were drug addicted. It was also seen that 6.5% and 6.9% of the street children whose fathers' income per day was <BDT 300 and BDT 300+ respectively were drug addicted. It was revealed that 7.9% and 9.6% of the street children whose mothers' income per day was <BDT 200 and BDT 200+ respectively were drug addicted. It was also revealed that 14.8%, 17.8%, 2.7% and 5.3% of the street children who collected their food from street shop, begging, home and institution respectively were drug addicted. Based on BMI it was found that 12.1%, 7.5% and 9.0% of the street children who were under weight, normal weight

Overweight/ obese respectively were drug addicted. It was also found that 33.9% and 1.6% of the street children who were smoker and were not smoker respectively were drug addicted. It was revealed that 15.3% and 6.3% of the street children were sick and were not sick respectively were drug addicted. It was also revealed that 8.0% of the street children were suffered from sickness at least once in their lives and 7.7% were never suffered in their lives were drug addicted. It was seen that 17.2% and 7.0% of the street children were injured and were not injured respectively were drug addicted. It was also found that 14.3% of the street children were injured at least once in their lives and 4.9% were never injured were drug addicted. It was also found that 8.3% of the street children who went to recognized physicians during their sickness/injury and 9.7% of them who did not go to recognized physicians during their sickness/injury were drug addicted. It was observed that 8.0% and 13.0% of the street children took allopathic and others treatment respectively were drug addicted.

The χ^2 - test demonstrated that the association between sickness of street children and Types of street children ($p<0.01$), gender of street children ($p<0.05$), places of interview ($p<0.01$), current age ($p<0.01$), Types of work ($p<0.05$), working hours per day ($p<0.01$), working days per week ($p<0.05$), earnings per day ($p<0.01$), places of birth ($p<0.01$), parents' compositions ($p<0.01$), food collection ($p<0.01$), smoking practice ($p<0.01$), sickness ($p<0.01$), injury ($p<0.01$) and ever injury ($p<0.01$) were statistically significant. On the other hand reasons of becoming street children, saving money, currently attending school, ever attending school, fathers' education levels, mothers' education levels, fathers' occupations, mothers' occupations, fathers' income per day, mothers' income per day, BMI, ever sickness, going to recognized physicians and types of treatment were not statistically significant with drug addiction of street children.

Table 6.14 Bivariate distribution of drug addiction of street children by their background characteristics

Background characteristics	Drug addiction		χ^2 - values (p values)
	Yes	No	
Types of street children			80.304 (0.000)
Street living children	56 (20.7)	215 (79.3)	
Street working children	20 (4.0)	477 (96.0)	
Children from street families	6 (5.5)	104 (94.5)	
Children who were in institutional care	6 (2.6)	224 (97.4)	
Gender of street children			5.088 (0.024)
Male	82 (8.7)	859 (91.3)	
Female	6 (3.6)	161 (96.4)	
Places of interview			103.186 (0.000)
Mazar	20 (37.7)	33 (62.3)	
Rail station/bus stand/launch terminal	50 (13.0)	335 (87.0)	
Kachabazar	7 (3.2)	210 (96.8)	
Park/institution	11 (2.4)	442 (97.6)	
Reasons of becoming street children			2.184 (0.139)
Poverty	75 (7.5)	920 (92.5)	
Step parents/none for caring	13 (11.5)	100 (88.5)	
Current age (in years)			40.445 (0.000)
5-9	6 (2.8)	205 (97.2)	
10-14	49 (6.7)	680 (93.3)	
15-18	33 (19.6)	135 (80.4)	
Types of work			12.013 (0.017)
Small business	5 (2.8)	173 (97.2)	
Tokai	27 (97.8)	317 (92.2)	
Coolie/minti	24 (12.2)	172 (87.8)	
Labour	26 (8.6)	275 (91.4)	
Begging	6 (11.5)	46 (88.5)	
Working hours per day			19.675 (0.000)
<5	10 (4.3)	223 (95.7)	
5-7	19 (5.3)	341 (94.7)	
8+	59 (12.3)	419 (87.7)	
Working days per week			7.633 (0.006)
<7	15 (4.7)	306 (95.3)	
7	73 (9.7)	677 (90.3)	
Earnings per day			15.698 (0.000)
< BDT 100	38 (5.7)	634 (94.3)	
BDT 100+	50 (12.5)	349 (87.5)	
Saving money			0.323 (0.570)
Yes	36 (7.7)	433 (92.3)	
No	52 (8.6)	550 (91.4)	
Places of birth			4.436 (0.02)
Rural	53 (6.5)	767 (93.5)	
Urban	35 (12.2)	253 (87.8)	
Currently attending school			
Yes	32 (6.9)	93.1	
No	56 (8.7)	1.3	

