MASTER OF SCIENCE IN TECHNICAL EDUCATION

(ELECTRICAL AND ELECTRONICS ENGINEERING)





MSc. Thesis

WOMEN IN TECHNICAL AND VOCATIONAL EDUCATION: A CASE STUDY IN BANGLADESH.

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DECLARATION

This is to certify that the work presented in this thesis is authentic and the outcome of investigation carried out by **Marin** under the supervision of **Prof. Dr. Faruque Ahmed Haolader, Professor** at the Department of Technical and Vocational Education (TVE), Islamic University of Technology (IUT). Gazipur, Bangladesh. It is hereby declared that this thesis/report or part of it has not been submitted elsewhere for the award of any Degree or Diploma. All literatures and contributions cited are fully acknowledged.

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DEDICATION

I dedicate my thesis work to my parents who brought me into this nice world and also to my husband and son for their encouragement, wisdom and uncountable assistance in one way or the other, which enabled me to stay strongly and sharply focused throughout the entire masters' program.

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LIST OF ACRONYM

ADB	Asian Development Bank
BANBEIS	Bangladesh Bureau of Educational Information and Statistics
BTEB	Bangladesh Technical Education Board
BMET	Bureau of Manpower, Employment and Training
DTE	Directorate of Technical Education
ILO	International Labor Organization
IUT	Islamic University of Technology
M.Sc.TE	Master of Science in Technical Education
MPO	Monthly Payment Order
NGO	Non-Government Organization
NSDC	National Skills Development Council
NSDP	National Skills Development Policy
NSC	National Skill Certificate
NSS	National Skills Standard
OIC	Organization of Islamic Cooperation
PhD	Doctor of Philosophy
SPSS	Statistical Package for Social Science
TSC	Technical School and College
TTC	Technical Training Center
TVE	Technical and Vocational Education
TVET	Technical and Vocational Education and Training

ABSTRACT

In Bangladesh Women/females face a lot of problems in the field of Technical and Vocational Education. These problems can be categorized as classroom environment, institutional context, married female students and teachers problems, industrial training difficulties. Due to this they development in terms of knowledge, skills as well as their attitudes has been held back. Furthermore, due to insufficient knowledge, skills they hold, little has been witnessed as a contribution towards social and economic development of the country.

This study is designed to investigate whether classroom environment, institutional context married female students and teachers problems, industrial training difficulties are the major problems faced by women/female in Technical and Vocational Education in Bangladesh.

This study employed a quantitative method and a descriptive in nature. A structured questionnaire based on Five point Likert type scale was used as a data collection tool. Samples of this study were students, teachers, and staff fromThese include government and private polytechnic institutes, TTCs and TSCs in Bangladesh. The responses collected, were tabulated, analyzed and interpreted based on non parametric Chi square and Weighted average tests with the help SPSS 25 as software. The findings revealed that majority of the respondents agreed that classroom environment, institutional context married female students and teachers problems, industrial training difficulties are the major problems faced by women/female TVE in Bangladesh.

To overcome these problems the study recommended that women/female should be protected, encouraged, motivated and educated so that they will have the privilege of contributing their parts in national and international social and economic development. Similarly Government and non Governmental institutions should fund the activities of imparting knowledge, skills to women/female in order for them to be productive in the field of TVE.

This study is significant not only for Bangladesh but also for developing countries because it stressed the major constraints faced by women/female with possible solutions to address it which will yield social and economic development.

CHAPTER I

Introduction

1.1 Background and Present State of the Problem

Bangladesh is one of the multi-cultural country in the world with total population of more than 163 million (census 2016). The country is progressing from least developing country to mid-level economic country. The social, economic and cultural development of any country largely depends upon education. Education has a tremendous impact on all segments of society. However, in a modern age of society and technology, foundation of development cannot build by general education only. Scholars argue that countries need a well-diversified education system in order to gain sustainable development through education. The primary purpose of technical and vocational education (TVE) is useful employment for adults and young who are preparing to enter occupations in agriculture, business, and home-making, industrial and technical fields. Thus, technical and vocational education played a vital role in national development, especially in areas which include the following:

Generation of employment/creation of job opportunities: Technical/vocational education could be used to developed marketable skills in students/youths so that they can become easily employable. It makes an individual to become an asset to him and the nation and also prevent him from being a liability to the society.

Industrial development: TVE helps a nation develop technologically and industrially by producing people competent and capable of developing and utilizing technologies for industrial and economic development.

Entrepreneurship strategy: Technical and vocational education offers the beneficiary the ability to be self-reliant, to be job creators and employers of labour.

So, the technical and vocational education (TVE) is considered as a vital tool/ a masker key for economic development of a country. It prepares young people and adults for jobs not only in domestic but also in overseas market.

In Bangladesh Government-regulated (formal) TVET programmes are offered both at Certificate and Diploma level. Students who complete Grade VIII may take the Two-Year SSC in Vocational Education, SSC (Voc) courses with various trades/technical specializations, and students who have SSC (Voc) qualification can proceed to the Two-Year HSC (Voc). The SSC (Voc) and HSC (Voc) courses are provided by Technical School and College (TSC)and Technical Training Center (TTC). At the upper secondary non-tertiary level, three-year and four-year diplomalevel courses are offered through polytechnic and mono-technique institutions and now at some selected TSCs and TTCs. Students with SSC or SSC (Voc) qualifications can enroll to the Diploma level courses.

Table 1.1:Indication Number of Private and Government TVET Institutes inBangladesh

Govt. TVET Institutions	Private Training institutions
Polytechnic Institutes: 49	Polytechnic Institutes: 465
• Tech. School & College: 64	• (BM) Inst.:1805
• TSC: 100 (Under Construction)	 Secondary (Vocational) Schools: 2230
• Tech. Training Centre: 38	 Textile Institute: 130
• Textile Institute: 07	 Agriculture Institute : 160
• Agriculture Institute: 16	 Institute of Medical Technology: 226
• Forestry Institute: 03	 Fishers Institute: 54 Tab
• Marine Institute: 06	
• Textile Vocational Institute: 40	
• Engineering Collage: 04	

Table 1. 2: Types of TVET Programs Available

Government	Private
• Diploma In Engineering (4 years)	• Diploma in Engineering (4 years)
• Diploma in Agriculture,	• Diploma in Agriculture
• Fisheries,	• Diploma in Fishers
• Forestry and Livestock	• (BM)- 2years
• Diploma In Textile (Voc)-2 years	• SSC (Voc)- 2 years
• SSC (Voc)- 2 years	• Certificate courses - 6 months
• Certificate courses - 3 to 6 months	• NTVQF Level Pv-1- 2 and NSC
• NTVQF Level Pv-1-2 and NSC	Level 01 to 06
Level-01 to 06	

SSC (Vocational) trades (Grades 9-10 (Vocational) trades (Grades 11 – 12 Equivalent	
Equivalent)	
✓ Refrigeration& Air Conditioning	✓ Refrigeration & Air Conditioning
✓ General Electronics	 Electronic Control and Communication
✓ Fish Culture & Breeding	✓ Fish Culture & Breeding
✓ Welding & Fabrication	✓ Welding & Fabrication
✓ Computer & IT	✓ Computer Operation & Maintenance
✓ Dress Making	Clothing & Garments Finishing
✓ Farm Machinery	✓ Agro Machinery
✓ General Electrical Works	✓ Electrical Works & Maintenance
✓ Automotive	✓ Automobile
✓ Poultry Rearingv& Farming	✓ Poultry Rearingv& Farming
✓ Civil Drafting with CAD	✓ Drafting and Civil
✓ Machine Tools Operation	✓ Machine Tools Operation &
✓ Building Maintenance	Maintenance
✓ Wood Working/Carpentry	✓ Building Maintenance & Construction
	✓ Industrial Wood Working

Table1. 3: Vocational Courses Available at Technical School and College Institutions

Certificate	Entry	Year/Months	Providers/Institutions
Received	Requirement	of schooling	
NSS (Basic)	Class VIII	3 to 9 months	TSCs (Technical Schools and
		(usually 360	Colleges), TTCs (Technical Training
		hrs)	Centers), UCEP and other NGOs
NSS III /	Class VIII	1 year	TSCs, General schools, TTCs, UCEP
Class IX			and other NGOs
NSS II/	Class VIII	2 years	TSCs, General schools, TTCs, UCEP
SSC (voc)			and other NGOs.
HSC (voc)/	SSC/ SSC (voc)	2 years	TSCs, Private colleges
HSC (BM)			
Diploma-in-	SSC/ SSC(voc)/	4 years	Public and Private Polytechnic
engineering	HSC/ HSC(voc)		Institutes
Certificate	SSC(Voc)for	1 year – cert.	VTTI (Vocational Technical Training
& Diploma	Cert.and	and 1 year –	Institutions)
in Voc.	SSC(Voc)+cert.	diploma	
Teaching	for Diploma		
B.Sc(Tech)	Diploma in Eng.	1 year	TTTC (Technical Teacher Training
and	for DipTech and	Diploma and 2	Colleges)
Diploma in	Diploma (Eng)+	years B.Sc	
Technical	DipTech for BSc		
Education			
(DipTech)			

Table 1.4: Sample of TVET Programs with Entry Qualification and Duration

 Civil Engineering 	 Power Engineering
 Aeronautical Engineering 	 Instrumentation and Control
 Automobile/Automotive Engineering 	Engineering
 Chemical Engineering 	 Mechanical Engineering
 Computer Engineering 	 Industrial and Production
 Computer Science and Engineering 	Engineering
 Electrical Engineering 	 Mining Engineering
 Electronics Engineering 	 Marine Engineering
 Telecommunication/Communication 	 Materials Engineering
Engineering	 Manufacturing Engineering
 Electrical and Electronics Engineering 	 Petroleum Engineering
 Electronics and Telecommunication/ 	 Polymer Engineering
Communication Engineering	 Software Engineering
 Plastic Engineering 	Information
 Textile Engineering 	Technology/Engineering

Table1.5: Program Available at Polytechnic Level

At diploma level the following types of programs/ courses are available: Diploma in Engineering (4 years), Diploma in Agriculture, Diploma in Fisheries, Diploma in Forestry, Diploma in Medical Technology, Diploma In Textile, etc. (Haolader, et al. 2016; BTEB, 2016)

Knowledge of science and technology is essential to understanding the modern world and without it, it is impossible for anyone to participate in informed decision-making on many social and political issues. Global employments indicate that women workforce is on the increase. Women, however, tend to settle for low and middle level jobs. This is because factors such as inadequate formal education and occupational skills, limited occupational

horizons, traditional and social prejudices, male chauvinism of employers, sex discrimination and concomitant sex role expectations affect women career choice.

