

**EXPLORING THE GRADUATES' QUALITY OF LIFE THROUGH
NON-FORMAL EDUCATION PROGRAMMES IN BANGLADESH:
FOCUS ON HUMAN RESOURCE DEVELOPMENT**



PhD Dissertation

**Submitted to the Institute of Education and Research, University of
Rajshahi, Bangladesh in Partial Fulfillment of the Requirements for the
Degree of Doctor of Philosophy**

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Bangladesh**

June, 2024



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Dedicated

to

my ideal and adored parents-

Late Shulekha Mukherjee

&

Parimal Mukherjee

DECLARATION

I, the undersigned, hereby declare that the dissertation titled “**EXPLORING THE GRADUATES’ QUALITY OF LIFE THROUGH NON-FORMAL EDUCATION PROGRAMMES IN BANGLADESH: FOCUS ON HUMAN RESOURCE DEVELOPMENT**” has been prepared by me under the supervision of **Dr. Md. Abul Kashem**, Professor, department of History, University of Rajshahi as supervisor and **Dr. Tapan Kumar Roy** Professor and Chairman, department of Population Science and HRD, University of Rajshahi as co-supervisor. The dissertation has not been submitted, either wholly or partly, to any academic institution or university in pursuing any degree or diploma. All sources of scholarly information used in this thesis were duly acknowledged.



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June, 2024

SUPERVISORS' CERTIFICATE

This is to certify that the dissertation entitled “**EXPLORING THE GRADUATES’ QUALITY OF LIFE THROUGH NON-FORMAL EDUCATION PROGRAMMES IN BANGLADESH: FOCUS ON HUMAN RESOURCE DEVELOPMENT**” is an original work accomplished by **Pranab Mukherjee**, PhD Fellow of the session 2017-2018 at the Institute of Education and Research (IER), University of Rajshahi, Bangladesh. The findings and views expressed in the dissertation are originated from both primary and secondary data and are entirely his contribution. He has prepared this dissertation under our supervision and guidance. As far as we know the dissertation has not been submitted anywhere else for any academic purpose, e.g., any degree, diploma or publication. We have gone through the draft of the dissertation thoroughly and found it satisfactory for submission to the Institute of Education and Research (IER), University of Rajshahi, Bangladesh for the degree of Doctor of Philosophy.

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ABSTRACT

Non-Formal Education (NFE) programme is a remedial literacy programme which perform to impart the basic knowledge and skills to the under privileged people at outside the formal institution. NGOs have a vital role for working on NFE in Bangladesh. This study has attempted to explore the situation of human resource development and quality of life among graduates from skill-based NFE programmes in Bangladesh. Here, the skills acquisition and employment situation of the graduates have been examined and expressed the financial aspects of the graduates. This study also has identified the graduate's knowledge on physical well-being, individual well-being and social well-being which articulated the feature of quality of life of the graduates. This study has concentrated on convergent parallel mix method research approach under pragmatism paradigm. For this purpose, the quantitative and qualitative data has been gathered for better and deeper understanding of the research problems and to depict a significant conclusion. This study considers four categories of population i.e., the graduates from skill-based NFE programmes of NGOs, trainer of the programmes, NGO officials and employers of the graduates. A representative number of samples have been drawn through probability sampling for the quantitative analysis and for the qualitative analysis followed by purposive sampling. Questionnaire survey, interview and content analysis have been applied to collect the data in a purposive mode. Both qualitative and quantitative data have been used simultaneously in this study. For data collection tools, questionnaires for surveys and interview schedule for interviewing have been used for primary sources data as well as the checklist for document analysis has been used for secondary sources of data. Three districts have been selected purposively from Rajshahi division: Nagoan, Natore and Rajshahi. The data have been collected from 385 graduates

using questionnaire survey and 18 respondents (Trainers, Employers and NGO Officials) through in-depth interviewing. This study is observed that the disadvantaged group of people become moderate skilled from this NFE programme of NGOs. The current study is found that the large number of graduates are employed with wage employment (49 percent) and only one fourth are self-employment (25 percent). The study has also revealed that the self-employment rate of the female graduates (31 percent) is higher than the male graduates (23 percent). From the study it is also remarkable that unemployment rate of female was 29 percent on the contrary male 24 percent. Additionally, this study also observed that separately the employment rate of female is amplified by 23 percent after getting training on the other hand the increased employment rate of male was 10 percent. It implies that the employment rate of women after completing training more than two times that of men. Conversely this study has articulated that more than one-fourth graduates are unemployed (26 percent) who are engaged in NFE programme. To find out the causes of unemployment, the study found that the content of entrepreneurial development is almost absent in the training manual, lack of micro credit facilities, lack of post-training communication to graduates with NGOs' authorities, minimum use of modern equipment during training, short time of internship period. lack of IT knowledge of the graduates etc. The findings of the study may important to the policy maker for encouraging the intensification of the programme for increasing the employment rate.

It is worthwhile to mention that this study is an effort to explore the situation of the quality of life among graduates from skill-based NFE programme of NGOs. The study has been investigated that graduates' knowledge of physical well-being, individual well-being and social well-being from this NFE programme and it is found that the respondents has very little knowledge on such quality of life issues.

Indeed, these are crucial for the quality of life of graduates and also involves with the sustainable development. The study further states that skill-based NFE programmes have provided financial security to graduates however have not been able to ensure their improved overall quality of life. It is clear from this study that quality of life is a largely unknown element of the graduates in skills-based NFE programmes of NGOs in Bangladesh. The study exhibits that majority of the graduates have no idea about HIV awareness, child malnutrition, importance of proper hand washing and necessities of child immunization. This survey also found that even majority of the respondents have a gap in knowledge about first aid and traffic signals although both are related to improving quality of life. Respondents have also very few knowledge about protecting children from abuse and violence, equal access to the rule of law and justice, etc.

The multivariate logistic regression analysis has been observed that sex (gender), internet use, income generation and skill development are the significant predictors of HRD of graduates in NFE programme. The ordinal regression results show that two independent variables named skill development and income generation have the inverse relationship between knowledge of social well-being. Remaining two independent variables such as knowledge of physical well-being and knowledge of individual well-being have the positive relationship with the knowledge of social well-being. The performance of ordinal regression result has been checked through generalized linear model (GLM). The GLM results show the same direction as ordinal regression result.

Indeed, this research can generate new understanding and avenues for further research on quality of life and human resource development through skill-based NFE programmes that can be helpful for policy implementation and contribute to improving the quality of life of the people of Bangladesh.

ABBREVIATION

ADB	: Asian Development Bank
AIDS	: Acquired Immune Deficiency Syndrome
APPEAL	: Asia-Pacific Programme of Education for All
ATI	: Access to Information
BANBEIS	: Bangladesh Bureau of Education, Information and Statistics
BANBEIS	: Bangladesh Bureau of Educational Information and Statistics
BBS	: Bangladesh Bureau of Statistics
BNFE	: Bureau Non-Formal Education
CHE	: Current Health Expenditure
DNFED	: Directorate of Non-formal Education
EFA	: Education for All
FYP	: Five Year Plan
GDP	: Gross Domestic Product
GOB	: Government of Bangladesh
HIV	: Human Immunodeficiency Virus
HRD	: Human Resource Development
INFEP	: Integrated NFE Programme
IT	: Information Technology
KM	: Knowledge Management
LAS	: Literacy Assessment Survey
LFP	: Labour Force Participation
LFS	: Labour Force Survey
NFE	: Non-formal Education
NGOs	: Non-Government Organizations
NSDC	: National Skill Development Corporation
NSDP	: National Skills Development Policy
NTVQF	: National Training and Vocational Qualifications Framework
OECD	: Organisation for Economic Co-operation and Development
QLIP	: Quality of Life Improvement Programme
QOL	: Quality of Life
ORS	: Oral Rehydration Solution
RTA	: Road Traffic Accidents
SDGs	: Sustainable Development Goals
SPSS	: Statistical Package for the Social Sciences
TAFE	: Technical and Further Education
TTS	: Trainee Tracking System
TVET	: Technical and Vocational Education and Training
UNESCO	: United Nations Educational, Scientific and Cultural Organization
UNFPA	: United Nations Population Fund
WHO	: World Health Organization
7th FYP	: 7 th Five Year Plan

Chapter-1

Introduction

1.1 Introduction

Non-Formal Education (NFE) is a restorative literacy programme carried out to impart the basic skills of reading, writing and arithmetic to youths and adults (Egbezor and Okanezi, 2008). They also mentioned that NFE is formulated towards functional literacy, where the beneficiaries are anticipated to use the skills acquired to improve their living standards. In fact, NFE signifies all educational programmes that lie outside the formal education system and general educational programme. According to Non-Formal Education Policy (2006), NFE is a purposeful and planned form of learning that generally occurs outside the formal educational institutions and it is an organized and systematic educational activity to provide need-based learning to particular sub-groups in the population like adults as well as children. NFE has been designed to meet the learning needs of educationally underprivileged people of different ages and from different parts of the country. NFE may cover elementary and continuing educational programmes to carry basic literacy, including life skills and general cultural knowledge. It also facilitates lifelong learning and enhances earning capability, thereby playing a crucial role in human resource development (Non-Formal Education Policy, 2006).

NFE was formally started in British India in 1918 when an attempt was made to start adult education in night schools. By 1926, over a thousand night-schools were operating nonetheless in 1936, Frank Luebac's campaign of 'Each One Teach One' gained popularity among the community about schooling. Adult education programme was supervised under the newly formed 'Rural Development Department' of Bangla

provincial government. However, the programme loomed a closure due to the second world war. After 1947, it was stimulated through various international and individual initiatives. Afterward in 1954, the adult education was conducted under the support of V-AID programme of United States. In 1956, HGS Beaver, a bureaucrat of government, established a 'Literacy Centre' at Dhaka and then in 1963, an adult education section was opened at Bangladesh Academy for Rural Development BARD, Comilla campus under a pilot project of the 'Directorate of Public Instruction'. The project continued even after the independence of Bangladesh.

Education is stated in Article-17 of the constitution of Bangladesh as a directive principle of state policy. It states that: "State shall adopt effective measures for the purpose of (a) establishing a uniform, mass-oriented and universal system of education and extending free and compulsory education to all children to such stage as may be determined by law; (b) relating education to the needs of society and producing properly trained and motivated citizens to serve those needs; (c) removing illiteracy within such time as may be determined by law." The government has taken many steps to expand education but education has not yet been recognized as a fundamental right in the constitution of Bangladesh. As a signatory to the Universal Declaration of Human Rights (UDHR), it is imperative for Bangladesh to ensure education for every citizen. Bangladesh's neighbors, including India, recognized education as a fundamental right in 2006. Sri Lanka did it in 2003 and Nepal in 2013 but the Bangladesh government has not yet recognized it as a fundamental right. Although education is included as a fundamental principle in Bangladesh under Article-5 (a) in 'provision of basic necessities', there is room for confusion as to whether it is a fundamental right if it is not included in the constitution.

However, it is not possible to bring all sections of the people under the formal education system. A non-formal basic education programme is necessary to address for the rest of the peoples' needs. Bangladesh is a signatory to the World Declaration on Education for All (Jomtien, Thailand, March 1990) as well as signatory of the 'Convention on the rights of child' (September 1990, New York, USA). In line with the government commitment to Education for All (EFA), an Integrated NFE Programme (INFEP) was initiated in 1991 to address the need of illiterate people (BNFE, 2017). As pointed out by Coombs (1968) that NFE became part of international discourse on education policy in the late 1960s and early 1970s. He also mentioned that it could be seen as related to the concepts of continuous and lifelong learning.

NFE programmes act as a tool to build opportunities for marginalized social groups in order to bridge the gap between unemployment and employment (Georgiadou, et al. 2009 cited in Mayombe, 2017). As described in the Act of Non-Formal Education (2014), the nature and style of non-formal education is classified into two that is a) non-formal primary education and, b) non-formal adult and lifelong Education. In fact, adult and non-formal education programmes are deeply interlinked with the case of income generation activities. For this reason, it is also called income generating non-formal education programme. The act also mentioned that the age limit of 'non-formal adult and lifelong education' would be fifteen years and above for both the men and women. Individuals who have never attended school, dropped out from the primary school or neo-literates who want to continue acquiring need-based life skills and livelihood skills may be the beneficiaries of NFE. Students in non-formal education programmes have less interest in proper education as the main focus of the family is to earn money (Mridha, 2021). Egbezor and Okanezi (2008) also mentioned that the various skills acquisition through NFE help to improve living standards for adults and youth who have

never had the opportunity to get formal education or did not complete their primary education as well as other categories of disadvantaged group of society. Consequently, this type of education helps to acquire skills and generate income. According to Islam, Mia & Sorcar (2015), NFE is an important approach to human resource development especially for developing countries. As stated, Hussain and Haladu (2013), the quality of adult citizens plays a vital role in the development of the nation. NFE helps to ensure good quality of adult citizens and consequently leads to better prospects to move the nation forward. According to Islam and Mia (2007), conventional NFE programmes work mostly with literacy. It is now extensively admitted that the economic role of NFE can be seen in its involvement towards human capital formation. When NFE extended to continuing educational programmes, it has always particularly emphasized on imparting skills that can generate income as well as human resource development.

NFE programmes are inspired by creative and adaptive methods that can often be attributed to the involvement of certain Non-Government Organizations (NGOs), which is alternative, compensatory and accountable to the community (Blaak, Openjura and Zeelen, 2012). In a study, Sukontamarn (2004) also stated that NGOs are seriously involved in NFE in Bangladesh. In another study, Sakya (2000) mentioned that Bangladesh has very strong network of NGOs and they are doing notable work in the field of NFE. As per Islam and Mia (2007), NFE has become an important phenomenon in Bangladesh where many international, national and local NGOs are providing education through income generation programmes for the poor and disadvantaged groups of people. According to Haq (2010):

“Since the Education for All (EFA) goals for the year 2000 were established, Government of Bangladesh (GOB) has encouraged NGOs and the development partners to support literacy programmes for children and adults. Thus, the

Directorate of Non-formal Education (DNFE) was established in 1995. Initially GOB commissioned several projects to offer literacy to children, adolescents and adults through developing partnership with NGOs during the first half of that decade. DNFE was established with a view to developing network with the NGOs to implement the NFE programme for children and adults. In 1 November 2003, DNFE was abolished and its responsibilities were passed on to a smaller body of a much smaller scale named Bureau of Non-Formal Education (BNFE) from 17 April 2005. BNFE also implements its activities through NGOs.”

Here, it is discussed to deliberate about quality of life (QOL). QOL includes not only wealth and employment but also the basic physical and mental health, education, recreation and leisure time, environment and social belonging (Nussbaum & Sen, 1993, Gregory et al., 2009, cited in Abdulwahid & Salih, 2018, Sen, 2000). The quality of life should not be confused with just the concept of living of standard, which is largely dependent on income. In fact, QOL depend on the general well-being of an individual and society that outline the negative and positive features of life (Barcaccia, 2013, cited in Abdulwahid and Salih, 2018). QOL consists of internal environment and external environment that will be discussed in detail later. The role of NFE focuses on increasing the knowledge and skills of the learner that leads to community development (Kotze, 2012). As stated in Sen (2000), actual development refers to the improvement of quality of life. Although in most of the cases development is defined only from an economic perspective, non-economic factors must be taken into account besides the economic indicator to get full picture of QOL.

It is worthwhile to mention that it is necessary to identify the contribution of NFE programmes' on the development of human resource as well as developing 'quality of life' of the graduates. For this purpose, an attempt has been taken to know the situation of graduates in respect of development of human resources as well as find out the real picture of quality of life among graduates through skill-based non formal education programme. In this study, it is also tries to find out that the factors associated with HRD and QOL among graduates of these programmes. The study can be a milestone for the policymaker for making a realistic NEF programme in Bangladesh.

1.2 Statement of the Problem

In Bangladesh, non-formal education programmes work largely in basic literacy rather than conducting skill acquisition activities that help to promote income generation as well as human capital development (Islam and Mia, 2007). Skills acquisition through NFE can play an important role for the development of human resources. If we want to identify the proper development of society then we have to study the improvement in quality of life of the people. QOL includes not only economic issues but also the involvement of physical well-being, individual well-being, social well-being, environment social belonging etc. According to Sen (2000), narrow views of development only take into account the growth of GDP, personal incomes, industrialization, technological development, or social modernization. However, development also depends on other factors like opportunities to receive basic education, physical well-being (health care), individual well-being, political participation and so on. Many studies found that skills acquisition through NFE has a positive correlation with employment, income generation and poverty reduction. In this regard, Ebirim (2014) showed that adult NFE programmes were able to assist in reducing the poverty and

sustained livelihood in Nigeria. The study found that in order to reduce poverty, adults NFE programmes need to be provided for empowerment graduates through income generation. The study also found that proper utilization of adult education is necessary for poverty reduction and improvement of the standard of living. However, the other components of QOL have not been examined in this study.

Ozoemena (2013) found that the NFE programmes have helped to improve the socio-economic and living standard of the graduates in Nigeria. In this study, the researcher worked with graduates' life skills and income earning position only. However, other components of QOL like Physical well-being, social well-being and individual well-being has not been acknowledged here. Even the overall employment situation has not been examined and investigated in the above study.

Veen and Precec (2014) has shown that graduates basic literacy abilities that are treated as important component of QOL, are not sufficient to make a significant impact on poverty reduction, although they do help. Non-formal adult education or income generating NFE is potentially much better than literacy and basic education. In this study, it has been revealed that knowledge acquisition from skill-based NFE programme has a positive impact on poverty reduction. In their study, the researchers did not find the non-economic factors of QOL of the graduates.

Akpama et al. (2011) also investigated the influence of NFE programmes on poverty reduction among young adults in southern Nigeria. But, the issues of QOL were not addressed in this study too. Mayombe (2017) revealed that the adult NFE programme was effective for the graduates focusing on self-employment in micro enterprises. The study also found that this programme has contribution on increasing employment in South Africa. Researchers have highlighted employment issues while physical well-

being, individual well-being, social well-being of graduates have been overlooked. Oloube and Egbezor (2012) assessed the role and importance of NFE to human and national development of three states in south-south zone of Nigeria. The study was measured in some dimensions to determine of impact of NFE in human and national development. The dimensions are skills of the graduates, the reduction of poverty, re-skilling or up-skilling citizens through increased productivity and national development. The study revealed that there was a significant relationship between NFE and human and national development. However, other factors of quality of life also have not been identified here. Mamun and Rahman (2013) have investigated the role of Non-formal Primary Education (NFPE) in improving the quality of life of underprivileged children in Bangladesh. Here the researchers have considered economic, health, environmental issues and life skills which were treated as components of QOL. Here the researcher underlined the quality of life of the learner though the study based on non-formal basic literacy. On the other hand, the proposed study has also been attempted on improving quality of life as well as HRD through skill-based NFE programme of NGOs in Bangladesh.

Consequently, most of prior studies have emphasized frequently economical issues, but more accurate indicators of Quality of Life (QOL) are linked to sustainable development. Sustainable development is based on the three pillars of sustainability: the economic, environment and social stability (UNSD Summit, 2015). As illustrated by Brundtland Commission (1987), sustainable development requires meeting with all the basic needs and access to all the opportunities necessary to accomplish their desires for a better life. As a result, quality of life and sustainable development are interrelated. As stated in Pukeliene and Starkauskiene (2011), QOL consists with internal components of environment and components of external environment. They also mentioned internal

environment of QOL includes various factors viz income, health, family, education, social well-being etc. and external environment of QOL contains also different factors like political and socioeconomic condition, health system, social safety, social environment, natural environment etc. For this reason, in this study the researcher sought to find out the condition of human resource development of graduates as well as their quality of life (some internal components of QOL) through the skills-based NFE programme run by NGOs in Bangladesh.

1.3 Objectives

The general objective of this study is to identify the situation of human resource development and quality of life among graduates through skill-based NFE programmes in Bangladesh. To achieve the main objective, researcher have to attain some following specific objectives:

- (i) To outline the human resource development status of graduates through skill-based NFE programmes in Bangladesh.
- (ii) To identify the cognition of graduates about the 'quality of life' through the skill-based NFE programmes in Bangladesh.
- (iii) To explore the challenges of 'human resource development' and 'quality of life' of the graduates through skill-based NFE programmes in Bangladesh.

1.4 Research Questions

To find out proper pathway of the study, the following well-specified questions have been organized based on the objectives of this study.

1. What are the situations of the graduates in fostering technical skills from these NFE programmes in Bangladesh?
2. What are the income situations of the graduates from these NFE programmes in Bangladesh?
3. To what extent do these programmes help to educate about physical well-being of the graduates?
4. What are the roles of these programmes to convey about individual well-being of the graduates?
5. What are the contributions of these NFE programmes to raise awareness about social well-being of the graduates?
6. What are the challenges of 'human resource development' and 'quality of life' among graduates through these programmes?

1.5 Definitions of the Key Concepts

1.5.1 Non-formal Education

Non-formal Education (NFE) is designed to increase the capacity of the underprivileged and disadvantaged people who dropped out from the formal education. It is conducted in systematically structured learning process that extends to lifelong learning [Act of Non-Formal Education -2014 2(2)]

1.5.2 Non-formal Adult Education

Adult education is an organized and facilitated set of activities for adults where the focus is on the mainly of basic skills of reading, writing, numeracy and social awareness (MoPME-2009).

1.5.3 Continuing Education

Continuing education is the prerequisite of opportunities for lifelong learning beyond basic education (literacy and primary education) in response to the need of disadvantaged individuals and group to enhance their socio-economic lives (NFE policy-2006).

1.5.4 Skill-based Non-formal Education

Non-formal adult and lifelong education is also known as skill-based non-formal education. [Act of Non-Formal Education -2014 4(3)]

1.5.5 Non-formal Education Graduates

As per ‘Oxford Advanced Learner’s Dictionary’ graduates means to start doing something more difficult or important than what you were doing before. NFE graduates means trainees who have already been completed the course from the NEF programme (APPEAL Resource and Training Consortium –ARTC UNESCO Bangkok, 2003).

1.5.6 Human Resources Development

Human resources development for the community is a process of systematic learning and practice to improve their competence and performance in their current work and prepare themselves for future role and responsibilities (Hendrawijaya, 2020).

1.5.7 Employment Situation

The employment situation has been described in detail in terms of employment, self-employment, unemployment, etc. (Bangladesh Bank, 2006).

1.5.7.1 Employment: According to Oxford Learner’s Dictionary, “Especially when it is done to earn money, the state on being employed. It is also called paid-employment.”

1.5.7.2. Unemployment: Unemployment occurs when people are without work while actively searching for employment. Oxford Learner's Dictionary mentioned that the number of people without a job is called unemployment.

1.5.7.3 Self-employment: Self-employment is the state of working for oneself rather than an employer. As per The Cambridge English Dictionary, "Not having for an employment but finding work for yourself or having your own business."

1.5.8 Quality of Life

Quality of life is the general well-being of individuals and societies that outlining negative and positive features of life. It observes life satisfaction including everything from physical health, family, education, employment, wealth, safety, security to freedom, religious beliefs, and the environment. The internal components of QOL include the underlying physical and personal well-being, social and material well-being that form the basis for measuring quality of life (Pukeliene and Starkauskiene, 2011). In accordance with the Non-Formal Education Policy (2006), it has been said to implement the 'quality of life' improvement programme for the graduates.

1.6 Rationale of the Study

NFE is very much connected with skills development and income generation as well as human capital formation. According to Ahmad and Ahmed (2002), the government identifies the need for post-literacy and continuing education programmes for helping learners strengthen basic skills which help to improve their lives as well as ensuring income-earning skills through external assistance. Nevertheless, the study described that our country still emphasizes mainly on literacy campaign for NFE Programme and

limited facilities for skilled development related programmes which helps to increase income-generating manpower.

Bangladesh has faced still 18.70 percent poverty rate along with 2.64 million labour force being unemployed and 30.45 percent labour force being illiterate (BBS,2022). Even extremely poor population of the country is now at 24.4 million, which stand for the 4th largest extreme poor population of the world (World Bank report on Poverty and Shared Prosperity, 2018). One significant concern of the labour force is nearly 51 percent has no schooling and only a small fraction, 0.4 percent, has received skills development training (Titumir and Hassain, 2003). In addition, as reported by Bangladesh Education Statistic (2022), the dropout rate of secondary level is 35.98 percent and particularly the dropout rate of boys is very alarming because it has increased by almost 3 percent than last year. There were many reasons for increasing dropout rate of boys. The main causes were identified as low income of guardian, poverty and engagement with income generating activities and so on (BANBEIS, 2022). A terrible picture has been showed in the report of EIU-BC (2014), as per that report about 47 percent graduate of Bangladesh are jobless while in India 33 percent and in Pakistan 28 percent even in Nepal 20 percent. According to the report of World Bank (2019), 71 percent graduates of National University are jobless, only 1 percent college graduates are self-employed and 46 percent graduates are searching job during three years.

In this situation, the skills acquisition through NFE is very effective and it can help to upgrade that kind of marginal and disadvantages group. In our country NGOs play vital roles with the help of NFE programmes. Thus, it is very necessary to look at the NGO-run skill-based NFE programmes on improving of human resources as well as quality of life of the graduates through such programmes since we can realize the actual scenario of these programmes.

1.7 Significance of the Research

In our context, not any study was found in which both indicators were accounted for developing of human resources as well as improving quality of life through NFE programmes. Therefore, the intention of this study is to explore the involvement of skill-based NFE programmes of NGOs in Bangladesh on the encouraging of the employment situation and quality of life (QOL) of their graduates. Thus, the situation demands a comprehensive research-based study related to these issues. The researcher has also desired to conduct such a study that might generate thoughtful findings which will ultimately contribute to assist the policy makers to realize the current position as well as to take realistic judgment for human capital formation in addition to improving QOL among graduates through skill-based NFE programme of NGOs. That is why, this study has significance and necessary for our society. This study also significant for many developing countries along with some developed countries because it is related to sustainable development issues.

1.8 Scope of the Study

The study has examined the position of the development of human resources and quality of life among the graduates from the skill-based NFE programme of NGOs in Bangladesh. The study also originated the skills acquisition and employment situation of the graduates which expressed them financial aspects. The researcher attempted to find out the particular components of the internal environment of the QOL. In fact, the physical well-being, individual well-being and the social well-being have been identified as the components of the internal environment of the QOL. This study also will be disclosed the quality of the life for the graduates of the skill-based NFE programme which focused on the sustainable development of the society.

1.9 Construction of the Thesis

Along with this introductory chapter, six more chapters present the current dissertation with its research foundation and empirical findings, supplementary analysis and reaches to the conclusion.

Chapter one covers statement of the problems, research objectives and questions, rationale of the study, significance of the study, definitions of the key concepts of the study, scope of the study.

The second chapter reviews the related literature and identifies the knowledge gaps in the proposed study area at the same time helps to add new knowledge to the existing literature. The conceptual framework of the study also develops in this chapter.

The third chapter is named as Methodology which plans the systematic approach of the investigation of the current study.

Chapter four named 'Human Resource Development and Skill-based NFE Programmes in Bangladesh' focuses on how NGOs' NFE programmes in Bangladesh contribute to skills acquisition and concentrate on the human resource development of their graduates. Here descriptive analysis and inferential statistical analysis (ANOVA and logistic regression) has been used.

The chapter fifth attempts to show how the NFE programme is improving the financial prosperity as well as the quality of life of the graduates which reflects the sustainable development. This chapter also analyzes the graduates' knowledge about health well-being, personal well-being, and social well-being. In this chapter also descriptive

analysis and inferential statistical analysis (ANOVA, ordinal regression and generalized linear model) has been applied.

Chapter six has observed the factual challenges of human resources development and quality of life in NFE programmes in Bangladesh from literatures, content analysis, analytical results and respondents' views.

Finally, chapter seven draws a conclusion of the study. This chapter is composed of the main findings from the previous chapters, implications of the study, limitations of the study and questions for further study. Last of all, References are included in this dissertation. Questionnaires and interview schedules are also attached here as appendix.

Chapter-2

Review of Literature

2.1 Introduction

The literature review is a process to identify the knowledge gap in the field of proposed study (Adedin, 2015). It also helps the researcher to become aware of the literature study that is required of one chosen research area (Sarker, 2017). As stated by Creswell (2012), by reviewing the related literatures, researcher can make sure how the deliberated study adds new to the existing literature. According to Zaman and Mosrur (2019), the literature review also helps to impede the replication of the present study moreover it also helps to construct the conceptual mapping for the study.

The aim of this literature review relating to issues of NFE and skills development programmes of NGOs. The review also detects the researches on skills development, income generation activities and employment situation for NFE. As well the review examines reports and studies that have looked into the factors of human resources development, quality of life and sustainable development. Furthermore, the review focuses on various studies that have used different methodological approaches.

it is shown that none of the reviewed literatures has fully comprehended the field of this study. Several studies have been conducted on relation with skills-based programmes of NFE and income generation activities; few researches on role of NFE for poverty alleviation; some studies on contribution of NFE on economic growth and few studies have been conducted on the assessment of NFE as a tool to human resource development. While few studies have been conducted on contribution of non-formal vocational education for developing empowerment; very few have been done on skill-

based NFE as well as quality of life and no one has explicitly found on the 'development of human resource' and 'quality of life' of graduates from the skill-based NFE. Even most of the studies have been done in abroad. Consequently, no such study has so far been performed on the related concern in the context of Bangladesh. That is why; this piece study has been fresh attempt on this issue.

2.2 Non-Formal Education and Human Resources Development

Coombs and Ahmed (1980), in their prominent works named 'Attacking Rural Poverty: How Non-Formal can help', mentioned NFE programmes concerned with general and basic education for school dropout or unschooled youngsters and the most exception were adult literacy programmes. They also pointed out general NFE acted for occupational skills training programmes for developing non-formal rural skills for artisan and small entrepreneurs.

As per 'UNESCO GUIDELINES (2012): for the Recognition, Validation and Accreditation of the Outcomes of Non-formal and Informal Learning' (2012), NFE is also structured according to education and training arrangements, but in nature it is more flexible. It usually takes place in community-based setting. On the other hand, the recognition, validation and accreditation process, NFE can contribute to qualification and other recognitions.

Mocker and Spear (1982) created a two-by-two matrix for understanding the relationship of control of 'objective of learning' and 'means of learning'. This matrix identifies the 'objective of the learning' as controlled by either the institution or the learner on one dimension, and the control of the 'means of learning' by either the institution or the learner on the other dimension. As per them, in NFE the learners

control the 'objectives of learning' but the institution controls the 'means of learning' (as cited in Heimlich, 1993).

Egbezor and Okanezi (2008) stated that NFE represents a solution to the shortage of formal education as an antidote to the developmental needs. As per Ihejirika (2012), Adult education and non-formal education programmes are intricately intertwined because both are related to develop learners' abilities, enrich their knowledge and improve their technical or professional qualifications to meet their needs as well as generate employment and income potentials for societies. Indabawa and Mpofu (2006) cited in Blaak et al. (2012), pointed out that adult education interchangeable with income generating non-formal education, because adult education can contribute to increase of empowerment through the programmes. The opportunities to further education can also improve social interaction by sound skills in negotiation. The paper also mentioned that the graduates make clear to human rights issue by awareness and changed in behavior and attitudes. This study revealed also several aspects of non-formal education apart from income generating skills. Whereas, the employment situation and QOL of graduates have not studied here.

Hendrabijay's (2020) did a work entitled "The Impact of Non-Formal Education Mediation on Human Resource Development", which analyzed and tested human resource development through non-formal education intervention. The study used an explanatory research method including 240 street vendors in Jember city, Indonesia. The result showed that the type of work, income level, condition of family and home living directly have a positive and significance effect on non-formal education and human resource development. Nevertheless, the overall employment situation and QOL of the graduates have not focused here.

In a study Sing and Kumar (2016) named “Inclusive Human Capital Development through Non-formal Education: A comprehensive Analysis on Vocational Training Programmes in Sikkim” highlighted of the study on the feasibility, outcome and relevance of vocational education and training programme in the light of human capital development among the remotely located residents in Sikkim. The study identified significant antecedents of this programme on skilled development, motivation and academic achievement. Unpredictably, it is revealed that the programme did not have remarkable effect on the getting employment generation in Sikkim.

Another study conducted by Iretiayo (2017) titled “The Role of Non-formal Education in Maximizing Human capital Development” exposed the NFE is an instrument per excellence for enhancing human resources and that resources is a core element in the development effort of any nation. In this study, the specific component of human resource development was not highlighted.

However, Ekpenyong, Tawo and Oboque (2018) mentioned of their study named “Non-formal Education for Empowering Adult in Nigeria for Sustainable Development” that non-formal education has created a chance for adult learners to acquire and apply the knowledge and skills which helps to develop human resources development consequently contribute to the economic growth. The study also emphasized on the sustainable development also. While, the study did not underline on the quality of life for graduates.

2.3 Skills Development, Income Generation Activities and Employment Situation

Egbezor and Okanezi (2008) showed their study that NFE provided life skills and employment opportunities to the graduates of these programmes in Nigeria. Quantitative method was used for this study. This study also investigated that

employment opportunities of the learner of NFE gradually increased but the employment situation and quality of life of learner totally ignored in this study.

Ihejirika (2012) examined in his study how adult and NFE programmes can be used to reduce rural poverty in Nigeria. In this paper he investigated the income generating NFE programmes can achieve some degree of personal development, improved health conditions, high standard of living, economic survival skills, all of which can enable to eradicate poverty. He also identified that some efforts turned into failure due to office corruptions and lack of proper mobilization.

Mayombe & Lombard (2015) did a study at South Africa and found that non-formal adult education and training (NFET) was arranged to meet the training needs of adult who have been deprived of formal education to promote access to opportunities for skills acquisition and employment for improving social and economic situation. There also appeared a significance correlation between NFET and skills acquisition for successful employment outcomes of graduates. But the reason of unemployment and QOL has not been examined this study.

Another study was conducted by Mayombe (2017, 2017b) in South Africa and investigated that without linkage the NFET programmes to external stakeholders, graduate will persist difficulties to be employed or to start small business which lead to perpetual unemployment and chronic poverty in South Africa. Whereas the issues of QOL were not this objective of this study.

Ebirim (2014) identified in his study that adult and NFE could assist to reduce poverty and sustained livelihood of the learner. The researcher showed that NFE needs to be provided for the marginalized adult to empower them for income generation. The study was recommended that the government should fund for adult education.

Ozoemena (2013) examined the manpower development and utilization in income generating NFE in Nigeria. With respect to manpower utilization, it is discovered that the programme has helped to improve the socio-economic and living standards of these participants. The study identified the following challenges: withdrawal of participants due to lack of interest; lack of incentives for facilitators; lack of mobility for effective monitoring and evaluation, and weak curriculum among others.

Islam and Mia (2007) studied on the innovative element of NFE of Bangladesh in terms of its contribution towards poverty alleviation through income generating programmes. However, the researchers did not find the other components of QOL even employment situation of the graduates was not examined of this study. As indicated by 7th Five Year Plan (2016-2020) in Bangladesh, NFE has a connection with life skills and livelihood skills development which considered as the process of empowerment that contributes to human resource development and poverty reduction. It is noteworthy that the NFE programme serves as a tool to create opportunities for marginalized social groups to bridge the gap between unemployment and employment (Georgiadou, et al. 2009 cited in Mayombe, 2017). Thus, it is required to reveal the employment situation and QOL of the graduates of NFE because it is related to the empowerment and human resources development also.

2.4 Non-Formal Education Programmes of NGOs

It is well recognized that the NGOs are more capable than the public sector formal institutions in reaching the unreached marginalized group (Haq, 2010). He mentioned in Bangladesh, the Ministry (Ministry of Primary and Mass Education, MoPME) involvement on NGOs for implementation of mass literacy programme throughout the country. Sakya (2000) identified, in his study 'Role of NGOs in the Development of

Non- Formal Education in Nepal', that NGOs are the part of civil society. He also mentioned that NGOs have played more vigorous role for basic education for the poor people especially in South Asia and Sub-Saharan Africa.

Ahmad and Ahemd (2002) pointed out, in their paper of "Bangladesh Education Sector Overview" (JBIC Sector study), that government of Bangladesh involves NFE programmes mainly through literacy campaign on the other hand NGOs offer non-formal primary education and limited skill training for youth. So, NGOs have a great role for NFE education in Bangladesh. 'The Entry of NGO Schools and Girls' Educational Outcomes in Bangladesh', the works of Sukontamarn (2004), have shown that the entry of NGO schools has significantly girls' enrollment as compared to boys. He also revealed that NGO-run school has performed better than state-run schools in respect of primary education. Rose (2007), in cited Blaak et al. (2012), also claimed that mostly NFE are NGO provided alternative and compensatory education which are in nature accountable to civil society or the community, flexible and locally relevant. Most of the mentioned studies has been attempted to examine the NGOs performance on basic education. That is why the current study has been tried to reveal 'the quality of life' of the graduates from the NFE of NGOs.

2.5 Quality of Life and Sustainable Development through NFE

Quality of Life (QOL) is a broad multidimensional concept that usually includes social, cultural, health-related issues, environmental and ecological variables and monetary or financial aspects (Gazzola and Querci, 2017). This paper also mentioned that sustainability is connected with the quality of life in a community. It is the economic, social and environmental system that builds communities as well as provides healthy, productive, meaningful living for all community residents now and in the future.

Similarly, Todorovic et al. (2016) also believed that QOL is the subjective feeling of well-being and includes physical, psychological, social, environmental and economic dimensions. They also mentioned that according to World Health Organization (WHO), the QOL at the individual level is defined as the individual perception in their lives, respecting the cultural and value system in an environment in which they live.

APPEAL-training materials for continuing education personnel (ATLP-CE) -1993 (vol.-1) has defined Continuing Education as a broad concept which includes all the learning opportunities of all people want or need outside of basic literacy education and primary education. The Regional Coordinating Committee for APPEAL has classified continuing education into six programmes. The Quality Improvement Programmes (QLIPS), called Programme-3, equips learners with the essential knowledge, values and skills needed to improve their quality of life. At the same time The Individual Interest Promotion Programmes (IIPs) also known as Programme-5, indicate that they provide opportunities to participate and learn in selected social, health-related, cultural, artistic, ect.

Sen (1993) viewed that QOL should be assessed in term of the person's *capabilities*. He describes that the *capability* perspective has been used for analyzing a number of social issues those are well-being and poverty, liberty and freedom, living standards and development, gender bias and sexual division, justice and social ethics. As per Sen, capability approach can lead to increase QOL that can enable to achieve sustainable development.

The sustainable development is that type of development, which meets the needs of the present without compromising the ability of future generations to meet their own needs (The world Commission on Environment and Development, 1987). The main aim of sustainable development is to increase quality of life in long-ran with respect to other

living beings (Mederly, 2003). Meanwhile, the life-long education is the process for the betterment of human well-being and this paradigm is seen to be increasingly sustainable society. At the same time, NFE has involved various innovative learning methods for attaining the development the practical skills, including matter of health, sanitation, literacy, to be applied in real life situation.

The interesting insights in the quality of life exists in the concept of human capability, self-reliance and empowerment. The potential of the individual has been emphasized in achieving this quality of life (Blaak et al., 2012). They also explained that quality of life and development are more than ability to income, rather it depends on one's make change in social, individuals and economic areas of life.

