

Incidence of Youth Unemployment and the Vulnerability Status of Unemployed Youths in Rajshahi City

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Abstract

Youth unemployment in urban areas poses an unprecedented challenge to the economic development of Bangladesh. Youth unemployment in Rajshahi city is a good example. The study tries to present the incidence of youth unemployment in Rajshahi city to represent unemployed youths' vulnerability status. For this purpose, the study uses primary data collected from randomly selected 125 passed out students of different educational institutions in Rajshahi city. The study firstly applies descriptive statistics approach to describe the incidence of youth unemployment and secondly, the Analytic Hierarchy Process (AHP) to present the vulnerability status of unemployed youths in the city. Results find a severe incidence of urban youth unemployment in Rajshahi city where both the youth unemployment rate and mean duration of unemployment are relatively high relative to the national rate. It is calculated that the youth unemployment rate is 61%, and the mean duration of unemployment is 2.5 years. The youths who are unemployed are

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leading miserable livelihoods through their haphazard lifestyles. The AHP results show that the youths are highly vulnerable in economic, social and institutional indicators. Therefore, unemployed youths in Rajshahi city should be provided with economic incentives, awareness building training, and institutional facilities to create entrepreneurship opportunities.

JEL Classification E24 · I31 · J13 · J64

Keywords Youth Unemployment · Vulnerability · Haphazard Lifestyles · Rajshahi City

1.1 Introduction

Unemployment is a macroeconomic phenomenon (Mankiew, 2003), one of the major challenges for both developed and developing countries worldwide (Kassa, 2012). Although the impact and intensity differ from place to place, it has a consistent adverse impact on growth and development through loss of labour force productivity. Several unexpected private and social problems are bound to rise due to the high unemployment rate, such as increased crimes, suicides, poverty, alcoholism, prostitution (Eita and Ashipala, 2010). In developing countries, high unemployment rates may spread HIV/AIDS (Henry et al., 1999; Haile, 2003). In general, the cost of unemployment is one of the prime sources of human tragedy for developing countries.

Bangladesh is a lower-middle-income country where unemployment is a crucial issue and becoming a social evil, especially for urban areas (World Bank, 2015) as the countries are well on the path of rapid urbanisation (Ahmed, 2012). Although the country's rural economy has witnessed a tremendous pace of employment creation through non-farm jobs, employment creation is so complex in urban areas. It is observed that despite a decrease in the rate of unemployment in Bangladesh from 5.1% in 2009 to 4.30% in 2014, the urban unemployment rate is alarmingly increasing (BBS, 2014). The urban unemployment rate in Bangladesh is 6.45%, almost twice that of rural unemployment (3.94%). It is mainly the cause of high unemployment among master's degree holders and engineering and medical students (Ahmed, 2012). These sorts of youth unemployment are prevalent to a large extent around the urban areas of Bangladesh. About 36% of urban youth are out of employment (World Bank, 2015).

Moreover, a vast majority of young people recently in Bangladesh are migrating from rural areas to urban areas for looking employment (Sohel and Khan, 2015). Because of the deficiency in the rural labour market, there is always a tendency to migrate to urban areas with development resources than rural areas. Due to this population pressure, jobs created in urban areas are not enough for

everyone who wants to work. According to Keynes (1936), this creates cyclical and involuntary unemployment because the returning rate from the countryside is high; those returning had to be absorbed into the urban economy (Knight and Xue, 2006). There also exists a mismatch between the skill of an unemployed person and the particular skill needed for being employed in urban areas of Bangladesh (Ahmed, 2012). It is evidence of structural unemployment in the urban economy of Bangladesh. Sometimes job seekers and providers fall into a fraught interaction in Bangladesh, and hence the problem of frictional unemployment due to the transitional period between job loss and entry to the next job is also evident in the country's urban areas. Therefore, it confirms that there exist several forms of unemployment in the urban economy of Bangladesh. The effects of the problem are both prolonged and widespread compared to the other actual problems in the city areas. Rajshahi is a divisional city where all types of unemployment exist among the graduated youths from different educational institutions. Because the city is still not industrialised with modern facilities and the city is yet to be updated with the dynamic service sector.

Despite a flood of research on unemployment, most researchers in Bangladesh always overlook urban youth unemployment. The scant number of existing studies in this issue has been criticised for being poorly designed, devoid of theory, and narrow focus. The current research aims to establish a reliable and valid instrument that will systematically assess the incidence and vulnerability status of urban youth unemployment in Rajshahi city of Bangladesh.