From many perspectives women in South Asia find themselves in subordinate positions to men and are socially, culturally, and economically dependent on them. Women are largely excluded from making decisions, have limited access to and control over resources, are restricted in their mobility, and are often under threat of violence from male relatives. Sons are perceived to have economic, social, or religious utility; daughters are often felt to be an economic liability because of the dowry system(Fikree and Pasha 2004).

In Bangladesh, with the current reformed TVET system and policies, graduates of TVEare employable in the labour market as well as they are eligible to apply for enrollment in universities, regardless of higher secondary education. A report prepared by the Economist Intelligence Unit (EIU) sponsored by British Council stated the unemployment rate of university graduates as about 47 percent (Asadullah, 2015) although Bangladesh Bureau of Statistics (BBS) reported this figure as 11.2 percent in the fiscal year 2016-2017 (NewAgeBD (2018). Furthermore, around 46 percent of female students at secondary education level (as opposed to 34 percent of males) drop out before completing it (BANBEIS 2015), failing to progress to higher education under the general education stream in Bangladesh. Consequently, a large section of the dropped-out female population enters either low-skilled jobs or remains unemployed at home. In this situation, the TVE can offer valuable opportunities of mid/higher-level technical and vocational education and skills training creating an alternative pathway to higher education for young people and for those who did not complete higher secondary education, particularly females. Despite many efforts of the government the enrollment in TVET at secondary level/ non-tertiary level remain low, 11 to 16 percent of the total enrollment in the country(BTEB, 2016, pp. 22-23). The 7th Five-Year Plan 2016 – 2020 of the government aims at increasing the females' ratio in the overall TVET from 27 percent in 2015 to 40 percent by 2020 (WB, 2017, p. 9). The overall gender parity index (GPI) in TVET is 0.38 at level Grade VIII to XIV, while this figure for polytechnic enrollments is significantly low (0.09) (WB, 2017, p. 19, w.r.t. BANBEIS, 2014).

In the meantime, Bangladesh has taken different steps to increase the enrollment including increasing the female participation in technical and vocational education and training (TVET) as well as to improve the quality of TVET. Expanding female participation in TVET will improve the chances of post-secondary level education attainment by females and likely enhance their labour market participation and quality of employment, giving the TVET system an increasingly larger role in skilling up female youths.

The situation stated above clearly show that despite several steps taken by the government the female participation in TVET remains significantly low. Therefore, this study attempts to explore the current situation of women in TVET institutions in Bangladesh.

1.2 Aims and Objective of the Study

This research work is aimed at bringing out the current status of (problems and/or (special) facilities given to)female in TVET institutions in Bangladesh.

Thespecificobjectives of the study are:

- i. To identify the problemsfaced by female students ,female teachers & staff and/or special facilities provided for them in TVETinstitutions particularly in the classroom environment, and institutional context;
- ii. To identify special problems and/or facilities in case of married female students and teachers; and
- To identify problems faced by female students at Industrial Training/Internship Training.

1.3 Research Questions

To carry out this study the following research questions were formulated which served as a guide for investigation:

1- What type of problems faced by and/or special facilities provided for female students, teachers and staffs of a TVET institution particularly in the classroom environment and institutional context?

- 2- Which type of problems faced by married female students, married female teachers and staff a TVET?
- 3- What type of problems faced by female students at Industrial Training/Internship Training?

1.5 Significance of the Study

The findings of this study could serve as a guideline and will help in reducing the problems faced by women in Technical and Vocational Education because women are backbone of social and economic development of any country. The research work will also address and solve difficulties faced by women in Technical and Vocational skills acquisition and training among both teachers and students of learning. TVET institutions female will benefit from this study because it will enable them to reduce problems faced by female and it will provide information to the policy makers concerning ways of reducing or solving difficulties faced by women in Technical Education in Bangladesh.

1.6 Delimitation of the Study

As mentioned in Section 1.1(Table 1.2), various types of TVET programmes are offered by various types of TVET institutions under several ministries of the Government of Bangladesh.

However, this study was carried out only in selected TVET institutions those offer certificate and/or diploma level programs in engineering technology/ trade. These include government and private polytechnic institutes and technical training centers (TTCs), technical school and colleges (TSCs) in Bangladesh. TVET institutions like, Textile Institutes, Marine &Shipbuilding Institutes, Medical Technology &Nursing institutions, Agriculture, Fisheries institutions, Forestry Institutions, etc. are not included in this study.

1.7 Definition of Terms

TVET (Technical and Vocational Education and Training) is education and training that provides the necessary knowledge and skills for employment. It uses many forms of education including formal, non-formal and informal learning, and is said to be important for social equity and inclusion, as well as for the sustainability of development. TVET, literacy and higher education, is one of three priority subsectors for UNESCO. Indeed, it is in line with its work to foster inclusive and equitable quality education and lifelong learning opportunities for all.

The development and definition of TVET is one that parallels other types of education and training, such as Vocational Education; however, TVET was officiated on an international level as a better term to describe the field, and therefore is likewise used as an umbrella term to encompass education and training activities such as Vocational Education.

Vocational education is education that prepares people to work in various jobs, such as a trade, a craft, or as a technician. Vocational education is sometimes referred to as career education or technical education. A vocational school is a type of educational institution specifically designed to provide vocational education.

Vocational education can take place at the post-secondary, further education, and higher education level; and can interact with the apprenticeship system. At the post-secondary level, vocational education is often provided by highly specialized trade, Technical schools, community colleges, colleges of further education UK, universities, Institutes of technology / Polytechnic Institutes.

Until recently, almost all vocational education took place in the classroom, or on the job site, with students learning trade skills and trade theory from accredited professors or established professionals. However, online vocational education has grown in popularity, and made it easier than ever for students to learn various trade skills and soft skills from established professionals in the industry.

The World Bank's 2019 World Development Report on the future of work suggests that flexibility between general and vocational education particularly in higher education is imperative to enable workers to compete in changing labor markets where technology plays an increasingly important role.

CHAPTER II

Related Literature

2.0 Introduction

The review of the related literature look at the problems faced by women in technical and vocational education and the importance of female in national development in terms technical and vocational education and training.

2.1 The Role Of Technical and Vocational Education in National Development According to Alam (2007), human capital theory has powerful influence on the analysis of labor market. Alam notes that investment in education and training produces benefit both to the individual and to society as a whole. The return on investment for society will be a skilled workforce that will enable global competitiveness and economic growth, while the return of the individual will be a better career path, increased earning and a better quality of life.

According to Fagerlind and Shah (1989) the concept of 'human capital' suggests that education and training raises the productivity of workers, and increases their lifetime earning capacity.

According to Alam (2007), governments perceive increased demands for skills when the labor supply shows rapid growth, when employment grows quickly, or when employment increases significantly. They argue that governments have called upon vocational education and training (VET) systems to help unemployed young people and older workers get jobs, reduce the burden on higher education, attract foreign investment ensure rapid growth of earnings and employment, and reduce the inequality of earnings between the rich and the poor. But Zymelman (1976) Paschorpoulos (1987) and Tilak (1998) argue that TVE provides a lower rate of return (ROR) than general education. However, Bennell (1996) rebuts this ,arguing that even if TVE students are less 'academically brilliant', the RORfor TVE is still high. Colin (1999) suggests that TVE not only prepares skilled labor but also provides general education to the students. Foster

also (1965) aggressively criticizes that vocational school is a fallacy in development planning, and points out that vocational education can be effective if the acquired skills are utilized properly. Colin (1999) likewise says that TVE can play vitalrole for development planning, but he warns that if the policy makers do not make it up-to-date, and TVE schools do not have enough qualified teaching faculty and sufficient facilities to offer quality TVE, it will not be useful. He also claims that these are not limitations of TVE per se, but limitations of the educational policy of the country. Bennell (1996) says that though TVE has been a powerful influence in development planning; indiscriminately offering TVE may have negative impact on development. Arriagada and Ziderman (1992) criticize TVE, saying does not pay an appropriate role in development and claim that the higher investment needed for TVE does not seems to be compensated for by high return. However his definition of TVE can explain a good significant role of TVE in development: "Vocationalization refers to effort by school to include in their curriculum those practical subjects which are likely to generate among the students some basic knowledge, skills and dispositions that might prepare them to think becoming skilled worker or to enter other manual occupations". The World Bank Policy Paper on TVE (1991), says that to get the maximum benefit to national development from TVE certainfactors must be considered:

- Well-timed modern courses linked of local and global demand;

- relevant and up-to-date TVE courses need to be developed;

 proper justification in respect of individual country that at which level of schooling is best in offering TVE courses; and

- wider range of TVE courses need to be developed in terms of demand and cost effectiveness (not only for offering various courses but also for duration of the courses, for student classification in terms of their merit, ages, job market, etc.).