Sen (2000) underlined the importance of education to attain improved QOL and to develop an individual's potential. According to Sen, education has wider gains than economic development, the worth of education lies in reading, communicating, arguing, for that, the benefits of education exceed its role as human capital in commodity production. At the same time, he acknowledges that greater human capital can stimulate the achievement of other freedoms and the education can indeed stimulate the economic growth of a nation. He also strongly believes that missing out of education can be seen a form of un-freedom. 'Transforming Our World for People and Planet' (Sustainable Development Summit-UN, 2015) declared "Since the 1992 UN Conference on Environment and Development- the Earth Summit, in Rio de Janeiro, Brazil, the world has identified a new pathway to human well-being, which indicates sustainable development. The concept of sustainable development recognized that economic development must be balanced with growth that meets people's needs and protects the environment."

Quality of life is affected by factors. In this connection, Cummins (1996) and Hagerty et al. (2001) cited in Pukeliene & Starkauskiene (2011), there is no universally accepted classification of factors and no undisputed opinion concerning factors determining quality of life and relationship among those factors. They have analyzed QOL that is determined by external environment (political and socioeconomic condition, health system, social safety etc.) and internal environment (family, health, education, income, social well-being etc.). They also stated that internal environment consists of physical well-being, individual development well-being, material well-being and social well-being on the other hand external environment consists of natural environment, social environment, political environment and economic environment.

According to the Seventh Five Year Plan-7FYP (2016-2020) in Bangladesh, economic growth is not only driven by quantities of capital and labour. The qualities of these inputs are important determinants of growth as well. It is also mentioned at 7FYP in Bangladesh that proper education not only increase efficiency but also augments the overall QOL. Apart from the economic impacts, education also has positive impacts on health, social and environmental issues. According to Pukeliene and Starkauskiene (2011), the concept of sustainable development is related to the quality of individual's life and well-being and safety of the society that must be ensured by careful coordination of economic, social development and environment protection needs.

Mamun and Rahaman (2013) studied their research on basic NFE in improving QOL. They also identified the economic condition of the learner in addition analyzed life skills, health issues as well as environmental issues of the learner. Therefore, it necessary to identify the QOL of graduates from skill-based NFE.

Rogers (2018) in his work “Second-generation non-formal education and the sustainable development goals: Operationalizing the SDGs through Community Learning Centers” observed that adult education cannot be achieved through formal education alone, as well as need for the non-formal education programmes, which helps in achieving the goals of sustainable development. This study was conducted with qualitative study using case study. Similarly, the current study has been carried out with mixed method approach.

At the end of the literature review, the current study is designed to draw a conceptual mapping based on some logical perspectives. NGOs are working with the NFE programmes in Bangladesh. NGOs have some NFE programmes that works to improve human resource development as well as the quality of life of graduates. The study seeks to explore the human resource development of graduates under ‘material well-being’ (monetary). In addition, this study will be looked ‘physical well-being’, ‘individual well-being’ and ‘social well-being’ from the graduates of NFE programmes. Graduates’ QOL can be improved by achieving material and physical well-being, individual and social well-being. Consequently, sustainable development for society might be achieved. The study is aimed at achieving specific factors of internal environment of QOL through NGO-run NFE programmes.

2.6 Non-formal Education (NFE) Context in Bangladesh

There are significant differences between Bangladesh's curriculum, teacher-student ratio, teacher qualifications, school environment and population health and nutrition status among the population. Education has been declared a human right for almost half a century and it is important to ensure quality education for the development of the nation in developing countries. The formal education system provides Education for All (EFA) but it is still far from being universally available to all citizens of Bangladesh. Our

education system still faces serious problems and challenges in advancing basic education for our young and adults. Sultana and Haque (2018) conducted a study entitled “Non-Formal Education for Sustainable Development in Bangladesh: A Study” and mentioned that non-formal education has been considered as the most practical and decisive method of education. In addition to formal education, non-formal education has been included as a broad spectrum of educational and training activities. Skill development is an important component of continuing education in Bangladesh. Approximately eighteen (18) ministries, which are directly or indirectly involved in skills development activities. Apart from the government, NGOs and the private sector are also involved promoting skills development. These institutions provide various skill development training and support schemes. Skill development includes life skills, trade courses, vocational trainings and technical education. It addresses different types of learners, that is, uneducated, semi-educated, educated youth and adults.

In accordance with ‘Mapping of Non-Formal Education Activities in Bangladesh- (BNFE,2009)’ that there is no universally accepted definition of skill development. It's context and culture-specific and need-based. As the scope of skill development expands, the contents of training have also widened. In addition to acquiring technical knowledge, training is also embodied nowadays learning and acquiring skills through empowerment and capacity building. Skills development training is more closely integrated or 'embedded' with financial and non-financial intervention, which seeks sustainable improvement in livelihoods poor. The report also pointed out that the Quality-of-Life Improvement Programme (QLIP) is designed to equip students and the community with the necessary knowledge, perspectives, values and skills to enable them to improve the quality of life as individuals and community members. The quality of life refers to the level of well-being of the society and the level of satisfaction of a number of human needs. The study of Sultana

and Haque (2018) revealed that the non-formal education sector as an alternative to basic education increases the pressure to transform the larger education system. Non-formal education has the potential to be an effective tool for sustainable development in Bangladesh. It quickly adopted a conservative formal education system in addition to the informal style and approved education expansion programmes. Non-formal education methods, especially in developing countries like Bangladesh, have been established as the most successful alternative education methods. However, to achieve a quality civil society and social peace through non-formal education activities, we need better cooperation, better coordination and expert commitment. This study also reflects sustainability from a form of thinking about a future where environmental, social, health and economic considerations advance and sustainability for a higher quality of life

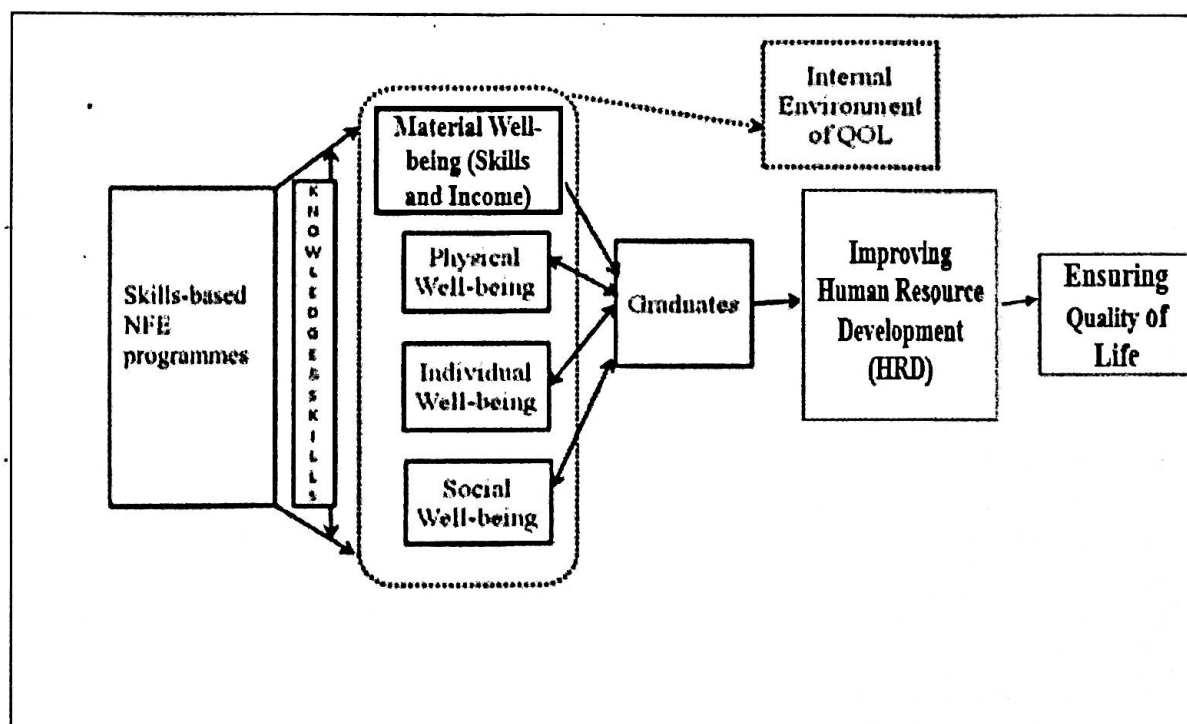
2.7 Conceptual Framework

The present study has been considered based on some coherent background. 'Quality of life' and 'development' are more than worth earning. In addition, it depends on one's knowledge of economics, health, life skills and social well-being. Indeed, SDG4 (Quality education and lifelong learning opportunities for all) can be interpreted along with other goals such as ensuring access to education to increase skills and better paying jobs, opportunities to enjoy better health and become more involved with the community (Allen Boeren-2019). Nevertheless, SDG-3 (Good health and well-being) indicates how much we can enjoy life is affected by our health. This requires health awareness and ideas about safe and effective drugs and vaccines. However, SDG-5 (Gender and Women's Rights) indicates that women and girls lag behind in almost every case. There is still gross inequality in work and wages. The Sustainable Development Goals set out to end discrimination against women and girls everywhere. SDG-6 (Safe Water and

Sanitation) mentions that everyone in the world should have access to safe and affordable drinking water. Although many people use clear drinking water and sanitation, many cannot afford it. SDG-8 (Decent work and Economic Growth) states that an important aspect of economic development is the employment of people who pay enough to support themselves and their families. This goal can encourage the entrepreneurship and job creation. This study tries to attain the mentioned goals.

In Bangladesh, NFE is related to develop skills and employment facility. Trainees could be informed with knowledge of material well-being, physical well-being, individual well-being and social well-being (components of internal environment of QOL) eventually they are learned as well. In this way, the graduates could improve their quality of life.

Figure 2.1: Conceptual framework of this study



Chapter-3

Research Methodology

3.1 Introduction

Methodology is a planned and systematic approach of investigation and it is very essential for any research work to achieve the aim of the study (Abedin, 2015). Creswell (2014) mentioned that methodology is the process of research. This study is concentrated on mix method research approach. For this purpose, in this study the quantitative and qualitative data has been gathered for better and deeper understanding of the research problems in this study and to depict a significant conclusion. Populations are considered as four categories i.e., the Graduates from skill-based NFE programmes of NGOs, Trainers of the programmes, NGO officials and Employers of the graduates. A representative number of samples have been selected through the probability sampling for the quantitative analysis and for the qualitative analysis is followed by purposive sampling. The researcher used a self-administered instrument containing five-point Likert scale questionnaires to know the situation of human resource development and position of QOL knowledge among graduates from skill-based NFE programmes. In order to explore the situation of the human resources development and position of QOL knowledge among graduates, three separate open-ended interview schedules have been assigned to interview with the trainers, NGO officials and graduate recruiters. The content analysis has also been used for the qualitative analysis of the study.

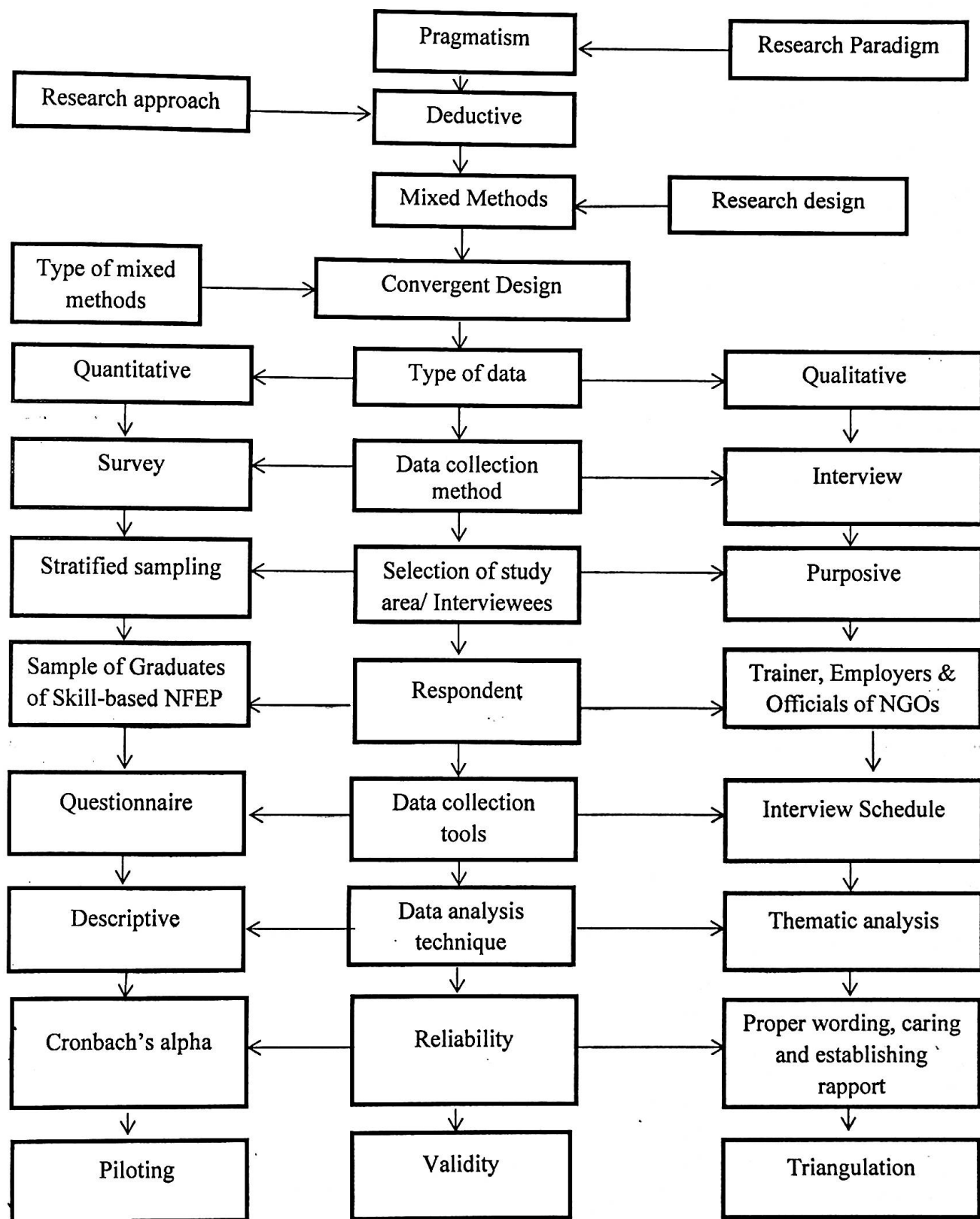
This chapter demonstrates the research approach, design, study area, determination of sample size, sources of data and data collection instruments, analysis techniques and procedures of data interpretation.

3.2 Research Approach and Design

The convergent parallel mixed method research design has been used under pragmatism paradigm for this study. The pragmatism paradigm is concerned with understanding the problems so it is also called problem-centered worldview (Creswell, 2014). Pragmatism is not committed to any one system of philosophy rather it believes pluralistic. This applies to the study of mixed methods that researchers draw liberally from both quantitative and qualitative perspectives when it is involved in one study (Morgan 2007). In fact, this paradigm accentuates the research problems and uses all available approaches to understand the problem. All at once, with this design both quantitative and qualitative data can be collected, they can be analyzed individually and then the results are compared with the objectives. That is why, mixed methods approach has been used to explain the research problem clearly.

The core assumption of the mixed method research is that the combination of qualitative and quantitative approaches to provide a more complete understanding of a research problem than either approach alone. There are many mixed method study designs and researcher have to use any particular design based on demand of the research objectives. The exploratory sequential mixed method design works with firstly qualitative method then jobs with quantitative method. Another type of mixed method design is sequential explanatory mixed method design. The goal of this design is to use qualitative methods to explain earlier quantitative findings. On the other hand, convergent mixed method designs are a type of concurrent mixed methods research design. This design used to gather qualitative and quantitative data at the same time, analyzed separately, then the results are compared to understand a research problem. This study attempts to understand the problems using qualitative and quantitative data simultaneously during the analysis. For this reason, convergent mixed method designs would be the best fit to attain the set objectives of this study. The flow-chart of the research design is given below:

Figure 3.1: Flow-chart of research design for this study



3.3 Selection of Study Area

Three districts have been selected purposively from Rajshahi division. The selected districts are Nagoan, Natore and Rajshahi. Thirty-five NGOs involved in education programmes have been employed in these three selected districts, of which only ten per cent are involved in skilled development based NFE programme (CAMPE, 2016). One regional, one national and one international level NGO are considered for this study. The selected NGOs are Caritas Bangladesh as national, Ashrai as regional and BRAC as international. In respect of activities, NGOs are working the same activities in Rajshahi division as well as national level.

Caritas is a national non-government development organization. It was founded in 1967 as the eastern branch of Pakistan. The name 'Caritas Bangladesh' was re-introduced in 1976. Caritas Bangladesh has its central office in Dhaka. There are eight Regional Offices in various part of Bangladesh. In all these places, Caritas is operational in Integrated Development and Human Resource Development, under a central management. BRAC, an international development organization based in Bangladesh, is the largest non-governmental development organization in the world, in terms of number of employees as of September 2016. Established in 1972 after the independence of Bangladesh, BRAC is present in all 64 districts of Bangladesh as well as 13 other countries in Asia, Africa, and the Americas. Ashrai is also a non-government development organization which established in 1990. From the beginning, they have been working for the social, human right and economic development for the tribal and marginalized people of northern part of the country. It is working with six districts of Barandra region (Rajshahi and Rangpur Division). Considering the financial constraints and easy access for data collection, researcher considered three districts of Rajshahi

division for this study. Rajshahi district is a district in northwestern Bangladesh and is a part of the Rajshahi division. The metropolitan city of Rajshahi is in Rajshahi District. Nagoan is a district in northern Bangladesh. It is central part of Borendra region. Natore is also a district in northern Bangladesh. It borders the metropolitan city of Rajshahi. Overall, the selected NGOs and districts may signify the whole picture of the human development and quality of life (QOL) position of graduates from skill-based NFE programmes of NGOs in Bangladesh.

3.4 Determination of Sample Size for Quantitative Analysis

The population of this study is the graduates who have participated in skill-based NFE programmes from three selected NGOs across the three selected districts in the last four years (2015-2018). The total number of populations of the survey is 1130 (BRAC-400, Caritas Bangladesh-540 and Ashrai-190). The following formula has been used in determining the ideal sample size at a given confidence level (Israel, 2003; Cochran, 1977 and Kalton, 1983):

$$n = \frac{z^2 \times p \times q}{d^2} = \frac{1.96^2 \times 0.5 \times 0.5}{0.05^2} = 385$$

[when p is unknown, generally it is best option to set it at 0.5]

where, n = Sample size; p = the probability (0.5); q = (1- p) is the reverse probability;

z = the area of the standard normal curve (1.96, at 95% confidence Level); and

d = the desired level of precision.

By using the above formula, total number of samples have resulted in 385 graduates. Then, the stratified random sampling procedure has been followed to draw the sample for the quantitative analysis of the study. The proportional allocation method is used for

distribution of the total number of samples. The sample size for each study NGO (n_i) has been calculated by using the following formula: $n_i = \frac{N_i}{N} \times n$

where, n_i = Sample size of study NGOs; N_i =Study population of selected NGOs; N = Total number of study population; n = Sample Size.

By using this formula, following tables have shown the distribution of samples among the graduates of selected NGOs:

Table 3.1: Distribution of the respondents of the study NGOs

Study NGOs	Frequency	Percent
Caritas Bangladesh	184	48
BRAC	136	35
Ashrai	65	17
Total	385	100

Table 3.2: Training center wise distribution of the respondents

Location of the Training Center	District of respondents' obtained training			Total Respondents
	Rajshahi	Nagoan	Natore	
Matihar ,Rajshahi	61(15.8%)	-		61
Paba, Rajshahi	140(36.4%)	-		140
Banpara, Natore	-		79(20.5%)	79
Patnitala, Nagoan	-	61(15.7%)	-	61
Shapahar, Nagoan		44(11.5%)	-	44
Total	201(52.3%)*	105 (27.2%)*	79 (20.5%)*	385

*The parenthesis presents the percentage of respondents on the basis of total respondents.

The following table 3.3 is shown the procedure of data collection method and samples.

Table 3.3: Sampling and data collection matrix of respondents

Objectives	Ways of data collection	Tools	Respondents/Sources	Number of Respondents
Objective – 1	Survey	Questionnaire	Graduates from skills based NFE of NGOs	385
	Interview	Interview Schedule	Trainers, Officials and Employer	18
	Document Analysis	Checklist	Course Outline and Various Reports	-
Objective – 2	Survey	Questionnaire	Graduates from skills based NFE of NGOs	385
	Interview	Interview Schedule	Trainers, Officials and Employer	18
	Document Analysis	Checklist	Course Outline and Various Reports	-
Objective – 3	Interview	Interview Schedule	Trainers, Officials and Employer	18
	Document Analysis	Checklist	Course Outline and Various Reports	-

3.5 Sampling for Qualitative Analysis

Purposive sampling has been performed for the interview with the trainer, NGO officials and employer of the graduates. The following table is given the sample distribution of respondents for interviewing:

Table 3.4: Distribution of the respondents of the study NGOs’ trainer, officials and employer

Types of Respondents	Number of Respondents					Types of Sampling	No. of Respondents and Sex
	BRAC	Ashrai	Caritas				
	Rajshahi	Rajshahi	Rajshahi	Natore	Nagoan		
Trainer	2	2	-	1	1	Purposively	(5 Males+1 Female) =6
Official	2	2	2	-	-	Purposively	(5 Males+1 Female) =6
Employer	2	2	-	1	1	Purposively	(5 Males+1 Female) =6
Total	6	6	2	2	2		18

Interviews has been taken among 6 trainers out of which 5 were male and 1 were female and among them 2 from BRAC in Rajshahi, 2 from Asharai in Rajshahi, 1 from Caritas in Natore and 1 from Caritas in Nagoan. Interviews also is conducted among 6 officials out of which 5 were male and 1 were female and among them 2 from BRAC in Rajshahi, 2 from Asharai in Rajshahi, 2 from Caritas in Rajshahi. Another category of respondent for interview was employers and 6 employers have been selected for interview of which 5 were male and 1 were female and among them 2 from BRAC in Rajshahi, 2 from Asharai in Rajshahi, 1 from Caritas in Natore and 1 from Caritas in Nagoan.

3.6 Sources of Data

The study was based on both secondary and primary sources of data. Primary data has been collected from 385 graduates through survey questionnaire and interview has been conducted with 18 persons among them 6 trainers, 6 employers and 6 officials of NGOs. Content analysis has also been done. Most of the secondary data was collected from the course outline and various reports.

3.7 Instrument for Data Collection

The data collection tools are used as questionnaires for surveys and interview schedule for interviewing which is used for primary sources of data. In addition, the checklist for document analysis has been used for secondary sources of data. The various tools which have been used in this study are described in the following:

3.7.1 Questionnaire Survey

Firstly, the primary data has been gathered from the selected respondents of this study through the questionnaire survey method. It is worth mentioning that the researcher received data from 385 respondents. Gay et al. (2012) stated that the ways of data collection with questionnaire are mail, email, or interview over the phone or in personal. In this study, two graduate level students have been engaged by the researcher to help with the survey work. In addition, the data was also collected by postal mail, interview over the phone and in personal with the formulated questionnaire.

3.7.1.1 Questionnaire Formulation

The questionnaire has been organized in such way it would address the research objectives and various issues related to objectives. The researcher developed the instrument inspired by specially the various reviewed articles of Pukeliene and Starkauskiene (2011), Mederly et al (2003), Mahruf et al. (2006), Mamun and Rahaman (2013), Abdulwahid and Salin (2018) and Burckhardt and Anderson (2003). It was developed five-point Likert scale, where the numeric 1 meant for 'Strongly Disagree' (SD) and 5 for 'Strongly Agree' (SA); 2, 3, and 4 for Disagree (D), Neutral (N) and Agree (A) respectively in between them.

The draft of the questionnaire was pre-tested by the respondents for its appropriate wording, format, functionality, length and sequence of questions. The pre-tested feedback was used to conduct necessary addition and omission in the questionnaire until it was ready for data collection. The questionnaire was firstly developed in English then it was translated into Bengali so that the respondents could understand the questions easily and the researcher could get appropriate answer from them. Mainly the questionnaire has been contained two parts viz Part-A and Part-B. Part-A includes questions relating to respondents' demographic information: gender, age, occupational status and Part-B have been divided into four clusters according to the research questions. Reliability is important in quantitative studies because without reliability there will no consistency of validity. Cronbach's Alpha test is used for the internal reliability of multiple Likert Scale. The following table 3.5 shows the Cronbach's Alpha test result:

Table 3.5: Cronbach's Alpha result of overall items

Reliability statistics of overall Items

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
.730	.733	24

Cronbach's Alpha result of overall items of questionnaire was 0.73 which has been adequately above the suggested level of 0.60 (Cronbach, 1951; Hair, 2003; Malhorta and Dash, 2009). Thus, the result indicates that the overall scale of instrument items is internal consistency and statistically acceptable.

3.7.2 In-depth Interview

It is also an instrument used for collecting primary data source. Interview is a purposeful interaction in which researcher obtains information from respondents for qualitative data.

Researcher can explore and probe participants' response to gather in-depth data about their experience, feelings, interests, concerns and values (Gay et al., 2012). For the qualitative judgments, the study has been conducted by interviewing with NGO officials, trainers of NGO and employers of the graduates. It has explored the means of improving the human resource and knowledge on QOL of the graduates. Three separate sets of formal interview schedules have been used for each category of the respondents. The interview has been recorded by an Android mobile phone and transcribes the recorded contents as per the research objectives.

3.7.3 Document Analysis

Document analysis is a systematic procedure for reviewing or evaluating both printed and electronic documents (Bowen, 2009). Trade module or training manual or course outline has been reviewed in this study using a predetermined checklist. Documents analysis is investigated in the same way that focus groups or interviews are analyzed through coding themes. Here the researcher has followed this method to analyze it.

3.7.4 Secondary Literatures

A comprehensive review of available secondary literatures has been done to realize the present status of skill-based NFE and its contribution on QOL. Secondary data of the study were collected from annual report of study NGOs, different publication of Bangladesh Bureau of Statistics (BBS) such as Bangladesh Statistical Year Book 2022, Literacy Assessment Survey (LAS); different publication of Bangladesh Bureau of Education, Information and Statistics (BANBEIS) such as Secondary School Dropout Survey and Bangladesh Education Statistics; various UN reports such as Brundtland Commission Report; different World Bank reports; Non-Formal Education Policy-2006;

Non-Formal Education Act-2014; related books, dissertations and articles. These secondary sources have provided intensive understanding of the research issue and basement of formulating the questionnaire for sample survey and interview schedule for in-depth interview of different subgroups of the respondents.

3.8 Collection of Data

Cross-sectional study has been used for this research. A cross-sectional study is a type of research design in which one collect data from many different individuals at a single point in time. According to Creswell (2012), Cross-sectional survey designs are quantitative research methods where investigators conduct a sample survey to describe trends, evaluate a programme, attitudes, opinions, behavior, understanding, or demographic characteristics. In the present study, the researchers sought to identify the situation of graduates in human resource development as well as their knowledge and awareness about quality of life (QOL) from the skill-based NFE programmes of NGOs in Bangladesh.

After finalizing the self-administered questionnaire as data collection tool, data of 385 respondents were collected during April,2019-November, 2019. The target population of this study included graduates of the skills-based NFE programmes of NGOs. Both male and female were considered proportionately in this study. At the same time, based on the research questions three separate interview schedules have been formulated for conducting interview with the selected samples for qualitative study.

3.9 Data Analysis Procedure

The collected data have been arranged and scrutinized carefully in accordance with the objectives. After completing of data processing, the researcher turned his attention to

analyzing both types of data. To answer the research questions, both the descriptive and inferential statistical analysis have been performed by using the statistical software SPSS (Statistical Package for Social Science) 20 version. Frequency, mean, mode and Standard Deviation (SD) have been adopted for descriptive analysis. Some sophisticated statistical analytical tools such as ANOVA, Logistic Regression, Ordinal Regression and Generalized Linear Models (GLM) have been used in this study. The multivariate analysis such as logistic regression has been employed to association between dependent variable and some important covariates. In this study, the multivariate logistic regression has been applied to know the predictors of HRD among graduates. On the other hand, coding and theme-based analysis have been conducted for the qualitative data from interviewing and content analyzing.

3.10 Ethical Consideration

Ethical issues in research dominate increased attention today. The ethical considerations are necessitated extensively that are reflected through the research process (Creswell, 2014). The researcher has an obligation to respect the rights, needs, values and desires of the respondents. The following safeguards have been employed to protect the respondents:

- (i) The research objectives were articulated both verbally and written so that those are clearly understood by the respondents.
- (ii) The researcher proclaimed the description of the procedure of data use in the study. This means the data will not be used to make comparisons between organizations.
- (iii) The respondents' rights, interest and wishes were considered strictly for collecting data.
- (vi) Privacy and anonymity of respondents was maintained highly.

Chapter-4

Human Resource Development and Skill-based NFE Programmes in Bangladesh

4.1 Introduction

NFE programme is very much connected with skills development and income generation issues (Islam, Mia and Sorcar, 2005). The government identifies the need for the programmes which helping learners strengthen basic skills and help to improve their lives through ensuring income-earning skills. However, NFE programme still emphasizes mainly on literacy campaign rather skills development related programmes Bangladesh. The skills development related programmes help to raise income-generating work force consequently it helps to enhance human resources development. Thus, this study needs to reveal the overall employment situation that indicates employment, unemployment and self-employment of the graduates through NFE programmes. The main aim of this chapter is to identify the state of human resource development of the graduates of these programmes by using both quantitative and qualitative data. The material well-being is the important component of the 'quality of life'. Mostly, the financial issues have been related to the material well-being. Consequently, the skills development, income generation and employment situation of the graduates need to be revealed first for identifying the quality of life of the graduates. This chapter focus how the NFE Programme of NGOs in Bangladesh contribute to the skills acquiring and how concentrate on human resources development of their graduates.

4.2 Role of Demographic and Socio-Economic Characteristics on Skills-based NFE Programme

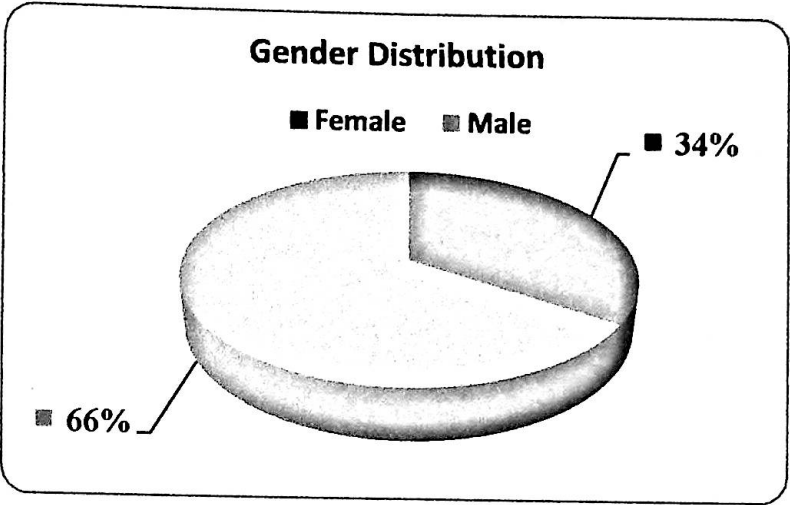
The effectiveness of skill development training depends on various demographic and socio-economic characteristics. Here, the discussion is focused on graduates' skills based on demographic and socio-economic characteristics. The following Table 4.1 and Figures 4.1 to 4.7 summarize the demographic and socio-economic characteristics of the respondents.

Table 4.1: Demographic and socio-economic characteristics

Characteristic	Category	Frequency	Percentage
Gender	Male	256	66.50
	Female	129	33.50
Age	≤ 20 years	139	36.10
	21-29 years	191	49.61
	≥ 30 years	55	14.29
Residence	Urban	144	37.40
	Rural	241	62.60
Marital Status	Unmarried	192	49.90
	Married	178	46.20
	Others	15	3.90
Educational Level	≤ 5 Grade	184	47.80
	6-8 Grade	158	41.20
	≥ 9 Grade	43	11.00
Occupational Status	Service	187	48.50
	Self-employed	98	25.50
	Unemployed	100	26.00

Source: Field Work, 2019

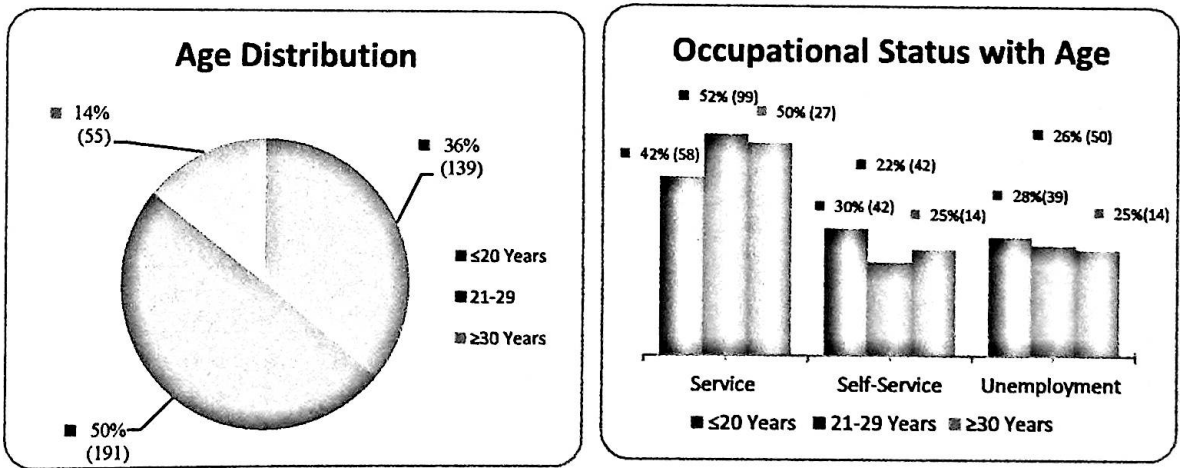
Figure 4.1: Distribution of gender in skill-based NFE programme



Source: Field work, 2019

The above figure has been emerged from the field survey of this study. The figure shows that 66 percent male in contrast to 34 percent female respondents have been participated in skill development training conducted by NGOs. It stands for a notable number of females are engaged with income generating NFE programme of NGOs in Bangladesh.

Figure 4.2: Distribution of age in skill-based NFE programme

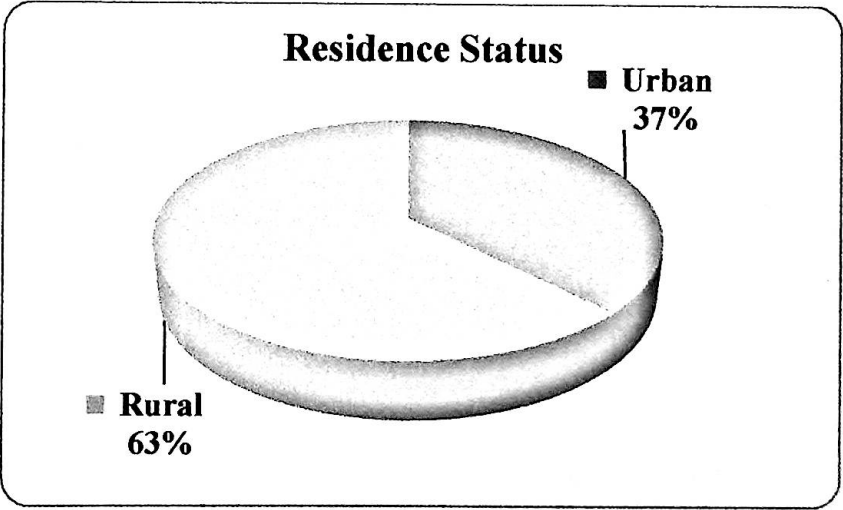


Source: Field work, 2019

From the survey, it is found that 21-29 years age group demonstrates the highest (50 percent) graduates look skill development training among the other groups. This means that most of the respondents were young in this study. According to the Bangladesh Bureau of Statistics, the age group 15–29-year-olds are considered as youth (BBS, 2022). In that sense, over 80 percent of respondents to this study were young. The rest of the age groups are 20 years & below (36 percent) and 30 years & above (14 percent) that indicates all the graduates are adults which is significance in non-formal education programmes. It is very significant that the highest wage-employment rate (52 percent) exists in the age of 21-29 years. Alternatively, the highest self-employment rate (30 percent) and highest unemployment rate (28 percent) subsist in the age below 20 years.

On the other hand, the lowest wage-employment rate (42 percent) is seen between the ages of 20 and below. The lowest self-employment rate (22 percent) is present between the ages of 21-29. Also, the lowest unemployment rate (25 percent) is between 30-years and older.

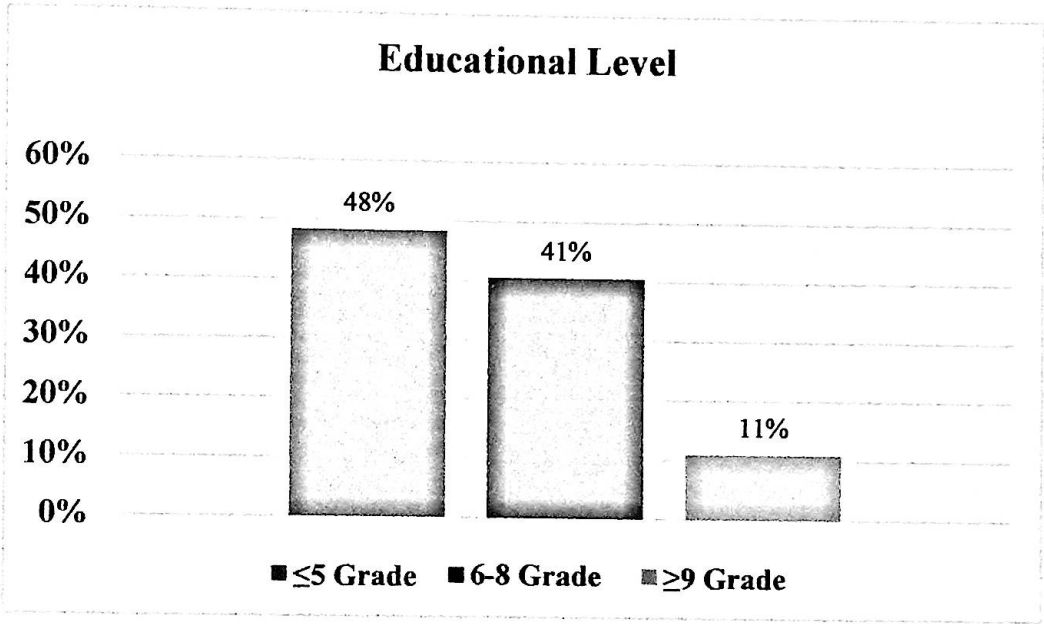
Figure 4.3 : Distribution of residence in skill-based NFE programmes



Source: Field work, 2019

The residence status of respondents exposed rural (63 percent) are higher than the urban (37 percent) that indicates the NFE programme of NGOs is strongly concerned in rural area of Bangladesh. As Bangladesh is a rural country, 61.82 percent of the population lives in rural areas (World Bank, 2022).