1.2 Literature Review

In drafting the idea for the study of urban youth unemployment, the researchers review the existing literature comprehensively. However, the empirical research on the issue of urban youth unemployment is scant. The earlier studies on unemployment and even on urban employment are flooded over the world. Some of the critical earlier studies regarding urban and urban youth unemployment are summarized in the following table.

1.3 Methodology

1.3.1 Sources of Data

There are two main avenues of data sources for the study, such as primary data through personal interviews with structured question schedules and secondary data from journals, books and other sources.

Table 1: Summarised Literature Review

Author(s)	Year	Subject	Methodology	Findings
Sernceels	2004	Nature of Urban Unemployment (Ethiopia)	Simple statistics	Almost half of the urban young people are unemployed who are well-educated and government job seekers.
Josh Mitchell	2013	Long-term unemployment (USA)	Descriptive statistics	Most of the long-term unemployed people are uneducated and oldest where the responsible factors are racism, gender discrimination, work-limiting disabilities.
Prakash & Abraham	2004	Urban unemployment (Kerala)	Simple statistics	The growth of urbanisation is rapid, and there is an excess supply of educated young labour force but slow growth of the organised sector and thereby urban youth unemployment.
Nivorozhkin	2006	Risk and duration of urban unemployment (Russia)	Econometrics and duration Modelling	About one-third of the unemployed finds their job efficiently, and the rest of them continues searching. It also found that with a longer duration risk of job searching tends to decrease.
Baah-Boateng	2013	Determinants of unemployment (Ghana)	Probit regression model	Sluggish growth of the high labour absorption sector is the reason for unemployment and slower economic growth. Moreover, youth urban dwellers are severely vulnerable.
Alivon & Guillaum	2018	Urban segregation and unemployment (France)	Spatial probit model	The probability of unemployment is higher for people living in a deprived neighbourhood or near a deprived area.
Saungweme et al.	2014	Unemployment, output growth and (Zimbabwe)	Log-linear model	The main forcing factor behind the thriving informal sector is the continual collapse of the formal job sector.
Baah-Boateng	2015	Unemployment in Africa	Scatter plot and simple correlation analysis	There is a significantly negative correlation between unemployment and informality.

Author(s)	Year	Subject	Methodology	Findings
Tansel & Tasci	2010	Determinants of unemployment duration (Turkey)	Non-Parametric and parametric estimation methods	The unemployment duration of women is higher than men and age has negative, and education positively relates to unemployment.
ILO	2008	Global Unemployment trends of youth	Descriptive statistics	The Youth unemployment rate is increased more than four per cent in South Asia (1997-2007).
Ajaegbu	2012	Unemployment and Violent Crime (Nigeria)	The deprivation theory proposed by Ted Gurr	The feeling of deprivation and frustration created by unemployment is the reason for violent crime incurred by youth.
Okafor	2011	Youth unemployment and democracy (Nigeria)	Descriptive statistics	The stability of democracy is in danger because of joblessness among youths.

Source: Summarised by the Authors

1.3.2 Study Area

The study is based on primary data collected from Rajshahi City Corporation, Rajshahi district, Bangladesh. The city is the most urbanised area than the other districts of the northern part in Bangladesh, which is both a Zila and a divisional town, has been flourished day by day. In 1988, Rajshahi city emerged as Rajshahi City Corporation, one of the first few in Bangladesh. The area of the city corporation is 96.72 square kilometres, and it possesses a total of 731128 populations (BBS, 2001). The city corporation is between 24-05', 25-14' North Latitude and 88-09' to 89-25' East Longitude. The average annual temperature in the city is 23.80C, with a mean annual rainfall of about 1447.6 mm. Rajshahi city is on the northern bank of the Padma River. The city corporation is mainly populated by high, middle- and lower-income classes. The residents include academic professionals, government officials, bank officers, NGO workers, rickshaw pullers, shopkeepers, salesman, day labourers, and domestic workers have been seen in a large number.

1.3.3 Sampling Design

Using a multistage sampling technique, 125 respondents were selected for the study. The first stage is featured as a purposive selection of Rajshahi City Corporation. In the second stage, five educational institutions from the existing list are selected randomly. The educational institutions are Rajshahi University, Rajshahi College, Rajshahi Polytechnic College, Varendra University and Varendra College. In the third stage, the lists of students are collected from the selected educational institutions who have passed their final examination. After collecting the list, randomly selected 25 students from each selected institution are interviewed to collect data for our study. It constitutes 125 respondents for the study. The study is restricted to the youth respondents who have completed their education at master's, honour's and technical levels and looking for jobs.