Lewin (1993, p. 14) claims that TVE seems to allow us to "kill several birds with the same stone." Akyeampong (2002) points out that TVE in national educational system not only for its economic contribution but also for its cultural, social and political contribution. International Labor Organization (ILO) (2001) claims that TVE is

intended as a bold and courageous step to undertake, with the changing scenario for economic life by developing human capital.

From the discussions above, it seems clear that from the economic, social and political standpoint, national development requires education which is intended to meet a range ofdifferent national needs. These include those associated with building an appropriate workforce, and stronger economy, as well a cohesive, literate and healthy society. Economical freedom and social freedom are interrelated; one cannot thrive without the others.

Alam (2007) says that without economical growth, social freedom cannot be achieved. Therefore the purpose of education is to provide adequate knowledge to the local community to cope with the professions, and that education will also provide social value, so that people can achieve two developmental things. Moreover, if education programs offered do not provide employment, parents will perceive that investment in education as not worthwhile, because their children do not achieve anything promising for their future as a result of their schooling. Under circumstances where there is no effective enforcement of law to makes primary and secondary schooling compulsory, the number of school-going people will likely decrease. Though this decline might not initially hurt the employment market since there are few job opportunities in Bangladesh, it will impact in terms of social development predominantly in the health and other sensitive sectors through a drop in general literacy and it will hamper future economic growth.

Context Present Situation of Technical and Vocational Education in Bangladesh The discussion above indicate that offering different TVE programs may have a significant role to play in achieving national development, but suggest still Bangladesh has not made an 'epoch-making development' of TVE. In this section, I discuss the current situation of TVE in Bangladesh.

Jeong (1999) claims that before joining at the labor force, workers need to be trained to be more productive and to perform their tasks properly. Atcharena and Caillods (1999) say that workers need the training before joining the labor force, and also need in-service training to maintain up-to-date skills. But Bangladesh has taken the decision to build more traditional educational institutions rather than TVE institutions, which has resulted in producing graduates rather than skilled person power. TVE is inherently multidisciplinary in nature, and depends to a significant extent on specialists from relevant disciplines in the country, as well as those in developed countries where development has been progressed through multidisciplinary activities (Watts, 1985). So the multidisciplinary nature of TVE may help the students to reach the labor market and further education, with a solid foundation. Under such circumstances, there are many unemployed young people in Bangladesh. Such people engage in socially-undesirable activities such as drug-taking resulting in social problems. The present drop-out rate is high at secondary level (Grades 9-10); about 52% for males, and 58% for females (BANBEIS, 2007). These drop-out students try to join the labor force without any requisite training or skills, because general school curriculum does not have a TVE component. Under the control of Bangladesh Technical Education Board (BTEB), there are only a few schools providing TVE to the local community. Most of the schools are non-government, and are regulated by NGOs. Though the drop-out rate is high at the secondary school level, polytechnic institutions (of which there are 20-government and 7-Non-government options) offer diploma-level education using an out-dated TVE program to their llocal community and with limited resources (Oxtoby, 1997).

So drop-out students remain untrained for employment. The number of polytechnic institutions is also low in comparison with most other countries, and the Bangladesh population. O ne government vocational teachers training institute offers in-service training for the teachers, but its effectiveness is questionable (World Bank, 1990). This brings question how effectively TVE teachers are performing in teaching. Additionally, the present TVE system does not provide any in-service training for workers. So secondary school-leaver workers have little chance to undertake professional training in their lifetime, and instead gain experience from work. Hyland (1999) considers that workers need training before and also need 'inside' training. Hyland highlights the importance of lifelong learning if the worker is to cope with changes.

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The above discussion about the role TVE might play in national development, especially mentioned points noted in a World Bank Policy Paper on TVE, and implies that to maximize gains in sustainable development via TVE, modern and well-timed TVE programs should be offered to students, and these need to provide the best practical knowledge in relevant programs. Colin (1999) insists that TVE needs to offer most up-to-date technical, professional and job-oriented courses in order to meet the challenges of the twenty first century labor market. He also says that even if providing modern up-to-date TVE program is expensive, developing countries must make this investment, because such investment will help build the appropriate human resources which will contribute to national development and participation of labor market. But it seems that Bangladesh has not made desired progress tomoderate and to innovate and provide up-to-date TVE programs (Rafique, 1996; World Bank, 1990).

Rafique (1996) says that present status of TVE in Bangladesh is such that we only offer old programs and topics. He suggests that Bangladesh needs to offer up-to-date programs such as information technology, computer science, e-commerce and so on. Oxtoby (1997) likewise says that Bangladesh not only needs to restructure its TVE facilities, but also needs to restructure the TVE programs.

Rafique (1996) reports that in Bangladesh 64% of technician level jobs are held by people without any formal education or training, and suggest that that if TVE in Bangladesh fails provide good programs with an up-to-date curriculum; they will likely lose credibility with the employers. Rafique's arguments raise the question as to whether trained people can meet employer demands, or if employers feel a need to be involved in training people themselves. However, Moenjak and Worswick (2001) claim that although in some circumstances some employers do not bother recruiting trained people, the importance of skilled person power is unquestionable.

Barriers to Technical and Vocational Education in Bangladesh There are many barriers to the development of TVE in Bangladesh and these are summarized below: - Most elite parents think that their children should not become a laborer. Even if their children are less academically able, parents try to push their children into higher education-disobeying the law. Social elites and political leaders in Bangladesh do not bother much about the law. They also send their children to study abroad. In such circumstances, poor parents become disappointed about their children's education (Alam, 2003,2007);

- The quality of TVE is poor and cannot provide sufficient significant knowledge for jobs. Most of TVE schools are also located far from rural areas; meaning village students easilv cannot have access them (World Bank. 1991): to - Gallart (1988) claims students of TVE suffer anxiety about the purpose of TVE, being only preparing laborers to get more profit from them, saying it is a moral obligation to eradicate such anxiousness and help them understand that TVE has two roles - preparing skilled manpower for the world of work, and opening the door for TVE students to pursue higher education with a solid foundation. Unfortunately, higher education is very limited for TVE school graduates in Bangladesh. In addition, once a student has of academic а gap two years study, he/she cannot enroll in further higher education. In these circumstances if a TVE graduate joins his/her job after completion of secondary and higher secondary education, he/she cannot back into further education (Rafique, 1996); come - Higher educated people in general discipline areas can work at any place but higher educated people from TVE can only work in TV related placements, which is low in terms of social prestige. All boards, educational enterprises, and other organizations are under the control of their mother organization named ministry. The head of the ministries is the honorable minister who is appointed politically so he/she does not need prerequisite qualifications. The second head of the ministries is the secretary, who must have the general educational background and mainly secretary controls the ministries even if it is 'Ministry of Science and Technology. Therefore the top authorities enjoy the respect and favor of general graduates rather than TVE graduates. In these circumstances TVE graduates are socially neglected so bright students do not have much interest in studying TVE(Rafique, 1996); and

- Providing good TVE needs more money for practical workshop facilities, and also demands industrial attachments for internships (World Bank, 1990).

Lauglo and Lillis (1988) say that vocational and practical subjects 'pedagogic systems have unusually multifarious expensive requirements (such as equipments materials, resources, curriculum, support system, personnel, managements requirements, etc.), which are not easily met. As a poor country, achieving a high budget for education is a real challenge for Bangladesh.

The World Bank (2002) notes that political leaders of Bangladesh have no strong commitment to develop the country or providing appropriate training. Since a certain level of TVE is emerging at secondary and higher secondary education for national development but as elite children do not have any problem in build their careers, so the concepts of TVE seems only for speeches. The above mentioned barriers to the development of TVE produce a serious, detrimental impact on enrolments in TVE as Figure 6 illustrates.

Job Market for Skilled Persons

The World Bank report of 2002 notes the present population of Bangladesh is more than 140 million, with density of 1050 persons per square kilometer. Over-population can be a barrier to economic growth for a nation, but if the people are trained and are more productive, they may not a burden on society, but instead a source of skilled person power. They can perform their task efficiently with best professionalism, and they can also contribute for national development by participating global labor market.

The country can benefit by the use of trained human resources (if the country can develop trained human resources in various professions). Though, there are many sectors, which might be progressed by skilled person power, the agriculture, garments and leather sectors, and consider the impact of the exportability of skilled person power.

Comparison of Employed Skilled Person Power and Employment Patterns Before discussing this issue in respect of Bangladesh, first make comparison of employed skilled person power employment pattern found in the study of job market for TVE graduates with South Korea and Germany/Japan. It is worthwhile to note that position of skilled worker of Bangladesh is an official agenda but the position is occupied by unskilled worker who do not have either TVE or general education (Rafique, 1996; ILO, 1993). As a point of concern, it should be noted that this comparison does not take into consideration the quality and level of skill possessed by the skilled person power of the countries included.

2.2 Women in Technical and Vocational Education

Gender equality and empowerment has been set as one of the seven categories of monitorable targets to achieve according to the vision and objectives of the Sixth Five Year Perspective Plan in Bangladesh that serves as a framework for halving poverty and improving lives. Substantive equality between women and men in all dimensions of development is an indispensable tool for advancing socio-economic progress and reducing poverty.

Over the past two decades the government has demonstrated strong commitment to achieve gender parity in primary and secondary education through policy reform and programme development. Women's participation in the labour force has shown a significant rise. Life expectancy has increased and health awareness and overall political sensitization have improved. Despite these remarkable achievements, challenges still remain critical and inequalities are persistent.