Ever attending school			0.007
Yes	66 (7.9)	769 (92.1)	(0.935)
No	22 (8.1)	251 (91.9)	
Fathers' education levels			0.367
Illiterate	48 (8.3)	532 (91.7)	(0.832)
Primary	31 (7.9)	363 (92.1)	
Secondary+	9 (6.7)	125 (93.3)	
Mothers' education levels			3.203
Illiterate	42 (6.7)	587 (93.3)	(0.202)
Primary	39 (9.7)	364 (90.3)	
Secondary+	7 (9.2)	69 (90.8)	
Fathers' occupations			3.953
Farming	6 (8.5)	65 (91.5)	(0.412)
Labour	25 (6.8)	345 (93.2)	
Small business	15 (9.0)	151 (91.0)	
Rickshaw/van puller/ driving	20 (6.7)	278 (93.3)	
Others (Begging, kabiraji, jobless, etc.)	22 (10.8)	181 (89.2)	
Mothers' occupations			2.270
Labour	12 (9.1)	120 (90.9)	(0.686)
Small business	5 (7.9)	58 (92.1)	
Maid servant	30 (7.8)	354 (92.2)	
Housewife	31 (7.0)	411 (93.0)	
Others (Begging, singer, tokai etc.)	10 (11.5)	77 (88.5)	
Parents' compositions			36.365
Father and mother	44 (5.4)	774 (94.6)	(0.000)
Step parents	26 (20.3)	102 (79.7)	
Only father or mother/ none	18 (11.1)	144 (88.9)	
Fathers' income per day			0.034
< BDT 300	23 (6.5)	329 (93.5)	(0.853)
BDT 300+	37 (6.9)	503 (93.1)	
Mothers' income per day			0.645
< BDT 200	61 (7.9)	716 (92.1)	(0.422)
BDT 200+	20 (9.6)	189 (90.4)	
Food collection			54.488
Street shop	49 (14.8)	281 (85.2)	(0.000)
Begging	16 (17.8)	74 (82.2)	
Home made	14 (2.7)	503 (97.3)	
Institution	9 (5.3)	162 (94.7)	
BMI			1.897
Underweight	7 (12.1)	51 (87.9)	(0.387)
Normal weight	66 (7.5)	818 (92.5)	
Overweight/ obese	15 (9.0)	151 (91.0)	
Smoking practice			50.981
Yes	74 (33.9)	144 (66.1)	(0.000)
No	14 (1.6)	876 (98.4)	
Sickness			
Yes	31 (15.3)	(84.7)	
No	57 (6.3)	(93.7)	

Ever sickness			
Yes			0.024
No	71 (8.0)	816 (92.0)	(0.878)
Injury			
Yes			12.666
No	17 (17.2)	82 (82.8)	(0.000)
Ever injury			
Yes			28.988
No	71 (7.0)	938 (93.0)	(0.000)
Going to recognized physicians			
Yes			0.298
No	51 (14.3)	306 (85.7)	(0.585)
Types of treatment			
Allopathic			1.458
Others	37 (4.9)	714 (95.1)	(0.227)
	66 (8.3)	731 (91.7)	
	14 (9.7)	131 (90.3)	
	60 (8.0)	691 (92.0)	
	6 (13.0)	40 (87.0)	