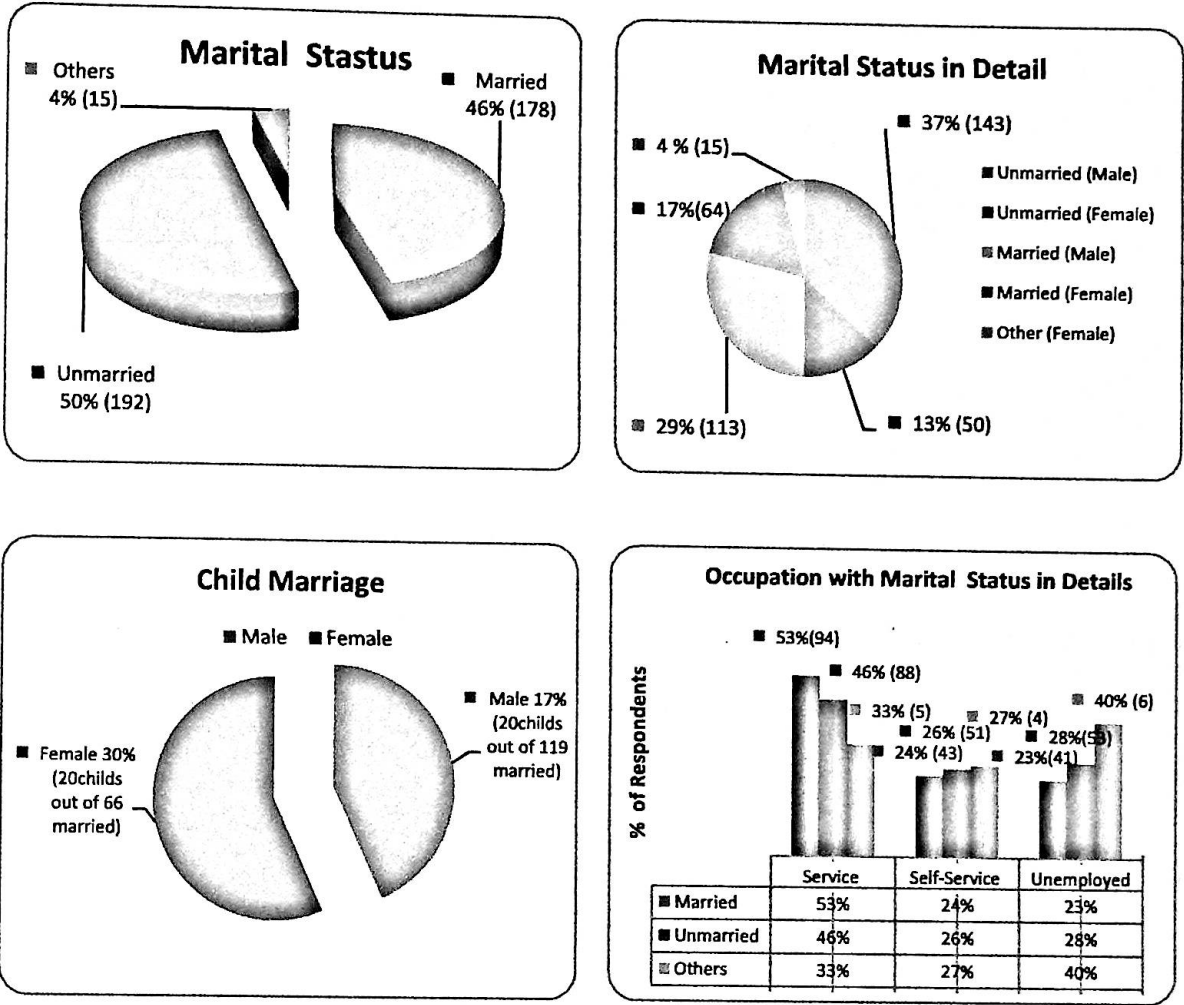
Figure 4.4: Distribution of educational level in NFE programmes



Source: Field work, 2019

The figure uncovered that most of the graduates completed their formal education upto grade 5 and blow (48 percent) compare to grade five to eight (41 percent) and only 11 percent of garduates had the experience of nine or above years formal education. In the study showed that the most of the graduates had experience only five years or below with formal education which also relevant with the charecteristics of non-formal education.

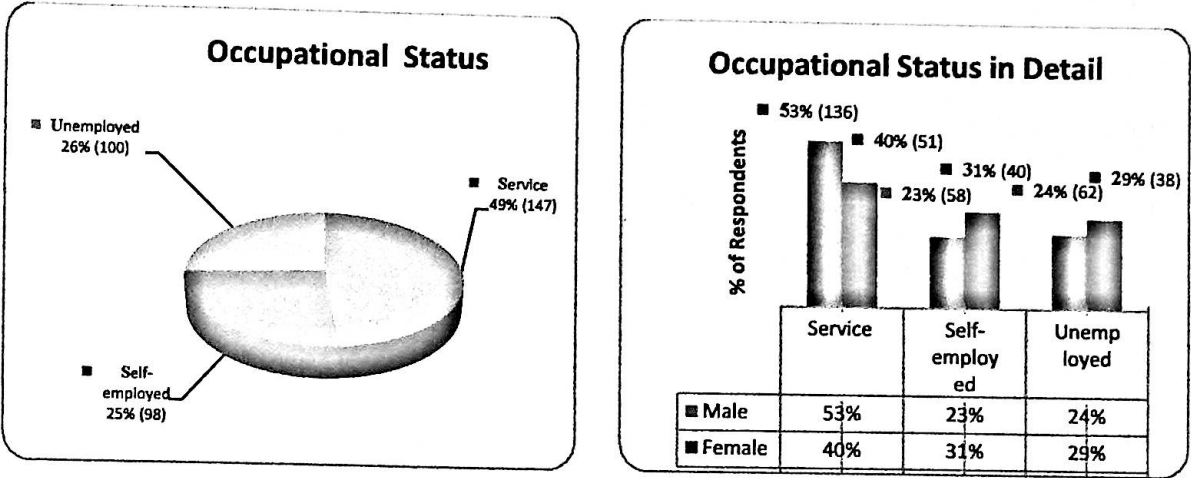
Figure 4.5: Distribution of marital status in the skill-based NFE programme



Source: Field Work, 2019

Marital status revealed 50 percent unmarried compare to 46 percent married and 4 percent others or divorce. We can see from the figure that the married males (29 percent) are significantly higher than the married female (17 percent). On the other hand, the researcher found 22 percent of the overall child marriage. Nevertheless, individually the rate of female (30 percent) shown more than the male (17 percent). In fact, it is a terrible scenario of our country. According to BBS (2022), Bangladesh has faced 41.6 percent of child marriage. It is alarming that the last three years have shown an increasing trend of child marriage. In that respect, the picture in this survey is not so bad.

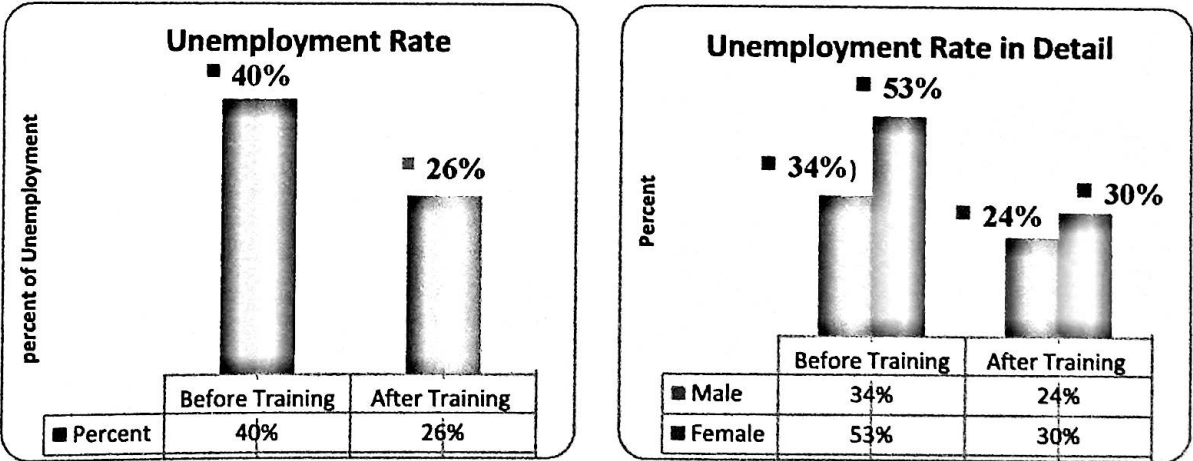
Figure 4.6: Occupational status of the graduates



Source:Field work, 2019

The figure shown 49 percent graduates were serviceholder and 25 percent graduates engaged in self-employed. The study observed that 26 percent graduates were unemployed. The study was also found that individually the employment rate of the male was 76 percent compare to 71 percent female. On the other hand, the survey revealed that the self-employment rate of the female graduates (31 percent) was higher than the male graduates (23 percent). From the study it was also remarkable that unemployment rate of female was 29 percent on the contrary male 24 percent. Various factors are identified for the causes of unemployment which affect on HRD.

Figure 4.7: Unemployment rate of the graduates



The researcher explored that after getting training from skills-based NFE programme of NGOs the overall employment rate was augmented by 14 percent. Before training the unemployment rate of the male was 34 percent (87) and the female was 53 percent (68). It is also observed that separately the employment rate of female was amplified by 23 percent (30) after getting training. On the other hand increased employment rate of male was 10 percent (27). Thus, the survey implies that the employment rate of women after completing training is more than double that of men.

4.3 Contribution of Skill-based NFE Programmes of NGOs on HRD: Content Analysis

To know the impact of skill-based training among graduates on human resource development, the content analysis is conducted in this section. The training manuals of selected skill-based NGOs have been analyzed as content analysis. The general learning needs of NFE are identified as three main themes: 'essential for socio-economic life', 'essential for living' and 'essential for education and cultural life' (Latif, 2002). A total of 485 items were found in the analysis among them skills related issues, entrepreneurial issues, health awareness issues, basic education, life skills related issues are important. This content analysis can play an important role on the overall findings.

Table 4.2: Content analysis of the programme based on their training manual

Types of Subject Matter	Number of Items	% of the topic in content
<u>Needed for Socio-Economic life</u>		
*Skills Related subject matter	269	55%
*Entrepreneurial subject matter	17	3.5%
<u>Needed for Living</u>		
*Health consciousness subject matter (Balance Food, Nutrition, Cloths, Water)	55	11.5%
<u>Needed for Education and Cultural life</u>		
*Basic Education (Reading, Writing & Arithmetic)	94	19.5%
*Life Skills Related (First Aid, Traffic signal knowledge, Making saline etc.	26	5.5%
	10	2%
*Social Well-being subject matter (Entertainment, Leisure Time, Social activities etc.)	14	3%
*Ethical subject matter		
Total	485	100%

The analysis shows that 55 percent of skill development related subject matter, 3.50 percent of entrepreneurship related subject matter, and 11.5 percent of health awareness related subject matter are among the content of skill-based NFE programmes of NGOs. Additionally, in the overall content of skill-based NFE programmes of NGOs has 19.5 percent subject matter for basic education, 5.5 percent for life skills related subject matter, 2.0 percent for social well-being related subject matter and only 3.0 percent for ethics related subject matter. Thus, it can be uttered that skill development related subject matter has been emphasized in the content of the skill-based NFE programmes of NGOs.

4.4 Contribution of Skill-based NFE Programmes to Develop of Technical Skills of graduates

In this action, it has been investigated the views of graduates on skills acquisition from NGO operated non-formal training programme which plays on human resource development. For this purpose, the average value of technical skills items has been used which collected from questionnaire survey data from graduates who have received training from Skill-based NFE programmes NGOs. The questionnaire survey with the selected graduates was presented here.

Table 4.3: Technical skills status of graduates of skill-based NFE in Bangladesh

Items of Technical Skills Issues		*W.A.	**S.D.
S.1	Skill-based training programme helps to increase skills of graduates	4.33	0.51
S.2	Opportunities to use up-to-date equipment and training materials at the training session help to develop skills	3.86	0.58
S.3	Skill-based training programme has imparted entrepreneurial knowledge (skills in business planning, leadership, communication, business management, finance, marketing, etc.) that helped in managing self-employment.	2.97	1.17
S.4	Do you agree that the NGO-provided training is suitable for the job market?	4.24	0.70
	Mean of W.A. and S.D.	3.85	0.74

* W.A. – Weighted Average; ** S.D. – Standard Deviation, Source: Field Study, 2019

In table 4.3 exhibits that the entire items mean are almost 4.0 and at the same time consistency observed in the standard deviation. On average 4.33 graduates expressed that skill-based training programme helps to increase their skills. The variability is very low

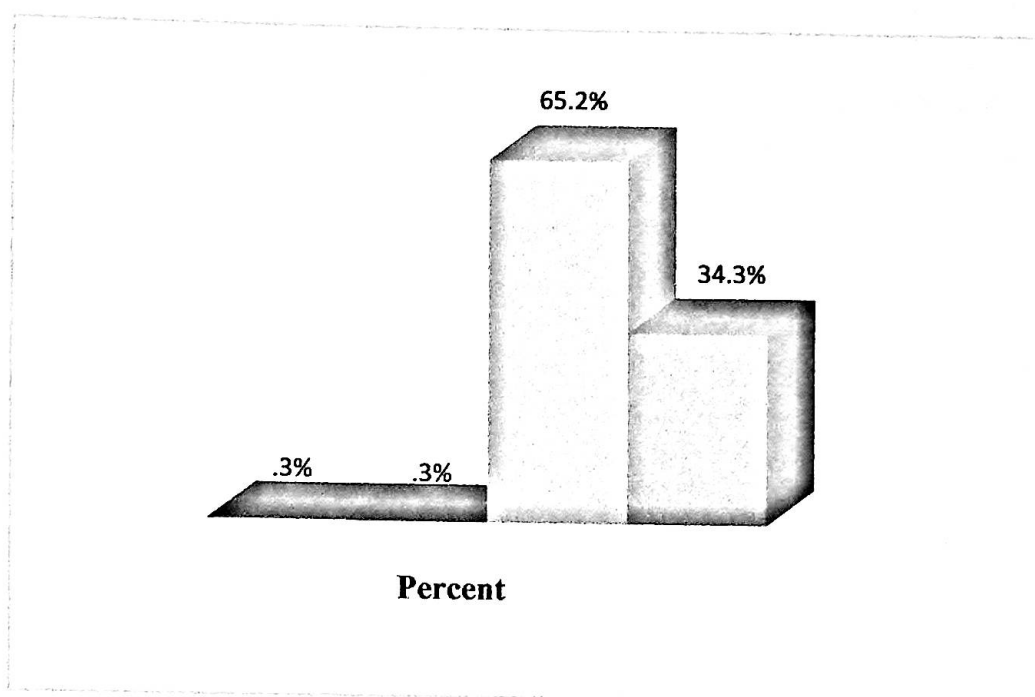
(0.51) indicates most of the graduates' opinion are the same. The views on 'NGO-provided training is suitable for the job market' shows the above position direction (4.24). On the other hand, 'opportunities to use up-to-date equipment' and 'imparting entrepreneurial knowledge' shows average value less than 4.00 and variability increases. Furthermore, interviews with various groups of the programme revealed that short duration, lack of use of updated equipment, lack of practical classes have existed in the programmes. The average mean and standard deviation are 3.85 and 0.74 respectively. Therefore, from the findings, it is exposed that the skill-based NFE programmes of NGOs are tremendous performance on skills development of their graduates as well as contribute to increase the income of them. Consequently, such training of technical skills plays a vital role to develop human resources.

4.4.1 Acquisition of Graduates through Skill-based NFE Programmes

The performance of competency-based NFE programmes among graduates in term of skill development training are shown here. It indicates that most of the respondents of the study have agreed that the skill development programme can be able to increase their skills.

Table 4.4: Descriptive statistics for opinion of the programme and graduates' skills

Responses	Frequency	Percent	Mean	Standard Deviation
Strongly Disagree	1	.3	4.33	0.509
Disagree	-	-		
Undecided	1	.3		
Agree	251	65.2		
Strongly Agree	132	34.3		
Total	385	100.0		

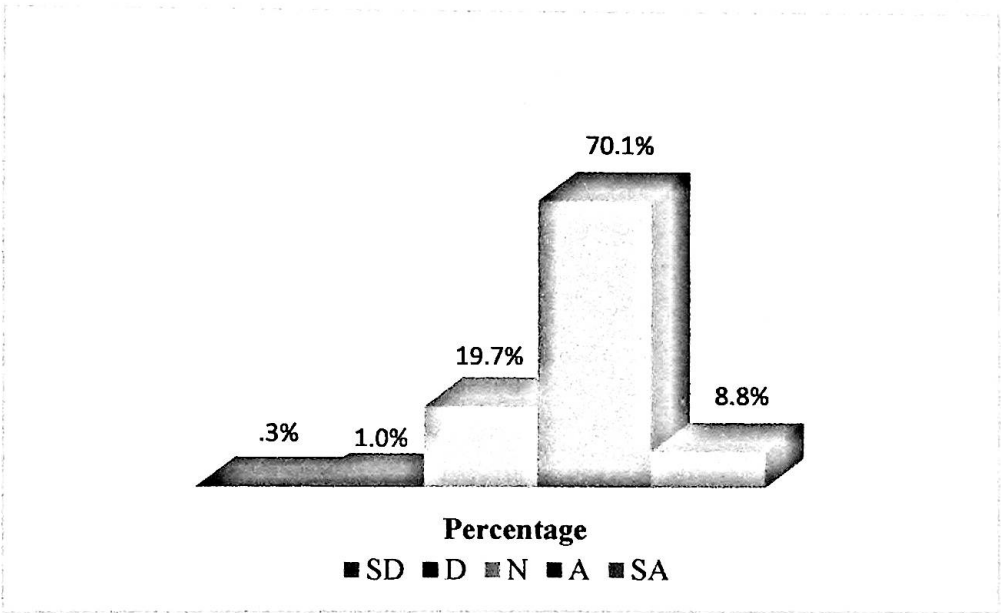
Figure 4.8: Distribution of skills-based training to increase efficiency

At the same time from the interviews with the trainers, most of the trainers exposed that the graduates have benefited from this programme of NGOs to enhance their skills. An influential instructor of auto mechanics said that most of the participants in the programmes are disadvantaged groups in the society who have no technical knowledge earlier. A female trainer at a beauty parlor noted that most of the trainees in this trade had no prior experience of any kind of training and even had very few opportunities for formal education. She further mentioned that most of the graduates did not know how to hold a comb before training but after training they are employed in different organizations. At the same time, content analysis revealed that 55 percent of the subject matter in this training manual relates to skill development.

Table 4.5: Descriptive statistics for opinion of up-to-date instrument and skills development

Responses	Frequency	Percent	Mean	Standard Deviation
Strongly Disagree	1	.3	4.33	0.509
Disagree	4	1.0		
Undecided	76	19.7		
Agree	270	70.1		
Strongly Agree	34	8.8		
Total	385	100.0		

Figure 4.9: Distribution of facility to use up-to-date instrument

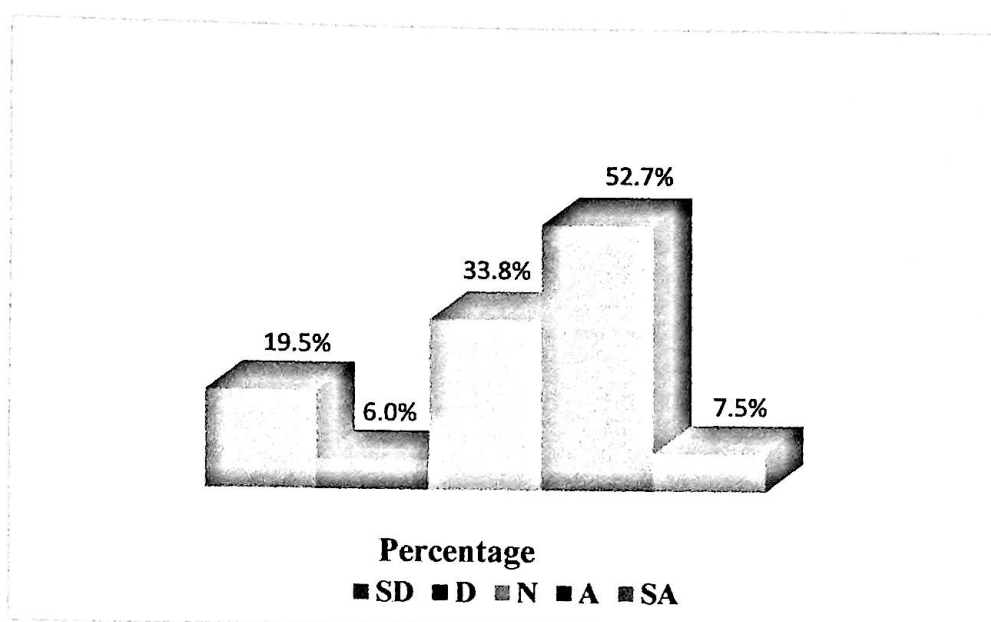


More than 78 percent of respondents have agreed that opportunities to use modernization tools and training materials help to develop skills in training sessions. In practical terms, more than 80 percent of the graduates expressed that they do not have access to up-to-date equipment and training materials. Most of the trainers of these programmes also mentioned from the interview that modernized tools and training materials should be introduced for the training session. An employer at a motorcycle workshop said that the

employees of his organization, who have received training from this programme, have very little idea about up-to-date equipment. Most of the employer alluded that the graduates of this programme should have more knowledge about the latest equipment. The most of the officials of NGOs also agreed that the tools and instrument of training should be upgraded. However, one of the officials said that they used upgraded tools and instruments for the training session. On the other hand, an official expressed that they have some limitations of fund for the introducing of upgraded tools.

Table 4.6: Descriptive statistics for opinion of entrepreneurship knowledge and self-employment

Responses	Frequency	Percent	Mean	Standard Deviation
Strongly Disagree	75	19.50	2.97	1.17
Disagree	29	7.50		
Undecided	124	32.20		
Agree	145	37.70		
Strongly Agree	12	3.10		
Total	385	100.0		

Figure 4.10: Distribution of entrepreneurship knowledge for self-employment

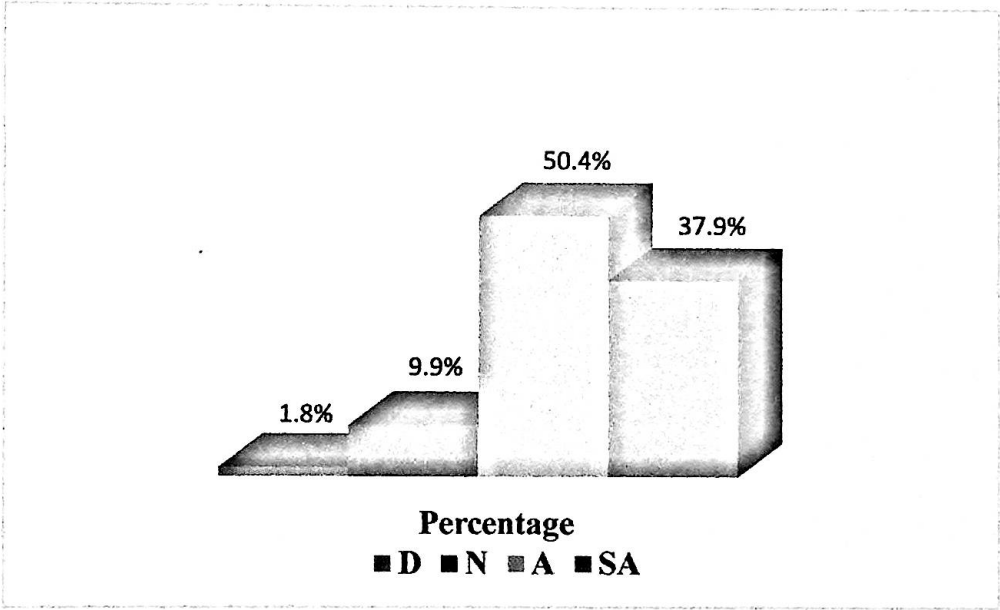
More than 76 percent of the graduates had no idea about entrepreneurial knowledge that helps in managing self-employment. In reality, these programmes have given very little knowledge about entrepreneurial development to the graduates.

On the other hand, Gangi Y.A. (2017) studied in Qatar on entrepreneurship and he suggested that training has a tremendous role in developing entrepreneurial knowledge. Content analysis also revealed that the subject matter for entrepreneurship development included only 3.5 percent in the training manual of this programme. Besides, it has been also exposed from the survey with the respondents that the loan facility of the graduates was not sufficient from the NGOs even most of the case it was not present. For that reason, the study found only 25 Percent graduates were self-employed and on the other hand 26 percent were unemployed of this programme. It was also found that 31 percent women and 23 percent men were self-employed among the graduates.

Table 4.7: Descriptive statistics for opinion of skills acquisition and job market

Responses	Frequency	Percent	Mean	Standard Deviation
Strongly Disagree	-	-	4.24	0.702
Disagree	7	1.8		
Undecided	38	9.9		
Agree	194	50.4		
Strongly Agree	146	37.9		
Total	385	100.0		

Figure 4.11: Distribution of skills acquisition training for job market



Most of the respondents believe that the NGO provided trades are suitable for the job market. Though, a vital official of a prominent NGO opinioned that the market survey for the demand of trade could make a good result for this programme because sometime trainees are interested on a particular trade but for the limited seat, one cannot choose his/her desired trades. Majority of the trainer also mentioned that interested participants perform well in the training session. An employer of a motorbike workshop also

mentioned that the programme should be selected on more need-based as a large number of graduates came to look for jobs in his organization. From the survey with the graduates, the study found the 74 percent graduates were employed from these programmes. However, the survey was exposed 26 percent unemployment.

4.5 Relationship among HRD, NFE and Skill Development: ANOVA

Now, one-way Analysis of Variance (ANOVA) has employed to know the relationship among HRD, NFE, and skill development and test if significance relationships existed in respondents replies to the variables and their perception of the role of non-formal education in income earning of the graduates which impact on HRD. In analysis of variance, the observed variability in the sample is divided into two parts: variability of the observations within-groups mean and the variability of observation between-groups mean. The two estimates differ in a very important way: the between-groups variance will be correct only if the null hypothesis is true. If the null hypothesis null is false, the between-groups estimates of variance will be too large. The within-groups estimates of variability do not depend on the null hypothesis being true (Marija, 1997). We also assessed how much the observed sample means vary by comparing the between-groups estimates and within-groups estimates of variability. Moreover, since the null hypothesis is true, one expects of the population variance (Ololube, 2006).

Hypothesis 1 states that “There is no significant relationship between non-formal education and skill development of the graduates (a component of HRD).” The results from analysis of variance (Table: 4.7) show that significant relationship was found in the group dimensions (Item S-1 to S-4 explained in questionnaire) on non-formal education and HRD (skills development of graduates). The most of the respondents agreed that this programme helps to increase skills of most of them at ($F=126.983, p<.000$), and most of

them believe that use of up-to-date equipment and training materials at the training session helps to develop skills of them ($F= 171.644$, $p< .000$). Prominently, the perception of most of the respondents that if the programme provided entrepreneurial knowledge to the graduates which could help for the self-employment of them ($F= 342.571$, $p<000$) which directly contributes and develops human resource. Most of the respondents also felt that the graduates of this programme were engaged in the job market ($F=308.448$, $p<000$).

Table 4.8: Results of ANOVA for non-formal education and skill development of the graduates (HRD)

		Sum of squares	Df	Mean Square	F	Sig.
S-1	Between Groups	94.263	4	24.566		
	Within Groups	73.514	380	0.193	126.983	.000
	Total	171.777	384			
S-2	Between Groups	110.576	4	27.644		
	Within Groups	61.201	380	0.161	171.644	.000
	Total	171.777	384			
S-3	Between Groups	134.413	4	33.621		
	Within Groups	37.294	380	0.098	342.571	.000
	Total	171.777	384			
S-4	Between Groups	131.328	4	32.432		
	Within Groups	40.448	380	0.106	308.448	.000
	Total	171.777	384			

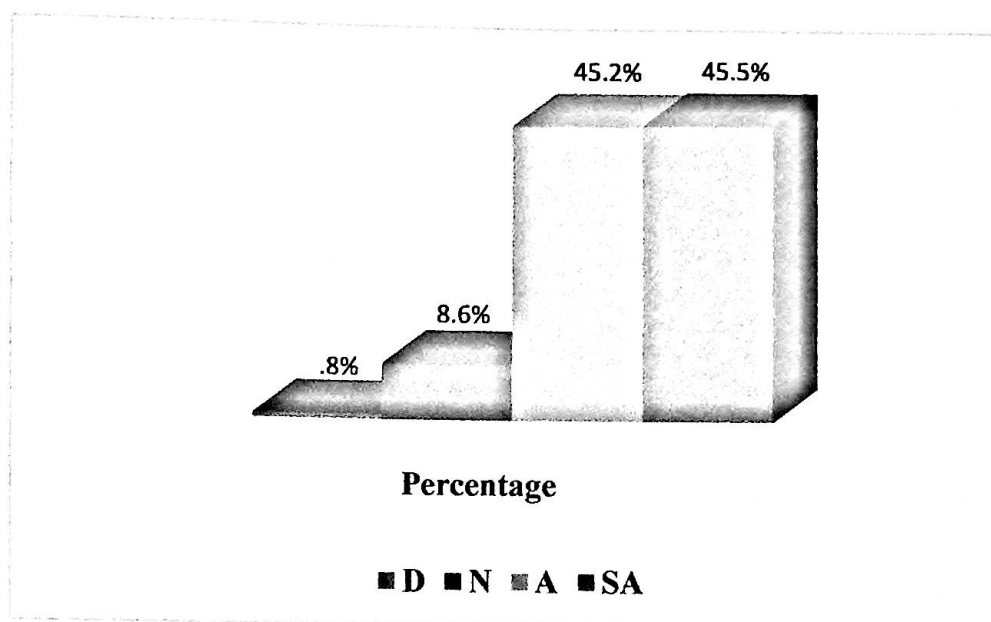
4.6 Income generation and employment condition from skills-based NFE in Bangladesh

Skilled manpower is the backbone of any thriving economy. They do not only contribute to higher productivity but also enable innovation and adaptation to a country's rapidly changing environment. To take the next leap in Bangladesh's development journey, there is no alternative to focus on skill development. That is way, the study has been conducted for exploring the skills development of underprivileged people the skill-based NFE programme.

Table 4.9: Technical skills and income generating condition of graduates (N=385)

Items of Income Generating Issues		*W.A.	**S.D.
I.1	Skill-based NFE programme can help to increase our income.	4.35	0.67
I.2	After completion of training, the linkage with the graduates of NGOs can help to increase the employment.	3.88	0.65
I.3	After completion of training, self-employment is facilitated if micro-loans are provided by NGOs.	3.86	0.64
I.4	Arrangement of further advanced training help us to increase our income tremendously.	3.82	0.68
	Mean of W.A. and S.D.	3.97	0.66

* W.A. – Weighted Average; ** S.D. – Standard Deviation, Source: Field Study, 2019

Figure 4.12: Distribution of skills acquisition training for income generation

In table 4.9 shown the entire items mean almost 4 and above (3.82 to 4.35) at the same time consistency observed in the standard deviation. In fact, manpower develops after training and many graduates have to gain a lot of experience for which they are employed as apprentices under experienced one. The average mean and standard deviation are 3.97 and 0.66 respectively. Therefore, from the result, it is exposed that the skill-based NFE programmes of NGOs are tremendous performance on skills development of their graduates as well as contribute to increase the income of them.

Table 4.10: Descriptive statistics for opinion of graduates' skills acquisition and increasing income

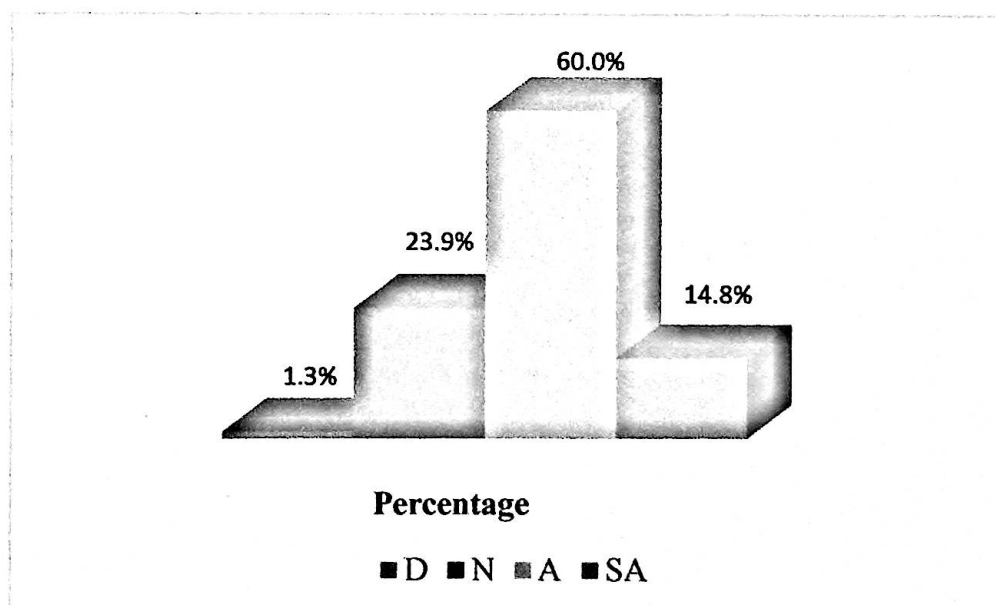
Responses	Frequency	Percent	Mean	Standard Deviation
Strongly Disagree	-	-	4.35	0.669
Disagree	3	.8		
Undecided	33	8.6		
Agree	174	45.2		
Strongly Agree	175	45.5		
Total	385	100.0		

Above 90 percent graduates have agreed that the training of this programme helps to increase their income. Most of the respondents of the interview also expressed that the graduates are too happy with their increased income. One of the trainers expressed his opinion that most of the graduates had no income at the time of training; however, after completion of training they are engaged in income generating activities. It has been learned through interviews with the officials that most of the graduates of the programme are employed. An official said that after the training, they help the graduates to get employed. Another official said that they advised for self-employment to the graduates.

Table 4.11: Descriptive statistics for opinion of NGOs' linkage with graduates and increasing the employment

Responses	Frequency	Percent	Mean	Standard Deviation
Strongly Disagree	-	-	3.88	0.653
Disagree	5	1.3		
Undecided	92	23.9		
Agree	231	66.0		
Strongly Agree	57	14.8		
Total	385	100.0		

Figure 4.13: NGOs' linkage with graduates for increasing the employment

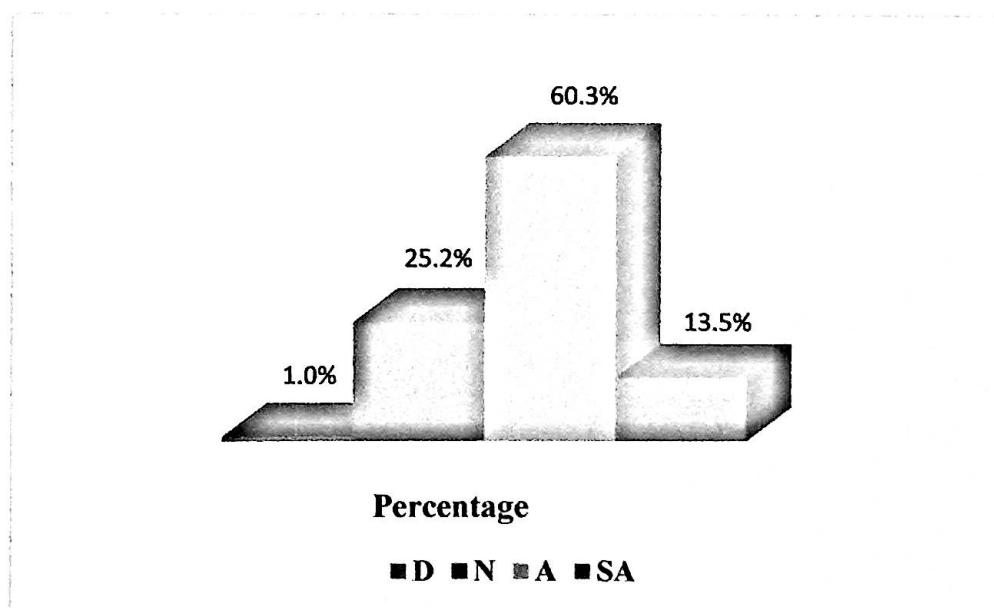


Almost 75 percent respondents agreed that NGOs' linkage with the graduates help to be employed. Whereas most of the NGOs linkage time was very short. From interview with officials, most of them agreed that they have no 'Trainer Tracking System' and the facility of contact with the graduates for few weeks only.

Table 4.12: Descriptive statistics for opinion of graduates on arrangement of micro credit and employment rate

Responses	Frequency	Percent	Mean	Standard Deviation
Strongly Disagree	-	-	3.82	0.682
Disagree	4	1.0		
Undecided	97	25.2		
Agree	232	60.3		
Strongly Agree	52	13.5		
Total	385	100.0		

Figure 4.14: Distribution of microcredit facilities for self-employment

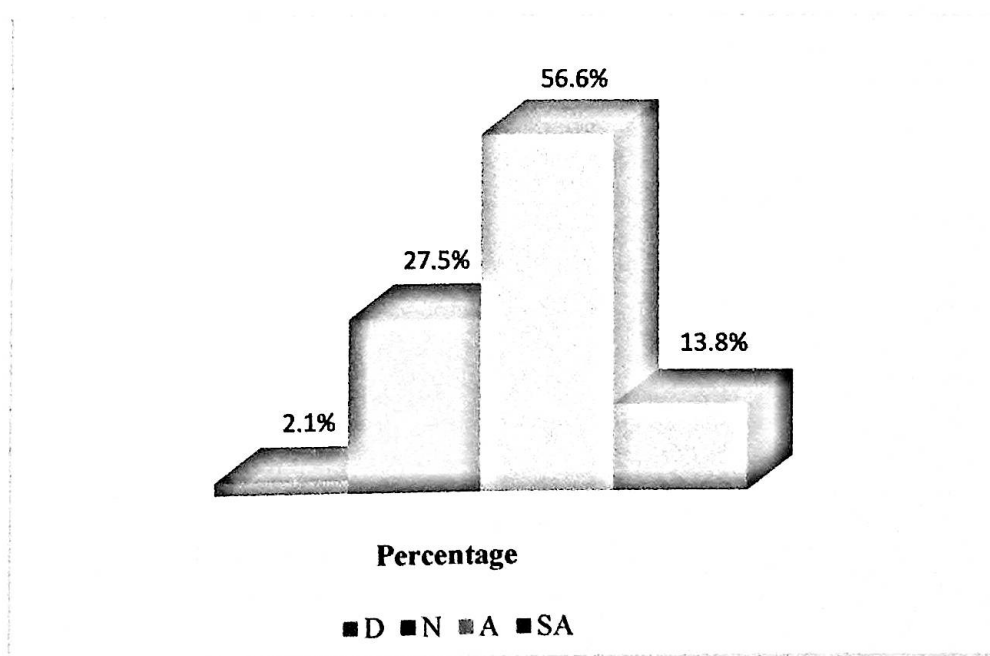


About 74 percent of respondents agreed that the micro-credit facility could help them engage in self-employment. However, in practice it is known from interviews that most of the graduates gave their opinion that the loan facility from the institution is almost absent. Interviews with NGO officials also revealed that the organization currently has limited credit facilities.

Table 4.13: Descriptive statistics for opinion of graduates on arrangement of farther training and income

Responses	Frequency	Percent	Mean	Standard Deviation
Strongly Disagree	-	-	3.82	0.682
Disagree	8	2.1		
Undecided	106	27.5		
Agree	218	56.6		
Strongly Agree	53	13.8		
Total	385	100.0		

Figure 4.15: Arrangement of farther training for increasing income



More than 70 percent of respondents believed that further training for graduates could be very effective for their skills. Interviews with NGO officials and graduates revealed that such training was not organized by NGOs. Most of the officials further said that lack of funds could not provide such important training.