This is frustratingly evident in the low female participation that exists in the Technical and Vocational Education and Training (TVET) sector, particularly in formal institutions. Women's participation in TVET in Bangladesh is strikingly low, ranging from 9% to 13% in public institutions and 33% in private institutions, the average is approximately 24%. Similarly, the number of female instructors overall is about one-fifth of the total number

within technical institutes. It is also worth noting that the lesser number of Technical Training Centers (TTCs) within the variety of technical education providers is more on par with the national averages for women's participation. Technical School and Colleges (TSCs) are severely lagging behind national averages of gender inclusion by about half (i.e. one-tenth of all teachers and one-eighth of all students within TSCs are female).

The government is now strongly committed to addressing this situation. Recently in March 2012, the National Skills Development Policy (NSDP), Bangladesh, was approved. This policy recognizes "the current low participation rates of women in skills development", and states that "special efforts are necessary to correct this gender imbalance, particularly in the formal training system". the Policy document, it also proposes several measures to redress this gender imbalance, such as promoting women's inclusion in "non-traditional" courses to provide knowledge and skills for better employment opportunities; conducting social marketing and awareness raising; providing separate washrooms for women; and encouraging recruitment offfemale instructors wherever possible.

Subsequently, a National Strategy for Promoting Gender Equality has been formulated jointly by NSDC and the ILO-Reform Project with the explicit aim of increasing female participation in TVET, "through a comprehensive and holistic intermix of social, economic, institutional and systemic transformational measures".

Provide full free education for girls in TVET up to Diploma level. Reserve special quota for girls, at least 25 percent. Carry out extensive social campaigning through sensitization and awareness raising. Establish social network for information dissemination particularly in rural areas. Engender TVET institutional system: policy, programmes and budgetary processes. Conduct extensive capacity building on gender mainstreaming in all TVET institutions. Revise all training curriculum, delivery modalities, registration procedures, evaluation forms to incorporate gender aspects. Introduce diversified non-traditional programmes specially geared for female students.Introduce special programmes designed for women in business and informal workers.Set up job counseling centers within all TVET institutions with special capacity to advise both male and female students.Initiate and strengthen linkages with industry and labour market as well as with informal.

2.3 Female as a Victim of Discrimination

Gender is a common term where as gender discrimination is meant only for women, because females are the only victims of gender discrimination.

Gender discrimination is not biologically determined but it is determined by socially and the discrimination can be changed by the proper and perpetuate efforts. Denial of equality, rights and opportunity and suppresement in any form on the basis of gender is gender discrimination. Half of the world's population is females. They are doing two-third of work of the total work in the world but received only one-tenth of the world's total income. Nearly two-third of the world only one-fourth of the families are headed by female. India is a male dominant society and gender discrimination is customised habitually.

Discriminations

From web to death females are facing lots of discrimination against them.

Some of them are ;

- Abortion of female gravida with the help of scanning.
- Feoticide (By giving liquid extract from cactus / opuntia, giving raw paddy to new bornfemale baby, by pressing the face by pillow or by breaking the female baby's neck)
- Not giving enough and nutritious food .
- Not allowing to go to school (Denial of education)
- Not giving needy health care while in ill health .Early marriage
- Eve teasing, Rape and Sexual harassment
- Dowry
- Divorce, Destitution even for silly or without any reason.

The causes of gender discrimination are

□Educational backwardness

Caste

□Religious beliefs

Culture

 \Box On the name of family history

 \Box Customs and beliefs

Races

 \Box Low income

□Unemployment

□Society

 \Box Family situation and

□Attitudes

Like male or even above them female plays important role in the family and national development. But her contribution is not recognized by the male dominant society.

Sonalde Desai (1994) observed that parents reluctance to educate daughters has its roots in the situation of women. Parents have several incentives for not educating their daughters. Foremost is the view that education of girls brings no returns to parents and that their future roles, being mainly reproductive and perhaps including agricultural labor, require no formal education.

Kalyani Menon Sen and A.K.Shivakumar (2001) found that girls in India are discriminated against in several ways – fewer months of breastfeeding less of nurturing and play, less care or medical treatment if they fall ill, less of "special" food, less of parental attention. As a

result, girls are far more susceptible than boys to disease and infections, leading to poor health and a shorter lifespan. It is this life-long discrimination in nurturing and care that is the real killer ofgirls – less visible and dramatic, but as unequivocally lethal as female infanticide.

Berta Esteve – Volart (2004) described that gender discrimination against women in the market place reduces the available talent in an economy, hich has negative economic consequences. Gender discrimination takes many forms. Many social practices seen as normal from a religious or cultural point of view (which may have deep historical roots) have women out of the economic mainstream. These social practices may have profound economic consequences because they do not allow society to take advantage of the talent inherent in women.

Anna-Maria Lind (2006) stated that India's population still leads traditional lives in rural areas. Religious laws and traditions still determine the lives of many people, particularly women. Even if women are formerly entitled to own land and resources social and religious factors make many women refrain from this right in order not to cause distortions within the family. The preference for having sons permeates all social classes in India, which sets the standard for girls throughout their entire lives. GOI Planning Commission (2008) indicated that discrimination against women and girls impinges upon their right to health and manifests itself in the form of worsening health and nutrition indices. Thus, India continuous to grapple with unacceptably high MMR, IMB, and increasing ates of anemia, malnutrition, HIV/AIDS among women.

Julie Mullin (2008) indicated that the developing world is full of poverty stricken families who see their daughters as an economic predicament. That attitude has resulted in the widespread neglect to baby girls in Africa, Asia and South America. In many communities, it's a regular practice to breastfeed girls for a shorter time than boys so that women can try to get pregnant again with a boy as soon as possible. As a result, girls miss out on life-giving nutrition during a crucial window of their development, which stunts their growth and weakens their resistance to disease.

The rural economy of Bangladesh has witnessed remarkable structural changes and diversification during the 1990s. In today's society, the role of women extends way beyond the home and bringing up of children. Empirical evidence indicates that there are significant gender differences in all spares and family lives in rural Bangladesh. In Bangladesh about 85 percent of women live in rural areas. The rural social structure plagued with many problems such as illiteracy, unemployment, malnutrition and poverty. Even there is the traditionalization of the system and institution that place them in unequal and disadvantages position (Ali, 2012). Women have to perform the dual role of housewife and wage earner. Women participation in home and farm activities is dependent upon social cultural and economic condition in an area. It also varies region to region and even with a region, their involvement varies widely among different farming system, castes, classes and socio-economic status. Women's opportunities and public involvement have changed extensively in recent decades. For example, major progress has been made in closing the gender gap in school enrolments at both primary and secondary levels (Ferdousi, 2012).

In Bangladesh, there are social and religious restrictions on women in doing works outside homestead area. Therefore their activities are confined to child care, household management, kitchen gardening, processing of rice and maize, service etc. The peace of development in any country largely depends upon the people's participation including women. In Bangladesh women constitute almost half of the population. Bilkis (2010) find family culture and religious values that are taught by the family are the root causes of gender gap in employment.

Begum (2005) finds a higher level of gender gap between male and female among the rural households in Bangladesh. Bangladesh are now facing the issues that hinder their development: education for girls, women's political, legal and marital rights, and 56 Journal of Women's Entrepreneurship and Education (2015, No. 3-4, 54-64)employment outside of the home for women and men alike, lower fertility and reduced child mortality. Yet they have, for a long time, remained economically unproductive in the sense that their contributions to GDP are not acknowledged.

A good number of studies on women have been undertaken in Bangladesh, but a very few of these were undertaken to explore the gender inequality in rural households. The study was undertaken with a view to analyzing the impact of gender inequality on the socio-economic development of the rural household in Bangladesh.

It refers to differential treatment of men and women - in employment, education and access to resources and benefits, etc. - on the basis of their sex.

Discrimination may be direct or indirect. Direct sex discrimination exists when unequal treatment between women and men stems directly from laws, rules or practices making an explicit difference between women and men (e.g., laws which do not allow women to sign contracts).

Indirect discrimination is when rules and practices that appear gender neutral in practice lead to disadvantages primarily suffered by persons of one sex. Requirements which are irrelevant for a job and which typically only men can meet, such as certain height and weight levels, constitute indirect discrimination. The intention to discriminate is not required. Decent Work Productive work performed in conditions of freedom, equity, security and human dignity, to which women and men have access on equal

2.4 The Importance of Parental Education

Gender inequality in education has long been an issue deserving proper attention in Bangladesh. Although in recent years Bangladesh has registered significant improvement in gender disparity in the enrolments at the primary and secondary levels of education; however, gender disparities are significantly high in higher education.

(BANBEIS), at public universities, only 24.3% were female students and male enrolment is almost three According to a 2011 report by the Bureau of Bangladesh Education Information Statistics times higher (75.7%) than that of females. Identify the underlying causes for lower rates of female enrolment in higher education in Bangladesh. Much of the literature that has focused on gender and education in Bangladesh has found significant gender disparities in education, particularly girls' education in rural settings (Chowdhury et al., 2002; Khandker et al., 2003). The various factors influencing gender disparity in the enrolment in higher education. For instance, it has been noted that parental education and income, positively influence the academic achievement of children (Juma, 2012).

Although parental socio-economic background improves the educational attainment regardless of the gender of children, that parental attitudes formed by the perception of socio-cultural values are the foremost influential factor for educational attainment, especially for girls.

Chege and Sifunal (2006) observed that cultural expectations and values influence female participation in formal education and can have distinct effects on the educational outcomes of boys and girls.

Hamid (1993) observed that female schooling participation in higher education in most developing countries is still significantly lower than that of males. Hamid further found that parental attitudes are significantly associated with girls' schooling attainment and attitudes towards girls' schooling is directly associated with cultural values that act as constraints to gender equity in education.