Note: () indicates percentage of respondents

6.9.2 Determinants of drug addiction of street children

The effects of different characteristics on drug addiction of street children have been presented in Table 6.15. The information of model fitting was shown at the bottom of the Table. It was revealed that the model was better fit due to smallest shrinkage coefficient (0.0040). It was found that the drug addiction of street working children (OR=0.431, CI: 0.198-0.938) and children from street families (OR=0.267, CI: 0.081-0.885) was less likely drug than street living children. It was also found that the drug addiction of street children who were interviewed at railway station/bus stand/launch terminal (OR=0.047, CI: 0.018-0.121), kachabazar (OR=0.028, CI: 0.008-0.096) and park/institution (OR=0.052, CI: 0.015-0.184) respectively was less likely than the street children who were interviewed at mazar. Surprisingly it was revealed that the street children who were in the age group 10-14 years (OR=0.293, CI: 0.120-0.716) were less likely drug addicted than the street children who were in the age group 5-9 years. It was also revealed that the drug addiction of street children whose place of birth was urban area (OR=1.706, CI: 0.956-3.045) was more likely than the street children whose place of birth was rural area. It was also observed that the drug addiction of street children who were smoker (OR=13.613, CI: 6.442-28.769) was more than the street children who were non-smoker.

It was also observed that the sick street children (OR=1.856, CI: 0.998-3.453) were more likely drug addicted than the street children who were not sick during the interview time.

It was seen that the drug addiction of the street children who were injured at least once in their lives (OR=1.748, CI: 0.935-3.267) was more likely than the street children who never suffered from injury.

Table 6.15 Effects of selected background characteristics on drug addiction street children

Explanatory variables	Coefficients(β)	S.E of β	P- values	Odds ratio (OR)	95.0% C.I. for OR	
					Lower	Upper
Types of street children						
Street living children (r)	.....	.....	.....	1.000	.....	.....
Street working children	-0.841	0.396	0.034	0.431	0.198	0.938
Children from street families	-1.319	0.611	0.031	0.267	0.081	0.885
Children who were in institutional care	-0.450	0.858	0.600	0.637	0.119	3.428
Gender of street children						
Male (r)	.....	.....	.....	1.000	.....	.....
Female	-0.317	0.589	0.590	0.728	0.230	2.308
Places of interview						
Mazar (r)	.....	.....	.....	1.000	.....	.....
Railway station/bus stand/launch terminal	-3.061	0.485	0.000	0.047	0.018	0.121
Kachabazar	-3.565	0.621	0.000	0.028	0.008	0.096
Park/institution	-2.950	0.642	0.000	0.052	0.015	0.184
Current age (in years)						
5-9 (r)	.....	.....	.....	1.000	.....	.....
10-14	-1.229	0.456	0.007	0.293	0.120	0.716
15-18	-0.882	0.541	0.103	0.414	0.143	1.196
Types of work						
Small business (r)	.....	.....	.....	1.000	.....	.....
Tokai	-0.085	0.469	0.856	0.919	0.366	2.304
Coolie/mini	0.056	0.519	0.915	1.057	0.383	2.921
Labour	-0.005	0.470	0.992	0.995	0.396	2.502
Begging	-1.220	0.806	0.130	0.295	0.061	1.433
Working hours per day						
<5 (r)	.....	.....	.....	1.000	.....	.....
5-7	-0.464	0.488	0.341	0.629	0.242	1.636
8+	0.095	0.470	0.840	1.100	0.437	2.765
Working days per week						
<7(r)	.....	.....	.....	1.000	.....	.....
7	0.213	0.333	0.522	1.237	0.645	2.375
Earnings per day						
< BDT100 (r)	.....	.....	.....	1.000	.....	.....
BDT100+	0.243	0.321	0.450	1.275	0.679	2.393

Places of birth						
Rural (r)	.....	.....	.....	1.000	.....	.....
Urban	0.534	0.295	0.071	1.706	0.956	3.045
Parents' compositions						
Father and mother (r)	.....	.....	.....	1.000	.....	.....
Step parents	0.216	0.351	0.537	1.241	0.624	2.468
Only father or mother/ none	0.260	0.389	0.505	1.296	0.605	2.780
Food collection						
Street shop (r)	.....	.....	.....	1.000	.....	.....
Begging	-0.325	0.485	0.503	0.723	0.279	1.869
Home made	-0.234	0.492	0.634	0.791	0.301	2.077
Institution	-0.510	0.657	0.438	0.601	0.166	2.176
Smoking practice						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	2.611	0.382	0.000	13.613	6.442	28.769
Sickness						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.618	0.317	0.051	1.856	.998	3.453
Injury						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.021	0.423	0.961	1.021	0.446	2.338
Ever injury						
No (r)	.....	.....	.....	1.000	.....	.....
Yes	0.558	0.319	0.080	1.748	0.935	3.267