1.3.4 Measurement of the Duration of Unemployment

Transition data analysis or duration modelling will be used to model the impact of various socio-economic characteristics on the unemployment duration among individuals who passed the university/college/diploma. We use the Kaplan-Meier plot of survival function in this process, which measures how many people remain in the unemployment pool (survived) as time passes.

Unemployment duration is measured in days beginning from the date of result publication and ending with the date of employment. The spell is considered right-censored if an unemployed individual was still unemployed at the end of our

observation period. Therefore, following Serneels (2004), the study constructs the measure of duration as follows:

1.3.5 Calculation of Vulnerability Score

Firstly, the researchers first select variables from different social, economic, and institutional factors to measure vulnerability scores. Again, for measuring each variable secondly, the researchers select different indicators. Thirdly, the present study uses the Analytic Hierarchy Process (AHP) to assign weights for each variable and its indicators. The Analytic Hierarchy Process (AHP) is a structured technique for dealing with complex decisions. Rather than prescribing a "correct" decision. The AHP originally was developed by Saaty (1980) and often it is referred to as the Saaty method (Coyle, 2007 and Rahman, 2007). The vulnerability score equation is:

$$\text{Vulnerability Score} = \sum \text{Variable Weight} \times \text{Indicator Weight} \text{ -----}$$

By using this equation, the vulnerability score of each respondent is calculated. Thus, the resulting summation unit is uniform, but the scale ranges are different, i.e. maximum and a minimum score of each respondent represents different values. Therefore, it should be in a standard scaling system. In this study, the standard scale ranges from 0-100 is selected. In this uniform scale, the 100 value represents the most vulnerable.

On the other hand, 0 value represents no vulnerability. According to this uniform scale, all scores of respondent level are standardised using maximum value as scaling point. The following equation is used for standardising:

$$S_{VC} = \frac{IR_{VC}}{H_{VC}} \times 100$$

Where S_{VC} = Standardised Vulnerability Score
 IR_{VC} = Individual Respondent Vulnerability Score
 H_{VC} = Highest Vulnerability Score among respondents

1.4 Results and Discussion

In analysing primary data in line with the objectives of the study, the study finds exciting results. The significant parts of the obtained results are presented and discussed in the following sections.

1.4.1 Distribution of Respondents According to the Level of Education, Age Marital Status and Employment Situation

Table 2 reports descriptive statistics for showing the distribution of respondents according to the level of education, marital status and employment situation.

Firstly, it is found that most of the respondents have honour's degree followed by master's and technical degree. As the study objectives are concentrated on youths. The survey finds that most 67% of respondents are aged between 20-25 years, and the other 33% are aged between 25+ to 30 years. The survey also finds that only 5% of respondents are married.

Table 2: Distribution of Respondents according to the Level of Education, Age, Marital Status and Employment situation

<i>Level of Education</i>	Percentage of 125 respondents
Master's	33.54%
Honour's	46.46%
Technical Degree or Diploma	20%
<i>Age</i>	
20 to 25 years	67%
25+ to 30 years	33%
<i>Marital Status</i>	
Married	5%
<i>Employment Situation</i>	
Public Sector	13%
Private Sector	16%
Part-time	3%
Self-employment/Private Tuition	7%
Unemployed	61%

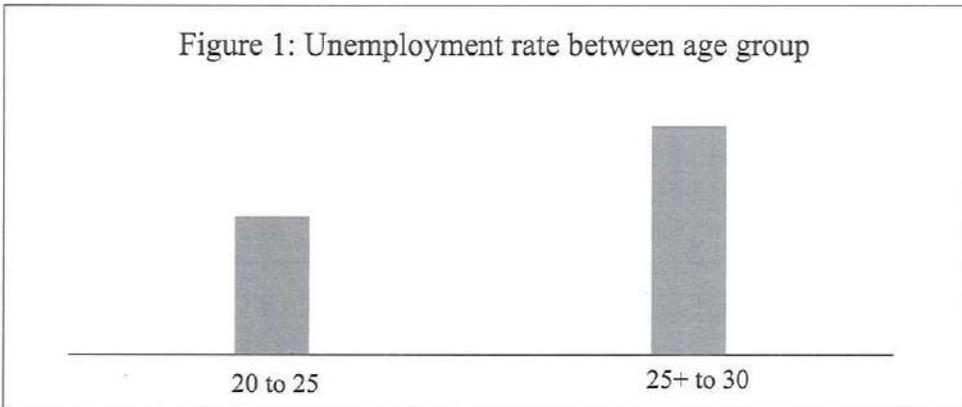
Source: Authors' Calculation from Field Survey Data, 2019