4.7 Relationship between NFE and Income Generation in HRD: ANOVA

Hypothesis 2 has been aimed to determine is a significant relationship exists between non-formal education and income generation of graduates using ANOVA. The null hypothesis states, "There is no significance relationship between non-formal education and income generation of the graduates". The outcome of the analysis of variance on items I-1 to I-4 (mentioned in questionnaire) exposed significant relationship between non-formal education and income generation of graduates (Table-4.14). Most respondents found that their income has increased after receiving training from the programme ($F=356.615$, $p<0.000$), and most of them believed that after completing the training, constant communication of NGOs with the graduates could help increase employment ($F=353.980$, $p<0.000$). Most of them thought that micro credit from NGOs can help graduates to become self-employed ($F=350.018$, $p<0.000$). They also opined that the arrangement of further advanced training could help the graduates' income. ($F=347.942$, $p<0.000$).

Table 4.14: Results of ANOVA for non-formal education and income earning of the graduates

		Sum of squares	Df	Mean Square	F	Sig.
I-1	Between Groups	179.77	4	44.94		
	Within Groups	47.89	380	.129	356.615	.000
	Total	227.66	384			
I-2	Between Groups	179.489	4	44.872		
	Within Groups	48.89	380	.127	353.980	.000
	Total	227.66	384			
I-3	Between Groups	179.060	4	44.765		
	Within Groups	48.600	380	.128	350.018	.000
	Total	227.66	384			
I-4	Between Groups	178.833	4	44.708		
	Within Groups	48.827	380	.128	347.942	.000
	Total	227.66	384			

4.8 Contribution of Income in HRD

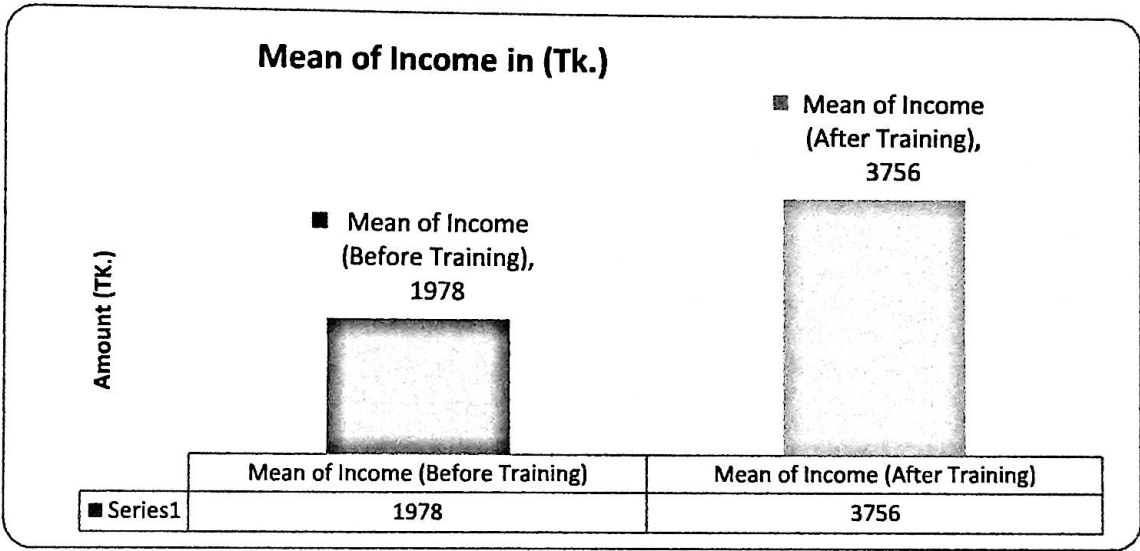
Income is proxy indicator for live standard and socioeconomic development. It plays a vital role to develop human resources and it is a crucial element of HRD. Table 4.15 expresses the relative change to the contribution of income to develop graduates' life and living standard. After training, graduates earning capacity has been enriched. The table finds that 74.0 percent graduates has been employed after completion of training programme compare to 60 percent graduates was employed before training.

Table 4.15: Relative changes for the contribution of the programme

Characteristics	Before	After	Relative change
Employment Status	60.00%	74.00%	14.00%
Mean Income	Tk. 1978.00	Tk. 3756.00	90.00%

Source: Field Study, 2019

Figure 4.16: Mean of income in (Tk.)



That means, the employment rate is relatively changed by 14 percent after getting skills-based NFE programme of NGOs. The table also shown the mean of income of the respondent is Tk. 3756 per month after training compare to the mean income Tk.1978 was earned by the graduates before training. Subsequently, after training the mean of income is relatively changed by 90 percent that means almost two times than mean of income of before training. The scenario uttered skills-based NFE programme of NGO has significance contribution in increasing earnings of the graduates as well as develop human resources.

4.9 Factors Influencing HRD of Graduates in NFE Programmes : A Logistic Regression Analysis

In multivariate analysis, considering at all possible independent variables and their relationships with each other provides a more complete examination of the data. In this subsection, the relative importance of all variables has to be tested simultaneously by specialized multivariate techniques such as logistic regression. The results of logistic regression analysis are presented in the below table 4.16 that once all explanatory variables have been controlled for covariates and are associated with HRD.

Table 4.16: Results of logistic regression analysis showing HRD of NFE graduates by selected socio-demographic characteristics

Characteristic	Coefficient	S.E.	Sig. Level	Odds Ratio	95% Confidence Interval	
					Lower	Upper
Age						
<29 Years	.065	.236	.784	1.607	.671	1.696
≥29 Years				1.00		
Marital Status						
Unmarried	.241	.230	.294	1.273	.811	1.996
Married				1.00		
Education						
≤5 Grade	.088	.227	.699	1.092	.699	1.705
≥9 Grade				1.00		
Sex						
Female	.838	.235	.000	2.312	1.458	3.665
Male				1.00		
Internet						
User	.732	2.54	.004	.481	.293	.791
Non-user				1.00		
Income generation	.352	.149	.018	1.421	1.061	1.903
Skill development	.368	.175	.036	1.445	1.025	2.037
Physical well-being knowledge	.399	.229	.810	1.490	.951	2.334
Individual well-being knowledge	-.085	.213	.688	.918	.605	1.394
Social well-being knowledge	.048	.230	.715	1.088	.693	1.076

* S.E.= Standard Error

Table 4.16 shows that age is insignificantly associated with HRD. The results revealed that the contribution of graduates below 29 years of age had 1.60 times higher odds of HRD than that of graduates above 29 years of age. Marital status has no significant effect on HRD. The role of unmarried graduates had 27 percent higher odds being HRD than that of married graduates. The results show that there is no significant effect of education on HRD for the NFE programme. The results exposed that gender had a significant impact on human resource development of graduates. Women have more than twice as much influence as men of being develops. In fact, the study also found that the self-employment rate of female was significantly higher than that of male. Internet use significantly impact on HRD. The result shows that graduates who use the internet have a significant impression on HRD. Graduates who use internet contribute 52 percent more being HRD than graduates who do not use internet. That is why, the present study shows that after training the formal education have no effect on employment. It is also noted that more than 90 percent of the graduates in our collected sample had formal education of 8th grade or below.

The results also demonstrate that graduate earnings have a highly significant impact on HRD. The analysis also found that as income increases HRD also increased the odds ratio is 1.421. The results further confirmed that skilled development of graduates has a very vital impact on HRD. The analysis also found that skilled graduates contributed 1.44 times odds for HRD. Other components of quality of life are physical well-being, individual well-being and social well-being – this analysis found no significant impact on HRD as graduates of these programmes have little knowledge on all the mentioned components of QOL.

4.10 Discussion and Conclusion

This chapter of the study has explored human resource development among graduates, for instance the skills, income and employment status of graduates from the NFE of NGOs in Bangladesh. For this purpose, the researcher has analyzed the graduates' benefits from the programmes, income status of graduates before and after training and the employment situation of the graduates before and after training. This chapter mainly examines the contribution of NFE to NGOs in human resource development in Bangladesh.

From the analysis, it is found that the most of the respondents agreed that this programme helps to increase skills acquisition and most of them believe that use of up-to-date equipment and training materials at the training session helps to develop skills of them. The perception of the respondents that if the programme provided more entrepreneurial knowledge to the graduates which could help for the self-employment of them. They also felt that the graduates of this programme were engaged in the job market.

The Seventh Five Year Plan (FY-2016 – FY2-020), for national skill development have been identified that youth as the key target group. The goal of youth development is to organize the youth in socio-economic and voluntary activities to build their sense of social responsibility and enhance their skills so that they can be trained as skilled workers and adequate employment can be provided. The government is committed to transform unemployed youth into skilled manpower by providing quality technical and vocational training at minimum cost and ensuring equal opportunities. In the same way, the current study shows that the under privileged group of the society, especially the youth, have become proficient by being trained in the NGOs' NFE programme.

The National Skills Development Policy-2011 pointed out that an important issue is that many young people drop out of school before the eighth grade of general

education and therefore fail to enroll in formal skills development programmes. That is why NFE has played an important role in our society. Non-formal education especially literacy and continuing education for adults and youth including life skills and livelihood skills development, is considered as the process of empowerment that contributes to human resource development and poverty reduction (Seventh Five Year Plan FY-2016 – FY-2020).

National Skill Development Policy (2011) also mentioned, a key target group is the youth, women and low-skilled individuals, to whom access to education, training and lifelong learning will be enhanced. The National Skills Development Policy emphasizes the development of skills-based education and training as an important option for students and workers, so that the profession of skills trainer or skilled worker can become a valuable career path. In our country, NFE programmes do the same to contribute to skills development and employment. This study reveals that the NFE programme provides very little knowledge about entrepreneurship and related business knowledge. After getting the training, the employed rate has been raised significantly (14 percent) in the present study. SDGs emphasize sustainable economic growth, which of course encourages inclusive and decent work. Given the importance of active youth employment, the SDG targets support a youth-centered approach by significantly reducing the rate of NEET (not in employment, education or training) among young people (SDG 8.6). In Bangladesh, the youth labour force participation rate was 40.3 percent during the fiscal year 2017. For the men youth population, the labour force participation rate was 54.4 percent, whereas for female youth population; the rate was only 26.3 percent, was less than half the rate for men (BBS, 2022). The Center for Policy Dialogue (2018) assesses current trends and found that the unemployment rate in higher education increase gradually. More than one-third of the total youth workforce (34.3

percent) was unemployed in 2016-17. A similar picture for the women's team was even higher (42.5 percent). In addition, the unemployment rate was higher in rural areas than in urban areas (CPD, 2018b). Evidence suggested that education of women and girls is a serious problem in many developing and underdeveloped countries (Pandya and Maniar 2014). The high dropout rate of girls at primary level is due to prejudice and discriminatory attitudes. Many believe that girls do not need the same education as boys. However, this study significantly established that those women and girl actively participated in the programmes and after completing it they engaged in various types of jobs.

Another matter, the study has identified that a certain number of graduates still unemployed (27 percent). The study found that most of them have lack of positive outlook to do something outside of their area. Consequently, they did not get job as per their skills. Besides, the NGO authorities have some negligence for the graduates' job.

From the analysis it is found that the programme helps to enhance the skills of those graduates and it has a positive outcome on the income earning consequently strengthening the HRD of the graduates. The analysis also shows that graduates who are knowledgeable about internet usage have an impact on human resource development.

From the above discussion and findings one can conclude that the disadvantage adult and youths of Bangladesh have an opportunity to get training from NGO operated skill-based NFE programmes. Haney (2019) also concluded that competency-based NFE provides opportunities for students to transition into this new world of work and retain existing employees. Similarly, most of them get skills from those programmes as well as get different types of jobs. The study found that graduates' income and employment rates increased significantly after training. Studies have also shown that the employment rate of women is significantly higher than that of men after training.

Chapter-5

Quality of Life of Graduates and Skill-based Non-formal Education in Bangladesh

5.1 Introduction snapshot

Non-formal education is a purposeful education system driven by preconceived ideas aimed at imparting knowledge, attitudes, values, skills related education, livelihood and life skills. It is a matter of basic learning skills to be empowered in daily life and need-based and work-oriented in nature. It is not only affordable but also innovative and goal-oriented. It affects both short term and long term. It is designed to meet the learning needs of educationally disadvantaged people of all ages. It helps with basic education, life skills, continuing education activities, general culture, and lifelong learning benefits. The purpose of NFE increases the ability to earn and helps to reduce poverty so that graduates improve their quality of life. The scope of NFE is much wider includes early childhood and care education, alternative primary schooling, literacy education, awareness education, vocational education, entrepreneurship development education, professional career development as well as continuing education. NFE also addresses the overall well-being of those who are isolated from development of mainstream. Quality of life includes the knowledge of physical well-being, individual well-being, social well-being and so on. From such programmes, disadvantaged children can receive physical, psycho-social, cognitive and language development skills including health-care and nutritional support. They also have the opportunity of pre-school education, second chance of primary education for mainstream education and skill development training to make a living. Furthermore, NFE contributes to the human potential for better learning and quality of life as well as livelihood for a large population of the country. This chapter

also finds out the knowledge about graduates' health well-being, individual well-being, and social well-being.

NFE tries link education with formal and informal employment generation, as a result such connections accelerate economic growth which leads to reduce grassroots poverty. It is worthwhile to mention that the contribution of NFE improves the quality of life. Additionally, NFE can be considered as a tool for economic development and cultural transformation in attitudes and behaviors. Indeed, it also helps to think about future sustainable development where environmental, social and economic considerations ensure sustainability for the quality of life. Such quality of life refers to the level of well-being of the society and the level of satisfaction of many human needs. NFE plays an important role in building human capital and is considered an investment in social change that contributes to improving the quality of life. NFE plays a huge role in social change and improving the quality of life.

Considering the backdrop of the above scenario, this chapter tries to show how the programme is improving the knowledge of the quality of life of the graduates which reflects the sustainable development. Specifically, here examines the knowledge about graduates' health well-being, individual well-being, and social well-being.

5.2 Quality of Life and Knowledge of Health Well-being

Health and well-being are essential aspects of our lives that contribute to our quality of life. Knowledge of well-being is fundamental to a person's overall health, which enables one to successfully overcome difficulties and achieve what one wants from life. Past experiences, perspectives, and attitudes can influence on well-being. It can also be offered from the NFE programme. Here opinions have been taken to learn about the health knowledge of the graduates of the non-formal education activities conducted by the NGO.

Table 5.1: Descriptive statistics for opinion of physical well-being of the graduates

Items of health well-being issues		*W.A.	**S.D.
HW1	Using safe water for drinking and daily use is good for health	3.79	.57
HW2	Washing hand properly before meal and after using latrine is very important for good health	3.49	.857
HW3	Child immunization is very important for our next generation's health	3.23	1.03
HW4	Free physical relationship may cause for HIV/AIDS	1.66	.76
HW5	Child malnutrition hinder the good health of our next generation	1.57	.71
	Average Mean and SD	2.75	.78

* W.A. – Weighted Average; ** S.D. – Standard Deviation Source: Field Study, 2019

Table 5.1 represents graduates' knowledge about the health welfare. The above table presented that the mean score is below 3.0 (Mean Score = 2.75, SD= 0.78) that indicates graduates belong moderate knowledge about physical well-being. The graduate has a little bit knowledge about HIV/AIDS as well as the knowledge on child malnutrition of the

graduates was very little. From the interview with the different groups, it is found that the issue has not been emphasized in this programme. In addition, the content analysis has revealed that the training manual designed only 11 percent with the overall health issue.

Figure 5.1: Distribution of safe water for drinking and daily use

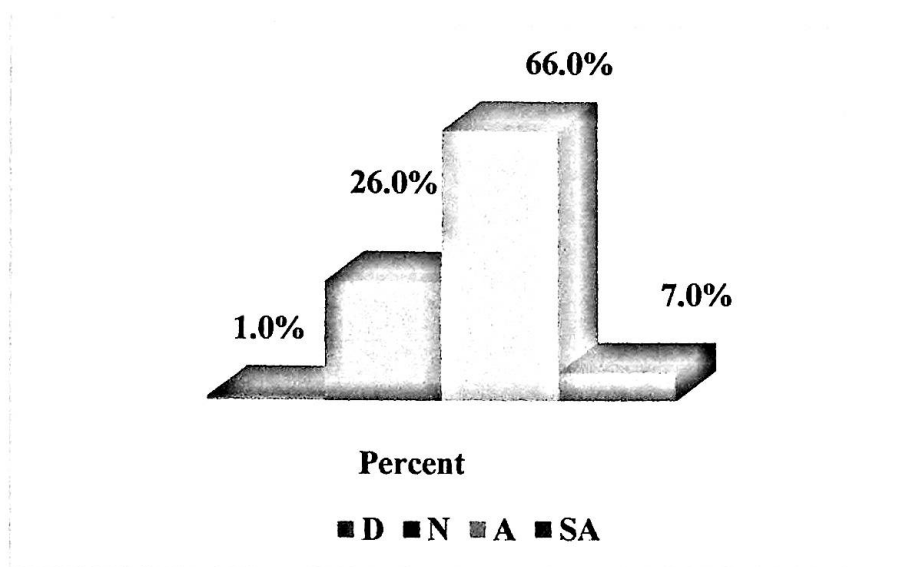


Table 5.2: Descriptive statistics for opinion of safe drinking water and safety use among graduates

Responses	Frequence	Percent (%)	Mean	S.D.
Strongly Disagree	-	-	3.79	0.573
Disagree	4	1.0		
Undecided	100	26.0		
Agree	254	66.0		
Strongly Agree	27	7.0		
Total	385	100.0		

Drinking and using safe water ensures quality of life. It is noted that SDG's goal No. 6 mentions the need for safe water for all. According to goal-6, Safe water, sanitation and hygiene are the most basic human needs for health and well-being. Table 5.2 represents the

knowledge of graduates about safe drinking water and its safety uses. The survey indicates that 73 percent graduates have idea about the safe water. In all countries are increasingly facing challenges involved to water-related ecosystems, water scarcity caused by climate change, underinvestment in water and sanitation, and insufficient cooperation on transboundary water. The study revealed that 27 percent of the respondents are not aware of using and drinking safe water. Nevertheless, significant number of the graduates of the NFE programmes are aware about the using and drinking of the safe water.

Figure 5.2: Distribution of graduates’ knowledge on washing hand properly

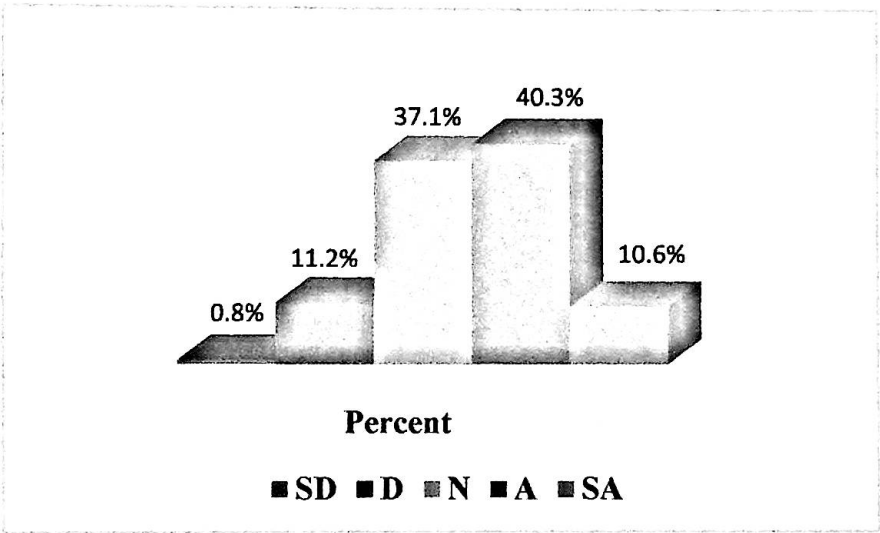


Table 5.3: Descriptive statistics for opinion of Graduates’ knowledge on washing hand

Responses	Frequency	Percent (%)	Mean	S.D.
Strongly Disagree	3	.8	3.49	0.857
Disagree	43	11.2		
Undecided	143	37.1		
Agree	155	40.3		
Strongly Agree	41	10.6		
Total	385	100.0		

The above table interpreted that more than half of the respondents have the knowledge about the washing hand before taking meal and after using toilet. In fact, content analysis has been revealed that these types of health issues were included in the training manual. Nonetheless, 49 percent respondents were not conscious on this issue. According to SDG Goal-3, the corresponding target is to ensure universal health lives and promote well-being for all at all ages. In this regard our skill based NFE is far behind.

Figure 5.3: Distribution of Graduates’ knowledge on Child Immunization

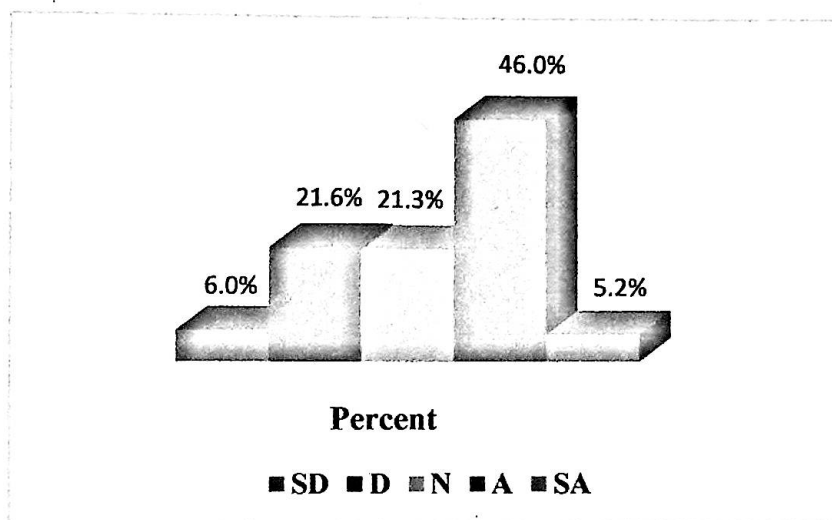


Table 5.4: Descriptive statistics for opinion of graduates’ knowledge on child immunization

Responses	F	Percent	Mean	S.D.
Strongly Disagree	23	6.0	3.23	1.03
Disagree	83	21.6		
Undecided	82	21.3		
Agree	177	46.0		
Strongly Agree	20	5.2		
Total	385	100.0		

According to SDG goal-3.b, the availability of safe and effective vaccines and medicines are needed for the communicable and non-communicable disease. Table 5.4 explained that above 51 percent respondents have the knowledge about child immunization. Though, Bangladesh has an impressive achievement in the field of child immunization (Rahman, 2020). Nevertheless, almost 50 percent graduates were confused about the child immunization. Considering the above in mind, graduates of the NFE has to need more knowledge on child immunization.

Figure 5.4: Distribution of graduates' knowledge about the causes of HIV

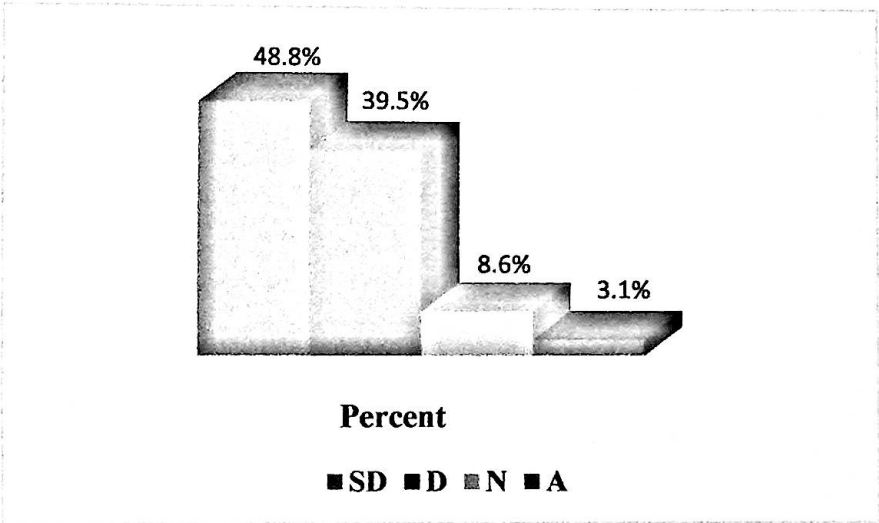


Table 5.5: Descriptive statistics for opinion of Graduates' knowledge about the causes of HIV

Responses	Frequency	Percent (%)	Mean	S.D.
Strongly Disagree	188	48.8	1.66	0.764
Disagree6	152	39.5		
Undecided	33	8.6		
Agree	12	3.1		
Strongly Agree	-	-		
Total	385	100.0		

Table 5.5 shows that 88 percent of respondents do not have adequate knowledge about HIV. Interviews have conducted among officials and revealed that the programme mostly focused on skill development. Content analysis also supported that very few topics were included in the training manual on physical well-being. The SDG- target 3.3 aims to end the epidemics of AIDS. AIDS is the leading cause of adolescent death in sub-Saharan Africa. It is high time we raise our awareness on this important issue. But, the respondents of this survey have a very low level of awareness about this.

Figure 5.5: Distribution of knowledge about child malnutrition among graduates

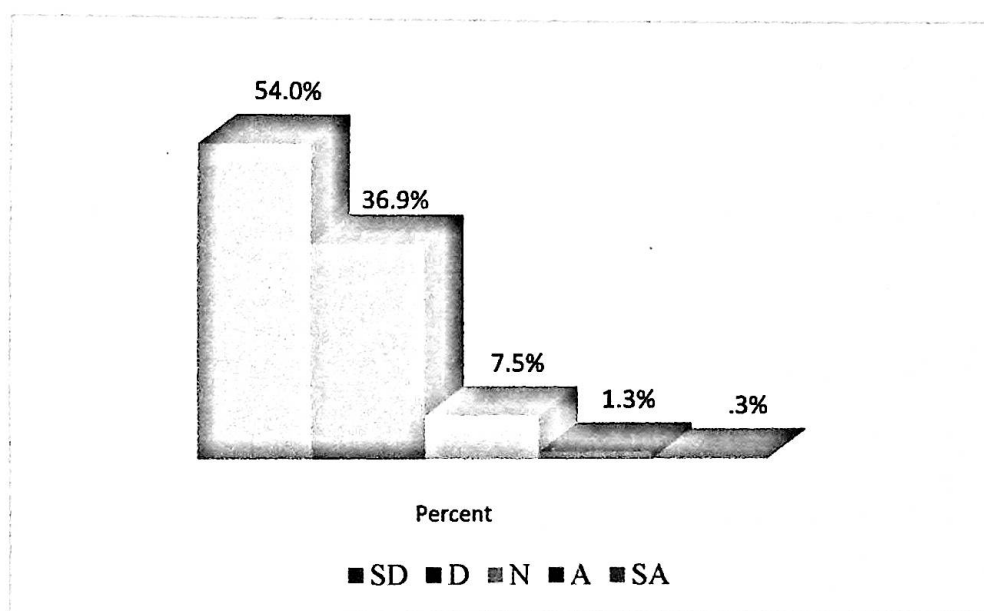


Table 5.6: Descriptive statistics for opinion of knowledge about child malnutrition

Responses	F	Percent	Mean	S.D.
Strongly Disagree	208	54.0	1.57	0.712
Disagree	142	36.9		
Undecided	29	7.5		
Agree	5	1.3		
Strongly Agree	1	.3		
Total	385	100.0		

Table 5.6 depicts that 91 percent of respondents do not have knowledge about child malnutrition. However, it is very important for the health of next generation. Such knowledge helps people to accelerate the quality of life. SDG- target: 2.2 aims to end all forms of malnutrition by 2025 and this target also mentions that good nutrition promotes health-related quality of life by averting malnutrition, preventing dietary deficiency disease and promoting optimal functioning.

5.3 Relationship between Non-formal Education and Physical Wellbeing of the Graduates: ANOVA

To know the research question-3, that explains the influence of non-formal education on physical wellbeing of graduates. The ANOVA has been used to identify the relationship between NFE and physical well-being and to find out the source of variation. The outcome of the analysis of variance on items H-1 to H-5 exposed that the p-value is less than the significance level ($p < .05$). After finished the training from the skill-based NEF programme, most respondents' knowledge about using safe water for drinking and daily use was not sound ($F=361.945$, $p < .000$), and most of them also were reluctant about washing hand properly before meal and after using latrine ($F=315.123$, $p < .000$). Respondents' familiarity with child immunization was not strong ($F=347.881$, $p < .000$) although Bangladesh has a strong position in child immunization. However, this study revealed that a significant number of respondents were less knowledgeable about this topic. Majority of the respondents in this study had very little knowledge about HIV/AIDS ($F=352.382$, $p < .000$) even they were not aware of the cause of the disease. Nowadays, many parts of the world are facing the ravages of HIV/AIDS. Another important health issue is child malnutrition. They also had less knowledge about child malnutrition ($F=358.304$, $p < .000$) although it is very necessary for a healthy next generation.

Table: 5.7: Results of ANOVA for knowledge on physical wellbeing of the graduates and non-formal Education

		Sum of squares	Df	Mean Square	F	Sig.
H-1	Between Groups	207.20	4	45.605		
	Within Groups	50.360	380	.126	361.945	.000
	Total	257.560	384			
H-2	Between Groups	209.67	4	46.008		
	Within Groups	47.890	380	.146	315.23	.000
	Total	257.560	384			
H-3	Between Groups	205.54	4	44.181		
	Within Groups	52.020	380	.127	347.881	.000
	Total	257.560	384			
H-4	Between Groups	207.06	4	45.108		
	Within Groups	50.50	380	.128	352.382	.000
	Total	257.560	384			
H-5	Between Groups	206.02	4	45.505		
	Within Groups	51.540	380	.127	358.307	.000
	Total	257.560	384			

5.4 Quality of Life and Knowledge of Individual Well-being

Quality of life (QOL) is a concept that aims to capture the well-being of a population or an individual, both positive and negative, in the totality of their existence at a given point of time. Hence, the life skills of graduates through NFE programmes are identified here.

Table 5.8: Status of individual well-being of the graduates of skill-based NFE

Items of Individual Well-being issues		Mean	*S.D.
IW1	The ability of express your-self by writing, comprehend by reading and keep daily accounts are necessary for personal welfare.	3.62	0.56
IW2	The knowledge of traffic signal is required for betterment of individual's life	2.89	0.59
IW3	Knowledge about first-aid is very necessary for welfare of daily life	3.16	1.00
IW4	Knowledge of the life-saving role of saline preparation	2.76	0.92
IW5	Understanding the dangers of electric and gas ovens	2.20	1.14
IW6	The use of information technology helps to improve individual's life	1.69	0.98
Average Mean and SD		2.76	0.86

* S.D. – Standard Deviation

Source: Field Study, 2019

The mean value indicates that most of the graduates has belonged partial knowledge about individual well-being or life skills (Mean value less than 3). Research has shown that graduates' knowledge of elementary education (reading, writing and arithmetic) from these programmes is remarkable. Although knowledge about the proper use of electric and gas stoves is not enough. The study also found that graduates from these

programmes have very little knowledge about information technology. Most of them from the interview with the trainer said that during the training they provided many things which was not included in the training manual. Content analysis revealed that 20 percent of basic education materials and only 5 percent of other life skills related materials were included in the training manuals of these programmes.

Figure 5.6: Distribution of graduates’ knowledge about fundamental education

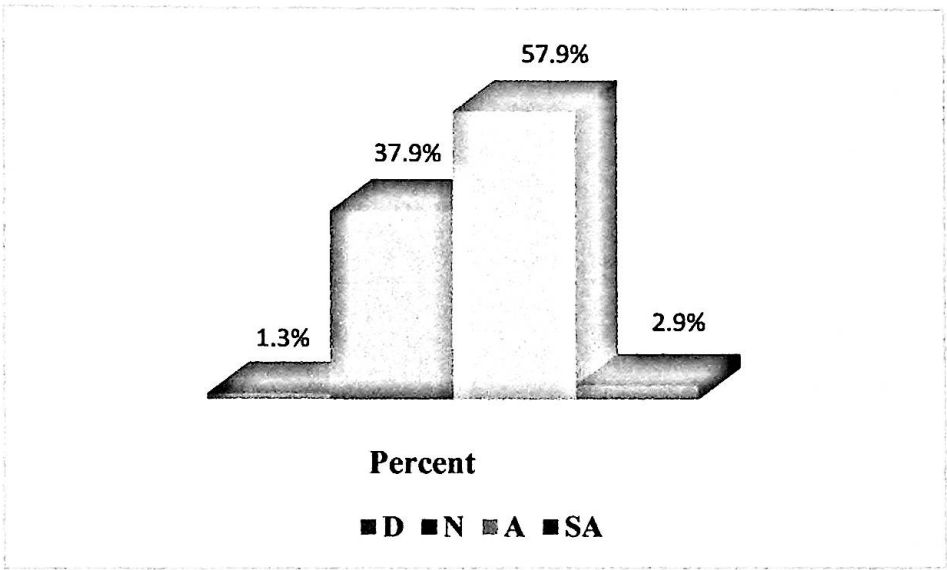


Table 5.9: Descriptive statistics for opinion of graduates’ knowledge about fundamental education

Responses	Frequency	Percent (%)	Mean	S.D.
Strongly Disagree	-	-	3.62	0.565
Disagree	5	1.3		
Undecided	146	37.9		
Agree	223	57.9		
Strongly Agree	11	2.9		
Total	385	100.0		

The above table explicated that 60 percent of respondents had knowledge about basic education. Content analysis revealed that curriculum of skill-based NFE programmes cover 20 percent of basic education content. SDG-4 calls for all youth and a significant proportion of adults, both men and women, to achieve literacy and numeracy. Besides, 40 percent of the study participants did not have proper knowledge about basic education.

Figure 5.7: Distribution of graduates' knowledge about traffic signal

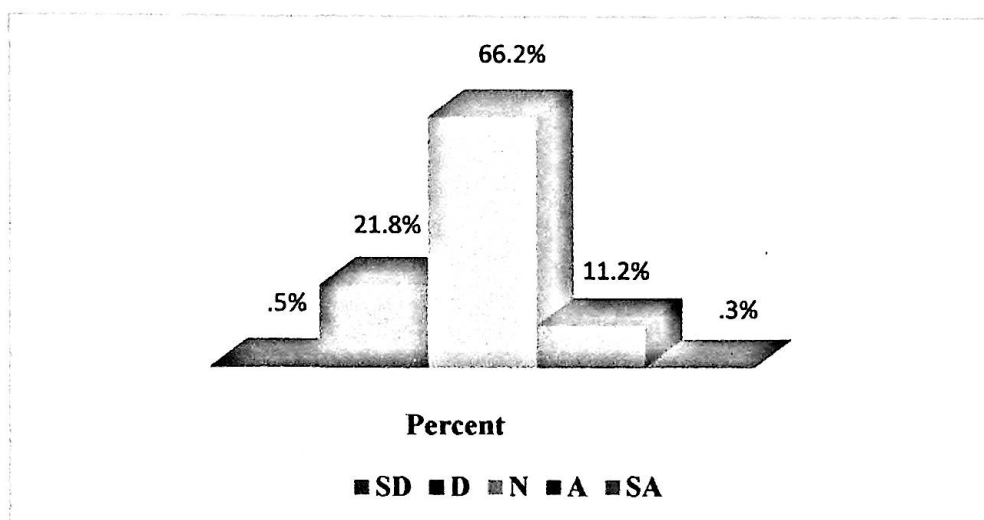


Table 5.10: Descriptive statistics for opinion of graduates' knowledge about traffic signal

Responses	Frequency	Percent (%)	Mean	S.D.
Strongly Disagree	2	.5	2.89	0.591
Disagree	84	21.8		
Undecided	255	66.2		
Agree	43	11.2		
Strongly Agree	1	.3		
Total	385	100.0		

The table 5.10 expounded that above 88 percent of respondents did not have knowledge about traffic signal. Content analysis also revealed that this life skills component was

included in only 5 percent in training manual of the programmes. From the survey it is revealed that less than 12 percent of the respondents have knowledge about traffic signals. Although it is very necessary for a person to run their life smoothly.

Figure 5.8: Distribution of graduates’ knowledge about fast-aid in the workplace

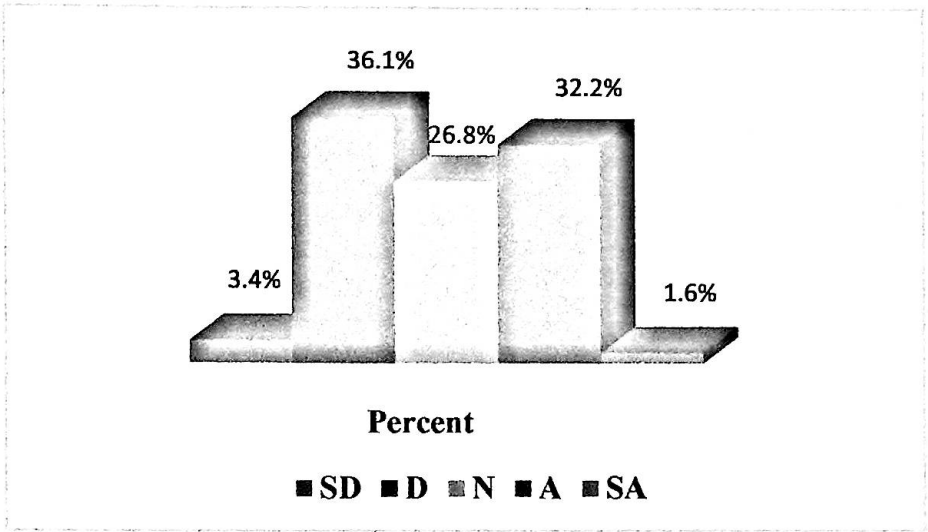


Table 5.11: Descriptive statistics for opinion of graduates’ knowledge about fast-aid

Responses	Frequency	Percent	Mean	S.D.
Strongly Disagree	13	3.4	2.92	0.937
Disagree	139	36.1		
Undecided	103	26.8		
Agree	124	32.2		
Strongly Agree	6	1.6		
Total	385	100.0		

First-aid in the workplace is defined as the temporary assistance an injured person needs until professional medical care can be provided. From the survey it is exposed that 33 percent (Table 5.11) of the respondents have knowledge about fast-aid. In fact, an employee's knowledge of first-aid helps to ensure the safety of the

organization's work environment. Also, Knowledge of first aid helps workers learn to be more aware of workplace safety, thereby reducing the number of accidents and injuries. Indeed, the effectiveness of first aid knowledge is essential to change the occupational safety and health approach of workers in an organization.