Model summary: Model $\chi^2 = 1109.439$ (0.000), -2 Log likelihood = 375.282

Nagelkerke R square = 0.860, $\rho^2_{cv} = 0.856$, Shrinkage coefficient = 0.0040

Stability of R square = 0.996

Note: r represents the reference category, CI represents the confidence interval

Chapter 7

Conclusions and Recommendations

Chapter 7

Conclusions and Recommendations

Children are the valuable asset of any nation and street children are the part of them. Street children are the most vulnerable group in our country. They are deprived from their all basic needs. Sustainable development of any country is not possible without development of the life style of street children. Firstly this chapter describes the major findings of this research. Secondly, it describes the policy recommendations and put some ideas about future research. Here suggestions have been made for future scope of study and improvements. Finally limitations of this study have been mentioned at the end in this chapter.

7.1 Major findings of the study

In this research, social, demographic, economic and health related characteristics of the street children of Bangladesh have been analyzed. Some demographic parameters have been estimated and some models have been fitted.

Some important findings of social characteristics are as follows:

- The rate of currently attending school of overall street children was 41.8% but the rate of currently attending school of female street children particularly was 76%. The rate of currently attending school of the respondents in the age group 5-9 years was 48.3%, 10-14 years was 42.2% and 15-18 years was 31.5%. That is attending school of street children were decreasing with the increasing of their age. The rate of currently attending school of street children who collected their food from institution was 90.6%. The rate of currently attending school of the smoker street children was 26.6%.

- The rate of currently attending school of female street children was 1.873 times more likely than the male street children. The rate of currently attending school of the street children whose working hours per day were 5-7 hours and 8+ hours was 0.342 times and 0.288 times respectively less likely than the street children whose were working hours per day were <5 hours. The rate of currently attending school of the street children whose fathers' education levels were secondary+ was 1.729 times more likely that the street children who were illiterate. The rate of currently attending school of the street children who collected their food from home and institution was 1.837 times and 10.130 times more likely than the street children who collected their food from street shop.
- The rate of ever attending school of overall street children was 75.4% but ever attending school of female street children particularly was 88.0%. Rate of ever attending school among the street children whose working hours per day were <5 hours was highest (85.8%), among the street children whose working hours per day were 5-7 hours was 72.5% and among the street children whose working hours per day were 8+ hours was 70.7% which indicated that rate of ever attending school was decreasing with the increasing of their working hours per day. The rate of ever attending school of street children who collected their food from institution was 96.5%.
- The rate of ever attending school of female street children was 1.783 times more likely than the male street children. Ever attending school of the street children whose fathers' education levels were primary and secondary+ was 2.143 times and 2.079 times respectively more likely than the street children whose fathers were illiterate. The rate of ever attending school of the street children who collected their food from institution was 4.512 times more likely than the street children who collected their food from street shop.

Despite social characteristics, some findings of the demographic characteristics are as follows:

- Out of total sample data, maximum number of the respondents (84.9%) were male and only 15.1% were female. Majority of the street (65.8%) were in the age group 10-14 years. Maximum street children (59.0%) started their street life from the age 5-9 years. Around three fourth of the respondents (74%) came from different rural areas in Dhaka City.
- Probability of dying (q_x) of street children of Dhaka City in Bangladesh at age 5 years was the highest but the probability of dying for the subsequent ages declined drastically. The probability of dying at age 6 to 18 years was approximately similar but fluctuating in nature.
- The migration rate from rural to urban of male street children was higher than that of female street children. Among four types of street children, migration rate of street working children was the highest. Migration rate of street children of illiterate fathers was higher than that of street children of literate fathers. Migration rate of street children of illiterate mothers was higher than that of street children of literate mothers.