Table 2 also finds that the youth unemployment rate is relatively high in Rajshahi city. It is calculated that 61% of the 125 respondents are unemployed, where 16% are employed in the private sector, and only 13% are involved in public services. There is little opportunity for self-employment and part-time jobs.

1.4.2 Rate and Duration of Unemployment in Rajshahi City

Figure 1 plots the unemployment rate against age to illustrate the concentration of unemployment among the educated young. The graph shows that in the age group between 20 to 25 years, the unemployment rate is 0.46, where the rate is 0.76 for the age group between 25+ to 30 years.

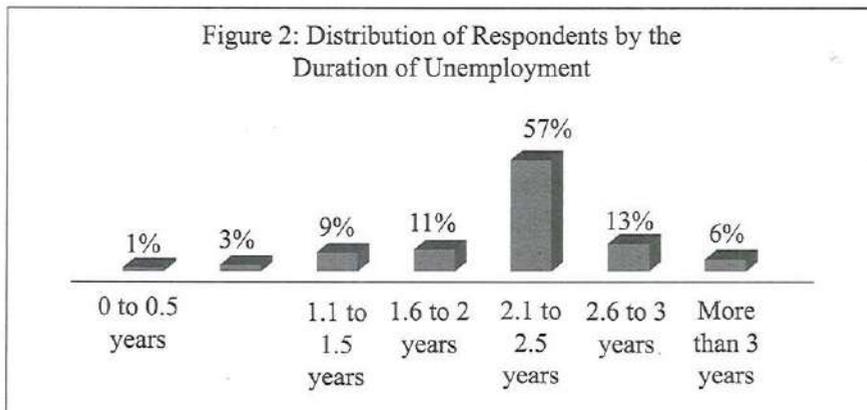
Moreover, it is estimated that the mean duration of unemployment among the youths in Rajshahi city is 2.5 years or 30 months. Figure 2 shows the distribution of respondents by the unemployment duration. It shows that most 57% of respondents need 2.1 to 2.5 years to be employed.



Source: Authors' Calculation from Field Survey Data, 2019

1.4.3 Vulnerability Status of Unemployed Youths in Rajshahi City

The ultimate goal of this study is to develop an overall vulnerability index, which represents the level of vulnerability to unemployment among youths in Rajshahi city. The following results presented in Table 3 have been developed by aggregating three factors of vulnerability: economic, social, and institutional factors. The following Table 3 presents that the highest number (66.52%) of respondents are highly vulnerable due to unemployment. Because of, most of the respondent youths are economically, socially and institutionally very highly vulnerable due to unemployment.



Source: Authors' Calculation from Field Survey Data, 2019

Table 3: Vulnerability Scores of Unemployed Youths in Rajshahi City

Degrees of Vulnerability	Frequency	Per cent	Range/Scale of Vulnerability Score
Low	5	3.61	0-25
Moderate	13	10.69	26-50
High	24	19.18	51-75
Very High	83	66.52	76-100
Total	125	100	

Source: Authors' Calculation from Field Survey Data, 2019

It is observed from Table 3 that a good number (19.18%) of youths are highly vulnerable to waterlogging. Few (10.69%) respondent youths are in moderately vulnerable situation whereas only 3.61 per cent of households in the study area are less vulnerable due to unemployment hazards.

1.5 Conclusion

The study has two-fold objectives, such as determining the rate and duration of youth unemployment rate and investigating the vulnerability status of unemployed youths in Rajshahi city. It is a unique study in Bangladesh as it applies a rigorous methodology to obtain study objectives. This study is a significant example for further investigation of the severity of youth unemployment in the city areas of Bangladesh.

The study finds that the rate and mean duration of youth unemployment in Rajshahi city is relatively higher than the national rate and duration. Moreover, the study finds that most unemployed youths in the city are leading haphazard lifestyles with a high level of vulnerability in terms of economic, social, and institutional indicators. Therefore, it is urgent to look towards unemployed educated youths in the city with economic incentives and create entrepreneurship opportunities with awareness and institutional facilities.

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