Figure 5.9: Distribution of graduates’ knowledge about the life-saving role of saline

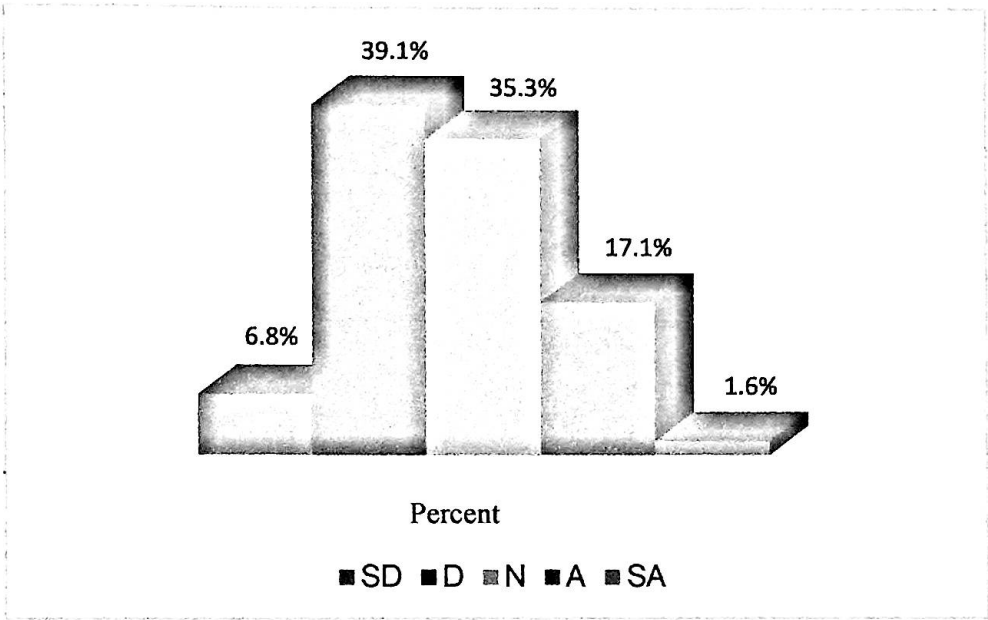


Table 5.12: Descriptive statistics for opinion of graduates’ knowledge about the life-saving role of saline

Responses	Frequency	Percent (%)	Mean	S.D.
Strongly Disagree	26	6.8	2.68	0.89
Disagree	151	39.2		
Undecided	136	35.3		
Agree	66	17.1		
Strongly Agree	6	1.6		
Total	385	100.0		

The above table shows that significant parts of the respondents were not aware of the life-saving role of saline. It has been mentioned earlier that these types of elements are included in the life skills category. Although 46 percent of respondents had the idea of the life-saving role of saline. Actually, this is the matter of people's life so most people should have insight about this.

Figure 5.10: Distribution of graduates’ knowledge on the dangers of electric and gas ovens

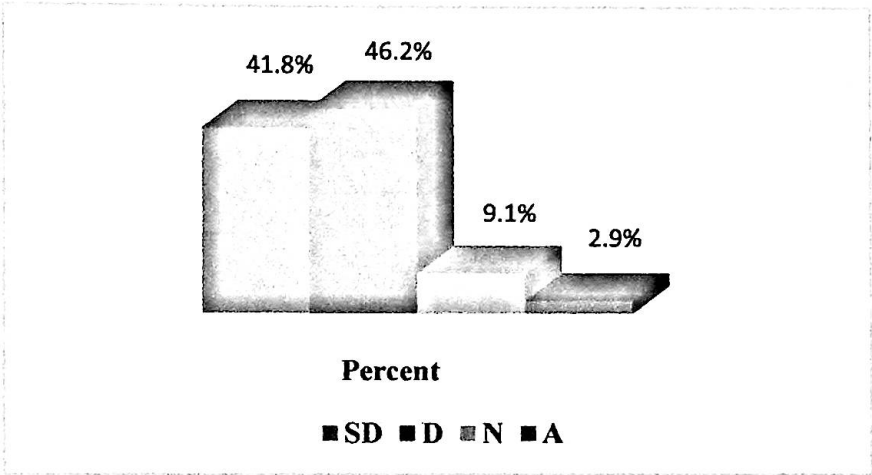


Table 5.13: Descriptive statistics for opinion of graduates’ knowledge on the dangers of electric and gas ovens

Responses	Frequency	Percent (%)	Mean	S.D.
Strongly Disagree	161	41.8	1.73	0.743
Disagree	178	46.2		
Undecided	35	9.1		
Agree	11	2.9		
Total	385	100.0		

The above table shows that more than 96 percent of the respondents were not aware of the dangers of electricity and gas oven. Few of the respondents were aware of this. Electrical safety is a very important issue that needs urgent attention. This safety is important at workplace and at home. Electricity is essential to modern life in both places.

Figure 5.11: Distribution of graduates’ knowledge on use of information technology

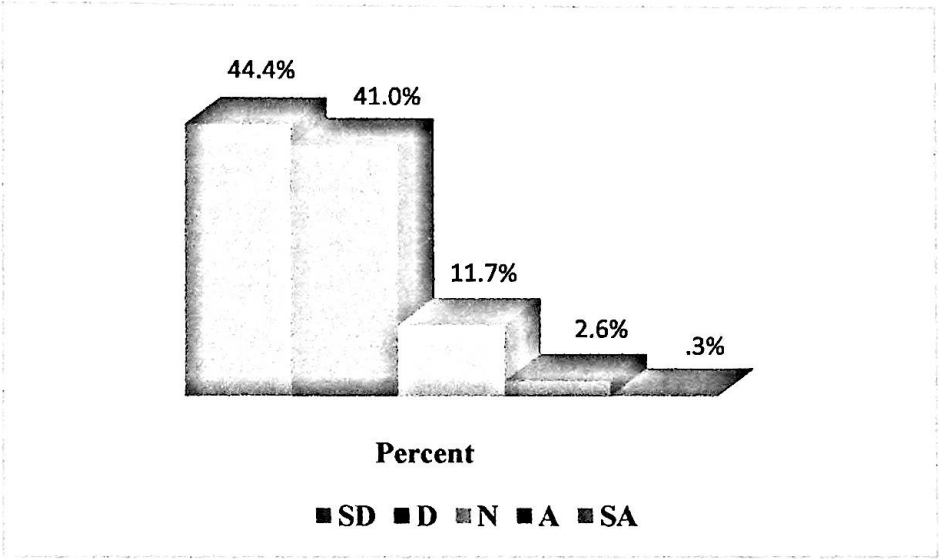


Table 5.14: Descriptive statistics for opinion of graduates’ knowledge on use of information technology

Responses	Frequency	Percent (%)	Mean	S.D.
Strongly Disagree	171	44.4	1.73	0.786
Disagree	158	41.0		
Undecided	45	11.7		
Agree	10	2.6		
Strongly Agree	1	.3		
Total	385	100.0		

The survey found that more than 96 percent of the respondents were not information technology (IT) literate. Knowledge is a critical resource for corporate competitiveness and so there are many information technology solutions that provide support in knowledge management. Knowledge Management (KM) is the process of identifying, organizing, storing and disseminating information within an organization. Today, the relative demand for skilled labour has increased dramatically. Change of efficiency-based technological has contributed to this. Information Technology is a powerful force influencing the economy. Bresnahan, Brynjolfsson & Hitt (1998) mentioned that organizations that use information technology are often able to achieve organizational growth by improving their service quality. However, this study found that graduates had very little knowledge about IT.

5.5 Relationship between the Role of Non-formal Education and Individual Well-being of the Graduates: ANOVA

Hypothesis 4 has been intended to determine that a significant relationship between non-formal education and individual wellbeing of graduates. The outcome of the analysis of variance on items IW-1 to IW-6 exposed that the p-value is less than the significant level. That means, graduates' knowledge of individual wellbeing was not sound after completing the non-formal education programme. After finished the training from the NEF programme, most respondents' skill of reading, writing and basic account was not sound ($F=259.05$, $p<.005$), and most of them had very poor knowledge about basic traffic signal ($F= 477.633$, $p<.005$). Respondents' familiarity with using fast-aid was very unsatisfactory level ($F= 254.137$, $p<.005$) though it is very important for daily working life. However, this study exposed that a remarkable number of respondents were not well-informed about this topic. Majority of the respondents in this study had very little knowledge about making

saline for saving life from dehydration ($F=248.707$, $p<.005$) even they were not conscious of this serious issue. Another important individual wellbeing issue is of using electricity and gas oven. They also had less knowledge about using electricity and gas oven ($F=247.571$, $p<.005$) although it is very essential for daily life. A large number of respondents in this study had very diminutive knowledge about information technology ($F=240.90$, $p<.005$), nowadays it is very essential for every phase of life.

Table 5.15: Results of ANOVA for the role non-formal education and individual well-being of the graduates

		Sum of squares	Df	Mean Square	F	Sig.
IW-1	Between Groups	207.231	4	51.81	259.05	.000
	Within Groups	76.340	380	.200		
	Total	283.571	384			
IW -2	Between Groups	208.251	4	52.062	477.633	.000
	Within Groups	75.320	380	.109		
	Total	283.571	384			
IW -3	Between Groups	206.357	4	51.59	254.137	.000
	Within Groups	77.214	380	.203		
	Total	283.571	384			
IW-4	Between Groups	204.970	4	51.24	248.737	.000
	Within Groups	78.601	380	.206		
	Total	283.571	384			
IW-5	Between Groups	203.759	4	50.94	247.571	.000
	Within Groups	79.812	380	.21		
	Total	283.571	384			
IW-6	Between Groups	203.31	4	50.83	240.90	.000
	Within Groups	80.191	380	.211		
	Total	283.571	384			

5.6 Quality of Life and Knowledge of Social Well-being

Social well-being refers to our relationships and how we interact with others. Our relationship can provide support in difficult times. Social wellness involves building healthy, nurturing and supportive relationships, as well as developing a genuine connection with those around you. Here, graduates' social well-being is tested through skill-based NFE programmes.

Table: 5.16: Status of social well-being of the graduates of skill-based

Items of social well-being issues		*W.A.	**S.D.
SW1	Knowledge about protect children from abuse and violence is essential to well-being.	3.08	0.85
SW2	Rule of law and equal access to justice can ensure social well-being.	2.57	0.81
SW3	Public access to information and protection of fundamental freedoms are related to social well-being.	2.06	0.65
SW4	The habit of enjoying recreational activities is essential to social well-being.	1.78	0.71
SW5	Spending leisure time with family can play an important role in social well-being.	1.74	.82
Mean of W.A. and S.D.		2.25	0.76

W.A. – Weighted Average; ** S.D. – Standard Deviation

Source: Field Study, 2019

The mean value indicates that most of the graduates have little knowledge about social well-being awareness which related to QOL of the graduates. Interviews with different groups revealed that most of them agreed that elements of QOL, which related to social well-being, were neglected in these programmes. The knowledge about protects children

from abuse and violence, rule of law and equal access to justice, habit of enjoying and participating recreation activities, spending leisure with family of graduates were very little. However, content analysis found that only 2 percent of topics related to social well-being were included in the training manual for these programmes.

Figure 5.12: Distribution of graduates’ knowledge about protects children from abuse and violence

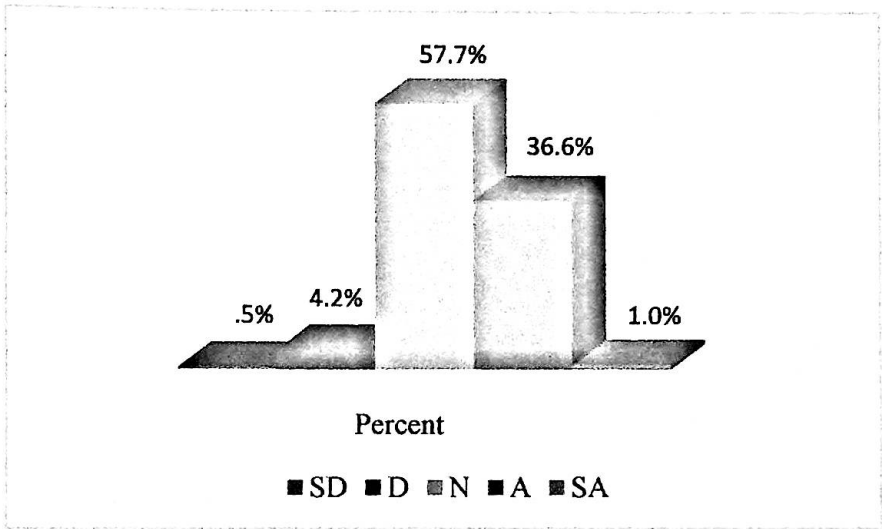


Table 5.17: Descriptive statistics for opinion of graduates’ knowledge about protects children from abuse and violence

Responses	Frequency	Percent (%)	Mean	S.D.
Strongly Disagree	2	.5	3.34	0.560
Disagree	16	4.2		
Undecided	222	57.7		
Agree	141	36.6		
Strongly Agree	4	1.0		
Total	385	100.0		

The above table shows that more than 62 percent of the respondents do not aware of what is required to protect children from abuse and violence. In fact, it is also associated with the social well-being. Protection of children from all forms of violence is a fundamental right preserved in the UN Charter on the Rights of the Child. The inclusion of a specific goal (SDG 16.2) in the 2030 the ‘Agenda for Sustainable Development’ to end all forms of violence against children provides new impetus towards realizing the right of every child to live free from fear, neglect, abuse and exploitation. Several other SDG targets address specific forms of violence and harm against children, such as child marriage and female genital mutilation (SDG target 5.3) and the elimination of child labour, including the recruitment and use of child soldiers (SDG target 8.7). According to Article 9 of the UN Charter on ‘The Rights of the Child-1990’, the state shall ensure that no child shall be separated from his parents against his will. If such separation is required in the best interests of the child, it shall be determined by the competent authority subject to judicial review. Such a determination may be required in a specific case such as one involving abuse or neglect children by parents, or where the parents are living separately and a decision must be made as the child's residence.

Figure 5.13: Distribution of graduates’ knowledge on rule of law and equal access to justice

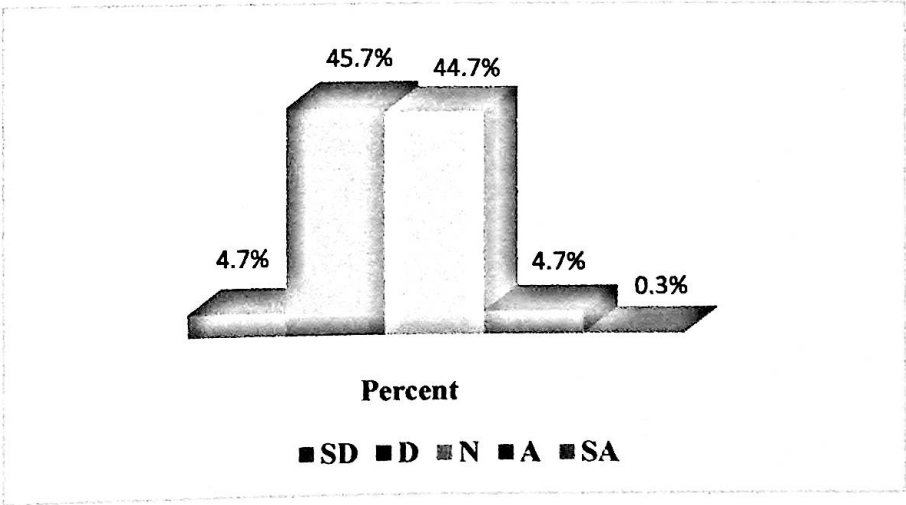


Table 5.18: Descriptive statistics of graduates' knowledge on Rule of law and equal access to justice

Responses	Frequency	Percent (%)	Mean	S.D.
Strongly Disagree	18	4.7	2.50	0.674
Disagree	176	45.7		
Undecided	172	44.7		
Agree	18	4.7		
Strongly Agree	1	.3		
Total	385	100.0		

The above table 5.18 above shows that more than 95 percent of the respondents are not aware of the need to have equal rights to the rule of law and justice. The principles of the rule of law are equality, justice, inclusion, rights, law and strong institutions. SDG-16 aims to promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels. Significantly reduce violence and related deaths everywhere. According to SDG- target 16.3, promote the rule of law at the national and international levels and ensure equal access to justice for all. But, the respondents had very little knowledge on this matter.

Figure 5.14: Distribution of graduates’ knowledge about public access to information

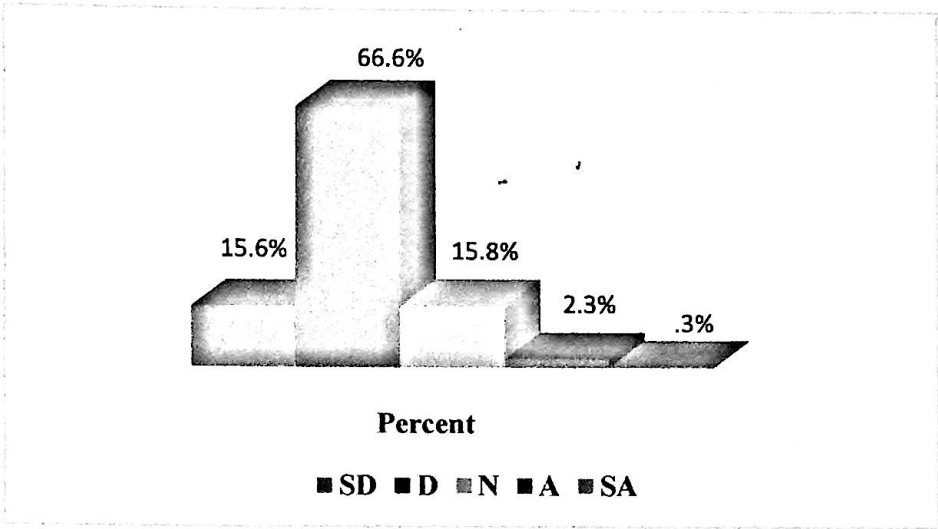


Table 5.19: Descriptive statistics for opinion of graduates’ knowledge about public access to information

Responses	Frequency	Percent (%)	Mean	S.D.
Strongly Disagree	60	15.6	2.06	0.65
Disagree	254	66.0		
Undecided	61	15.8		
Agree	9	2.3		
Strongly Agree	10	.3		
Total	385	100.0		

The above table shows that 90 percent of respondents were not aware of public access to information and protection of fundamental freedoms. Ensuring access to information is vital to achieving the ‘Sustainable Development Goals (SDGs)’. Access to information has been recognized as a key component of sustainable development which has been

adopted at RIO Declaration of 1992 (From Promise to Practice: Access to Information for Sustainable Development).

Figure 5.15: Distribution of graduates’ knowledge about the habit of enjoying recreational activities

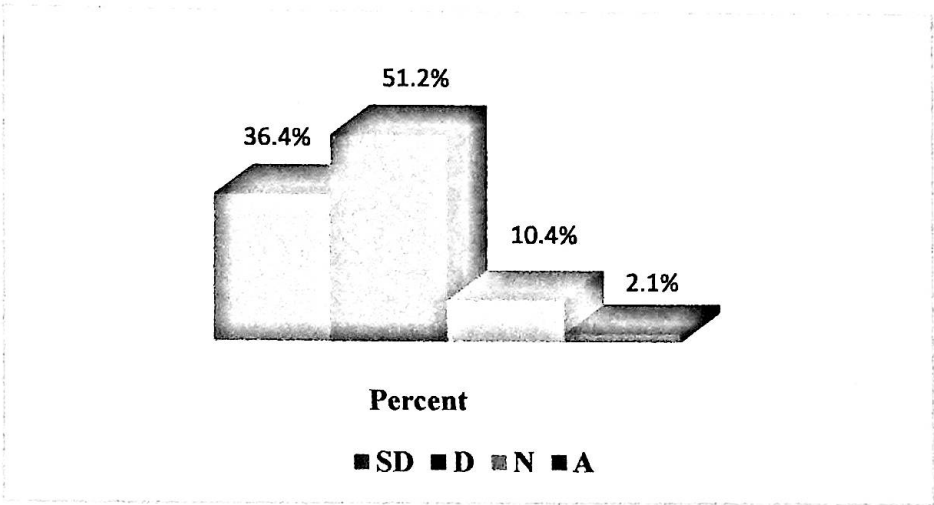


Table 5.20: Descriptive statistics for opinion of graduates’ knowledge about the habit of enjoying recreational activities

Responses	F	Percent	Mean	S. D.
Strongly Disagree	140	36.4	1.78	0.710
Disagree	197	51.2		
Undecided	40	10.4		
Agree	8	2.1		
Total	385	100.0		

The above table shows that 87 percent of respondents are not aware of enjoying recreational activities is essential to social well-being. Those who participate in sports clubs and organize recreational activities enjoy better mental health and are more liberated against the pressures of modern life.

Figure 5.16: Distribution of graduates’ knowledge about spending leisure time

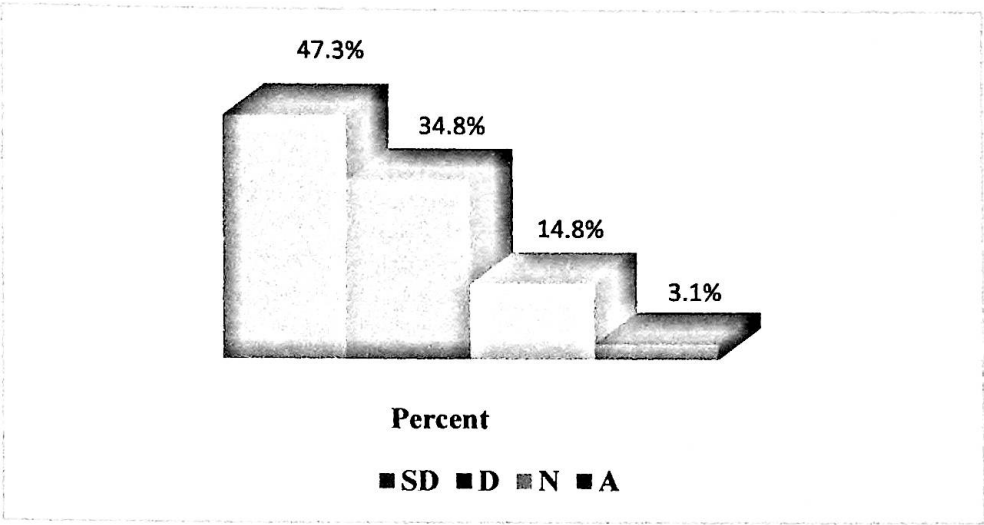


Table 5.21: Descriptive statistics for opinion of graduates’ knowledge about spending leisure time with family

Responses	F	Percent	Mean	S.D.
Strongly Disagree	182	47.3	1.74	0.824
Disagree	134	34.8		
Undecided	57	14.8		
Agree	12	3.1		
Strongly Agree	-	-		
Total	385	100.0		

Table: 5.21 shows that 97 percent of respondents are not aware of spending leisure time with family can play an important role in social well-being. Leisure time means only supplementary or remaining time after work. However, it is an inherent value of the human potential for freedom, self-realization, fun and relaxation. Activities that together with family members refer to watching TV, walking, traveling, visiting friends or relatives, and doing cultural activities. Enjoyable leisure activities are associated with people's

psychosocial development and relevant to physical health and well-being which associated with the individual's professional development.

5.7 Relationship between the Role of Non-formal Education and Social Wellbeing of the Graduates: ANOVA

Hypothesis 5 has been intended to determine that a significant relationship between non-formal education and social wellbeing of graduates. The outcome of the analysis of variance on items SW-1 to SW-5 exposed that the p-value is greater than the significant level. After finished the training from the NEF programme, most of the respondents are not aware of protecting children from abuse and violence which is related to social well-being ($F=238.043$, $p<.000$), and most of them also are disinclined about the rule of law and equal access to justice ($F=201.043$, $p<.000$). Respondents' knowledge to public access to information and protection of fundamental freedoms are very poor ($F=236.336$, $p<.000$). Most of the respondents have very few ideas about the habit of enjoying recreational activities ($F=277.063$, $p<.000$). Also, most of the them have very little knowledge about benefits of spending leisure time with family ($F=292.025$, $p<.000$).

Table 5.22: Results of ANOVA for non-formal education and social well-being of the graduates

		Sum of squares	df	Mean Square	F	Sig.
	Between Groups	219.009	4	54.75		
SW-1	Within Groups	87.510	380	.230	238.043	.000
	Total	306.519	384			
	Between Groups	208.303	4	52.075		
SW -2	Within Groups	98.210	380	.258	201.841	.000
	Total	306.513	384			
	Between Groups	218.403	4	54.60	236.363	
SW -3	Within Groups	88.110	380	.231		.000
	Total	306.513	384			
	Between Groups	228.303	4	57.075		
SW-4	Within Groups	78.210	380	.206	277.063	.000
	Total	306.513	384			
	Between Groups	231.283	4	57.821		
SW-5	Within Groups	75.230	380	.198	292.025	.000
	Total	306.513	384			

5.8 Predictors of QOL (Physical well-being, Individual well-being and Social well-being): An Ordinal Regression Analysis

In this section, predictors of quality of life such as predictors of physical well-being, individual well-being and social well-being have been determined using ordinal regression analysis. A 5-point Likert scale has been used in this present study. It is possible to use ordinal regression analysis for Likert scales but all values must be converted to continuous values by calculating the composite mean before running the regression analysis. As a predictive analysis, ordinal regression describes data and explains the relationship between one dependent variable and two or more independent variables. In ordinal regression analysis, the dependent variable is ordinal (statistically it is polytomous ordinal) and the independent variables are ordinal or continuous-level (Papaoikonomou, A.D., 2021). The mentioned tables 5.23, 5.24 and 5.25 represents the estimated regression coefficients standard error, significant level and significance test output for each independent variable in the model. Regression coefficients are literally interpreted as the predicted change in the log odds of being in the higher category of the dependent variable (controlling for the remaining independent variables) per unit increase in the independent variable. For a positive estimate, the interpretation is for every one unit increase in an independent variable, there is a predicted increase (by a certain amount) in the log-odds of falling to a higher level in the dependent variable. This means, it indicates that the independent variable has an increased probability of falling to a greater level. On the other hand, for negative estimate as follows— for every one unit increase in an independent variable, there is a predicted decrease of a certain amount in the log-odds of being in a higher level on the dependent variable. This simply means that as the values of independent variable increases, there is a decreased probability of falling at a higher level on the dependent variable. The results of regression analysis are discussed below through various tables.

The table 5.23 shows that the skill development is a positive predictor of individual well-being and is highly significantly associated with individual well-being. For every one unit increase in skill development, there is a predicted increase of .484 in the log odds of being at a higher level on Individual well-being. The results also demonstrates that income generation is a positive predictor of individual well-being though it is not significant. Physical well-being knowledge is highly significant positive predictor of individual well-being. For every one unit increase in physical well-being knowledge, a graduate has a predicted 0.189 increase in the log odds of being at a higher level on individual well-being. This indicates that there is a positive relationship between knowledge of physical well-being and knowledge of individual well-being. Another important independent variable is social well-being, which is also a highly significant positive predictor of individual well-being. For every one unit increase in social well-being knowledge, there is a predicted increase of 0.933 in the log odds of being at a higher level on individual well-being.

Table 5.23: Results of ordinal regression analysis (Individual well-being)

Parameter	Estimate	Std. Error	Significant level	95% Confidence Interval	
				Lower	Upper
Skill development	0.484	0.139	0.001	0.211	0.757
Income generation	0.109	0.118	0.235	0.089	0.235
Physical well-being	1.577	0.189	0.000	1.209	1.945
Social well-being	0.933	0.183	0.000	0.575	1.291
- 2 Log likelihood = 1596.493					

The important finding in table 5.24 shows that the skill development is a negative predictor of knowledge of physical well-being. For every one unit increase in skill development, there is a predicted decrease of .119 in the log odds of being at a higher level on physical well-being. The result also expresses that income generation is a significant positive predictor of physical well-being. Individual well-being knowledge was a significant positive predictor of physical well-being. For every one unit increase in individual well-being knowledge, a graduate has a predicted .175 increase in the log odds of being at a higher level on physical well-being. This indicates that there is a positive relationship between knowledge of individual well-being and knowledge of physical well-being. Another important independent variable is knowledge of social well-being, the result exposes that social well-being knowledge is also a significant positive predictor of physical well-being. For every one unit increase in social well-being knowledge, there is a predicted increase of .185 in the log odds of being at a higher level on physical well-being.

Table 5.24: Results of ordinal regression analysis (Physical well-being)

Parameter	Estimate	Std. Error	Significant level	95% Confidence Interval	
				Lower	Upper
Skill development	-0.119	0.140	0.392	-0.393	0.154
Income generation	0.152	0.119	0.201	-0.81	0.385
Individual well-being	1.414	0.175	0.000	1.072	1.756
Social well-being	0.780	0.185	0.000	0.417	1.143
- 2 Log likelihood = 1655.302					

Table 5.25 illustrates that the skill development is a negative predictor of knowledge of social well-being. It is confirmed that income generation was negative predictor of social well-being. Physical well-being knowledge is a significant positive predictor of social well-being knowledge. For every one unit increase in physical well-being knowledge, a graduate has a predicted .844 increase in the log odds of being at a higher level on social well-being. This indicates that there is a positive relationship between knowledge of physical well-being and knowledge of social well-being. Another vital independent variable is knowledge of individual well-being, the result exposes that individual well-being knowledge is also a significant positive predictor of social well-being. For every one unit increase in individual well-being knowledge, there is a predicted increase of .860 in the log odds of being at a higher level on social well-being.

Table 5.25: Results of ordinal regression analysis (Social well-being)

Parameter	Estimate	Std. Error	Significant level	95% Confidence Interval	
				Lower	Upper
Skill development	-0.137	0.139	0.324	-0.409	0.135
Income generation	-0.049	0.118	0.676	-0.281	0.182
Physical well-being	0.844	0.185	0.000	0.481	1.206
Individual well-being	0.860	0.170	0.000	0.527	1.194
- 2 Log likelihood = 1627.336					

5.9 Checking the Performance of Ordinal Regression for QOL (Physical well-being, Individual Well-being and Social Well-being) using Generalized Linear Models (GLM)

The generalized linear model (GLM) is a form of advanced statistical modeling especially in non-normal distributions. GLM helps to explain how probability distributions can combine for modeling. GLM also summarizes the results of different studies. The generalized linear model extends the concept of well-understood linear regression model. It is a generalized form of linear regressions and is more flexible than linear regression because it works when the output variables are not continuous or unbounded. results of GLM are given in the table 5.26 -5.28 which is the extending the ordinal regression and to show the performance ordinal regression analysis. The same direction of the results is found in generalized regression model.

We know that a positive coefficient indicates that as the value of the independent variable increases, the mean of the dependent variable also tends to increase. A negative coefficient suggests that the dependent variable tends to decrease as the independent variable increases. From the above table, we can find out that skill development, income generation, knowledge of physical well-being and social well-being are the positives coefficient indicates of knowledge of individuals well-being. Here all the independent variables have a positive relation with the dependent variable. This indicates that there is a positive relationship among skill development, income generation, knowledge of physical well-being, knowledge of social well-being and knowledge of individual well-being. In another calculation (Table- 5.27) when dependent variable is knowledge of physical well-being and remaining four variables (Skill development, income generation, knowledge of individual well-being and knowledge of social well-being) are independent

variables. Here both positive and inverse relationships exist with the independent variable and the dependent variable. Only the independent variable called skill development has the inverse relationship between knowledge of physical well-being. Remaining three independent variables have the positive relationship with the knowledge of physical well-being.

The table- 5.28 shows that when dependent variable is knowledge of social well-being and rest of the four variables (Skill development, income generation, knowledge of physical well-being and knowledge of individual well-being) are independent variables. Two independent variables named skill development and income generation have the inverse relationship between knowledge of social well-being. Remaining two independent variables such as knowledge of physical well-being and knowledge of individual well-being have the positive relationship with the knowledge of social well-being. In terms of odds ratio, the same results have found as described in the above.

Table 5.26: Results of Generalized Linear Models (GLM) for individual well-being

Parameter	Estimate	Std. Error	Significant level	Odds ratio	95% Confidence Interval	
					Lower	Upper
Skill Development	0.484	0.149	0.001	1.622	1.212	2.172
Income Generation	0.109	0.121	0.653	1.051	1.039	1.107
Physical Knowledge	1.577	0.208	0.000	4.840	3.220	7.276
Social well-being	0.933	0.196	0.000	2.541	1.732	3.728
- 2 Log likelihood = 1688.694						

Table 5.27: Results of Generalized Linear Models (GLM) for physical well-being

Parameter	Estimate	Std. Error	Significant level	Odds ratio	95% Confidence Interval	
					Lower	Upper
Skill Development	-0.119	0.1540	0.435	0.887	0.656	1.200
Income Generation	0.152	0.1212	0.210	1.164	0.918	1.476
Individual well-being	1.414	0.1843	0.000	4.111	2.864	5.900
Social well-being	0.780	0.1876	0.000	2.181	1.510	3.150
- 2 Log likelihood = 1614.675						

Table 5.28: Results of Generalized Linear Models (GLM) for social well-being

Parameter	Estimate	Std. Error	Significant level	Odds ratio	95% Confidence Interval	
					Lower	Upper
Skill Development	-0.137	0.139	0.324	0.782	-0.409	0.135
Income Generation	-0.049	0.188	0.676	0.952	-0.281	0.182
Physical l well-being	0.844	0.185	0.000	2.325	-0.481	1.206
Individua well-being	0.860	0.170	0.000	2.364	0.527	1.194
- 2 Log likelihood = 1597.216						

5.10 Discussion and Conclusion

In this chapter, the study has explored the quality of the life of graduates from the NFE of NGOs in Bangladesh. For this purpose, the researcher has analyzed the graduates' non-financial benefits from the programmes. The physical well-being, individual well-being and social well-being of the graduates have been investigated here. This chapter mainly focuses on the roles of NFE programmes in improving the quality of life of NFE graduates in Bangladesh.

Suryad et al. (2022) conducted their research in Indonesia and found that NFE programmes had a significant impact on reducing depression levels among the elderly, thereby increasing senior citizens' life satisfaction and self-esteem. The study findings observed that non-formal education programmes have a positive effect on the mental health of graduates. On the other hand, Talapatra and Rahaman (2016) in their study found that most of the workers were not aware of the health issues due to which they were exposed to various health hazards. From the analysis of the current study, it is found that the most of the respondents of these programme have very little knowledge about physical well-being.

Our present study showed that half of the respondents do not have proper knowledge about hand washing. But there is considerable need to implement health and hygiene programmes to reduce communicable diseases especially among graduates. Whereas, Rabbi & Dey (2013) and Alam et al. (2020) have identified the lack of knowledge about hand washing practices in their study area. In interviews, most NGO officials stated that the design of the training manual engrossed on technical knowledge and basic education instead of imparting the knowledge of QOL.

Indeed, water is a basic human right and the most valuable resource for economy and health. Drinking water and sanitation is a basic health service. A person's health mainly depends on his quality a safe amount of water. In this context, SDG target no. 6 also focuses of the importance of safe water.

In this survey, it was found that a portion of the respondents (27 percent) have very little knowledge about safe drinking water and usage. Hossain et al. (2021) conducted a study on a low-income population in southwestern coastal Bangladesh and found that only 12 percent of the population had knowledge about drinking safely managed water, while 64 percent of the population lacked knowledge about drinking clean water. Furthermore, our study found that a significant number of graduates (73 percent) of NGOs' NFE programmes are knowledgeable about safe drinking water and its use.

The study found that graduates had little knowledge about HIV/AIDS. At the time of interview one of the officials express his opinion "We agree that knowledge about harm and prevention of HIV/AIDS should be imparted to the trainees but despite our desire for time constraints this is not possible". Bhowmik and Biswas (2022) stated in their study that women's knowledge about HIV/AIDS, knowledge about HIV/AIDS infection and knowledge about misconceptions about HIV infection were 60.3 percent, 52.2 percent and 71.7 percent respectively. In our study, it was revealed that more than 90 percent of the respondents had very little knowledge about HIV/AIDS. It is noteworthy that 47 percent of the respondents' education level was grade 5 or below and only 11 percent was grade 9 or above. Those who have no education or primary and secondary level education, they have low knowledge of HIV compared to those educated at higher secondary level (Yaya et al., 2016).

Another important component of quality of life is child malnutrition. The survey also found that the respondents' (above 80 percent) knowledge about child malnutrition was very low as was the previous element called HIV/AIDS. Rahaman et al. (2009) showed in their study that the prevalence of severe and moderate malnutrition among children was high, and the overall prevalence of acute malnutrition was about 10 percent, which one of the major public health problems in the Bangladesh. Our survey also suggests that more than 90 percent of respondents have little knowledge about child malnutrition. It should be noted that maternal malnutrition is strongly associated with acute malnutrition in children. Malnutrition is common in older people, often more prevalent and results in poorer quality of life (Rasheed and Woods, 2013). This is why graduates' knowledge of the impact of malnutrition is essential to improve their quality of life. In this regard, Rahaman et al. (2009) found that parents who socially and culturally advanced they are more conscious about nutrition and child care. Most of our respondents in this current study are less educated and therefore socially and culturally disadvantaged.

Knowledge about reading, writing and basic accounts is one of the important elements of the individual wellbeing. The current study showed that the skills-based NFE had a significant contribution on the basic education of the graduates. Above 60 percent of the graduates of the skill based NFE programmes of NGOs had the knowledge on basic literacy. This study identified that graduates' knowledge of basic education (reading, writing and arithmetic) from these programmes was significant. Javed, Javed and Khan (2016) in their study in India found significant differences between educated and uneducated Muslim women on various dimensions of quality of life and well-being. According to the present study, skill-based non-formal education by NGOs has also focused on basic literacy.

Knowledge of traffic signals helps people to run their lives smoothly. However, most of the respondents of this study had very little knowledge on traffic signals. While interviewing the owners, a motorcycle workshop owner said, "I hired a worker from a skill-based NFE center for my workshop and he had no knowledge of traffic signals and even did not know how to cross the road. So, sometimes I got into trouble with him." Gap in knowledge of traffic signals leads to road accidents, measures should be taken in this regard during training (Olalekan et al.2019).

Another important element of physical wellbeing is the knowledge about Fast Aid. First aid is usually performed by someone with basic medical training. Midani et al. (2019) conducted the study in UAE and found that more than half (54.2 percent) of the population was not knowledgeable enough about basic first aid. The study also noted that similar results were found in Poland, Jordan, India and Turkey. The current study also found that the more than half of the respondents (66 percent) had very little knowledge about fast aid.

Information technology (IT) is a vital force for economic development in a country. IT brings new opportunities to achieve the Sustainable Development Goal (SDG)-4 "Include and promote equitable quality education and lifelong learning opportunities for all" and its goals (United Nations, 2015). Various studies have shown that organizations that acquire information technology competencies are often able to achieve organizational growth by improving their service quality (Hossin,2016). This paper also suggested that updated curriculum, stronger industry-academia linkages and IT skill development programmes were some of the suggested measures that could reduce the sector's skill gap as well as enhance the sector's growth potential. Besides, the present study exposed that the graduates had very little knowledge about IT.

Social well-being includes protection of children from abuse and violence, equal access to the rule of law and justice, enjoyment habits and participation in recreational activities, leisure time with family, etc.

Bangladesh is a densely populated country in the world. About half of the populations of our country are children and more than 20 million of them are under 5 years of age. Mohajan (2014) stated in his study that most of the children live in villages. The study also found that most children live below the international poverty line and violation of child rights is a common issue in Bangladesh. Knowledge of the impact of child abuse is essential for all to reduce abuse and violence against children. The present study also found that lack of knowledge about child abuse and violence was highly prevalent among the respondents. Chowdhury et al. (2014) suggested that the government should promote programmes in every sector of society to increase public awareness about child abuse as well as NGOs should launch better projects that promote children's rights.

Rule of law and access to justice is the essential elements of social wellbeing. It is also related to the Sustainable Development Goals (SDGs) and comprehensive development. In fact, the term was very unfamiliar to most of the respondents. Such topics are almost absent in the content of training manuals. During an interview with officials, one of them said, "Due to time constraints we mainly focus on enhancing the technical knowledge of the graduates." Actually, Access to justice is the foundation of good governance and related to social well-being.