Morinaga, Frieze, & Ferligoj (1993) also argued that societies with narrow and traditional gender values likely have broader gender disparities in terms of educational aspiration.

A key rationale for providing higher education to children is based on the notion of who will eventually become economically prolific contributors to the household. Hence, parental attitudes towards education may vary according to the gender of children when parents consider cultural backgrounds of their societies.

In a society like Bangladesh it is assumed that girls will be married and after that become members of their husbands' household. Consequently, parents may consider girls' education as futile investments while boys are viewed as resourceful investments (Sawada and Lokshin, 2001). Hence, parental educational aspiration varies according to the gender of the children in which cultural and economic perception and attitude of parents shape their decision-making whether to provide higher education to girls.

CHAPTER III

Research Methodology

3.0 Introduction

This study was problem face female of technical and vocational educational institutions. Such as classroom environment, institutional context. This study also aimed to identify the special problems married female students and teachers, female students at industrial training/internship training. This chapter describes methods used for data collection, analysis, and interpretation. According to Zulueta & Costales (2003) view quantitative that each of these objectives is done through the assignment of numerical values to the variables and the mathematical analysis of those values.

3.1 Research Design

Survey design was used for this study which is considered appropriate for this research work, because it focus to find out response from respondents by the use of questionnaire. Survey design is used in a situation where the study focus on people by the use of questionnaire to determine their attitudes, perception, understanding, culture, facts, and behaviors (Kerlinger 1979: 423).

3.2Population of the Study:

The population of the study was consist of all female students, teachers and staff of TVET institutions within the scope mentioned above such as government, private polytechnic institutes and other TVET institutions such as TTCs and TSCs.

3.3Sampling:

To make a consistent sampling process researcher will consider 6 divisional government polytechnics, 6 newly established govt. polytechnics out of 49 such institutes, and 12non-govt. polytechnic institutes out of appxt. 450, 6 Technical School and Colleges (TSCs) out of 64 and 6 Technical Training Centers (TTCs)out of 38 in Bangladesh. Altogether this

study considers the data only from 36 TVET institutions. Among the population of these selected institutions this study will seek opinion (response) from approximately twenty percent female students, twenty percent female teachers and twenty percent female staff. In the selection of the respondents random purposive sampling technique will be used.

Name of Area	Description	No of sample
Polytechnic Institutes	Students	20
(Diploma in engineering)	Teachers	15
	Staff	10
	Students	10
Technical School and Colleges (TSCs)	Teachers	10
	Staff	10
Technical Training Centers (TTCs)	Students	20
	Teachers	10
	Staff	10
		Total 115

 Table 3.1 Sampling area and number of samples

3.4 Data collection procedures

The data collection procedures are given below:

- 1. List of the institute and mobile number of institute were collected by the researcher himself through <u>www.moe.gov.bd</u> website and TVE Department(IUT) office room.
- 2. I requested the Head of the institute and relative trade teachers as per their schedule and willingness. Then researcher went to the actual field and distributed questionnaires to them for data collection.

- 3. Among 115 female students. female teachers and female staff sample, researcher himself and through his personally known teachers, and friends collected the data.
- 4. Sample respondents had realized and understood the statements of the questionnaire and given their opinion in the of 5-point Likert scale format. Researcher helped them to realize the statements of the questionnaire.
- 5. After compiling all data gathered and received, then the researcher conducted data analysis and interpretation with the assistance of SPSS 25 software.

Likert scale		Points
Strongly Agree	(SA)	5
Agree	(A)	4
Undecided	(U)	3
Disagree	(D)	2
Strongly Disagree	e (SD)	1

Table 3.2 five (5) point Likert scale

3.5 Detailed Description of Questionnaires

Atotal of one hundred and fifteen (115) respondents were sampled and questionnaires were distributed to them. Atotal of one hundred and fifteen (115) (100%) questionnaires were returned with no any missing questions.

3.6 Data Analysis:

Descriptive statistical values such as mean, standard deviation, variance, and percentage, and weighted average will be used for analysis of data. Collected data will be analyzed using statistical package for social science (SPSS) software. Open-ended items in the questionnaire are textual, that's why those questionnaires should be analyzed through qualitative method Quantitative method of data analysis was used, where mean, standard deviation, variance, and percentage, and weighted average was used for analysis of data. standard deviation and weighted average was used to find out the significance of the differences of data obtained together and questionnaires were also analyzed by weighted average (WA) mean while SPSS version 25 software was used for analyzing and interpreting the data obtained. In finding out whether the opinions of the respondents were statistically significant or not

Chi square test was used, the significant value was compared with the critical value at 0.05 level of significance and degree of freedom was calculated as well but the criteria for five Likert scale was interpreted in the table below;

Weighted Average	Responses
$5 \ge WA > 4.5$	Strongly Agree SA (5)
4.5≥ WA >3.5	Agree A (4)
3.5≥ WA> 2.5	Undecided U (3)
2.5≥ WA> 1.5	Disagree D (2)
1.5≥WA >0	Strongly Disagree SD (1)

 Table 3.6: Interpretation of Weighted Average Base on Five Likert Scale

3.7 Ethnical Consideration

Before starting any data collection, the researcher was seeking required permission from the participating Polytechnic Institute ,Technical School and College and Technical Training Center authority or administrative body. To make the process systematic an invitation letter signed by the Head, Department of Technical and Vocational Education, Islamic University of Technology (IUT), had been forwarded to the appropriate authorities of the participating institutions. Each and every participant was given a questionnaire and required time was also given to fill the questionnaire voluntarily. All the participants' information were used and kept confidential with utmost care.

CHAPTER IV

Analysis and Interpretation of Data

4.0 Introduction

In this chapter data obtained from the respondents through questionnaire have been tabulated in forms of frequencies and percentages. Also separate tables are prepared for different aspect of the questionnaires .Each table is interpreted base on the feedback received from the respondents. Chi- square test and weighted average (WA) were calculated and analyzed from the data collected through the questionnaires in form of five point Likert scale using SPSS. The complete set of the Questions has been attached in Appendix.

4.1 Analysis of Data and Findings Related to Research Objective 1

(Problems faced by Female in TVET) Table 4.1:Findings related to objective 1

S/	ITEMS	5(SA)	4(A)	3(U)	2(D	1(SD)	WA	χ2	Sig.	Df
N O.)				Valu	
									e	
1	Female students	45	40	9	27	4	3.72	24.8	.000	4
	usually face verbal	(36%	(31.7	(6.7	(23.	(3.3%		3		
	harassment	(3070		`		(3.370				
	(i.e Eve Teasing))	%)	%)	3))				
	from male students in									
	your institutions									
2	Female students faced	42	39	8	29	5	3.82	24.7	.000	4
	usually verbal harassment from male	(35%	(31.7	(6.7	(23.	(3.3%		3		

teachers and other)	%)	%)	3))				
staffs in your									
institutions.									
Female students are	40	36	9	30	26	3.00	8.83	.065	4
well satisfied with classroom environment.	(8.2%)	(30%)	(6.9 %)	(23. 3%)	(21.7 %)				
	47	55	6	8	7	4.05		.000	4
e	(38.3	(45%)	(5%	(6.7	(5%)		7		
problems while	ì)	``					
-	,		,	,					
their home and									
institution.									
Sexual harassment	32	52	9	25	3	3.72	33.1	.000	4
continues to spread in	(26.7	(43.3	(6.7	(21.	(1.7%		6		
your institution or any		`		`)				
other institutions	, .)	, .,	, .,	,,,,,	,				
because victims are									
always afraid to make									
report.									
Some teachers are	41	40	9	27	4	3.72	24.8	.000	4
failed female students	(35%	(31.7	(67	(23	(3 3%		3		
in order to force them)		`	-	,				
to their own sexual)	/0/	/0)	5)					
need.									
Lack of appropriate	20	32	14	28	18	3.03	7.33	.119	4
discipline from the	(16.7)	$(28)^2$	(11	(20	(150/				
management and					(13%)				
administrators of TVE	70)	70)	770)	570))				
	staffs in your institutions. Female students are well satisfied with classroom environment. Non-resident female students are facing problems while travelling between their home and institution. Sexual harassment continues to spread in your institution or any other institutions because victims are always afraid to make report. Some teachers are failed female students in order to force them to their own sexual need. Lack of appropriate discipline from the management and	staffs in your institutions. Female students are well satisfied with classroom environment. Non-resident female students are facing problems while travelling between their home and institution. Sexual harassment secause victims are always afraid to make report. Some teachers are some tea	staffsinyourinstitutions.4036Femalestudents4036wellsatisfiedwith(8.2%)(30%)classroom))36environment.4755studentsarefacingproblemswhile(38.3)(45%)yourbetween%)4theirhomeand3252continues to spread in3252(26.7)your institution or any%)%)%)otherinstitutions%)%)because victims are4140always afraid to make(35%)(31.7)in order to force them(35%)(31.7)in order to force them)%)%)Lack of appropriate2032disciplinefrom the(16.7)(28.3)%)%)%)%)	staffsinyourinstitutions.4036Female students are well satisfied with classroom environment.4036Non-resident(8.2%) problems(30%) problems(6.9 problemsNon-residentfemale47556students are facing problems(38.3 problems(45%) problems(5% problemstravellingbetween their home and institution.32529Sexual harassment problems32529continues to spread in your institution or any other institutions32529Some teachers in order to force them to their own sexual need.41409failed female students in order to force them to their own sexual need.(35%) problems(31.7 problems(6.7 problemsLack of appropriate management203214discipline from the management409(16.7 problems	staffsinyourinstitutions.4036930Well satisfied with classroom environment.(8.2%))(30%) (6.9 %)(6.9 (23. 3%)Non-resident female students are facing problems while travelling between their home and institution.475568Sexual harassment other institutions3252925Continues to spread in your institutions because victims are always afraid to make report.3252925Some teachers are failed female students in order to force them to their own sexual need.4140927Lack of appropriate management20321428discipline from the management(16.7 %)(28.3 %)(11. (28.3(28.3 %)	staffsinyourinstitutions. 40 36 9 30 26 Well satisfied with classroom environment. (8.2%) $)$ (30%) (6.9) $(23.(21.7)(21.7)(23.)Non-resident femalestudents are facingproblems whiletravelling betweentheir home andinstitution.4755687Sexual harassmentother institutions32529253Continues to spread inyour institutionsbecause victims arealways afraid to makereport.32529253Some teachers areto their own sexualneed.41409274failed female studentsin order to force themto their own sexualneed.2032142818discipline from themanagement2032142818$	staffsinyour institutions.inyour institutions.inyour institutions.Femalestudentsare (8.2%)4036930263.00wellsatisfiedwith classroom environment.(8.2%)(30%) %)(6.9 %)(23. (21.7) %)(21.7) %)Non-residentfemale47556874.05studentsare facing problems(38.3) %)(45%) %)(5% %)(6.7) %)(5%) %)(5%) %)(5%) %)(5%) %)(5%) %)(5%) %)(1.7%) %)Sexualharassment pother325292533.72continues to spread in your institution(26.7) %)(43.3) %)(6.7) %)(21. %)(1.7%) %)3.72Someteachers are failed female students in order to force them to their own sexual need.4092743.72Lack of appropriate20321428183.03discipline management(16.7) %)(28.3) %)(11.1) (28. (28.4)(15%) %)(23.5%) %)	staffsinyour 1 40 36 9 30 26 3.00 8.83 Female students are classroom environment. (8.2%) $)$ (30%) (30%) $(6.9$ $(23.(21.7)(23.(21.7)(21.7)3.008.83Non-resident femalestudents are facingproblemswhiletravelling betweentheir home andinstitution.47(38.3)(45\%)55(45\%)(45\%)6(5\%)7(5\%)4.05(5\%)47.67Sexual harassmentcontinues to spread inyour institution or anyother institutionsbecause victims arealways afraid to makereport.32(26.7)(43.3)(6.7)25(6.7)3(21.)(1.7\%)3.72(1.7\%)3.126Some teachers arefailed female studentsin order to force themto their own sexualneed.40(35\%)9(31.7)(6.7)27(23.)(3.3\%)3.03(3.3\%)Lack of appropriatemanagementand(16.7)22(23.)11(28.)(15\%)(30)111(28.)(28.)(111.)(28.)(28.)111(28.)3.03(3.03)7.33$	staffsinyour institutions. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <

	increase gender discrimination.									
	discrimination.									
8	Because of poverty	36	24	8	22	25	3.15	8.88	.064	4
	some parents are unable to send their	30%	20%	6.7	18.	23.3		1		
				%	3%	%				
	daughters to study									
	technical education.									
9	Very few numbers of	47	55	6	8	7	4.05	47.6	.000	4
	female instructors are in TE institutions.	(38.3 %)	(45%)	(5%	(6.7 %)	(5%)		7		
		/0))	70)					
10	You are happy to be	22	33	9	28	27	3.00	8.83	.065	4
	student of TVET	(8.3%	(30%)	(6.9	(23.	(21.7				
	institute.)		%)	3%)	%)				

S/NO	ITEMS	5(SA)	4(A)	3(U)	2(D)	1(SD)	WA	χ2	Sig.	D
•									Val	f
									ue	
11	Female teachers	40	41	9	28	4	3.72	24.83	.000	4
	or staffs usually	(31%)	(32.7%	(6.7%)	(23.3)	(3.3%				
	face verbal	())	(01,11)	()					
	harassment))				
	from male									
	students, male									
	colleague and									
	others staffs at									

	TVET									
	institutions.									
12	Female	35	48	13	-	20	3.69	13.448	.004	3
	teachers and	30%	40%	10%	_	16.7				
	staffs cannot	2070		1070		%				
	easily									
	communicate									
	with her higher									
	authority									
	(Principal/head									
	of department)									
	at institution for									
	work									
	troubleshooting									
13	Separate female	47	40	9	27	4	3.72	24.83	.000	4
	teacher	(35%)	(31.7%	(6.7%)	(22,2)	(3.3%				
	common room	(3370)	(31.770	(0.770)	(23.3)	(3.3%)				
	is essential for))				
	TVET									
	institution.									
14	A TVET	45	40	9	27	4	3.72	24.83	.000	4
	institution	(36%)	(31.7%	(6.7%)	(23.3)	(3.3%				
	should have	(5070))	(0.770)	(2010))				
	special facilities		,			,				
	for female									
	teacher and									
	staffs such as									
	maternity leave,									

	child care center.									
15	Some colleagues	10	60	12	-	25	3.47	20.756	.00	3
	are blackmailing female teacher in	11%	48.3%	10%	-	20%			0	
	order to force									
	them to their									
	own sexual need.									
	Lack of appropriate									
	discipline from	57	22	2	2	33	3.60	49.33	.00 0	4
	the	(50%)	(18.3%)	(1.7%)	(1.7%)	(28.3			Ŭ	
	management)			%)				
	and									
	administrators									
	of TVET									
	institutions									
	increase gender									
	discrimination.									

Statement1; 36% strongly agree, 31.7% agree that some male students in order to force (i.e Eve Teasing) their own sexual need, 6.7% undecided, 23.3% disagree and 3.3% strongly disagree that some female students (victims) affected verbal harassment from male students . The weighted average is $3.72 \ (3.72 \ge 3.50)$ which agree that some male students to force them to their own sexual need, at the same time Chi square test was performed at df = 4 with sig value of .000 which is less than 0.05 level of significance and $\chi o2 \ (24.83) > \chi c2 \ (9.488)$ shows that null hypothesis, responses on this statement are not statistically significant, is rejected. Therefore the researcher concluded that it was statistically significant to agree that

some female students (victims) affected verbal harassment (i.e Eve Teasing) from male students own sexual need.

Statement 2; 35% strongly agree, 31.7% agree that some teachers fail female students in their exams in order to force them to their own sexual need, 6.7% undecided, 23.3% disagree and 3.3% strongly disagree that some teachers fail female students in their exams in order to force them to their own sexual need. The weighted average is $3.72 (3.72 \ge 3.50)$ which agree that some teachers fail female students in their exams in order to force them to the same time Chi square test was performed at df = 4 with sig value of .000 which is less than 0.05 level of significance and $\chi o2 (24.83) > \chi c2 (9.488)$ shows that null hypothesis, responses on this statement are not statistically significant, is rejected. Therefore the researcher concluded that it was statistically significant to agree that some teachers fail female students in order to force them to their own sexual need.

Statement 3; 8.2% strongly agree, 30% agree that some female/women are not well motivated class room environment in Technical and Vocational Education Institutions, 6.9% undecided, 23,3% disagree and 21.7% strongly disagree that some female/women are not well motivated in Technical Education Institution. The weighted average is 3.00 ($3.00 \ge 2.50$) which undecided that some female/women are not well motivated in Technical Education Institutions, meanwhile the Chi square test was performed at df = 4 with sig. value of .065 which is greater than 0.05 level of significance and $\chi o2$ (8.833) < $\chi c2$ (9.488) of which the null hypothesis, responses on this statement are not statistically significant, is accepted. Therefore the researcher concluded that it was not statistically significant to agree that some female/women are not well motivated class room environment in TVET.

Statement 4; 37.3% strongly agree, 46% agree that non-resident female students are facing problems while travelling between their home and institution, 5% undecided, 6.7% disagreed and 5% strongly disagree that non-resident female students are facing problems while travelling between their home and institution. The weighted average is 4.05 ($4.05 \ge 3.50$) which agree that non-resident female students are facing problems while travelling between their home and institution. The weighted average is 4.05 ($4.05 \ge 3.50$) which agree that non-resident female students are facing problems while travelling between their home and institution. The weighted average is 4.05 ($4.05 \ge 3.50$) which agree that non-resident female students are facing problems while travelling between their home and institution.

value of .000 which is less than 0.05 level of significance and $\chi o2$ (49.66) > $\chi c2$ (9.488) of which the null hypothesis, responses on this statement are not statistically significant, is rejected. Then the researcher concluded that it was statistically significant to agree that non-resident female students are facing problems while travelling between their home and institution.

Statement 5; 26.7% strongly agree, 43.3% agree that sexual harassment continues to spread in Technical and Vocational Education institutions because victims always fear to report such incidences, 6.7% undecided, 21.7% disagreed and 1.7% strongly disagree that sexual harassment continues to spread in Technical and Vocational Education institutions because victims always fear to report such incidences. The weighted average is 3.72 ($3.72 \ge 3.50$) which agree that sexual harassment continues to spread in Technical and Vocational Education institutions because victims always fear to report such incidences, also Chi square test was conducted at df = 4 with sig value is .000 which is less than 0.05 level of significance and $\chi o2$ (33.16) > $\chi c2$ (9.488) shows that null hypothesis, responses on this statement are not statistically significant, is rejected. So the researcher came to conclude that it was statistically significant to agree that sexual harassment continues to spread in Technical and Vocational Education institutions because victims always fear to report such incidences.