The present study also concentrated on economic characteristics of the street children and its findings are discussed below:

- Street children were engaged mainly in small business, tokai, coolie/minti and begging. Among them majority (32.1%) were engaged in tokai. Earnings per day of 62.7% of the street children were <BDT 100 and 37.3% were BDT 100+. More than half (56.2%) of the respondents were not saving money whereas 43.8% of the respondents were saving money from their earning.
- Saving money of street children who were engaged in tokai, coolie/minlt and labour was 0.478 times, 0.505 times, and 0.518 times respectively less likely than the street children

who were engaged in small business. Saving money of street children whose earnings per day were BDT 100+ was 1.411 times more likely than the street children whose earnings per day were < BDT 100. Saving money of street children who were collected their food from home was 0.540 times less likely than the street children who collected their food from street shop. Saving money of street children who were injured at least once in their life was 1.341 times more likely than the street children who never injured in their life.

- Earnings per day BDT 100+ of female street children were 0.522 times less likely than the male street children. Earnings per day BDT 100+ of the street children who were in the age group 15-18 years were 2.519 times more likely than the street children who were in the age group 5-9 years. Earnings per day BDT 100+ of the street children who were engaged in tokai, labour and begging were 0.300 times, 0.352 times and 0.253 times less likely than the street children who were engaged in the small business.
- Earnings per day BDT 100+ of street children whose working hours per day were 5-7 hours and 8+ hours were 1.942 times and 2.482 times more likely than the street children whose working hours per day were < 5 hours. Earnings per day BDT 100+ of the respondents who saved money were 1.250 times more likely than the street children who did not save money. Earnings per day BDT 100+ of smoker street children were 1.568 times more likely than the non-smoker street children.
- Ability to bear required expenses of female street children was 0.491 times less likely than the male street children. Ability to bear required expenses of the street children who were in the age group 10-14 years and 15-18 years was 1.658 times and 2.200 times more likely than the street children who were in the age group 5-9 years. Ability to bear required expenses of the street children whose working hours per day were 5-7 hours and 8+ hours was 1.840 times and 2.102 times respectively more likely than the street children whose working hours per day were <5 hours.

- The street children whose working days per week were 7 days were 2.441 times more likely able to bear their required expenses than that of street children working days per week were <7 days. The street children whose earnings per day were BDT 100+ were 4.652 times more likely able to bear their required expenses than that of the street children whose earnings per day were <BDT 100. The street children who saved money were 1.650 times more likely able to bear their required expenses than that of the street children who did not save money.
- The street children who had step parents were 2.468 times more able to bear their required expenses than that of the street children who had both father and mother. The street children whose mothers' income per day was BDT 200+ were 0.624 times less likely than that of the street children whose mothers' income per day was < BDT 200. Ability to bear their required expenses of smoker street children was 1.867 times more likely than non-smoker street children.
- Working hours per day more than 8 hours of the respondents of "Children who were in institutional care " were 0.191 times less likely than that of the respondents of "street living children". Working hours per day more than 8 hours of female street children were 0.459 times less likely than that of male street children. Working hours per day more than 8 hours of street children who were interviewed at railway station/bus stand/launch terminal and park/institution was 0.452 times and 0.406 times respectively less likely than that of the street children who were interviewed at mazar.
- Working hours per day more than 8 hours of the street children in the age group 10-14 years were 2.131 times more likely than that of the street children in the age group 5-9 years. Working hours per day more than 8 hours of the respondents who were engaged in coolie/minti and labour were 1.885 times, 2.176 times and 1.428 times more likely than that of the street children who were engaged in small business. Working hours per day

more than 8 hours of the street children who saved money were 0.670 times less likely than that of the street children who did not save money.

- Working hours per day more than 8 hours of the street children who collected their food from home were 0.418 times less likely than that of the street children who collected their food from street shop. Working hours per day more than 8 hours of the street children who were sick were 1.552 times more likely than that of the street children who were not sick.