Access to relevant information determines the quality of life of an individual in the society (Yebowaah and Owusu-Ansah, 2020). Access to Information (ATI) is related to SGD goals and UNESCO has also emphasized that all countries implement it.

Bangladesh has enacted a law named "Right to Information Act-2020". Besides, the researcher found that the respondents of the study had very little knowledge on this.

Leisure is often seen as freely choosing activities after responsibilities have ended. Many studies have found that there is a positive relationship between enjoying leisure time and job satisfaction (Iso-Ahola and Baumeister, 2023, Aksoy et al., 2017). Consequently, job satisfaction increases quality of life. In this study, during interview most of the NGO officials said that they did not feel the need to include leisure time in the training manual, but now realize that the topic is quite important. One of the employers opinioned that they did not pay attention to leisure time for their employee.

Thus, we can conclude that graduates' knowledge of physical well-being has moderately created skills-based NFE in Bangladesh. Knowledge about individual well-being of graduates from such NFE programmes in Bangladesh is also mildly developed. It is also found that graduates from such programmes in Bangladesh have very little knowledge of social well-being.

Chapter-6

Identification of Challenges of ‘HRD’ and ‘QOL’ in NFE Programmes in Bangladesh

6.1 Introduction

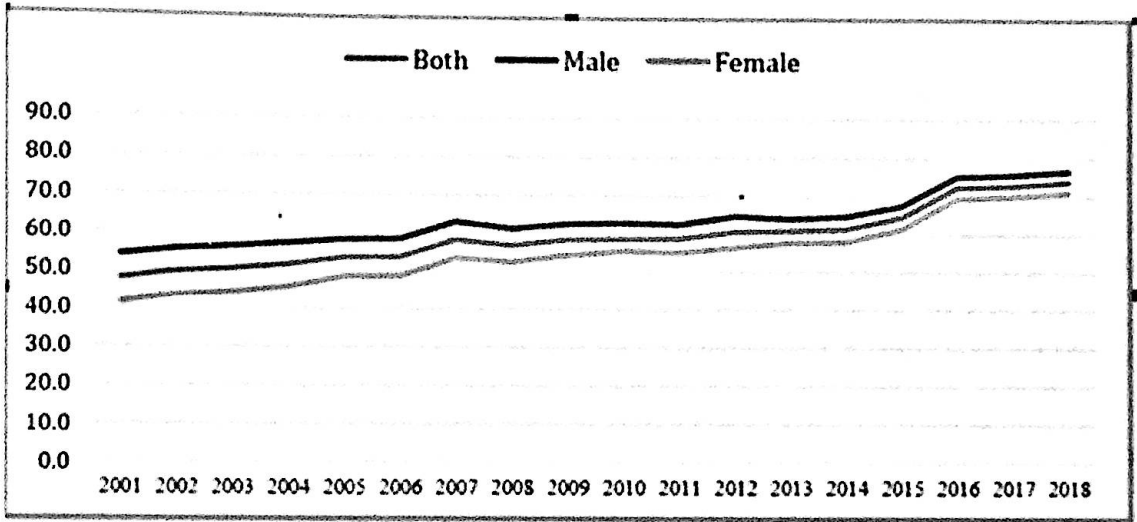
In this chapter an attempt has been made to unveil the real challenges of HRD and QOL in NFE programmes in Bangladesh. This chapter is designed with mixed method approach using both quantitative and qualitative (interviews, content analysis) analysis. During interviews taken from trainers, employers and NGO officials the researcher found some challenges of HRD and QOL in skill-based NFE programmes. Here, it has been tried to make an attempt to find out the ways to overcome those challenges based on suggestion earned from literatures, analytical results and opinion from respondents. It should be noted here that some challenges are indirectly related to HRD and QOL in NFE programmes in Bangladesh.

6.2 Challenges of HRD in NFE Programme in Bangladesh

According to 8th Five Year Plan (8FYP), the government is implementing NFE programmes in various forms since its independence in 1971. A commitment to combating adult illiteracy prompted the government to introduce a major non-formal education programme in 1990s, focusing on basic literacy. The government has adopted ‘The NFE Policy’ in 2006 aims to reduce the number of illiterates, proposing to need-based continue education, promoting equality between formal and non-formal education, ensuring community ownership and sustainability of the NFE programme.

According to the Multiple Indicator Cluster Survey-BBS (2019), completion rates were 82.6 percent for primary, 64.7 percent for lower secondary, and 29.4 percent for upper secondary education in Bangladesh.

Figure 6.1: Adult literacy rates for both males and females



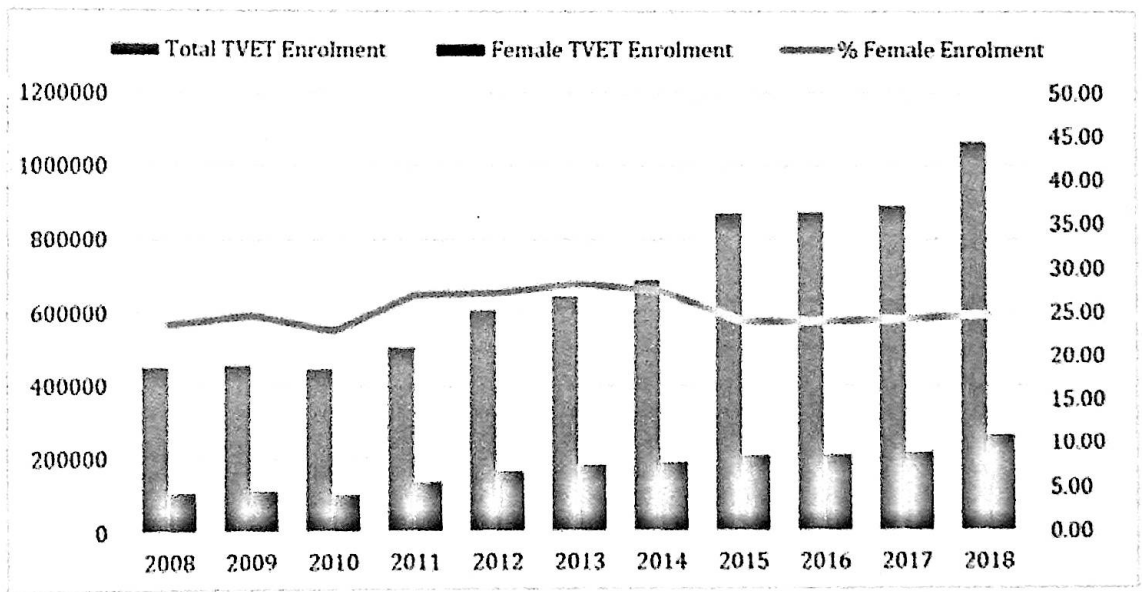
Source : Bangladesh Bureau of Statistic Yearbook, Various Years

Bangladesh has continued to make progress in improving its adult literacy rate, which has increased from 58.6 percent 2010 to 75.0 percent in 2018. Figure 6.1 shows progress in tackling adult illiteracy. There has been a slow but steady progress with the rise in adult literacy rates for both males and females. The gap between male and female education rates has also narrowed. Despite this progress, there is still a significant unfinished issue. About 29 percent of adult women and 23 percent of adult men remain illiterate. There is an essence rural-urban gap, where the average rural literacy rate is only 66 percent. Especially the rural adult women deprived of basic literacy; about 37 percent of women are illiterate. At the institutional level, Bureau of Non-formal Education (BNFE) is an important institutional change that are playing an important role in advancing the cause of NFE. However, the bureau is not fully equipped to implement the broad vision of the NFE policy framework. The Bureau of Non-formal Education

(BNFE) capacity needs substantial improvement to move towards lifelong learning goals. Mainly, the coordination, accountability, transparency, public participation and monitoring mechanisms are essential for improvement all aspects.

However, the progress was maintained under the Sixth and Seventh Five-Year Plans. Yet it contributes to skill development programmes that are run by NGOs. According to this survey, 26 percent of graduates did not have any job and only 25 percent of graduates were self-employed. It is also significant that women (31 percent) are ahead of men (23 percent) in self-employment.

Figure 6.2: Female enrolment in Technical and Vocational Education and Training (TVET)



Source: BANBIES, 2019

8FYP also stated that the absolute size of enrollment in skill-based NFE programmes had grown rapidly over the past decade. This is true for both men and women enrollment. The growth rate of female enrollment is equal to the growth rate of males' enrollment. As a result, the gender-mix ratio was stagnant about 25 percent of female students during

10 years. This represents a gender imbalance that remains to be addressed. Achieving the SDGs Gender Equality Target 4.3 requires equal access to Technical and Vocational Education and Training (TVET) for all men and women by 2030.

6.2.1 Challenges of Improvement of Graduates' Skills and Income

As per Bangladesh Multiple Indicator Cluster Survey-MICS (2019), only 1.4 percent of youth and adults of aged 15-49 years have information and communications technology (ICT) skills, which is 4.1 percent in urban areas and below 1.0 percent in rural areas. The report also shows that around 4.6 percent of the women have used computers, 71.4 percent own a mobile phone and 14.2 percent of women have used the internet. Our field survey states that that 91 percent of the participants of these programmes are not satisfied with the basic computer training facilities.

Table 6.1: Frequency distribution of basic computer training facilities

Satisfaction status	Frequency	Percent
No	350	90.9
Yes	35	9.1
Total	385	100.0

Source: Field work, 2019

From the field survey of this study, it is observed that most of the graduates use mobile phones as a means of communication (95.3 percent) while internet users are very few (29.6 percent). Newspaper is used as a medium of communication by the least number of graduates (13.5 percent).

Table 6.2: Frequency of communication media in this study

Mass- Media Variables	Frequency	Percent (%)
Mobile		
No	18	4.7
Yes	367	95.3
Internet Use		
No	271	70.4
Yes	114	29.6
Reading Newspapers		
No	333	86.5
Yes	52	13.5
Watching Television		
No	95	24.7
Yes	290	75.3
Listening Radio		
No	215	62.2
Yes	134	34.8

Source: Field work, 2019

It was also found from the study that graduates use television (75.3 percent) more than radio (34.8 percent) as a means of communication. In fact, most of the radio user connected with their cell phone. At the time of interview with employers, one of the them said, "The employee who was hired for my store from the programme had very little knowledge of computers and internet usage. Since I own an automobile and bike repair shop, such skills are essential at times." A trainer from an NGO also opined, according to

him "We understand that basic knowledge about IT is very necessary these days. But surprisingly our training manuals are not designed with this in mind. Perhaps, the deadline is a barrier to launch it." The study has also been considered some NGO officials for interview with this matter. Most of the NGO officials' and employers opinioned that the IT skills of the graduates of these programme were very poor. One of officials said, "The infrastructure and budget do not support this kind of skill development. Even not all trades require IT skills." From the above discussion we understand that IT knowledge skills are lacking in NFE programmes and there are various challenges in developing IT skills in skill-based NFE programmes in Bangladesh.

6.2.2 Challenges of Development of Entrepreneurship Knowledge

Kuswanto, Tarigan and Nasori (2023) studied on entrepreneurs in Indonesia, they found that students' motivation to study entrepreneurship was enough to enrich their knowledge of entrepreneurship which helps them to earn income. In fact, an entrepreneur is someone who builds a venture around an invention. Entrepreneurial skills include various skill sets such as business planning, leadership, communication, business management, finance, marketing, time management, creative thinking as well as problem solving and so on. These entrepreneurial skills are vital for promoting innovation, business growth and competitiveness. Therefore, specific training is required to develop such skills.

Entrepreneurship training helps to create entrepreneurial knowledge that diversifies the growth of its economy (Gangi Y.A., 2017). The research also suggests that the entrepreneurship education and training require a comprehensive strategy for achieving success. The current study survey revealed that 76 percent of the graduates had no entrepreneurial knowledge that could help in forming self-employment. Nevertheless, opportunities to develop entrepreneurial knowledge in these NFE programmes are very

limited. Interviews with instructors revealed that some instructors in this programme did not have a clear understanding of entrepreneurship knowledge. One of them said, "Perhaps it's too difficult for the trainees so it's not designed into our training manual." But various previous studies have acknowledged that entrepreneurial knowledge can be enhanced by providing appropriate training. BIDS (2014) expressed in their report that entrepreneurship and self-employment rotate around the existence of an innovative business idea or concept. Entrepreneurs usually try to innovate something new to generate job opportunities.

From the interview with a senior NGO official said "We could not include content of entrepreneurial skills in the training manual as the programme mainly emphasizes specific trade skills," said in an interview. Interviews with trainers and NGO officials also revealed that micro credit facilities are not available with this programme. Nonetheless, the field survey data also revealed that 95 percent of the graduates agreed that microcredit facilities play a major role in establishing self-employment after completion of training.

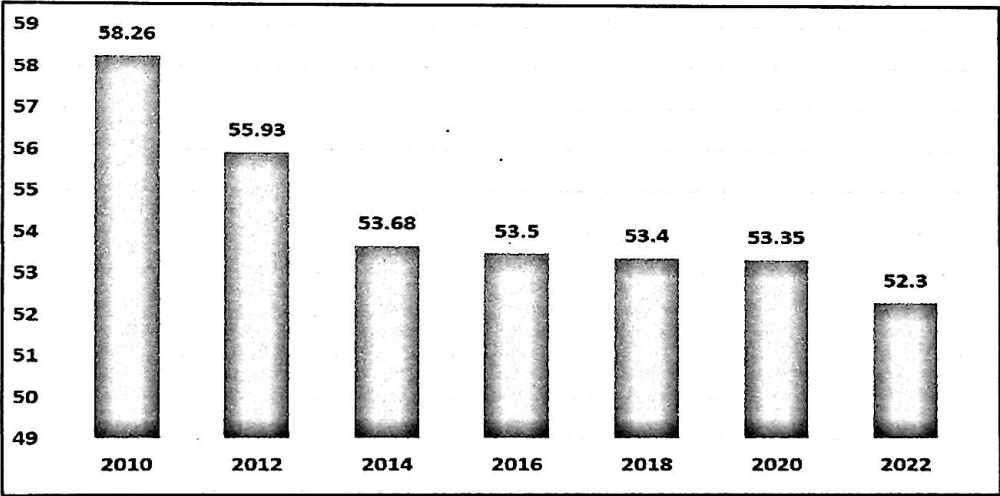
On the other hand, entrepreneurial skills and microcredit facilities are interrelated to increase self-employment. It mentioned earlier that content analysis have been performed for this study which supports quantitative data analysis. The training manual covers very few such as only 3 percent of the topics related to entrepreneurship skills.

6.2.3 Challenges of Opportunities of Job Market

In the recent decades, despite high economic growth, job creation and facilities has been slowed down. This is especially in the manufacturing and services sectors, where it remains a big challenge due to increased automation. The high degree of informal employment in Bangladesh, where its share in total employment remains well above 85

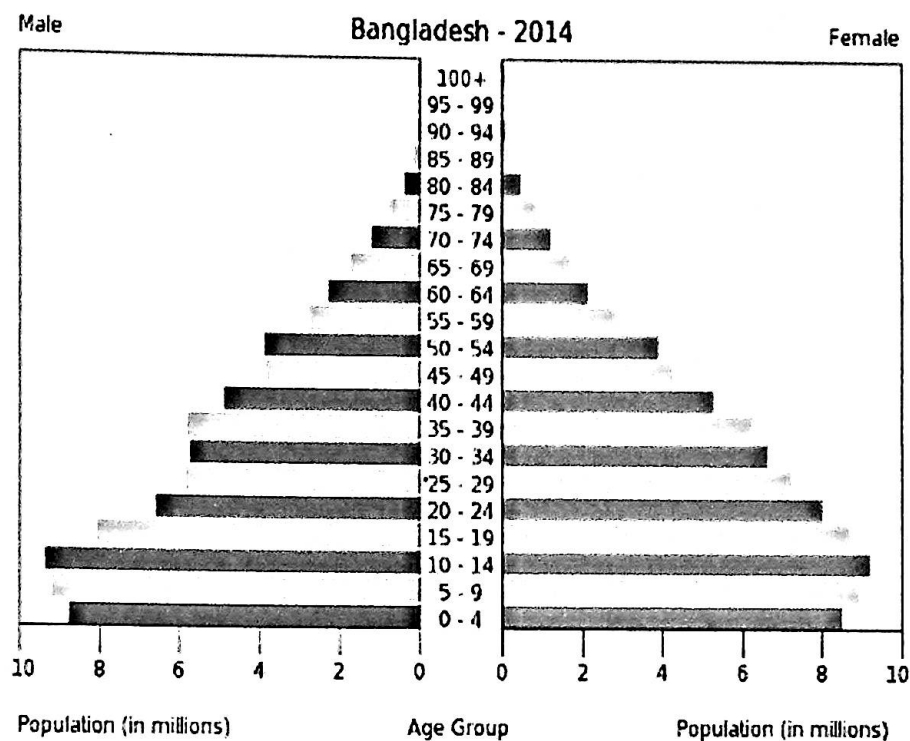
percent, is an immense challenge to ensuring decent jobs. The female labour force participation rate, over the past decade, has remained stagnant at around 35 percent. Despite the demographic dividend, the share of youth who are not in education, economic activities and training is high, and the youth unemployment rate is excessive. According to the United Nations Population Fund (UNFPA), when the number of working people in a country exceeds the number of people unable to work, it is called the demographic dividend or demographic bonus. Generally, a country's demographic dividend period is when less than 40 percent of its population is unable to work (zero-14 years and 65+ years) and more than 60 percent is working (15 to 64 years). A nation gets this demographic dividend period once every few hundred years.

Figure 6.3: Age dependency ratio (% of working-age population) in Bangladesh



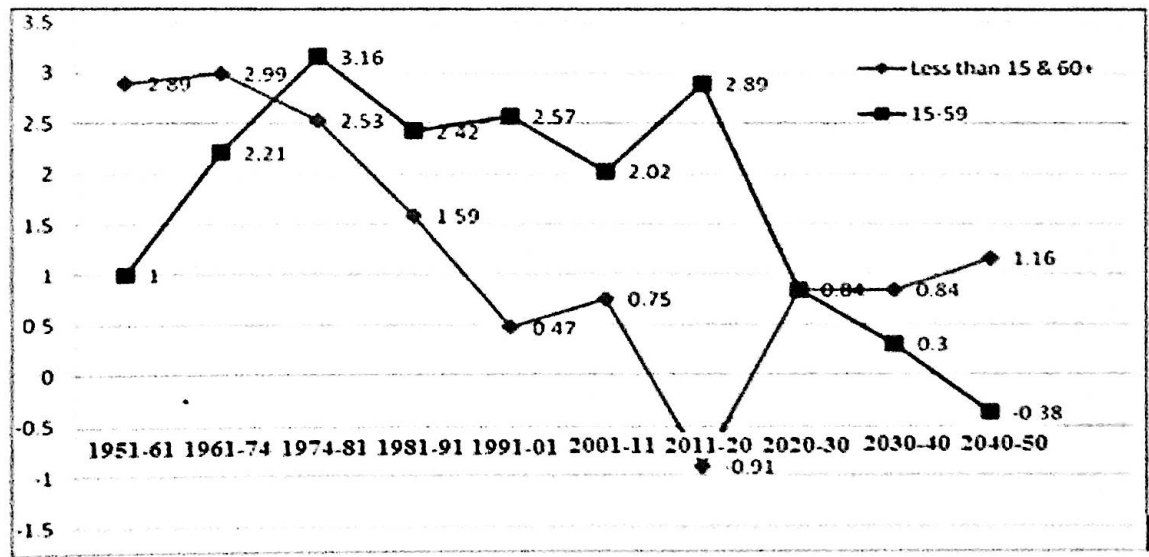
Source: Labour force Survey-2010-2022.

Figure 6.4: Age-based male and female (in millions) in Bangladesh



Source: World Bank Indicators (2014) –Bangladesh Population

Figure 6.5: Trends in growth rate of working age population (15-59) and the growth rate of dependent population (0-14 and above 60 years)



Source: BBS- Bangladesh Population and Housing Census -2011

At the time of independence, the number of working people in Bangladesh was about 30 percent. The entire nation is dependent on these 30 percent people. That is, these 30 percent people had to fulfill the needs of the entire nation, which was a very difficult task. Since 2007, Bangladesh's working population has grown to more than 60 percent of the total population. In other words, Bangladesh entered the era of demographic dividend in 2007. The demographic dividend is a time of immense potential. At this time, it became very easy to achieve economic prosperity due to the abundance of working people. According to Islam (2019), Bangladesh's demographic dividend will end by 2030. That's the deadline may be extended by five to ten years if population distribution results high share of educational attainment. This means that if the population with lower education could be declined and population with higher level of education could be amplified. Nevertheless, it's statistical possible, this will be a difficult task to accomplish within a decade. To harness the demographic bonus period, education, technology and health sectors need to be focused. The allocation given to education, technology and health sectors in the national budget of Bangladesh is very less than the requirement. Experts feel that more allocation and government attention should be given to education, technology and health sectors. At the same time, a happy, prosperous and modern Bangladesh will be developed if the government's attention is paid to the sectors that develop the skills of manpower.

Muktdair-Al-Mukit (2012) showed in his study that government spending on education has a positive and significant effect on economic growth in the long run. The study also found that a one percent increase in government spending on education contributes to a 0.34 percent increase in per capita GDP in the long run.

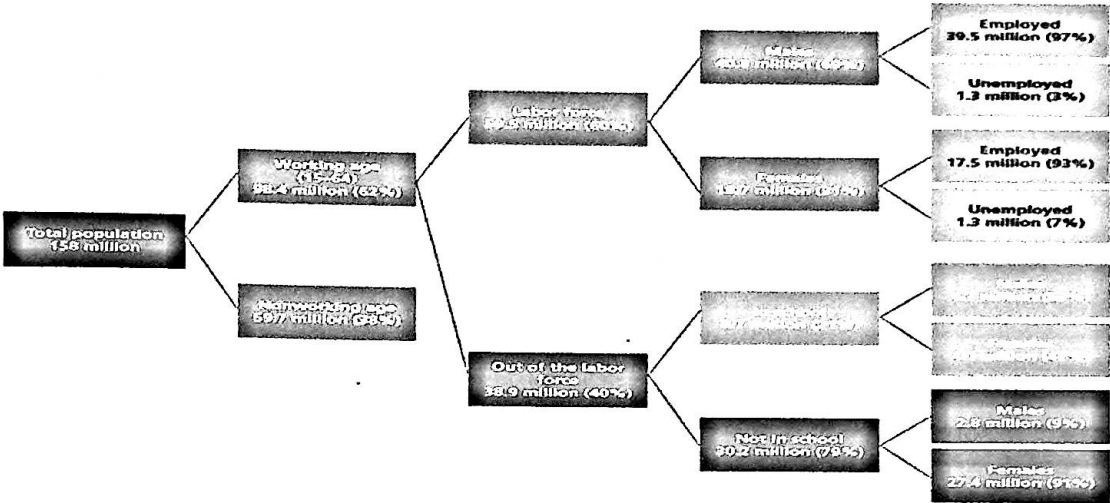
Table 6.3: Labour Force by Level of Education

Broad education group	Rural			Urban			Bangladesh		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
None	1.61	1.68	1.64	0.68	0.68	0.68	1.35	1.36	1.35
Primary	32.27	36.38	34.11	28.05	25.23	25.64	30.50	32.77	31.56
Secondary	51.77	51.53	51.66	40.88	50.68	45.75	48.69	51.25	49.88
Higher Secondary	7.12	6.16	6.69	13.26	11.87	12.57	8.86	8.01	8.46
Tertiary	6.07	3.29	4.82	18.32	11.02	14.69	9.54	5.78	7.79
Others	1.16	0.98	1.08	0.81	0.52	0.67	1.06	0.83	0.95
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : Labour force Survey-2022

In fact, education has an important contribution to economic growth. Bangladesh has also made notable progress on the education level of the labour force as the share with no education or only primary education declines. However, the proportion of women in the labour force in 2022 is much higher, there was either no education or only elementary education, male and female differences in this regard have been deleted by 2010. However, there are several weaknesses in the education level of the workforce, a notable fact is that a very small proportion of the labour force (only one in a thousand) had technical or vocational qualifications in 2010. It is mentionable that the enrollment in technical and vocational fields was only 2.43 percent of secondary enrollment, compared to 6.31 percent in Malaysia and 18.41 percent in the People's Republic of China (ADB, 2016). Additionally, men have significantly higher education compared to women in the labour force.

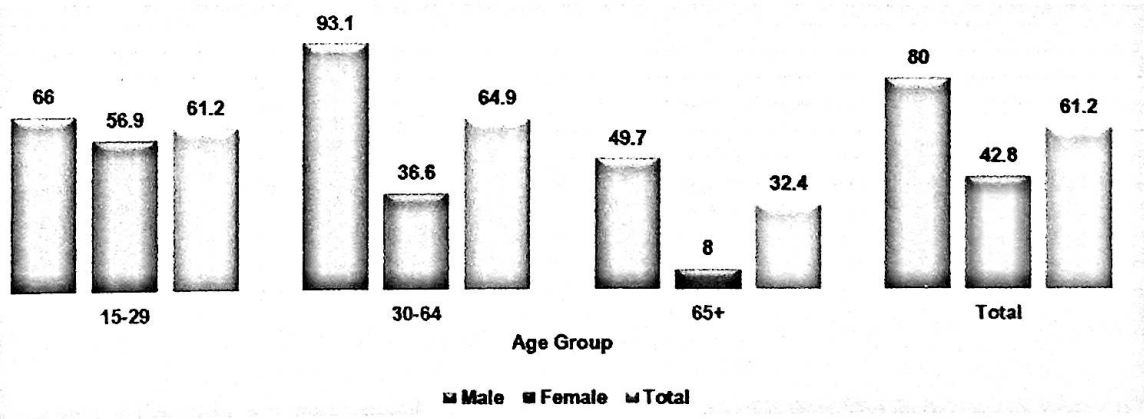
Figure 6.6: Snapshot of the Bangladesh labour market



Source : Labour Force Survey (LFS), 2016

The above figure-6.6 describes that the current state of the labour market in Bangladesh indicates significant underutilization of human resources where 40 percent of the working population is out of the labour force. The situation is mainly driven by very low female labour force participation (LFP), with the LFP rate for women in 2016 being around 37 percent, compared to including about 90 percent for men. In general, the labour force participation rate is strongly related to a person's age, health, and educational attainment, but the strong life-cycle pattern observed for males is not prominent for females. Additionally, significant differences are observed between rural and urban women.

Figure 6.7: Working-age population as share of total population



Source: Bangladesh Bureau of Statistics, Labour Force Survey (LFS)-2022

As a result, the part of the working-age population has increased for both males and females as well as for rural and urban areas (Figur 6.7). In this case, the country can reap the rewards of a so-called demographic dividend, if people of working age can be transformed into human capital and used in a productive manner (ADB-2016).

Roy & Kayesh (2016) mentioned that Bangladesh's economic growth will accelerate if working age people are productively employed. Theoretical and empirical literature on the effects of population on labour supply, savings and economic growth under pins this effort to understand and predict economic growth in Bangladesh. They also focused that failure to take advantage of the opportunities intrinsic in demographic change can lead to economic sluggishness.

The present survey found that more than 88 percent of the respondents opined that training provided by NGOs is not always relevant to the job market. Interviews with various authorities and stakeholders also revealed that there is no opportunity to survey the market demand before implementing these training programmes. But, in most cases a baseline survey is done before starting any kind of programme. The survey also revealed that a limited number of seats are allotted in certain trades. Thus the participants could not register the necessary trades. But this might not have been the case if seats were allocated on the basis of demand through the baseline survey. During the interview, a trainer said "some participants were not satisfied with their trade. Two trainee in my center wanted to join 'Fridge and AC Repairing' trade but had to join 'Auto Mechanic' trade. Because the 'refrigerator and AC repair' seats were very limited." An official conceded "Baseline survey can help to know the condition of the community. It is very important to gauge the real demand of a trade. But unfortunately we could not do it properly for this programme although it is very helpful for any project."

The table below shows the enrollment of trainees in different trades in this study. The highest enrollment rate in this survey was 'Tailoring and Industrial Sewing' (15.1 per cent) and the lowest rate trade was 'Wood Furniture Making' (5.5 per cent). The enrollment rates for 'Auto Mechanic' and 'Mobile Phone Servicing' were 14.50 percent and 13.00 percent respectively.

Table 6.4: Frequency distribution of different trades in this study

Name of Trade	Frequency	Percent
Auto Mechanic	56	14.5
Electric & Motor Rewinding	40	10.4
Tailoring & Industrial Sewing	58	15.1
Mobile Phone Servicing	50	13.0
Electronics & Refrigeration	23	6.0
Electrical House Wiring	31	8.1
Computer Office Application	30	7.8
Beauty Parlor	19	4.9
Tailoring & Dress Making (TDS)	34	8.8
Wood Furniture	21	5.5
Freez and AC Repairing	23	6.0
Total	385	100.0

Source: Field work, 2019

An employer (owner of an automobile workshop) from the interview opined thus “We need more trained hands for our workshop but the training center could not provide as per our requirement. I think they should sit with us to hear our requirements before starting the training programme.”

The above scenario does not reflect the actual desire of the trainees to enroll as some participants were interested in 'Fridge and AC Repair' trade but were forced to switch to other trades due to very limited seats in this trade. However, an official said, this trade requires various types of infrastructure facilities so the number of seats was limited.

6.2.4 Challenges of Contact with graduates after completing training

There are still limited linkages between employers and most institutions that provide Technical and Vocational Education and Training (TVET). This has led to little responsiveness of TVET provision to job market demands—with no systematic feedback concerning industry requirements and no tracer studies of graduates, there is little scope for such responsiveness. Farole et al. (2017) stated in their research paper that there is still limited linkage between employers and most training providers. This has led to little responsiveness of the training system to the demands of the job market resulting in a portion of trainees not entering the job market. Basically, such a situation occurs without any systematic response to industry needs and no tracer study of graduates. This paper also notes that the formal trainee track reaches a limited portion of the labour force. On the other hand, the present study shows that there is an absence of formal trainee track system in non-formal skills development programmes in our country. An official said during the interview, “We interact informally with the trainees for 2 to 3 months after completion of training. I think the employment rate will be higher than it is now if the formal system is introduced. But it is also noticeable that very few trainees voluntarily contact us after completing the training. They should come to us for their own sake. In fact, proper communication can help us achieve our goals.” From the conversation with the NGO officials, it was realized that the linkage with the graduates in these programmes is not formal and the officials do not mention anything about the linkage with the employer.

6.2.5 Challenges of Arrangement of Further Training Facilities

Training increases labour productivity and profitability and facilitates adoption of new technology and work (OECD,2021). This renders into higher wages and higher job satisfaction thereby reducing unemployment for the society and can have a positive impact on the society as a whole. Organization for Economic Cooperation and Development-OECD (2022), also noted that improving the basic digital skills of older workers or workers at risk of automation, digital technology can facilitate adoption and also strengthen their labour market attachment. The survey also found that 70 percent of respondents felt that further training could be very effective in improving their skills. In addition, skilled, innovative and flexible workforce has become a key resource for sustainable economic growth. Numerous studies have shown that the link between economic growth, human capital and increasing returns depends on advanced further education and training (FET strategy-2014-2019, Ireland). This report also mentioned that continuous skill development and lifelong learning can thereby ensure workers' participation in the labour market. Consequently, it helps to reduce the risk of unemployment, especially long-term unemployment. The Further Education and Training (FET) strategy-2014 is designed to strengthen Queensland's economic base that helps to build a skilled workforce and fit for the present and the future meets the needs of industry, government and communities (Creative Commons Attribution-2023). The purpose of this act was to facilitate the provision of vocational education and training that is linked to employment and responsive to develop future workforce and skills of requirements industry. Most of the officials, in this current study, opined that they are mainly focusing on the training of freshers. From the interview, an official said "Our scope is very limited for design to provide further training as the donor budget for the programmes is not allocated for further training for 'graduates". A trainer of this

programmes said that they have very limited facilities to take part a training". A trainer from this programme stated that they had very limited opportunities to attend training but felt that more training was very necessary and would benefit the trainees. Even training facilities of the instructors are extremely inadequate. Instructors are less motivated, if the training facility is limited. (ADB & ILO-2016).

6.3 Challenges of QOL in NFE in Bangladesh

6.3.1 Challenges of Improvement of Physical Well-being

Washing hand properly: Hand washing is universally promoted as a health issue. Park (2021) studied and found that positive knowledge of hand washing was connected with better health care status. He also revealed that the habit of hand washing is developed from childhood and has a great impact on good health. Studies in Bangladesh and elsewhere have shown that hand washing reduces diarrheal diseases by 14-40% (Houque,2003). Concepts and practices of hand washing vary widely changes in Bangladesh. Socioeconomic factors are also associated with practice patterns. In general, hand washing practices tend to be poor. Banu et al. (2021) studied hygiene behavior among female garment workers and found that various elements of personal hygiene such as bathing, brushing teeth, washing feet, washing/changing clothes, washing hair with soap/shampoo, cutting nails and washing hands. Most participants (75% and more) had standard knowledge and practice of each considered hygiene behavior. Regarding hand washing behavior, only 3% had adequate knowledge. In our study it is surveyed that 49 percent respondents were not suitable knowledge on the issue. But the implementation of health and cleanliness intervention programmes are substantially needed especially to reduce the transmissible diseases among workers in Bangladesh.

Child immunization: Pollard and Bijker (2021) opined that a vaccine is a biological product that can be used to safely induce an immune response that confers protection against infection and/or disease on subsequent exposure to a pathogen. They also noted that to achieve this, a vaccine antigen must be either derived from the pathogen or artificially produced to represent the pathogen as its component. Essential components of most vaccines are one or more protein antigens that induce an immune response that provides protection. Immunization is a keystone of public health policy and is highly visible cost-effective when used to protect child health. The study found that the one-fourth of the graduates (27 percent) was very reluctant about child immunization.

HIV/AIDS: Bangladesh began its initial response to the HIV epidemic in the mid-1980s. Since then, efforts have been made to improve HIV-prevention measures to reduce the risk to the population and the general youth. Without further intervention, Bangladesh's HIV epidemic will become similar to that of other neighboring countries and subsequently spread to other populations (Azim et al., 2012). In our present survey it is exposed that most of the respondents (above 90 percent) have no knowledge about HIV prevention. It is time to put more emphasis on education, media exposure, workshops and campaigns.

Child malnutrition: The future of a nation depends on the well-being of its children, which largely depends on their nutritional status. In formulating a national policy to address the problem of child malnutrition, a precise knowledge of the problem and the factors related to its magnitude is essential. According to FAO The 2020 report had 687.8 million people in the world undernourished in 2019. It has adverse effects on individual's physical and mental health, development and productivity. This significantly influences the social behavior and economic potential. As indicated by Bashar et al. (2021), prevalence of under-five malnutrition the number of children in rural areas of

Bangladesh is very high. Therefore, knowledge about the impact of malnutrition on the health of the next generation is very important for everyone. Banu et al. (2020) in their study found that only 30 percent of the total respondents were aware of nutritional status of the child. Similarly, our study found that graduates' knowledge about the impacts of malnutrition is very low which support the findings of the above studies.

6.3.2 Challenges of Improvement of Individual Well-being

The government has taken several NFE programmes through NGOs targeting adults, both male and female, with poor skills and low income to provide them with educational opportunities. The focus of adult literacy programmes has shifted from imparting basic literacy skills to developing basic literacy and livelihood skills. Besides the government, NGOs and civil society organizations are also actively engaged in conducting adult literacy programmes in the country. The below table-6.7 shows that adult literacy rate has increased significantly from around 53 percent in 2005 to 75.6 percent in 2020.

Table 6.5: Adult literacy rate of population aged 15 years and above

	2005	2010	2015	2016	2017	2018	2019	2020
All adults	53.5	58.6	64.6	72.3	72.9	73.9	74.7	75.6
Males	58.3	62.9	67.6	75.2	75.7	76.7	77.4	78.2
Females	48.6	55.4	61.6	69.5	70.1	71.2	71.9	73.0

Source: SVRS, BBS of various years

Also, the gap between male and female adult literacy rates has narrowed significantly over the time. The current study showed that the skills-based NFE had a good contribution on the basic education of the graduates. Though, it is also alarming that 40 percent are still far from proper basic literacy.

Ali et al. (2020) conducted a study among workers and showed that above 82 percent of the respondents had low health awareness, even they did not know their blood group. They also noted that workers lacked knowledge on first-aid. The present study revealed that more than 66 percent of the respondents had little knowledge about first aid. According to the content analysis, the training manual was not designed to impart this type of knowledge. Although it is very important for any type of work place and even the daily life of any person.

Islam et al. (2020) observed in their study that previous efforts have identified the most important factors behind Road Traffic Accidents (RTA) in Saudi Arabia, Poland and Canada are low knowledge and violation of traffic rules and signals. The study also noted that lack of knowledge and awareness about traffic is the main reason for violating traffic rules in Bangladesh that have a major impact on RTA. The present study showed that above 80 percent of respondents had very few knowledge on traffic signals. Olalekan et al. (2019) studied a survey of school students in Nigeria and found that almost half (45 percent) of the respondents had low knowledge about road signs. They also opinioned on their paper that a significant knowledge gaps still exists among the students, and more efforts are needed in that regard.

The infant mortality rate in Bangladesh has decreased a large number of diarrheal diseases in recent decades. Billah et al. (2019) showed their study that between 1980 to 2015, the diarrheal death rate among children under five decreased from 198.9 per (15.1 percent) 1000 live births to 37.6 per (6 percent) 1000 live births. They also found that ORS (oral rehydration solution) or oral saline contributed greatly to this success. The present study revealed that most of the respondents have the insight the idea of the life-saving role of saline.

6.3.3 Challenges of Improvement of Social Well-being

All over the world, children are victims of various forms of violence, abuse and exploitation. Globally, it is estimated that one in two children aged 2-17 experience some form of violence each year (Guideline for the Child Protection Case Management in Bangladesh, 2023). Every year, 1 billion children worldwide are victims of physical, sexual, or emotional abuse or neglect. The Children Act 1974 was ratified just after the emergence of Bangladesh for the protection of children and their rights. The introduction of this act was a significant milestone for a new country in establishing children's rights. Mohajan (2014) mentioned that about half of the population of Bangladesh are under 18 years of age who are termed as children and 20 million of them are under 5 years of age. The paper has also been revealed that one-third of these children live below the international poverty line. Children have a fundamental right to education, balanced diet, health and nutrition, safety, participation, recreation, safe water, sanitation and hygiene. Most of the children in Bangladesh are underprivileged of these basic rights. The study also mentioned that the violation of child rights is a common matter in Bangladesh. Children are perhaps the most neglected members of our society. Constantly, they are easily subjected to all sorts of abuse. Islam and Akter (2023) mentioned in their worked that it is important for everyone to know about the signs of child abuse and everybody need to know how to deal with it. Mohajan (2012), Razzaque (2023) also found that child abuse is a common phenomenon in Bangladesh and both children and parents are not aware of child rights. Our current study found a similar picture of lack of awareness of child abuse and violence among graduates of skill-based NFE programmes.

The present survey also indicated that knowledge about rules of laws and justice was very low among the respondents. The term was very unfamiliar to the most of the

respondents. Access to justice is essential to achieving the Sustainable Development Goals (SDGs-16.3) and inclusive growth. An estimated four billion people live outside the shield of law around the world, mostly because they are poor or marginalized among them the society. They can easily be cheated by employers, evicted from their land, victimized by being strong and by fear violence. Most of the respondents in the present study were poor and marginalized persons.