Statement 6; 35% strongly agree, 31.7% agree that some teachers fail female students in their exams in order to force them to their own sexual need, 6.7% undecided, 23.3% disagree and 3.3% strongly disagree that some teachers fail female students in their exams in order to force them to their own sexual need. The weighted average is 3.72 ($3.72 \ge 3.50$) which agree that some teachers fail female students in their exams in order to force them to the same time Chi square test was performed at df = 4 with sig value of .000 which is less than 0.05 level of significance and $\chi o2(24.83) > \chi c2$ (9.488) shows that null hypothesis, responses on this statement are not statistically significant, is rejected. Therefore the researcher concluded that it was statistically significant to agree that some teachers fail female students in order to force them to their own sexual need.

Statement 7 ; 16.7% strongly agree, 28.3% agree that lack of appropriate discipline from management and administrators of Technical and Vocational education increases gender discrimination, 11.7% undecided, 28.3% disagree and 15% strongly disagree that lack of appropriate discipline from management and administrators of Technical and Vocational education institutions increases gender discrimination. The weighted average is 3.03 (3.03 \geq 2.50) undecided that lack of appropriate discipline from management and administrators of Technical and Vocational Education increases gender discrimination, also Chi square test was performed at df = 4 with sig. value of 0.119 which greater than 0.05 level of significance and $\chi o2$ (7.333) < $\chi c2$ (9.488) of which the null hypothesis, responses on this statement are not statistically significant, is accepted. Then the researcher concluded that it was not statistically significant to agree that lack of appropriate discipline from management and administrators of Technical and Vocational education increases gender discrimination.

Statement 8, 30% strongly agree, 20% agree that some parents fail to send their female children to study Technical Education courses because of poverty, 6.7% undecided, 18.3% disagree and 23.3% strongly disagree that some parents fail to send their female children to study Technical Education courses because of poverty. The weighted average is $3.15 (3.15 \ge 2.50)$ undecided that some parents fail to send their female children to study Technical Education courses because of poverty, also Chi square test was performed at df = 4 with sig. value of .064 which is greater than 0.05 level of significance and $\chi o2 (8.881) < \chi c2 (9.488)$ of which the null hypothesis, responses on this statement are not statistically significant, is accepted. Therefore the researcher concluded that it was not statistically significant to say that some parents fail to send their female children to study Technical Education courses because of poverty.

Statement 9; 37.3% strongly agree, 46% agree that very few numbers of female instructors are in Technical and Vocational Education, 5% undecided, 6.7% disagreed and 5% strongly disagree that very few numbers of female instructors are in Technical and Vocational Education. The weighted average is 4.05 ($4.05 \ge 3.50$) which agree that very few numbers of

female instructors are in Technical and Vocational Education, also Chi square test was conducted at df = 4 with sig value of .000 which is less than 0.05 level of significance and $\chi o2$ (49.66) > $\chi c2$ (9.488) of which the null hypothesis, responses on this statement are not statistically significant, is rejected. Then the researcher concluded that it was statistically significant to agree that very few numbers of female instructors are in Technical and Vocational Education.

Statement 10; 8.3% strongly agree, 30% agree that some female/women are not well motivated in Technical Education Institutions, 6.9% undecided, 23,3% disagree and 21.7% strongly disagree that some female/women are not well motivated in Technical Education Institution. The weighted average is 3.00 ($3.00 \ge 2.50$) which undecided that some female/women are not well motivated in Technical Education Institutions, meanwhile the Chi square test was performed at df = 4 with sig. value of .065 which is greater than 0.05 level of significance and $\chi o2$ (8.833) < $\chi c2$ (9.488) of which the null hypothesis, responses on this statement are not statistically significant, is accepted. Therefore the researcher concluded that it was not statistically significant to agree that some female/women are not well motivated in Technical and Education Institutions.

Statement 11; 36% strongly agree, 33.7% agree that some male students in order to force (i.e Eve Teasing) their own sexual need, 6.7% undecided, 23.3% disagree and 3.3% strongly disagree that some female teachers and staff (victims) affected verbal harassment from male students. The weighted average is 3.72 ($3.72 \ge 3.50$) which agree that some male students to force them to their own sexual need, at the same time Chi square test was performed at df = 4 with sig value of .000 which is less than 0.05 level of significance and $\chi o2$ (24.83) > $\chi c2$ (9.488) shows that null hypothesis, responses on this statement are not statistically significant, is rejected. Therefore the researcher concluded that it was statistically significant to agree that some female teachers and staff (victims) affected verbal harassment (i.e Eve Teasing) from male students own sexual need.

Statement 12; 30% strongly agree, 40% agree that female teachers and staffs cannot easily communicate with her higher authority their various working environment, 10%

undecided and 16.7% strongly disagree that female teachers and staffs cannot easily communicate with her higher authority their various working environment. The weighted average is 3.69 ($3.69 \ge 3.50$) agree that female teachers and staffs cannot easily communicate with her higher authority their various working environment, also Chi square test was conducted at df = 3 with sig. value of .004 which is less than 0.05 level of significance and $\chi o2$ (13.448) > $\chi c2$ (7.815) of which the null hypothesis, responses on this statement are not statistically significant, is rejected. Then the researcher concluded that it was statistically significant to say that female teachers and staffs cannot easily communicate with her authority their various working environment.

Statement13; 35% strongly agree, 31.7% agree that Technical and Vocational Education Institutions, separate female teacher common room is essential that 6.7% undecided, 23.3% disagree and 3.3% strongly disagree that Technical and Vocational education institutions separate female teacher common room is essential. The weighted average is 3.72 ($3.72 \ge 3.50$) which agree Technical and Vocational education institutions Separate female teacher common room is essential , at the same time Chi square test was performed at df = 4 with sig value of .000 which is less than 0.05 level of significance and $\chi o2$ (24.83) > $\chi c2$ (9.488) shows that null hypothesis, responses on this statement are not statistically significant, is rejected. Therefore the researcher concluded that it was statistically significant to agree that Technical and Vocational Education institutions separate female teacher common room is essential.

Statement 14; 36% strongly agree, 31.7% agree that Technical and Vocational education institutions should have special facilities for female teacher and staffs such as maternity leave, child care center., 6.7% undecided, 23.3% disagree and 3.3% strongly disagree that Technical and Vocational education institutions should have special facilities for female teacher and staffs such , maternity leave, child care center.. The weighted average is 3.72 ($3.72 \ge 3.50$) which agree Technical and Vocational education institutions institutions institution should have special facilities for female teacher and staffs such agree Technical and Vocational education institutions institution should have special facilities for female teacher and staffs such as maternity leave, child care center, at the same time Chi square test was performed at df = 4 with sig value of .000 which is less

than 0.05 level of significance and $\chi o2$ (24.83) > $\chi c2$ (9.488) shows that null hypothesis, responses on this statement are not statistically significant, is rejected. Therefore the researcher concluded that it was statistically significant to agree that Technical and Vocational education institutions very much should have special facilities for female teacher and staff maternity leave, child care center.

Statement 15, 11% strongly agree, 48.3% agree that some colleagues are blackmailing female teachers and staff in order to force them to their own sexual need, 10% undecided and 20% strongly disagree that colleagues are blackmailing female teachers. The weighted average is 3.47 ($3.47 \ge 2.50$) undecided that female teachers in order to force them to their own sexual need, also Chi square test was conducted at df = 3 with sig. value of .000 which is less than 0.05 level of significance and $\chi o2$ (20.756) > $\chi c2$ (7.815) of which the null hypothesis, responses on this statement are not statistically significant, is rejected. Therefore the researcher concluded that it was statistically significant to say some colleagues are blackmailing female teachers and staff in order to force them to their own sexual need.

Statement 16, 50% of the respondents strongly agree, 18.3% agree that lack of active guidance and counseling centers increase gender discrimination in TVET institutions, 1.7% undecided, 1.7% disagreed and 28.3% strongly disagree that lack of active guidance and counseling centers increase gender discrimination in TVET institutions. The weighted average is 3.60 ($3.60 \ge 3.50$) which agrees that lack of active guidance and counseling centers increase gender discrimination, meanwhile the Chi square test was performed at df = 4 with sig. value of .000 which is less than 0.05 level of significance and $\chi o2$ (49.333) > $\chi c2$ (9.488) of which the null hypothesis, responses on this statement are not statistically significant, is rejected. Therefore the resdearcher concluded that it was statistically significant to agree that lack of active guidance and counseling centers increase gender discrimentation and Technical and Vocational Education Institutions.

4.2 Analysis of Data and Findings Related to Research Objective 2

(Special problem faced of married female in TVET)

S/N	ITEMS	SA	А	U	DA	SD	WA	χ2	Sig.
0.									Value
1	Your institute need child care	84	31	0	0	0	4.73	9.80	.002
	center	01	51		-		1.75	2.00	.002
		73.3	26.7	0%	0%	0%			
		%	%						
2	You do not balance your	82	33	1	1	3	4.73	9.80	.002
	education with your		25.7	2%	2.1	2.4%			
	household life.	73.3	%		%				
		%							
3	Do you think your result	56	59	0	2	1	4.88	.022	.881
	would be relatively better								
	if you were not married	48.9	51.1	0%	2.3	2%			
		%	%		%				
4	Are you facing any	53	62	0	1	1	4.46	.200	.655
	barrier from your			0%	2.1	2.3%			
	husband/husband family? If	46.7 %	53.3 %		%				
	yes, please mention what	70	,,,						
	kind of barrier. Ans:								
5	When did you get married?	97	18	1	2	3	4.84	21.35	.001
	After admission or before		15.6	1.6	2.4	2.8%			
	admission.	84.4 %		%	%				

Statement 1: From the return questionnaire show that 73.3% of the respondents strongly Agree and 26.7% of the respondents Agree that Your institute need child care center. The weighted average is 4.73 (4.73 \geq 4.50)which strongly Agree that Agree that Your institute need child care center, also Chi square test was conducted at df = 1 with sig. value of .000 which is less than 0.05 level of significance and $\chi o2$ (9.800) > $\chi c2$ (3.841) of which the null hypothesis, responses on this statement are not statistically significant, is rejected. Therefore the researcher concluded that it was statistically significant to say TVET institute need child care center.