At last an attempt has been made to analyze the health characteristics of the street children and its findings are as follows:

- Overall sickness of the respondents during interviewing time was 18.2% but the street children at mazar and railway station/bus stand/launch terminal it was 24.5% and 23.4%. Among underweight street children sickness was 31.0%. Sickness of smoker and drug addicted street children was 27.1% and 35.2% respectively.
- Street children at park/institution were 0.407 times less likely sick than the street children at mazar. Normal weight and overweight/obese street children were 0.343 times and 0.348 times respectively less likely sick than the underweight street children. Drug addicted street children were 1.699 times more likely sick than the non-drug addicted street children.
- Ever sickness of the respondents was 80.1% whereas the ever sickness of “children from street families” and “Children who were in institutional care ” was 83.6% and 87.0% respectively.
- Ever sickness of street working children was 1.494 times more likely than the street living children. Ever sickness of street children whose fathers’ occupations were labour, rickshaw/van puller/ driving and others was 2.323 times, 2.513 times and 2.712 times respectively more likely than the street children whose fathers’ occupation was farming.

- Injury of street children was 8.9% but among street living children it was 13.7%. Injury of street children at railway station/bus stand/launch terminal was 13.8%. Injury of the respondents who became street children due to step parents/none for caring was 17.7%. Injury of the street children who had step parents was 17.2%. Injury of smoker and drug addicted street children was 17.4% and 19.3% respectively.
- Injury of street children who were interviewed at railway station/bus stand/launch terminal, kachabazar, and park/institution, respectively was 0.201 times, 0.133 times and 0.130 times respectively less likely than the street children who were interviewed at mazar. The injury of street children who were in the age group 15-18 years was 0.426 times less likely injured than the street children who were in the age group 5-9 years. The injury of street children who collected their food from begging and home was 0.242 times and 0.434 times respectively less likely than the street children who collected their food from street shops.
- Ever injury of street children was 32.2% whereas among street living children it was 40.6%. The ever injury of street children at mazar and railway station/bus stand/launch terminal was 37.7% and 38.7% respectively. The ever injury of the respondents who became street children due to step parents/none was 44.2%. The ever injury of the street children who were in the age group 15-18 years was 39.9%. Rate of ever injury of the respondents who saved money was 37.5%. The ever injury of street children who had step parents was 37.7%. The ever injury of smoker and drug addicted street children was 52.8% and 58.0% respectively.
- The ever injury of street children who were interviewed at railway station/bus stand/launch terminal, kachabazar and park/institution was 0.332 times, 0.263 times and 0.497 times respectively less likely than the street children who were interviewed at

- mazar. The ever injury of street children who were in the age group 10-14 years was 1.405 times more likely than the street children who were in the age group 5-9 years. The
- injury of street children who saved money was 1.264 times more likely than that of the street children who did not saved money.
 - The ever injury of street children who had step parents was 1.901times more likely than that of the street children who had both father and mother. The ever injury of street children who collected their food from begging and home was 0.408 times and 0.577 times respectively less likely than the street children who collected their food from street shops. The ever injury of smoker street children was 1.771 times more likely than the non-smoker street children.
 - It was found that 84.6% of the respondents went to recognized physicians during their sickness/injury but 70.0% of street living children of the respondents went to recognized physicians. Going to recognized physicians of the street children who had step parents was 69.6%. Going to recognized physicians of smoker street children was less than 77.0%.
 - Going to recognized physicians of street children who were street working children, children from street families, and Children who were in institutional care was 2.156 times, 1.951 times and 5.544 times respectively more likely than the street living children. Going to recognized physicians of street children who saved money was 2.417 times more likely than the street children who did not save money.
 - Going to recognized physicians of the street children whose fathers' occupations were labour, small business, and rickshaw/van puller/ driving was 1.898 times, 3.787 times and 3.228 times more likely than the street children whose fathers' occupation was farming. . Going to recognized physicians of street children who had step parents was 0.519 times less likely than the street children who had both father and mother.