Access to information (ATI) has been recognized as a key element of sustainable development adopted the Rio Declaration in 1992. In 2015, ATI was included as an SDG target: 16.10 and mentioned "Ensure public access to information and protect fundamental freedoms, according to national laws and international agreements". Theoretically, 'public access to information' refers to the presence of an effective system to meet citizens' right to seek and receive information, especially that held by or on behalf of the public authority. According to UNESCO (2020) report found that although some countries have yet to adopt it while the ATI Act is specific to public access to information, they still report on ATI's progress in other contexts. Fortunately, we have a law called "Right to Information Act 2020" in our country. Though, our study showed the knowledge about access to information is very poor.

Leisure is the time when we are not working and we can spend our time relaxing and doing the things that we enjoy. According to Iso-Ahola and Baumeister (2023), the most important feature behind the concept of leisure is intrinsic motivation, followed by 'work relationships' and 'goal-orientation'. Khan (1997) opinioned in his study that despite poverty and hard work, working women enjoy their entertainment. It's hard to analyze through conventional approaches to how people spend their leisure time in recreational activities. In fact, they assess leisure time as 'free time' or 'non-compulsory activities.'

Hammond's (2020) researched in Ghana and found a positive relationship between employees' job satisfaction and safe work environment, work-life balance, personal development and significantly level of psychological well-being. It has also been noted that work-life balance refers to the level of priority between personal and professional activities in an individual's life and the level at which work-related activities are present at home. Enjoyable leisure activities are allied with psychosocial and physical measures pertinent to health and well-being (Pressman et al., 2009). Aksoy et al. (2017) found their study that participation in recreational activities is spontaneous physical and mental engagement that has a direct influence in the lifestyle of individuals. As a result, their quality of life and job satisfaction increased significantly. On the other hand, the current study found that most of the respondents of the study have little knowledge about participating in recreational activities.

6.4 Discussion and Conclusion

This chapter of the study has revealed the challenges of human resource development and quality of life in non-formal education programmes in Bangladesh. The researcher has investigated various challenges of HRD and QOL on graduates' skills and income, entrepreneurship knowledge, opportunities of job market, contact with graduates after completing training, advanced further training facilities, improvement of graduates' physical well-being, individual well-being and social well-being. Generally, this chapter is focused on concentrations to find out the challenges of HRD and QOL issues in NFE programmes in Bangladesh.

The study has identified that skill development and income earning conditions among graduates of the programmes are significantly better. However, the study found that graduates had significantly less knowledge about IT and entrepreneurship development.

The study has also revealed that lack of contact with graduates and NGO officials after training has been identified as a cause of unemployment. Advance further training facilities for graduates help to improve the skills of graduates as well as increase the employment rate. In this study, it is found the absence of advanced further training opportunities among graduates.

The present study found that skill based NFE programmes are contributing significantly to the human resource development of this country but it has been a major concern in improving the quality of life of the graduates. Interestingly, Physical well-being is an important part for a person to develop the quality of life. Knowledge of physical wellbeing also plays a vital role to develop quality life of a graduate.

Knowledge about the need for proper hand washing, child immunization, HIV/AIDS, child malnutrition is seen meaningfully below standard among the graduates. Knowledge of first aid, traffic signals, the role of oral saline in saving lives is significantly less, all these are included in the personal well-being of the graduates. Social wellbeing is also an important element for quality of life of graduate. Child abuse and violence, rule of law and equal access to justice, leisure time with family are related to the are imbedded in the social well-being of the graduates nonetheless the study revealed that the graduate had very little knowledge of the above social well-being issues.

Indeed, such NFE programmes conducted by NGOs have great contribution in HRD of the society but the QOL of the graduates is not improved through such programmes. Challenges in both HRD and QOL components are clearly identified in these programmes. But if we address the challenges positively then it can be an opportunity for us to ultimately ensure the sustainable development of the society.

Chapter-7

Summary and Conclusion

7.1 Introduction

This chapter summarizes key findings to assess the association of human resource development and quality of life with the NFE programme – described in the previous chapters of the study. These findings have been extracted based on the research questions – where the current status and challenges of human resource development (skills, income etc.) and quality of life (physical well-being, individual well-being and social well-being) through skills-based NFE programmes in Bangladesh have been examined. For this purpose, the primary data have been collected from 385 graduates who are taken training from skill-based programme of NGOs and the data also collected from NGO officials, trainers of NGO and employer of the graduates. The content analysis has been done through the training manual of the skill-based NFE programmes of NGOs. This chapter is divided into three parts. The first section of this chapter has abridged the central questions of the study along with key observations. The second part has drawn the broader implications of the main findings and the final section describes the further research opportunities.

7.2 Research Questions and Major Findings

To examine the central research question – the situation of human resource development among graduates and knowledge of quality of life of graduates from skill-based NFE programmes in Bangladesh, it has been divided into six detailed questions. To know the skills enhancement of the graduates from NFE programmes, the current study shows that

the under privileged group of the society, especially the youth, have become proficient by being trained in the NGOs' NFE programme. In a same breath, National Skills Development Policy (2011) also mentioned, a key target group is the youth, women and low-skilled individuals, to whom access to education, training and lifelong learning will be enhanced.

This study is an attempt to explore the human resource development and knowledge of quality of life of the graduates from skills development NFE programme of NGOs in Bangladesh. It may be very rare attempt to investigate that type of issue. Education of women and girls is a serious problem in many developing and underdeveloped countries where girls drop out at elementary level due to bigotry and discriminatory attitudes (Pandya and Maniar, 2014). Whereas, this study significantly established that women and girl (33.5 percent) vigorously participated in non-formal education programmes and after completion they engaged in various types of jobs. Similarly, Anikeeva et al. (2021) mentioned that non-formal education acts as a supplement to any knowledge and fulfills the needs of an individual for self-development. The current study also found that the disadvantaged group of people become moderate skilled form this NFE programme. On the other hand, it is also revealed that the graduates have lack of practical know-how and little knowledge about updated equipment. On the other hand, the present study has showed that the contribution of skills based NFE of NGOs have an immense role on employment and income earning. Both are relatively changed by 14 percent and 90 percent respectively.

The current study is also uncovered that the large number graduates are employed with wage employment (49 percent) and self-employment (25 percent). It is also found that one-fourth graduates are engaged with self-employment. According to BBS (2018), the

female youth labour force participation rate in the labour market is less than half that of the male youth labour force in Bangladesh. Whereas, this present study also uttered that the female is ahead on the self-employment (31 percent) as well as advance on relative change of employment rate. Conversely, this study has articulated that more than one-fourth graduates (26 percent) are unemployed. It may concern issue for the authority since NGOs target maximum portion of employment of their graduates. Therefore, it may very significant issue for the policy level decision making for reducing the unemployment. Another important aspect may be for the unemployment that the NGO uphold the linkage with the graduates for very short period of time after completion of training. This issue may be the important hints for the policy formulation. The study found that graduates had significantly less knowledge about IT, lack of knowledge of entrepreneurship development, lack of contact with graduates after completion of training and absence of further training opportunities for graduates which led to increased unemployment rate. Many studies have stated in their research papers that there is still limited linkage between employers and most training providers (ADB and ILO, 2016). In the same way, the present study shows that there is an absence of formal trainee track system in non-formal skills development programmes in our country. Several studies also suggest that education and training are necessary to achieve success from entrepreneurial knowledge (Gangi Y.A. ,201; Kuswanto, Tarigan & Nasori 2023).

Even, in the current study has very limited opportunities to develop entrepreneurial knowledge in NFE programmes. Numerous studies have shown that the link between economic growth, human capital and rising incomes depends on further education and training in Ireland (FET Strategy-2014-2019). In the current study, further training capacity of graduates is extremely limited. This study has observed that in most cases further training provision of programmes for graduates is missing.

The present study has also revealed the knowledge of QOL of graduates through skills based NFE of NGOs in Bangladesh. For this, some internal components of QOL such as physical well-being, individual well-being and social well-being status among graduates in NFE programme have been examined. The study observes that the cognition of the health-related issue of the graduates of NFE programme is very weak. It is noted that SDG Goal-3 aims to achieve universal health protection and access to safe and effective medicines and vaccines. In this regard our skill based NFE is far behind from actual goal of the programme. Most of the graduates have no idea about HIV awareness, child malnutrition, importance of proper hand washing and need of child immunization. Hand washing is widely promoted as a health issue that is related to quality of life. Several studies in Bangladesh and in another places have shown that proper hand washing reduces a variety of infectious diseases among workers (Houque, 2003; Banu et al.,2021). In our present study it is revealed that a significant portion of the respondents do not have proper knowledge on the above health related issues of quality of life. According to Rahman (2020), Bangladesh has an impressive childhood immunization record. In spite of this, almost half of the respondents in the current survey were not convinced of the benefits of childhood vaccination. In our present study, it is revealed that most of the respondents have no knowledge about HIV prevention. Similar findings have been found in several previous studies. The health of children depends on their nutritional status and the future of a nation depends on the health of its children. As noted in the study of Basher et al. (2021), the incidence of malnutrition among children under five years is high in rural Bangladesh. In the same tune, our study has also revealed that respondents' knowledge about the effects of child malnutrition is very low.

The individual well-being situation of graduates of skill-based NFE programmes has been explored from the present study as it is also an important factor in quality of life. The study also indicates that majority of the graduates have lack of knowledge on proper basic education, first aid and road traffic signals which are important components of individual well-being. A portion of respondents are found lack of proper basic education. It needs to be mentioned here that proper basic education means the ability to express oneself through writing, understanding through reading and keeping daily accounts necessary for personal well-being as well as quality of life.

In a study among workers and noticed that majority (82.2 percent) of respondents lacked knowledge on first-aid, even they did not know their blood group (Ali et al.,2020). Likewise, the present study exposed that above half of the respondents had little knowledge about first aid. In fact, it is very important for any kind of workplace and is very related to improving the quality of life.

The current study has also showed that lack of knowledge and awareness about traffic signal is one of the main reasons for violating traffic rules in Bangladesh that have a major reason for road traffic accidents (RTA). Similar findings are shown in many studies that have been conducted in Nigeria, Saudi Arabia, Poland and Canada and showed that almost half (45%) of the respondents had low knowledge of road signs (Olalekan et al. 2019; Islam et al., 2020). They opined in their paper that a significant gap in knowledge between students and staff still exists and further efforts are needed.

From the study it is known that most of the graduates possessed diminutive knowledge about social well-being awareness which related to quality of life of the graduates. This elements of QOL were mistreated in these programmes. Graduates had very little knowledge about protecting children from abuse and violence, equal access to the rule of

law and justice, enjoying habits and participation in recreational activities, spending time with family, etc. The mentioned factors are related to the social well-being as well as the quality of life of the respondents. Specific SDG goal-16.2 and several SDG targets address specific forms of violence and harm against children—such as child marriage and female genital mutilation (target 5.3) and eliminating child labour, including the recruitment and use of child soldiers (target 8.7) etc. Many studies have shown that almost half of Bangladesh's population is children of aged under 18 years. and about 73 percent of children live in villages, and one-third of these children live below the international poverty line, and most of them are deprived of these basic rights (Mohajan,2012; Islam and Akter,2023; Mohajan,2014). Those studies also noted that child rights violations are common in Bangladesh and society especially parents are not aware about child rights. Our present study found a lack of awareness of child abuse and violence among graduates of skill-based NFE programmes, which is similar to previously mentioned various studies.

Access to justice is essential for achieving the Sustainable Development Goals (SDGs) and inclusive growth that is linked to quality of life. Various studies have shown that a large part of the world lives outside the protection of the law due to poor or marginalized groups in society (OECD,2016). In the present study also shows the same figure that majority of the respondents in the present study were poor and marginalized people. The survey also designated that the term was very unaccustomed to most of the respondents.

Leisure is considered as 'free time' or 'non-compulsory activities'. Hammonds (2020) states in his research that there is a positive relationship between leisure time and employees' job satisfaction, safe work environment, quality of performance of work-life balance, personal development and significantly psychological well-being. Participation

in recreational activities is impulsive physical and mental engagement that has a direct impact on a person's quality of life (Aksoy et al., 2017). Whereas, the present study found that most of the respondents of the study have few knowledge about the benefit of participating in recreational activities. On the other hand, the current study did not find a clear indication that graduates who are more knowledgeable about quality of life are more active in their careers or not. Additionally, it is clear from this study that graduates of skill-based NFE programmes have little knowledge of the components of QOL that are important for sustainable development.

7.3 Implications of the Study

This study is an initiative to explore the position of HRD and QOL of the graduates of skills based NFE programmes of NGOs in Bangladesh. Combining two different things with a unique approach is considered a very complex task; in that sense, it is a new endeavor. Most of the prior literatures have presented on the basic NFE in Bangladesh. There may have a broad gap in the area of study regarding skills based NFE and QOL of the graduates of these programmes. This piece of the study may be the initial step in this regard.

Giving a close look to the situation of HRD in skill-based NFE programmes, we can observe that the contribution of the programmes has an immense role on employment and income earnings. Both relatively have been changed significantly after skill development training. The current study further found that a large number of graduates are engaged in wage employment and self-employment. The study also states that female is ahead in self-employment as well as in relative change in employment rates. Therefore, these results should also be important for policy makers to sponsor the expansion of the effectiveness of NFE programmes.

This study also revealed that the participants' have lack of practical expertise and very few knowledge about modernized equipment. Thus, the concerned authorities can take steps to strengthen this type of programme so that the disadvantaged groups of the society can benefit from it while at the same time they can be awakened to develop the skills of the graduates. Industrial exposure visit activities for trainees should be encompassed in the course curriculum. These activities could help trainees to understand the preparation needed to adapt to their future workplace and job market.

In contrast, the current research has found that more than one fourth of graduates from this programme remain unemployed. It is very alarming for the policymaker and NGOs authorities because such kind of programme has been conducted mainly to confirm maximum employment of the graduates. To find out the causes of unemployment, the present study found that the content of entrepreneurial development is almost absent in training manual, lack of micro credit facilities, lack of post-training communication to graduates with NGOs' authorities, minimum use of modern equipment during training, short time of internship period, lack of IT knowledge of the graduates etc. By emphasizing the above issues, policy makers could be proactive in increasing employment rate.

The manual of the skill based NFE programmes of selected NGOs has been analyzed and found that only 3 percent content allotted among the overall content for the entrepreneurial subject matter. To find out the causes of the unemployment the current study has unearthed that the subject matter of entrepreneurship development is almost absent in the training manual of the programme. That is why, policymaker as well as NGO authorities should take care on this issue and arrange to incorporate in the training manual for increasing the more employment rate.

According to the current study, in this programme the opportunities of micro-credit are very limited and in most cases absent which made lead to unemployment. Considers microfinance as a tool for socio-political empowerment of the economically weak and disadvantaged people of the society (Alam & Molla, 2012). In addition, they have claimed microcredit as an effective tool which helps to increase the income of the poor by creating opportunities for self-employment. According to Abdul and Muhammad (2015), microfinance has a major role in improving self-employment through business or productive activities. They also found its positive and highly significant effect on self-employment and suggested that self-employment could twice if loans were provided on a simple basis. Awan & Ibrahim (2015) also found their study that microcredit has a positive and highly significant impact on self-employment and self-employment could be twofold if loans are provided on a simple basis. The present study, like the previous studies mentioned above, also suggests that policy makers, concerned authorities and donors should emphasize microcredit schemes for graduates to increase employment rates. That means, financial support for graduate plays an important role in their self-employment and employability. Microcredit support should be incorporated with this programme for increasing the self-employment.

Another important finding of the study is that there is very little contact between graduates and training authorities after completion of training which may lead to unemployment. This issue can be an important indication for policy making by the concerned. A web-based system called Trainee Tracking System (TTS) can be established to capture enrollment, pass out of students or graduates, recruitment, job openings and other important data. At least, traditional (non-web based) communication between graduates and training authorities can be introduced to increase the employment

rate. Indeed, a nationwide trainee tracking system can quantify the economic benefits for graduates as well as contribute to employment.

It is clear from this study that quality of life is a largely unknown subject matter in skills-based NFE programmes of NGOs in Bangladesh. QOL is a broader factor than financial development. QOL is associated with various human well-being, individual's physical well-being, personal well-being, social well-being and so on. It needs to be mentioned that quality of life is related to sustainable development. For this reason, this study attempts to explore knowledge about QOL among graduates of skill-based NFE programmes in Bangladesh. The respondents of this study have less knowledge on physical well-being. On the other hand, the SDGs aim to achieve good health for all through the use of effective medicines and vaccines (Gola-3).

The study found that majority of the graduates have no idea about HIV awareness, child malnutrition, importance of proper hand washing and need of child immunization. In this connection, Ahmed et al. (2012) stated that governments, development partners, non-government organizations and academics need to work together to improve the malnutrition situation. They also mentioned that breastfeeding and appropriate supplementation, proper health care for adolescent girls, and care for pregnant and lactating women can contribute to this. Therefore, policy makers could take action as earlier to develop quality of life.

Proper knowledge on basic education, first aid and road traffic signals are important components of individual well-being. The current study has been identified the knowledge of the graduates on some components the individual well-being. The importance of proper basic education has been mentioned earlier. For this, policy makers need to focus not only on primary education, but also on proper primary education to

ensure quality of life. This survey also found that even majority of the respondents have a gap in knowledge about first aid and traffic signals although both are related to improving quality of life. It can be taken care by the concerned authorities because QOL is very important for the sustainable development of the society which is also a vital agenda of the nation. In this regard, topics related to individual well-being such as first aid matters, awareness of traffic signal related issues etc. could be incorporated in the curriculum of these programmes.

Graduates had also very few knowledge about protecting children from abuse and violence, equal access to the rule of law and justice, enjoying habits and participation in recreational activities, spending time with family, etc. The stated elements are associated with the social well-being as well as the quality of life of the respondents. Hence, initiatives need to be taken to enrich the knowledge of social well-being among the graduates of the programme otherwise inclusive development is not possible.

All these insights into the quality of life and human resource development through skill-based NFE programmes that contribute to sustainable development can generate new understandings and avenues for further research and be helpful for policy questions and implementation.

7.4 Limitations of the Study

This study has some limitations and faced some unavoidable circumstances. Basically, it is not possible for a researcher to deal with all aspects of a problem within a limited time and resource constraints. The purpose of this study is to reveal the situation of human resources development and quality of life of graduates from non-formal education programmes of NGOs in Bangladesh. Non-formal education itself is an extensive subject

and the development of human resources and quality of life are complex phenomena which is multidisciplinary issues and interlinked with variety of components. Selection of variables for this study is also a limitation of the researcher. The term quality of life composed of internal and external variables but in this study, it has been considered some variables of internal quality of life. Furthermore, the researcher did not able to focus on basic NFE programme and the external environment of QOL at all. The current research on NFE has been conducted with only a few selected NGOs in Rajshahi division. For this reason, this study may not be generalizable to all societies and situations. The findings and results of this study may vary beyond scope and methodology.

7.5 Scope of Further Research

This study is based on cross-sectional data. A follow-up study with proper intervention can be a scope to show the cause-and-effect relationship to progress NFE programme in Bangladesh. The current research assessed the HRD and QOL of the graduates from skills-based NFE of NGOs only. So, a study could be formulated on the inclusion of government parts also. Besides, this research focused only some selected internal elements of QOL of the graduates but the other factors of the quality of life was unnoticed here. So, there could be a vest research project on more internal and external elements of quality of life of graduates through skills-based NFE programmes. That may help to understand the proper development of the graduates as well as society. We have here sought to find out predominantly the position and challenges of HRD and QOL of graduates of skill based NFE programmes. Therefore, reason and solution of these could be examined by interested one.

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APPENDICES

APPENDIX- A

RESEARCH QUESTIONNAIRE

SL.No.....

Date.....

Good wishes, this is Pranab Mukherjee. I am conducting a research study on **“Exploring the Graduates’ Quality of Life through Non-Formal Education Programme in Bangladesh: Focus on Human Resource Development”**. The aim of the study is to get the picture of Human Resources Development (HRD) as well as Quality of Life (QOL) of the graduates who acquires training from skill-based NFE of NGO in Bangladesh. I am interested in knowing about your technical skills, economic conditions, health consciousness, life skills, and awareness about social well-being.

In all the questions, I ask about your personal opinions, so there is no right or wrong answer. All the collected information will be used only for this research purpose and treated in confidence. It is also need to be mentioned here that the identity of the respondent remains completely secret. If you have any question, please feel free to contact me on email: _____ or Mobile: _____

PART-A: Demographic Information

Instruction: Please tick (✓) at the appropriate box

1. Gender: Male/ Female

2. Age:

3. Residential Area: Urban/ Rural

4. Marital status: Unmarried / Married/ Others

5. Educational Qualifications:

6. Training Provided NGO: ASHRAI/ BRAC/ CARITAS

7. Location of Training Centre: Rajshahi/ Natore/Nagoan

8. Name of Trade:

9. Employment status: Service/Self-Employed/Others:

10. Length of Service (In case of Service):

11. Income per month (in tk.) Before Training:

12. Income per month (in tk.) After Training

13. Had the opportunity to use up-to-date equipment and training materials at the training session?

1. Yes 2. No

14. Had the opportunity to impart the knowledge about entrepreneurship, marketing, financing and business planning etc. at the of training?

1. Yes 2. No

15. Had the opportunity to learn about basic computer at training session?

1. Yes 2. No

16. Do you think NGO's micro credit facility will help in self-employment after training?

1. Yes 2. No

17. Which kind of information medium do you use? (Can be multiple options)

a) Mobile b) Internet c) Daily Newspaper d) TV e) Radi

PART-B:

Instruction: Please tick (✓) at the appropriate box

(Here, SD (1) = Strongly Disagree, D (2)= Disagree, U (3)= Undecided , A (4)=Agree, SA (5) = Strongly Agree)

a. Skills development condition of graduates

		SD 1	D 2	U 3	A 4	SA 5
S1	Skill-based training programme helps to increase skills of graduates	☐	☐	☐	☐	☐
S2	Opportunities to use up-to-date equipment and training materials at the training session help to develop skills	☐	☐	☐	☐	☐
S3	Skill-based training programme has imparted entrepreneurial knowledge (skills in business planning, leadership, communication, business management, finance, marketing, etc.) that helped in managing self-employment.	☐	☐	☐	☐	☐
S4	Do you agree that the NGO-provided training is suitable for the job market?	☐	☐	☐	☐	☐

b. Income generating condition of graduates

		SD 1	D 2	U 3	A 4	SA 5
I1	Skill-based NFE programme can help to increase our income.	☐	☐	☐	☐	☐
I2	After completion of training, the linkage with the graduates of NGOs can help to increase the employment.	☐	☐	☐	☐	☐
I3	After completion of training, self-employment is facilitated if micro-loans are provided by NGOs.	☐	☐	☐	☐	☐
I4	Arrangement of further advanced training help us to increase our income tremendously.	☐	☐	☐	☐	☐

c. Knowledge about Physical well-being of graduates

		SD 1	D 2	U 3	A 4	SA 5
H1	Using safe water for drinking and daily use is good for our health	☐	☐	☐	☐	☐
H2	Washing hand properly before meal and after using latrine is very important for good our health	☐	☐	☐	☐	☐
H3	Child immunization is very important for our next generation's health	☐	☐	☐	☐	☐
H4	Free physical relationship may cause for HIV/AIDS	☐	☐	☐	☐	☐
H5	Child malnutrition hinder the good health of our next generation	☐	☐	☐	☐	☐

d. Acquaintance about Individual well-being of graduates

		SD 1	D 2	U 3	A 4	SA 5
IW1	The ability of express your-self by writing, comprehend by reading and keep daily accounts are necessary for personal welfare.	☐	☐	☐	☐	☐
IW2	The knowledge of traffic signal is required for betterment of individual's life	☐	☐	☐	☐	☐
IW3	Knowledge about first-aid is very necessary for welfare of our daily life	☐	☐	☐	☐	☐
IW4	Knowledge of the life-saving role of saline preparation	☐	☐	☐	☐	☐
IW5	Understanding the dangers of electric and gas ovens	☐	☐	☐	☐	☐
IW6	The use of information technology helps to improve individual's life	☐	☐	☐	☐	☐

e. Awareness about social well-being of graduates

		SD 1	D 2	U 3	A 4	SA 5
SW1	Knowledge about protect children from abuse and violence is essential to social well-being.	☐	☐	☐	☐	☐
SW2	Rule of law and equal access to justice can ensure social well-being.	☐	☐	☐	☐	☐
SW3	Public access to information and protection of fundamental freedoms are related to social well-being.	☐	☐	☐	☐	☐
SW4	The habit of enjoying our recreational activities is essential to social well-being.	☐	☐	☐	☐	☐
SW5	Spending leisure time with family can play an important role in social well-being	☐	☐	☐	☐	☐

* Please write point wise in below the reason of the unemployment? (If applicable)

* Could you please give your valuable opinion for the further improvement of this training programme?

Thank you for your kind co-operation.

APPENDIX- B

গবেষণা প্রশ্নমালা

SL. No.:

Date:

মহাশয়,

শুভেচ্ছা। আমি প্রণব মুখার্জী, সহকারী অধ্যাপক ও বিশেষ ভারপ্রাপ্ত কর্মকর্তা, মাউশি, বাংলাদেশ, ঢাকা। আমি শিক্ষা ও গবেষণা ইনস্টিটিউট, রাজশাহী বিশ্ববিদ্যালয় থেকে একটি একাডেমিক গবেষণা করছি, যার শিরোনাম Exploring the Graduates' Quality of Life through Non-Formal Education Programme in Bangladesh : Focus on Human Resource Development। এই গবেষণার উদ্দেশ্য বাংলাদেশে এনজিও পরিচালিত আয় সৃজনীমূলক উপ-আনুষ্ঠানিক শিক্ষা কর্মসূচির মাধ্যমে প্রশিক্ষণ গ্রহণকারীদের মানবসম্পদ উন্নয়ন ও জীবনমান উন্নতির ধারা অনুসন্ধান/ অনুধাবন করা। এইজন্য আমি প্রশিক্ষণ গ্রহণকারীদের নিকট থেকে জানতে আগ্রহী, তাঁদের কারিগরী দক্ষতা অর্জন, আয় সৃজনীর অবস্থা, স্বাস্থ্য সংক্রান্ত সচেতনতা, জীবন দক্ষতা এবং সামাজিক কল্যাণ সংক্রান্ত জ্ঞানসমূহ।

প্রতিটি প্রশ্নে আপনার ব্যক্তিগত মতামত চাওয়া হয়েছে, তাই এখানে সঠিক বা ভুল উত্তর বলে কিছু নেই। সংগৃহীত সকল তথ্যসমূহ অত্যন্ত বিশ্বস্ততার সাথে শুধুমাত্র আমার গবেষণার কাজে ব্যবহৃত হবে। উল্লেখ্য উত্তরদাতার পরিচয় এখানে সযত্নে গোপন রাখা হবে। এছাড়াও আপনার প্রশ্নমালা সংক্রান্ত কোন ধরনের প্রশ্ন থাকলে অনুগ্রহপূর্বক প্রদত্ত মোবাইল নম্বরে (-----) যোগাযোগ করার জন্য অনুরোধ করছি।

PART-A: ব্যক্তিগত তথ্য

(নিচের প্রশ্নগুলোর যে কোন একটি অপশনে টিক (✓) চিহ্ন দিন। প্রযোজ্য ক্ষেত্রে সংক্ষেপে লিখুন)

১. লিঙ্গ :

২. বয়স:

৩. বাসস্থান : শহর/ গ্রাম

বৈবাহিক অবস্থা : বিবাহিত/ অবিবাহিত/ অন্যান্য-----

৪. শিক্ষাগত যোগ্যতা :
 ৫. যে এনজিও হতে প্রশিক্ষণগ্রহণ করেছেন : আশ্রয়/ কারিতাস/ ব্র্যাক
 ৬. প্রশিক্ষণ কেন্দ্রের অবস্থান : রাজশাহী/নাটোর/নওগাঁ
 ৭. ট্রেডের নাম (প্রশিক্ষণের বিষয়) : -----
 ৮. কর্মসংস্থানের অবস্থা : চাকুরী/স্ব-কর্মসংস্থান/ অন্যান্য-----
 ৯. কর্মকালের ব্যাপ্তি (কর্মরত হলে) -----
 ১০. প্রশিক্ষণের পূর্বে মাসিক আয় (টাকায়) : -----
 ১১. প্রশিক্ষণের পরে মাসিক আয় (টাকায়) : -----
 ১২. অধুনিক যন্ত্রপাতির সাহায্যে প্রশিক্ষণের সুযোগ ছিল কী?
 ১৩. প্রশিক্ষণে উদ্যোক্তা উন্নয়ন বিষয়ে শেখার সুযোগ ছিল কী?
 ১৪. প্রশিক্ষণে বেসিক কম্পিউটারের শেখার সুযোগ ছিল কী?
 ১৫. আপনি কী মনে করেন এনজিও কর্তৃক ক্ষুদ্রঋণের ব্যবস্থা প্রশিক্ষণার্থীদের স্বকর্মসংস্থানের হার বৃদ্ধি করতে সহায়তা করবে?
 ১৬. তথ্য সংগ্রহের জন্য আপনি কোন ধরনের মাধ্যম ব্যবহারি করেন? (একাধিক অপশন হতে পারে)
- ক) মোবাইল খ) ইন্টারনেট গ) খবরের কাগজ ঘ) টেলিভিশন ঙ) বেতার

PART-B: গবেষণা সংক্রান্ত তথ্য

(নিচের প্রশ্নগুলোর যে কোন একটি অপশনে টিক (V) চিহ্ন দিন।)

ক. কারিগরি দক্ষতার অবস্থা

মানসমূহ : ১= সম্পূর্ণ ভিন্নমত (সভি), ২= ভিন্নমত (ভি), ৩=নিরপেক্ষ (নি), ৪= একমত (এ), ৫= সম্পূর্ণ একমত(সএ)

		সভি (১)	ভি (২)	নি (৩)	এ (৪)	সএ (৫)
দ.১	দক্ষতা উন্নয়ন প্রশিক্ষণ দক্ষতা বৃদ্ধিতে সহায়ক।	☐	☐	☐	☐	☐
দ.২	প্রশিক্ষণের সময় অত্যাধুনিক যন্ত্রপাতি ও সরঞ্জামাদি ব্যবহারের সুযোগ দক্ষতা বৃদ্ধিতে সাহায্য করে।	☐	☐	☐	☐	☐
দ.৩	প্রশিক্ষণ থেকে শিল্পোদ্যোগ (উদ্যোক্তা উন্নয়ন),পুঁজির সংস্থান, হিসাব সংরক্ষণ, বাজারজাকরণ,ব্যবসা পরিকল্পনা ইত্যাদি সম্পর্কে জ্ঞানার্জন স্বকর্মসংস্থান পরিচালনার জন্য সহায়ক।	☐	☐	☐	☐	☐
ক.৪	দক্ষতা উন্নয়ন প্রশিক্ষণ কর্মবাজারের জন্য খুবই উপযোগী।	☐	☐	☐	☐	☐

খ. আয় সৃষ্ণীর অবস্থা

		সভি (১)	ভি (২)	নি (৩)	এ (৪)	সএ (৫)
আ.৬	দক্ষতা উন্নয়ন প্রশিক্ষণ আয় বৃদ্ধিতে সাহায্য করে।	☐	☐	☐	☐	☐
আ.৭	প্রশিক্ষণ শেষে, এনজিও কর্তৃক ‘স্নাতকদের সাথে যোগাযোগ প্রক্রিয়া’ কর্মসংস্থান বৃদ্ধিতে সাহায্য করে।	☐	☐	☐	☐	☐
আ.৮	প্রশিক্ষণ পরবর্তী এনজিও কর্তৃক ক্ষুদ্র ঋণ সুবিধা স্বকর্মসংস্থান বৃদ্ধিতে সাহায্য করে।	☐	☐	☐	☐	☐
আ.৯	উচ্চতর পুণঃপ্রশিক্ষণের ব্যবস্থা আমাদের আয় বৃদ্ধিতে আরো সাহায্য করতে পারে।	☐	☐	☐	☐	☐

গ. স্বাস্থ্যগত কল্যাণ সম্পর্কে জ্ঞান

		সভি (১)	ভি (২)	নি (৩)	এ (৪)	সএ (৫)
স্বা.১	নিরাপদ পানি পান এবং রান্নাসহ অন্যান্য কাজে ব্যবহার স্বাস্থ্যের জন্য ভালো।	☐	☐	☐	☐	☐
স্বা.২	খাবার গ্রহণের পূর্বে এবং মলত্যাগের পর সঠিক ভাবে হাত ধোওয়া স্বাস্থ্যের জন্য খুবই গুরুত্বপূর্ণ।	☐	☐	☐	☐	☐
স্বা.৩	পরবর্তী প্রজন্মের স্বাস্থ্যের জন্য শিশুদের নিয়মিত টিকাদান খুবই গুরুত্বপূর্ণ।	☐	☐	☐	☐	☐
স্বা.৪	অনিয়ন্ত্রিত/অবাধ দৈহিক মেলামেশা এইচ আই ভি/ এইডস এর একটি অন্যতম কারণ।	☐	☐	☐	☐	☐
স্বা.৫	পরবর্তী প্রজন্মের স্বাস্থ্যের জন্য শিশুদের অপুষ্টি একটি বড় বাঁধা।	☐	☐	☐	☐	☐

ঘ. ব্যক্তিগত কল্যাণ সম্পর্কে জ্ঞান

মানসমূহ : ১= সম্পূর্ণ ভিন্নমত (সভি), ২= ভিন্নমত (ভি), ৩=নিরপেক্ষ (নি), ৪= একমত (এ), ৫= সম্পূর্ণ একমত(সএ)

		সভি (১)	ভি (২)	নি (৩)	এ (৪)	সএ (৫)
ব্য.১	লেখার মাধ্যমে নিজেকে প্রকাশ, পড়ে বুঝতে পারা এবং দৈনন্দিন হিসাবের জ্ঞান থাকা প্রাত্যহিক জীবন অতিবাহিত করার জন্য খুবই প্রয়োজন।	☐	☐	☐	☐	☐
ব্য.২	ট্রাফিক সংকেত সম্পর্কে জ্ঞান থাকলে অনেক ক্ষেত্রে সড়ক দুর্ঘটনা এড়ানো সম্ভব।	☐	☐	☐	☐	☐
ব্য.৩	প্রাথমিক চিকিৎসা (ফাস্ট এইড) সংক্রান্ত জ্ঞান থাকা দৈনন্দিন জীবনের জন্য খুবই গুরুত্বপূর্ণ।	☐	☐	☐	☐	☐
ব্য.৪	স্যালাইন তৈরী সম্পর্কে জ্ঞান ব্যক্তি জীবনকে সহজ করে তুলতে সাহায্য করে।	☐	☐	☐	☐	☐
ব্য.৫	সঠিক বিদ্যুতের ব্যবহার ও গ্যাস উন্নয়ন ব্যবহার ব্যক্তি জীবনকে মসৃণভাবে চলতে সহায়তা করে।	☐	☐	☐	☐	☐
ব্য.৬	তথ্য প্রযুক্তির জ্ঞান ব্যক্তি জীবন উন্নয়নে সহায়তা করে।	☐	☐	☐	☐	☐

ঙ. সামাজিক কল্যাণ সম্পর্কে জ্ঞান

		সভি (১)	ভি (২)	নি (৩)	এ (৪)	সএ (৫)
সা.১	শিশুদের নির্যাতন ও সহিংসতা থেকে রক্ষা করার বিষয়ে জ্ঞান সামাজিক কল্যাণের জন্য অপরিহার্য	☐	☐	☐	☐	☐
সা.২	আইনের শাসন এবং ন্যায়বিচারের সমান সুযোগ সামাজিক কল্যাণ নিশ্চিত করতে পারে	☐	☐	☐	☐	☐
সা.৩	তথ্যে জনসাধারণের প্রবেশাধিকার এবং মৌলিক স্বাধীনতার সুরক্ষা সামাজিক কল্যাণের সাথে সম্পর্কিত	☐	☐	☐	☐	☐
সা.৪	বিনোদনমূলক অনুষ্ঠান উপভোগ সামাজিক কল্যাণের অন্তর্ভুক্ত।	☐	☐	☐	☐	☐
সা.৫	পরিবারের সাথে অবসর সময় অতিবাহিত করা সামাজিক কল্যাণের জন্য বিশেষ ভূমিকা রাখতে সক্ষম।	☐	☐	☐	☐	☐

** কর্মে নিয়োজিত না থাকলে তার কারণ পয়েন্ট আকারে নিচে লিখুন :

** প্রশিক্ষণ কার্যক্রমটির অধিক কার্যকারিতার জন্য আপনার মূল্যবান মতামত বা পরামর্শ থাকলে পয়েন্ট আকারে নিচে লিখুন :

আপনার সদয় সহযোগিতার জন্য আপনাকে অসংখ্য ধন্যবাদ।

APPENDIX- C

Interview Schedule for the Trainer

For interview with the **Trainer**, some questions have been planned for finding the answer of this objective.

Item 1: Personal Information (No personal data will be used by any means)

- Sex: ● Age: ● Educational Qualification:
- Name of NGO: BRAC/ASHARAI/CARITAS
- Name of Trade:
- Length of Service:
- Profession:
- What are your feelings about this job?
- What kind of work do you execute?
- What are some of your motivations for doing your job?

Item 2: Skills, Income & Employment

Q1. How are the graduates benefited from your training programme?

Q2. How could the effectiveness of the training programme be increased? Please provide your opinion in details.

Q3. Do you follow 'National Technical and Vocational Qualification Framework' (NTVQF) for conducting the training programme?

Q4. Do you follow 'Competency Based Training & Assessment' (CBT&A) as training procedures?

Q5. How could the employment rate of the graduates be more increased? Please provide your opinion in details.

Item 3: Physical wellbeing / Health Issues

Q6. Do you think that the graduate should have the knowledge about 'the safe water for drinking and other daily uses', 'Child immunization', 'Consciousness about HIV', 'harmfulness about Child malnutrition', 'awareness about cleanness', etc.?

- Why? Or why not? Could you please give your elaborated opinions here?
- Does the training manual incorporate these issues?
- Do you feel that these issues should be incorporated in the training manual? (if not incorporated)

Item 4: Individuals' wellbeing Issues

Q7. Do you think that the graduate should have the knowledge about 'Basic education', 'the traffic signal', 'use of first-aid', 'making saline', 'the proper use of electricity and gas stove', 'The use of information technology', etc.?

- Why? Or why not? Could you please give your elaborated opinions here?
- Does the training manual incorporate these issues?
- Do you feel that these issues should be incorporated in the training manual? (if not incorporated)

Q8. Do you believe the above issues can contribute to improving the Quality of Life (QOL) of graduates of income generating NFE programmes of NGOs?

- Why? Or why not? Could you please give your elaborated opinions here?

APPENDIX- D

Interview Schedule for the Employer

For interview with the **employer**, some questions have been planned for finding the answer of this objective.

Item 1: Personal Information (No personal data will be used by any means)

- Sex:
- Age:
- Educational Qualification:
- Name of NGO: BRAC/ASHARAI/CARITAS
- Name of Trade:
- Length of Service:
- Profession:
- What are your feelings about this job?
- What kind of work do you execute?
- What are some of your motivations for doing your job?

Item 2: Skills, Income & Employment

- Q1. Are you satisfied in employing graduates of NGOs and satisfied with their skills?
- Q2. How could the skills of the graduates be increased through the training programme of NGOs? Please provide your opinion in details.
- Q3. How could the employment rate of the graduates be further increased? Please provide your opinion in details.

Item 3: Physical wellbeing / Health Issues

- Q4. Do you think that the graduate should have the knowledge about 'the safe water for drinking and other daily uses', 'Child immunization', 'Consciousness about HIV', 'harmfulness about Child malnutrition', 'awareness about cleanness', etc.?

- Why? Or why not? Could you please give your elaborated opinions here?
- Do you feel that these issues should be incorporated in the training programme? (if not incorporated)

Item 4: Individuals' wellbeing Issues

Q5. Do you think that the graduate should have the knowledge about 'the traffic signal', 'use of first-aid', 'making saline', 'the proper use of electricity and gas stove', 'The use of information technology', etc.?

- Why? Or why not? Could you please give your elaborated opinions here?
- Do you feel that these issues should be incorporated in the training programme? (if not incorporated)

Item 5: Social wellbeing Issues

Q6. Do you think that the graduate should have the knowledge about 'protect children from abuse and violence', Rule of law and equal access to justice, 'Public access to information and protection', 'The habit of enjoying our recreational activities 'Spending leisure time with family', etc.?

Q7. Do you believe the above issues can contribute to improve the Quality of Life (QOL) of graduates of income generating NFE programs of NGOs?

- Why? Or why not? Could you please give your elaborated opinions her

APPENDIX- E

Interview Schedule for the NGO officials

For interview with the **NGO officials**, some questions have been planned for finding the answer of this objective.

Item 1: Personal Information (No personal data will be used by any means)

- Sex:
- Age:
- Educational Qualification:
- Name of NGO: BRAC/ASHARAI/CARITAS
- Name of Trade:
- Length of Service:
- Profession:
- What are your feelings about this job?
- What kind of work do you execute?
- What are some of your motivations for doing your job?

Item 2: Skills, Income & Employment

Q1. What types of learners have been getting training from your organization?

- Which kinds of trades are being offered from this organization?
- What is the ratio of male-female participants here?

Q2. How are the graduates benefitted from your training programme?

Q3. How could the effectiveness of the training programme be increased? Please provide your opinion in details.

Q4. Do you follow 'National Technical and Vocational Qualification Framework' (NTVQF) for conducting training programme?

Q5. Do you follow 'Competency Based Training &Assessment' (CBT&A) as training procedures?

Q.6 Do you use 'Competency Skills Log Book' (CSBL) for the assessment of your learners?

Q7. Do you believe for the further skills development of the graduates need upgrades or its necessary to bring changes to the training procedure or training manual ?

➤ Why? Or why not? Could you please give your elaborated opinions here?

Q8. How could the employment rate of the graduates be further increased ? Please provide your opinion in details.

Item 3: Physical wellbeing / Health Issues

Q9. Do you think that the graduate should have the knowledge about 'the safe water for drinking and other daily uses', 'Child immunization', 'Consciousness about HIV', 'harmfulness about Child malnutrition', 'awareness about cleanness', etc.?

➤ Why? Or why not? Could you please give your elaborated opinions here?

➤ Does the training manual incorporate these issues?

➤ Do you feel that these issues should be incorporated in the training manual? (if not incorporated)

Item 4: Individuals' wellbeing Issues

Q10. Do you think that the graduates should have knowledge about 'the traffic signal', 'use of first-aid, 'making saline', 'the proper use of electricity and gas stove', 'The use of information technology', etc.?

➤ Why? Or why not? Could you please give your elaborated opinions here?

➤ Does the training manual incorporate these issues?

➤ Do you feel that these issues should be incorporated in the training manual? (if not incorporated)

Item 5: Social wellbeing Issues

Q11. Do you think that the graduate should have the knowledge about 'protect children from abuse and violence', Rule of law and equal access to justice, 'Public access to information and protection', 'The habit of enjoying our recreational activities 'Spending leisure time with family', etc.?

- Why? Or why not? Could you please give your elaborated opinions here?
- Does the training manual incorporate these issues?
- Do you feel that these issues should be incorporated in the training manual? (if not incorporated)

Q12. Do you believe the above issues can contribute to improving the Quality of Life (QOL) of graduates of income generating NFE programmes of NGOs?

- Why? Or why not? Could you please give your elaborated opinions here?

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Exploring the Employment Situation through Non-Formal Education Programme of NGOs in Rajshahi Division

Pranab Mukherjee*

Abstract

Non-Formal Education (NFE) programme is a remedial literacy programme which perform to impart the basic knowledge and skills to the under privileged people at outside the formal institution. NGOs have a vital role for working on NFE in Bangladesh. This paper is an effort to explore the employment situation of the graduates from income generating non-formal education programme of NGOs, where the status of graduates related to their skills acquisition from the NGOs' programme of NFE, the employment situation of graduates and expose the causes of unemployment of the graduates have been examined. The data was collected from 385 graduates for questionnaire survey and 18 respondents (Trainers, Employers and NGO Officials) for in-depth interviewing from Rajshahi division of Bangladesh. The current study is found that the disadvantaged group of people become moderate skilled from this NFE programme of NGOs. The researcher have also uncovered that the large number graduates are employed (73%) as well as one-fourth graduates are engaged with self-employment (25%). This study also uttered that the female are ahead on the self-employment as well as advance on relative change of employment rate. Conversely this study has articulated that more than one-fourth graduates are unemployed (27%) of the programme. This paper also attempts to find out the causes of the unemployment of this programme and try to establish the implications for the concerned authorities. The findings of the study may important to the policy maker for encouraging the intensification of the programme at the same time for the unemployed graduates may concern issue for the authority.

Keywords: Non-Formal Education, Income generating Non-Formal Education, Employment Situation.

1. Introduction

Non-Formal Education (NFE) is a purposeful and planned form of learning that generally occurs outside the formal educational institutions (Non-Formal Education Policy, 2006). It is an organized and systematic educational activity to provide need-based learning to particular sub-groups in the population like adults as well as children who are deprived from the formal education. NFE may cover basic and continuing educational programmes to impart basic literacy, including life skills and general cultural knowledge. As described in the Act of Non-Formal Education-2014, the nature and style of non-formal education is classified into two i.e. a) Non-Formal Primary Education and, b) Non-formal Adult and Lifelong Education. In fact, Adult and non-formal education programmes are deeply

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intelinked specially in the case of income generation activities. It is also called Income Generating Non-formal Education Programme which helps to create employment. In this current study the researcher focused on this kind of NFE programme.

Sukontamarn (2004) also stated that NGOs are seriously involved in NFE in Bangladesh. In addition, Sakya (2000) mentioned that Bangladesh has very strong network of NGOs and they are doing notable work in the field of NFE. According to Islam & Mia (2007), NFE has become an important phenomenon in Bangladesh where many international, national and local NGOs are providing education through income generation programmes for the poor and disadvantaged groups.

Employment is defined as what individual do as paying job. According to Oxford Learner's Dictionary, "Especially when it is done to earn money, the state on being employed. It is also called paid-employment." On the other hand Self-employment is the state of working for oneself rather than an employer. As per The Cambridge English Dictionary, "Not having for an employment but finding work for yourself or having your own business." Conversely unemployment occurs when people are without work while actively searching for employment. Oxford Learner's Dictionary mentioned that the number of people without a job is called unemployment. In fact the employment situation is illustrated in detail the employment, self-employment, unemployment and so on (Bangladesh Bank, 2008). The current study also tried to express this.

1.1 Statement of the Problem

NFE is very much connected with skills development and income generation. According to Ahmad and Ahmed (2002), the government have identified that the need for income generation NFE programmes for the learners because it helps them to strengthen basic skills and help to improve their lives through employment. Nevertheless, the study described that our country still emphasizes mainly on literacy campaign for NFE Programme and limited facilities for skilled development related programmes which helps to increase income-generating manpower. Bangladesh has faced still 24.30% poverty rate along with 2.7 million labor force being unemployed and 30.59% labor force being illiterate (BBS-2017). Even extremely poor population of the country is now at 24.4 million, which stand for the 4th largest extreme poor population of the world (World Bank report on Poverty and Shared Prosperity-2018). One significant concern of the labour force is nearly 51 percent has no schooling and only a small fraction, 0.4 percent, has received vocational/technical/skills development training (Titumir & Hassain, 2003). In this situation, the skills acquisition through NFE is very effective and it can help to upgrade that kind of marginal and disadvantages group. In our country NGOs play vital roles for NFE. That is why, it is necessary to indentify the employment circumstance for NGO-run income generating NFE programmes that interlinked to develop human resource.

1.2 Objectives

The general objective of this study is to know the employment circumstance of the graduates from income generating non-formal education programme of NGOs at Rajshahi division. To achieve the main objective researcher have to attain some following specific objectives:

1. To find the status of graduates related to their skills acquisition from the income generating NFE Programme of NGOs.
2. To reveal the employment situation of graduates from the income generating NFE Programme of NGOs.
3. To find out the causes of unemployment of the graduates from the income generating NFE Programme of NGOs.

2. Review of Literature

A lot of studies on the NFE for basic literacy mostly emphasizing the development of basic education and life skills for the graduates have been conducted in Bangladesh and abroad. However, the income generating NFE remains relatively neglected and studies on employment situation of the graduates' are also very limited. A brief review of the few important studies available in the field of NFE in Bangladesh and abroad are reviewed below.

Egbezor & Okanezi (2008) showed their study that NFE provided life skills and employment opportunities to the graduates of these programmes in Nigeria. Quantitative method was used for this study. This study also investigated that employment opportunities of the learner of NFE gradually increased but the overall employment situation was ignored in this study.

Ihejirika (2012) examined in his study how adult and NFE programmes can be used to reduce rural poverty in Nigeria. In this paper the researcher investigated that income generating NFE programmes can achieve some degree of personal development, improved health conditions, high standard of living, economic survival skills, all of which can enable to eradicate poverty. He also identified that some efforts turned into failure due to office corruptions and lack of proper mobilization. However the overall employment situation was not the concern of this study.

Mayombe & Lombard (2015) did a study at South Africa and found that non-formal adult education and training (NFET) was arranged to meet the training needs of adult who have been deprived of formal education to promote access to opportunities for skills acquisition and employment for improving social and economic situation. It was also appeared that a significance correlation between this training programme and skills acquisition of the graduates for successful employment. Here the unemployment issues were not identified.

Islam & Mia (2007) studied on the innovative element of NFE of Bangladesh in terms of its contribution towards poverty alleviation through income generating programmes. However, the researchers did not find the overall employment situation.

Thus, it is shown that none of the reviewed literatures has fully comprehended the field of the current study. Several studies have been conducted on relation with basic education and development of life skills, some on skills development programmes of NFE and income generation activities; few researches on role of NFE for poverty alleviation; some study on contribution of NFE on economic growth and few studies have been conducted on the assessment of NFE as a tool to human resource development. It is mentionable that NFE programmes act as a tool to build opportunities for marginalized social groups in order to bridge the gap between unemployment and employment (Georgiadou, et al. 2009 cited in Mayombe, 2017). There are some income generating NFE programmes of NGOs which could be promoted to income generation towards employment of the graduates as well as contribute to the human resources development. For this reason, a thorough research have been demanded on this issue.

3. Research Methodology

This section has been demonstrated the study area, determination of sample size, sources of data and data collection instruments, analysis techniques and procedures of data interpretation. Creswell (2014) mentioned that methodology is the process of research. This study has concentrated on Explanatory Sequential Mix Method research approach. For that, in this study the quantitative approach has been attained firstly after that qualitative data has been gathered for better and deeper understanding of the research problems as well as to depict a significant conclusion.

3.1 Selection of Study Area

Three districts have been selected purposively from Rajshahi division. The selected districts are Nagoan, Natore and Rajshahi. Thirty-five NGOs related to education programme are engaged of those selected three districts, among them only ten percent are engaged with income generating NFE programme (CAMPE V.II, 2016). One regional, one national and one international level NGO are considered for this study. The selected NGOs are Caritas Bangladesh as national, Ashrai as regional and BRAC as international. The NGOs are doing their activities in Rajshahi division as well as national and international levels.

3.2 Determination of Sample Size and Distribution

3.2.1 Quantitative Survey

Last four years (2015-2018) graduates from the selected three NGOs covering the selected three districts are the population for this study. Total number of the study population is 1130 (BRAC- 400, Caritas Bangladesh- 540 and Ashrai-190). The following formula has been used in determine the ideal sample size at a given confidence level (Israel, 2003):

$$n = \frac{z^2 \times p \times q}{d^2} = \frac{1.96^2 \times 0.5 \times 0.5}{0.05^2} = 385$$

[When p is unknown, generally it is best to set it at .5]

Where, n = Sample size; p = the probability (0.5); $q = (1-p)$ is the reverse probability; z = the area of the standard normal curve (1.96, at 95% confidence Level); d = the desired level of precision.

By using the above formula, total number of sample has resulted in 385 graduates. After that, the Stratified Random Sampling procedure was followed to draw the sample for the quantitative part of the study. The proportional method is using for distribution of the total number of sample. Sample size for each study NGO (n_i) has been calculated by using the following formula:

$$n_i = \frac{N_i}{N} \times n$$

Where, n_i = Sample size of study NGOs; N_i = Study population of selected NGOs; N = Total Number of study population; n = Sample Size.

By using this formula, following table have shown the distribution of samples among the selected NGOs.

Table 3.1: Distribution of the respondents of the study NGOs

Study NGOs	Frequency	Percent
Caritas Bangladesh	184	48
BRAC	136	35
Ashrai	65	17
Total	385	100

3.2.2 Qualitative Survey

Purposive sampling has been performed for the interview with the Trainers, NGO officials and Employers. A total of 18 respondents covering 6 from each NGO and respondent categories have been recruited for the interview.

3.3 Instrument of Data Collection

Questionnaire survey and In-depth interview: The primary data has been gathered by a questionnaire survey method from the selected respondents of this study. It is mentioned that the researcher received a total of 368 usable responses or above 95% of the sample for analysis. Rest of the 17 respondents was rejected due to presenting incomplete date or non-respondents. It was developed five point Likert scale., where numeral 1 meant for 'Strongly Disagree' (SD) and 5 for 'Strongly Agree'(SA); 2, 3, and 4 for Disagree (D), Neutral (N) and Agree (A) respectively in between them. Three separate set of semi-structured interview schedule has been used for the each category of respondents.

3.4 Collection of Data and Analysis Procedure of data

After the completing of data processing, the researcher turned his attention to analyzing both types of data. To answer the research questions, the descriptive statistic has been performed by using the statistical software SPSS (Statistical Package for Social Science) 20 version. Frequency, mean, mode, weighted average, Standard Deviation (SD), range have been adopted for descriptive analysis. On the other hand, thematic based analysis has been conducted for the qualitative data by semi-structured interviewing schedule.

4. Result and Discussion

4.1 Descriptive statistics of demographic Characteristics

The table 4.1 shows 66% male contrast to 34% female respondents that stand for a notable number of female are engaging with income generating NFE Programme of NGO in Bangladesh. The residence status of respondents exposed rural (63%) are higher than the urban (37%) that indicates the NFE Programme of NGOs is strongly concerned in rural part of Bangladesh.

Age group of 21-29 years demonstrates the highest (48%) graduates among the other groups. The rest of the age groups are 20 years & below (27%) and 30 years & above (14%) that indicates all the graduates are adults and it is significance in non-formal education programmes. It is very significant that the highest wage-employment rate (52%) exists in the age of 21-29 years. Alternatively the highest self-employment rate (30%) and highest unemployment rate (28%) subsist in the age below 20 years.

The study uncovered that most of the graduates completed their formal education upto grade Five and blow (48%) compare to grade Five to Eight (41%) and only 11% of garduates had the experience of Nine or above years formal education. So the picture is showed that the most of the graduates had experience only five years or below with formal education which also relevant with the charecteristics of non-formal education.

Marital status revealed 51% unmarried compare to 45% married and 4% divorce. The study found that the married males (28%) are significantly higher than the married female (17%).

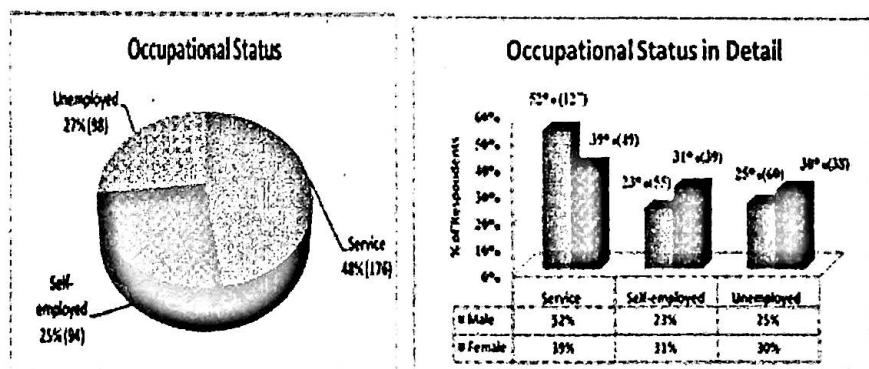
The figure 4.1 shown 48% graduates were wage-employed and 25% graduates engaged in self-employed. The study observed 27% unemployed graduates. The study was also found that individually the employment rate of the male was 75% compare to 70% female. On the other hand the survey revealed that the highest wage-employment (52%) rate is male and the female are shown in highest self-employment (31%) rate as well as highest unemployed (30%) rate.

Table 4.1: Demographic Characteristics (N=368)

Characteristic	Category	Frequency	Percentage
Gender	Male	242	65.80
	Female	126	34.20
Age	≤ 20 years	139	38.00
	21-29 years	178	48.00
	≥ 30 years	51	14.00
Residence	Urban	135	36.70
	Rural	233	63.30
Marital Status	Unmarried	186	50.54
	Married	167	45.38
	Others	15	4.08
Educational Level	≤ 5 Grade	178	48.00
	6-8 Grade	149	41.00
	≥ 9 Grade	41	11.00
Occupational Status	Wage-employed	176	47.80
	Self-employed	94	25.60
	Unemployed	98	26.60

Source: Field Work, 2019

Figure 4.1: Occupational Status



Source: Field work, 2019

4.1.1 Descriptive Statistics of technical skills and income generating aspects

The questionnaire survey with the selected graduates was conferred here. In table 4.2 shown the average mean and standard deviation of the items of technical skills acquisitions of graduates were 3.70 and 0.51 respectively. Weighted Average Score is >3.2 indicate positive or strongly positive result (Kang & Sharma, 2015). So, from the result it can be said that the income generating NFE has a great influence on the skills acquisition of the graduates. However, the item named S3 regarding after completion of training the work ability of the graduates individually found restrained result. Here the weighted average mean score was below 3 and only 25% (88) respondents were the agreed or strongly agreed with this item. It was a vital finding of the survey that graduates wear unable to work independently after

getting training. Another item S4 indicated the graduates agreed that the knowledge about entrepreneurship, marketing, financing and business planning could help to perform selfemployment. Quite the reverse from the field survey the overall self-employment rate was found only 25%. In respect of income generating perspective the study has been shown that the weighted average score and SD was 3.96 and 0.66 respectively. The result indicated the income generating NFE of NGOs have vital role on the increasing income of the graduates. In this study graduates agreed that the micro credit facility and arrangement of further advanced training could play imperative role on increasing income..

Table 4.2: Technical Skills and Income Generating Issues of Graduates (N=363)

Items of Technical Skills Issues			Items of Income Generating Issues		
		*W.A. **S.D.		*W.A. **S.D.	
S1	Skills development training helps to increase skills of trainees.	4.32 0.51	I1	SDP of NGOs can help to increase our income.	4.35 0.67
S2	Opportunities to use up-to-date equipment and training materials at the training session helps to develop skills.	3.85 0.51	I2	After completing training, received micro credit from NGO help us to fabricate self-employment.	3.83 0.65
S3	After completing training from Skills Development Programme (SDP) of NGOs I able to work without supervision.	3.91 0.85	I3	After completion of training, received micro credit from NGO help us to initiate self-employment.	3.85 0.64
S4	SDP of NGOs has imparted the knowledge about entrepreneurship, marketing, financing and business planning etc. for managing self-employment	3.61 0.71	I4	Arrangement of further advanced training help us to increase our income tremendously.	3.98 0.67
S5	The provided trades of SDP of NGOs are appropriate for the job market.	4.24 0.71			
	Mean of W.A. and S.D.	3.76 0.51		Mean of W.A. and S.D.	3.96 0.66

Source: Field Study, 2019

*W.A. = Weighted Average

** S.D. = Standard Deviation.

4.1.2 Relative change for the contribution of income generating NFE of NGOs

The table 4.3 shown 73% graduates were employed after completion of training Programme compare to 58% graduates wear employed before training. That means, the employment rate is relatively changed by almost 15% after getting income generating NFE Programme. The table also shown the mean of income of the respondent is Tk. 3701 per month after completion of training on the contrary the mean income Tk.1935 was earned by the graduates before training. Subsequently, after completion of training the mean of income is relatively changed by almost two times (91%) than mean of income of before training and the employment rate is relatively increased by almost 15%. The scenario uttered income generating NFE Programme of NGO has significance contribution in increasing earnings of the graduates.

Table 4.3: Relative Changes for the contribution of the programme

Characteristics	Before	After	Relative change
Employment Status	58.42%	73.40%	14.97%
Mean Income	Tk. 1935	Tk. 3701	91.27%

Source: Field Study, 2019

4.2 Thematic analysis for interview with different respondents

The researcher has conducted interview with different categories of respondents which mentioned earlier in the methodology part. From the interpretation of interview with the three different groups it is found that this programme of the NGOs is benefitted for both the graduates and the organization too. All the trainers and officials of this current study have expressed that the disadvantaged group of people like poor, unemployed, frustrated young, women, disabilities and even transgender are the stakeholders of the programmes. Similarly the researcher also found from the survey with the graduates that the most the participants of the programmes was dropout (89% was below five to eight grades). All the respondents group of interview agreed that the graduates acquire the technical skill from the programme. Employers also mentioned that it is good initiative for the NGOs consequently their organization can recruit the manpower that is better than novices. So the employers are also profited. Trainer and officials opinioned that after completion of the programme a large number of the graduates involved with income generating activities with different organization and initiated for self-employment. The survey revealed that the selfemployment (F31%-M23%=8%) rate and after completion of training the increased employment (F29%-M24%=6%) rate of female is higher than the male. So the female graduates have benefited from here significantly.

The study is found that the conducted training procedure of NGOs have some drawbacks in specific arena. Most of the employers said that the graduates have poor proficiency about updated equipment. At the same time the trainer and officials stated that the updated equipment has not been introduced for conducting of training. As well as most of the trainers and officials are confessed that the NGOs have executed training with traditional procedures instead of international standard procedure. The employers stated that the graduates have been observed lack of practical skills. All together both the trainer and officials agreed that the internship training of the graduates was very short period of time.

The researcher found from this interview that some aspects are responsible for the unemployment. In fact the NGOs are conducting this programme with the aim to cent percent employment of the graduates. However the survey was exposed 27% unemployment. Most of the officials and the trainers have mentioned that subject matter of entrepreneurship development of the graduates has not been integrated in the manual of the programme. In the similar way the field study is also found that the majority of the graduates (60%) have agreed with including the subject matter of entrepreneurship development which helps to increase the self-employment. According to the opinion of the NGO officials the micro credit (capital support) facilities of the programmes is very limited. Alike from the survey the researcher found that the most of the graduates (74%) of the programme have opinioned for the micro credit facilities which help also self-employment. Another important things has been revealed from the study that after completion the training from NGOs did not maintain linkage with the graduates (trainees tracking system) in long run. Alike the survey has been revealed that most of the graduates (75%) have comprehended with trainees tracking system could help for their employment.

4.3 Findings of the study

The findings of this study have been dragged out based on the research objectives. From this study it is observed that the disadvantaged group of people like poor, unemployed, frustrated young, women, disabilities and even transgender are the beneficiaries of the programmes. It is also found that the graduates are moderately skilled from this training programme of the NGOs. According to the current study the graduates have poor expertise about updated equipment which may lead to them lack of confidence. The study provides clear indications that after completion of the programme a large number of the graduates (73%) involved with income generating activities with different organization and commenced with self-employment (Ozoemena, 2013). It is also mentioned that the one-fourth graduates of the study have engaged with self-employment. The survey also pointed out that the female is superior in respect of self-employment rate (8%) and after completion of training the increased on relative change of employment (6%) rate. On the other hand the study uncovered that the more than one-fourth graduates (27%) of the programme remain unemployed which is very remarkable. According to the current study it is identified that the subject matter of entrepreneurship development of the graduates has not been incorporated in the manual of the training programme. The study also revealed that the NGOs facilitate micro credit in very limited for their graduates which could also raise the scope of self-employment. Whereas Begum et al. (2004) mentioned at their study that NGO has provided loan to employment generation. The study has dug out that the most the NGOs follows traditional procedure instead of the internationally recognized procedure for the training. The current study have also excavated that the internship training period of graduates is very insufficient that is why the graduates are lagging behind in practical field. From the study a different important finding has been unearthed that after completion of the training NGOs did not maintain linkage with the graduates in long run (Mayombe, 2017).

5. Implication of the Study

This study is an attempt to explore the employment situation of the graduates from income generating non-formal education programme of NGOs. It may be very rare attempt to investigate the employment situation and the income generating NFE programme. The current study found that the disadvantaged group of people becomes moderate skilled from this NFE programme. On the other hand it is also revealed that the graduates have lack of practical know-how and little knowledge about updated equipment. Thus the concerned authority may take step for intensifying this type of programme so that the disadvantaged group of the society could benefit from here at the same time they may awaken for the graduates' skill development.

The current study is also uncovered that the large number graduates are employed with wage employment and self-employment. It is also found that one-fourth graduates are

engaged with self-employment. This study also uttered that the female are ahead on the self-employment as well as advance on relative change of employment rate. Therefore these findings also may important to the policy maker for patronizing the spreading out the programme. Conversely this study has articulated that more than one-fourth graduates are unemployed. It may concern issue for the authority since NGO targets maximum portion of employment of their graduates.

To find out the causes of the unemployment the current study have unearthed that the subject matter of entrepreneurship development is not present in the training manual of the programme. According to the current study, in this programme the opportunities of micro-credit are very limited and in most cases absent which made lead to unemployment. Therefore it may very important issue for the policy level decision making for reducing the unemployment. Another important aspect may be for the unemployment that the NGO uphold the linkage with the graduates for very short after completion of training. This issue may be the important hints for the policy formulation.

5.1 Conclusion

The current study is uncovered that the underprivileged group of people become moderate skilled from this programme as well as the large number graduates became employment at the same time it is also revealed that recognizable number of graduates are self-employed and more than one-fourth remain unemployment. The study also indicates the causes of the unemployment. So an in-depth study could be organized to find out the way of overcoming from the unemployment. The current research assessed the employment situation of the graduates from NFE of NGOs only. So, a study could be formulated on the inclusion of government part also. Besides, this research focus only the financial issue of the graduates but the other factors of the quality of life is totally ignored here. So, there could be a vest research project on quality of life of graduates through income generating NFE. That may help to understand the proper development of the graduates as well as society.

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Exploring the Role of Skills-based Non-formal Education (NFE) Programmes in Improving the Quality of Life of NFE Graduates in Bangladesh

Pranab Mukherjee

Abstract

The Non-Formal Education (NFE) programme is a curative literacy programme that provides basic knowledge and skills for disadvantaged people outside of formal institutions. NGOs have an important role to play in working for NFE in Bangladesh. Several studies have found that skills-based NFE has a great impact on earnings of the graduates but the non-financial impacts are ignored by those studies. Consequently, this paper explores the quality of life of the graduates from skills-based NFE programme of NGOs. Graduates' knowledge of physical well-being and life-skills from this programme has been investigated by this study. From three selected NGOs, 30 graduates and 18 different officials (trainers, employers and NGO officials) were interviewed for their opinion on these impacts. Content analysis has also been conducted for this study. The current study has shown that people from disadvantaged groups become moderately skilled from these NFE programmes implemented by the NGOs. The researcher has also uncovered that the income of a large number of graduates has been almost doubled compared to their previous incomes and the employment rate also increased significantly. Additionally, this study finds that graduates have very little knowledge on physical well-being and life skills. Indeed, this is crucial for the quality of life of graduates, and this has implications for sustainable development. The study further finds that skills-based NFE programmes have provided financial security to graduates however have not been able to ensure their improved quality of life. The findings of the study can be important for policy makers in formulating programmes to improve the quality of life of graduates as well as contributing to sustainable development

Keywords: Non-Formal Education, Skills-based Non-Formal Education, Quality of Life.

Introduction

The Non-Formal Education (NFE) is a form of purposeful and planned learning that usually takes place outside of formal educational institutions (Non-Formal Education Policy-2006). It is an organized and systematic educational activity to meet the fundamental education needs of some sub-groups such as adults as well as some deprived children. NFE can cover basic and continuing education programmes to provide elementary literacy, including life skills and general cultural knowledge. According to the Non-Formal Education Act -2014, the types of non-formal education are classified as a) Non-Formal Primary Education and, b) Non-formal Adult and Lifelong Education. In fact, adult and

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lifelong education programmes are deeply interconnected with skill-based non-formal education. This type of programme helps increase skills of the graduates and consequently it contributes to human resource development. In this current study, the researcher concentrated on this kind of NFE programmes.

Non-Government Organizations (NGOs) have a significant role to play in managing NFE in Bangladesh. Sukantamam (2004) states that NGOs are heavily involved in NFE in Bangladesh. In addition, Shakya (2000) mentions that NGOs in Bangladesh have an extensive network, and they are doing significant work in the field of NFE. According to Islam and Mia (2007), NFE has become an important sector in Bangladesh where many international, national and local NGOs are providing education to poor and disadvantaged groups through skills-based programmes.

Now we need to define quality of life (QOL). QOL covers not only resources and employment but also basic physical and mental health, education, recreation and leisure time, environment and social issues (Nussbaum & Sen, 1993, Gregory et al., 2009, cited in Abdulwahid & Salih, 2018, Sen, 2000). Quality of life should not be confused only with the idea of standard of living, which is mainly dependent on income. Indeed, QOL relies on the general well-being of an individual and society that outlines the negative and positive features of life (Barcaccia, 2013, cited in Abdulwahid & Salih, 2018). Sen (2000) states that real development means improving the quality of life. Although in most cases development is defined only from an economic point of view, non-economic factors should be considered in addition to economic indicators to get a full picture of QOL.

In Bangladesh, non-formal education programmes are largely focused on literacy rather than conducting skills acquisition activities that contribute to income growth as well as human capital development (Islam and Mia, 2000). Acquiring skills through NFE can play an important role in the development of human resources. If we want to identify the proper development of society, we need to study the improvement of quality of life of people. QOL covers not only economic issues, but also physical well-being, personal well-being, social well-being etc. Quality of Life (QOL) is a broad multidimensional perception that typically includes social, cultural, health-related issues, environmental and ecological variables, and money or financial aspects (Gazzola & Querci, 2017). This paper further mentions that sustainability is associated with the quality of life of a community. It is an economic, social and environmental system that builds communities as well as arranges healthy, productive, meaningful living for all community. Sen (1993) observed that QOL should be evaluated based on individual's capabilities. He described that the capabilities to analyze a variety of social issues, including well-being and poverty, liberty and freedom, living standards and development, gender bias and sexuality, justice and social ethics. According to Sen (1993), the capacity approach can increase QOL which enables to achieve sustainable development. Sustainable development is based on the three pillars of sustainability: the economic, environment and social stability (UNSD Summit, 2015). As illustrated by Brundtland Commission (1987), Sustainable development requires meeting all the basic needs and access to all the opportunities necessary to accomplish desires for a

better life but without compromising the needs and opportunities of the future generations. As a result, quality of life and sustainable development are interrelated. As stated in Puke-liene & Starkauskiene (2011), QOL consists of the internal environment and the external environment. They also mentioned that the internal environment of QOL includes various elements such as income, health, family, education, social welfare, etc. and the external environment of QOL includes various elements such as political and socio-economic position, health system, social safety, social environment, natural environment etc. In this study, the researcher sought to see the level of awareness of the graduates about their physical well-being and life skills under the internal environment of QOL, which will determine the quality of life of the graduates of the skills-based NFE programme of NGOs in Bangladesh.

1.2 Objectives:

The general objective of this study is to know about the quality of life of graduates from the skill-based non-formal education programmes of NGOs in Bangladesh which is essential for sustainable development. To achieve the main objective, the researcher has to attain the following specific objectives:

1. To explore the knowledge about the physical well-being of graduates acquired from the skills-based NFE programme.
2. To identify the role of the skills-based NFE programme in learning about life-skills of graduates.

1.3 Rationale of the study

The study has examined the status of development of human resources and quality of life of the graduates from the skills-based NFE programmes of NGOs in Bangladesh. The study also focused on the skills acquisition of the graduates which impacts their earnings. The researcher attempted to find out the particular components of the internal environment of the QOL. In fact, the 'health issues' and 'life skills' of graduates have been observed to identify the state of the internal components of quality of life. This study also discloses the quality of life for the graduates of skills-based NFE programmes which focuses on the sustainable development of the society.

2. Research Methodology

This is a qualitative study based on interviews and content analysis. Respondents to the interviews were graduates of skills-based NFE programmes, trainers of the programmes, employers of the graduates and the NGO officials. The training programme manuals were considered as content for this study. Purposive sampling has been taken from three NGOs in Rajshahi district for the interview with the graduates, trainer, NGO officials and employer of the graduates. Among the three NGOs one regional, one national and one international level NGO were considered for this study. For interviewing 24 graduates were selected from the three NGOs considering male-female and residence. In addition, a total of 18 respondents representing trainers, employers and NGO officials of three NGOs

have been interviewed maintaining a balance between males and females. Four separate sets of semi-structured interview questionnaires were used for the relevant category of respondents.

2.1 Techniques of data interpretation

Creswell (2013) suggested five-stages for thematic analysis of the qualitative data. The researcher has followed this five-stage thematic analysis. Those are transcribing the data; formation list of tentative code; reduce code to categories; conceptualize the themes from the categorized codes; and present a detailed picture of the analyzed data. The interview has been recorded by an Android mobile phone and transcribes the recorded contents as per the research objectives. This allows for feedback on detail and expansion. This study reviewed training manuals using predefined checklists. Contents were analyzed in the same way that focus groups or interviews are analyzed through coding themes. Here the researcher has followed this method for analysis. Overall, the thematic analysis framework has been used to analyze the data for this study. The results from the analysis are presented according to the main theme. It is mentionable that ethical aspects of the research were followed for this study.

2.2 Research Limitations

Every research has some restrictions. In the same way, this study has faced some unavoidable limitations. Non-formal education itself is an extensive study. Moreover, QOL are consisted of variety of components. Here the researcher was able to focus on skills-based NFE programme and only two components of QOL under internal environment. Even the participation of state authorities was not shown in the study due to money and time constraint. The study has been conducted applying the qualitative methods. Mentioned factors may have compromised the finding somewhat. The purpose of the current study is to explore the QOL of graduates from skills-based NFE of NGOs in Bangladesh. It is obvious that more detailed study is needed to have a complete idea about the quality of life of skills-based NFE graduates.

3. Results and Discussion

3.1 Acquaintance with health awareness of the graduates

The researcher has conducted interview with different categories of respondents which mentioned earlier in the methodology part. From the interpretation of interview with the four different groups, it is found that these programmes have played a vital role for skills acquisition of the graduates. The researcher found that all the graduates of the programmes were from disadvantaged group of people like poor, unemployed, frustrated young, women, disabilities and even third-gender. Similarly, the researcher also found from interview with the graduates that the most of the participants of the programmes were dropout (90% were in grades five to eight) student. All the responding group of interviewees agreed that the graduates acquired the technical skill from these programmes. 41% of graduates said that they had no income before taking the training. After receiving the training programme 50% of the graduates' income has increased significantly.

It is clear from these interviews of graduates that the employment rate and income level of graduates have increased dramatically from the skills-based NEF programmes of NGOs. Islam and Mia (2000) in their work have mentioned skills-based NFE education have a great contribution for the human capital formation. On the other hand, interviews with variety of pre-determined respondents revealed that the knowledge about health awareness of the graduates from this programme was not very good. Most of the graduates have no idea about the dangers of HIV consciousness and child malnutrition. One of the graduates said that 'child malnutrition' is a very unfamiliar word to him. However, most of the graduates have the knowledge about the using and drinking safe drink water even though one of them notified that her family still uses pond water for cooking. Some graduates have commented that they are sometimes confused about child immunization. All trainers opined that first-aid awareness has been incorporated their training manuals. Most of the employer of the graduates also expressed that the recruited graduates have the knowledge on the first-aid. Most of the employers of graduates have further revealed that recruited graduates have a basic knowledge of first aid which is extremely necessary for daily work. Interviews with NGO officials revealed that they mainly focused on skills development issues. From the content analysis, the researcher further found that health related issues were significantly absent in the manual. Only 4% of health related topics are existed in the overall subject matter although first aid related topics are emphasized in the training manual. Most of the NGO officials have articulated that the above issues are important for any person to lead a comfortable life so it is better to impart knowledge of these issues to them.

3.2 Familiarity with the life skills of graduates

The term 'life skill' refers to the skills needed to acquire the most skills in life. Any skill that is effective in one's individual life can be considered as a life skill. Interviews with graduates revealed that most of them had five years or less of formal education experience and for a long time they were disconnected from their studies, but after training everyone had knowledge of elementary education (reading, writing and arithmetic). The rest of the different respondent groups have uttered that this elementary education is imparted to the graduates in the training sessions. Knowledge of traffic signals is considered an important life skill. Interviews with graduates show that such knowledge is rarely present among the NFE graduates. One employer commented that one of her employees was in big trouble due to lack of knowledge about traffic signals. She once asked this employee to open her beauty parlor in the morning but sometime later the employer came to the store and saw that it was still closed. It was later learned that it took the girl 15 minutes to cross the road. Most of the trainers and the NGO officials stated that this matter was not included for the training session in that way. Nowadays knowledge about ICT is one of the elements of life skills. However, through interviews with various respondents, it is clear that skills-based NFE ignore issues related to life skills. The researcher analyzed the content of the training manual and found that the training manual did not emphasize the element of life skills. The life-skills component exists in only 5% of the total content and most of it includes elementary education.

4. Findings of the Study

The findings of this study have been drawn on the basis of research objectives. From this study, it is found that the disadvantaged group of people of the society is benefitted from this programme. They also have gained skills from this programme and generated income after getting training, whereas the cognition of the health-related issue is very poor. Most of the graduates have no idea about the dangers of HIV and child malnutrition. It is found from the study that the employment rate and income level of graduates have increased vividly from the skills-based NEF programmes of NGOs. From the interviews and content analysis it has emerged that graduates' knowledge of health awareness is very low, although it is directly related to quality of life. It is also clear from this study that the skills-based NFE programme ignores issues related to the development of life skills of graduates.

5. Conclusion

The current study found that disadvantaged people have gained employment after completing NFE programmes as well as the training resulted in increased income of a large number of graduates. However, the study also found that their quality of life has not improved so much. The study discusses two components of quality of life which are health well-being and life skills. Since quality of life is related to sustainable development, this issue is very important at the present time. The study revealed that most of the graduates of these programmes do not have knowledge about HIV and the dangers of child malnutrition. Even graduates have very little idea about some elements of life skills such as traffic knowledge, ICT acquaintances, etc. Knowledge of the mentioned elements will help the graduates to lead a better life. Thus, the results of this study can be very important to decision makers through which they can help graduates of skills-based NFE programmes to increase specific knowledge and further enhance their quality of life. Consequently, it will contribute to achieving sustainable development goals.

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