- Overall smoking practice of the street children was 19.7% whereas among “street living children” it was 47.6%. Smoking practice of street children at mazar was 43.4% and at railway station/bus stand/launch terminal was 35.3%. Smoking practice of the street children who were in the age group 15-18 years was 47.6%. Smoking practice of the street children who were engaged in coolie/minti was 32.1%. Smoking practice of the street children who were not attending school was 24.8%. Smoking practice of the street children who collected their food from street shops and begging was 42.4% and 27.8% respectively. Smoking practice of drug addicted street children was 84.1%.
- Smoking practice of street working children and children from street families respectively was 0.545 times and 0.345 times less likely than the street living children. Smoking practice of female street children was 0.111 times less likely than male street children. The street children who were interviewed at railway station/bus stand/launch terminal kachabazar and park/institution were 0.128 times, 0.099 times and 0.065 times respectively less likely smoker than the street children who were interviewed at mazar.
- Smoking practice of the street children who were in the age group 10-14 years and 15-18 years was 3.363 times and 19.765 times respectively more likely than the street children who were in the age group 5-9 years. The street children who were engaged in tokai and coolie/minti were 2.970 times and 2.261 times respectively more likely smoker than the street children who were engaged in small business. The street children who collected their food from begging and home were 0.469 times and 0.253 times respectively less likely smoker than the street children who collected their food from street shops. Drug addicted street children were 15.51 times more likely smoker than non-drug addicted street children.
- Among the survey data 7.9% of the respondents were drug addicted whereas the drug addiction of “street living children” was 20.7%. Drug addiction of street children at mazar

was 37.7% and at railway station/bus stand/launch terminal was 13.0%, at kachabazar was 3.2%. Drug addition of the respondents born at urban areas was 12.2%. Drug addition of the street children who had step parents was 20.3%. Drug addition of smoker street children was 33.9%.

- Drug addiction of street working children and children from street families was 0.431 times and 0.267 times respectively less likely drug than street living children. Drug addiction of street children who were interviewed at railway station/bus stand/launch terminal, kachabazar and park/institution respectively was 0.047 times, 0.028 times and 0.052 times respectively less likely than the street children who were interviewed at mazar. Drug addiction of street children whose place of birth was urban area was 1.706 times more likely than the street children whose place of birth was rural area. Smoker street children were 13.613 times more likely drug addicted than non-smoker street children.

7.2 Policy recommendations and future research

Today's children will serve the nation in future and they will play a vital role for the development of the country. So, proper education and good health condition are very important for their social and mental development. Street children are underprivileged than other people. For sustainable development of the country several steps may be taken to provide the facilities of street children. Government and Non-Government organization should undertake initiatives to build up institutions to bring the street children into the institutional care. Social organizations may aware the parents of the street children about the importance of schooling of their children. The policy maker may take a program to provide financial incentive for schooling so that the street children can reduce their working hours for attending school and maintain healthy life. Moreover, the street

children may be involved into some petty business to have more earning and increase their savings money for the change of their life style and to reduce smoking practice. It can be suggested to the Government to take necessary initiatives so that the street children can avoid smoking and taking drug as well as get sufficient food to maintain normal weight for their healthy lives. It can also be suggested that the government should take necessary steps to keep them away from the vulnerable places like mazar, railway station/bus stand/launch terminal etc. and to control the movement of street children to reduce the ever injury with increasing of their age. Along with these it can also be suggested to improve social relation between the partners of the parents to reduce divorces and parents should provide food to their children. Multidimensional measures may be undertaken to reduce the injury/ever injury due to smoking and drug addiction. Based on the findings it may be suggested to the planners and policy makers to draw special attention to the street children who were born at urban, living in the street, in age group 10-18 years, staying at mazar, railway station/bus stand/launch terminal, earning BDT 100+ and male street children so that the street children can avoid smoking and drug. As almost all drug addicted are smoker, so the policy maker should take proper steps to reduce the smoking practice of street children for reducing drug addiction. This study could help us to take an initiative to construct the life table for street children. But for some limitations it could not be done here.

7.3 Limitations of the study

This study is based on Primary data of street children of Dhaka City, Bangladesh. Generally, street children always move from one place to another. They were engaged in different types of activities for earning. Getting time from them for interviewing was not so easy. So collecting information from street children was very difficult. Moreover,

getting information was so hard as the street children were illiterate and unstable. This study has been completed considering all these circumstances. Among the demographic Characteristics, death information was mostly limited, as a result construction of life table was not possible.

In further research an attempt can be made to construct the life table for street children and to measure the demographic parameters infant mortality rate (IMR), crude death rate (CDR), crude birth rate (CBR) and survival rates etc.

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