Statement 2: From the return questionnaire show that 73.3% of the respondents Yes and 26.7% of the respondents No that As a married students, did/do you balance your education with your household life. The weighted average is 4.73 (4.73 \ge 4.50) which Strongly Agree and Agree that As you do not balance your education with your household life, also Chi square test was conducted at df = 1 with sig. value of .000 which is less than 0.05 level of significance and $\chi o2$ (9.800) > $\chi c2$ (3.841) of which the null hypothesis, responses on this statement are not statistically significant, is rejected. Therefore the researcher concluded that it was statistically significant to say As a married students, you do balance your education with your household life.

Statement 3: From the return questionnaire show that 48.9% of the respondents Yes and 51.1% of the respondents No that Do you think your result would be relatively better. The weighted average is 4.49 ($4.49 \ge 3.50$)which Yes that No Do you think your result would be relatively better if you were not married, , also Chi square test was conducted at df = 1 with sig. value of .000 which is less than 0.05 level of significance and $\chi o2$ (.022) > $\chi c2$ (3.841) of which the null hypothesis, responses on this statement are not statistically significant, is rejected. Therefore the researcher concluded that it was statistically significant to say do you think your result would be relatively better if you were not married.

Statement 4: From the return questionnaire show that 46.7% of the respondents Yes and 26.7% of the respondents No that you are facing any barrier from your husband/husband

family If yes, please mention what kind of barrier. The weighted average is 4.45 (4.45 \geq 3.50)which Yes that No that Are you facing any barrier from your husband/husband family? If yes, please mention what kind of barrier, also Chi square test was conducted at df = 1 with sig. value of .000 which is less than 0.05 level of significance and $\chi o2$ (.200) < $\chi c2$ (3.841)of which the null hypothesis, responses on this statement are not statistically significant, is rejected. Therefore the researcher concluded that it was statistically significant to say you are facing any barrier from your husband/husband family.

Statement 5 : From the return questionnaire show that 84.4% of the respondents Yes and 15.6% of the respondents No that When did you get married After admission or before admission. The weighted average is 4.84 (4..84 \geq 4.50)which Yes that No that When did you get married After admission or before admission, also Chi square test was conducted at df = 1 with sig. value of .000 which is less than 0.05 level of significance and $\chi o2$ (21.356) $>\chi c2$ (3.841) of which the null hypothesis, responses on this statement are not statistically significant, is rejected. Therefore the researcher concluded that it was statistically significant to say When did you get married After admission or before admission or before admission.

4.3 Analysis of Data and Findings Related to Research Objective 3

(Identifying problems faced by female students at Industrial Training/Internship Training in TVET)

As mentioned in Chapter 3, the researcher developed a questionnaire in order to investigate the problems faced female students at Industrial Training/ Internship Training in TVET. The question-items and the findings are presented below:

Question-item 1: During your training program, where do/did you live? Please tick on the following *option(s): i) With family/ relative; ii) at Student Hostel/ rented House.*

Out of 115 respondents 56 (48.9%) female students live/lived with their parents or at relatives' house. The rest 59 (51.1%) students live/ lived at students' hall residence or rented house.

Question-item 2: If you live away from your family. Do/did you face any difficulty in living away from your family?

The opinion was almost equally divided. 51.1% of the responding students had no problems, 49.9% told they had problems living outside their family. However, they did mention any specific problems that they faced.

Question-item 3: Do/did you face any problem while traveling to attend your internship training. Out of 115 respondents 54 (47%) faced problems while travelling to internship training center.

Question-item 4: Do/ did you or any of your fellow female trainee students faced verbal harassment or any other kind of harassment from male in the training organization or company during your internship training? If Yes, please specify:.....

Majority (73%) respondents (female trainee students) expressed that they have faced problems such as verbal harassment and others. problems/ discriminations include; women are unfairly treated and face a lot of barriers in training time/working places, men receive more employers' attention in terms of offering training time than female.

CHAPTER V

Summary, Findings, Conclusion and Recommendation

5.1 Summary

The purpose of this study was to find out the problem faced by women in Technical and Vocational Education in Bangladesh.

The objectives of the study were to;

- i. To identify the problems faced by female students and female teachers& staff and/or special facilities provided for them in TVET institutions particularly in the classroom environment, and institutional context;
- ii. To identify special problems and/or facilities in case of married female students and teachers& staff; and
- To identify problems faced by female students at Industrial Training/Internship Training.

A questionnaire was designed to collect related data. The questionnaire was validities an experts. Weighted average and Chi square tests were conducted and used to analyze and interpret the data using SPSS software.

The population of the study ware of polytechnic institute, TTCs and TSCs in Bangladesh which consists of female teachers, students and staff. For identification the existing problems faced by women/female opinions were collected from individual students, teachers and staff of that particular area mentioned above as stated in the sample. 100% percent rate of questionnaires were fully returned and received with some unanswered questions, the required data were generated and analyzed using Statistical Packages for Social Science (SPSS) software version 25 from the collected copies of the questionnaires where all parts of the data were interpreted.

At 0.05 level of significance 0.05 using Chi square test, the collected data statistically analyzed, percentage and weighted average were also calculated.

The finding of the study revealed that; there are different problems faced by women/females in Technical and Vocational Education institutes in Bangladesh, among the problems are gender discrimination, parental problems/issues and job discrimination faced by women/females in Technical and Vocational Education institutes. All respondents were given importance to respond to the questionnaires and majority agreed that such problems faced by women/female exist in Technical and Vocational Education institutes in Bangladesh.

5.2 Discussion on Findings

Through the sample selected which comprised of teachers, staff and students the findings include the following as stated below;

- **5.2.1** From the analysis of collected data it was found out that the responses on this statement was statistically significant to say that majority of the respondents institutions agreed with the statements particularly in the classroom environment, and institutional context in Technical and Vocational Education institutes but only item 3 and 10 from table 4.1 that do not agree with the statement.
- **5.2.2** From the analysis and interpretation of the data collected in table 4.2 it was found that the responses on this statement was statistically significant to say that majority of the respondents agree that married female students and teacher faced of Technical and Vocational Education meanwhile only item 3 from table 4.2 that do not agree with the statement.
- **5.2.3** From the analysis and interpretation of the data collected in table 4.3 it was found that the responses on this statement was statistically significant to say that majority of the respondents agree that female students faced problems during industrial training in Technical and Vocational Education.

5.3 Conclusion

The study aims at identifying problems faced by women/female in Technical and Vocational Education but based on the findings from the analyzed and interpreted data the following conclusions has been made. The study revealed that:

- 1. Most of the respondents believed that women/female in Technical and Vocational Education faced a lot of problems in the aspect of gender discrimination such discriminations include lack of active guidance and counseling centers, few number of female instructors, continuous spread of sexual harassment, intentional failing of females students by teachers and perception of Technical and Vocational Education as a muscular preserve, not a place for women where some people believe that women are role users and consumers. So from findings it indicated that there is high rate of gender discrimination in Technical and Vocational Education.
- 2. Married female students and teachers faced a lot of family problems as revealed in the finding such problems include, lack of household parental support, no child care, perception of parents in relation with female interaction caused bad feeling, lack of parental/family enlighten on the importance of female education from voluntary agencies and women organization contributes toward female problems in Technical and Vocational Education.
- **3.** Most respondents agree that women/female faced problems/ discriminations in industrial training in Technical and Vocational Education. Such problems/ discriminations include; women are unfairly treated and face a lot of barriers in training time/working places, men receive more employers' attention in terms of offering training time than female. For job equality in Technical and Vocational Education Government should set up a policy that will allow fair treatment of men and women in terms of employment and promotion in various working environment so that job discrimination will be addressed among citizens of that particular country which will enhance social and economic development.

5.4 Recommendation

This is recommendation from research findings and conclusions "Problems faced by women/female in Technical and Vocational Education" the following recommendations can be made that can play a vital role in social-economic development and quality improvement of the product of Technical and Vocational Education.

1.Government should formulate a serious punishment to those who abuse women/female in Technical and Vocational Education

2- Government should bring policy and law that will address the problem of sex abuse in Technical and Vocational Education.

3- Non Governmental organizations should play a vital role towards educating and encouraging women/female to acquire skills that will make them to be self reliance.

4- Government should properly implement and interpret laws that protect women/female from the crimes and inequality in their various working environment.

- Government and traditional rulers should come up with concrete policies to ensure women feel motivated to work and continue their career, even after child birth in Technical and Vocational Education
- 6- Ministry of education should come up with the strategy and punishment to those teachers who abuse female students in academic and social environment in Technical and Vocational Education
- 7- Government should as well provide conducive teaching/learning to encourage women/female to learn self reliance skills in Technical and Vocational Education Government should assist and provide fund to women organizations and agencies to enlighten parents on the importance of women's participation in Technical and Vocational Education for economic and social development.
- 8- School management and administration should open an active guidance and counseling centers for necessary guidance and counseling students in aspect of gender discrimination among students of Technical and Vocational Education.

Based on this study the researcher recommended that a further study should be conducted in the aspect of stereotyping which is one among the major problems discovered in the course of this research work.

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APPENDIX

Department of Technical and Vocational Education (TVE) Islamic University of Technology (IUT) Board Bazar Gazipur 1704, Bangladesh. September, 2018.

Sir/Madam,

LETTER TO THE RESPONDENT

I am M.Sc.T.E. Electrical and Electronic Engineering student in the above mentioned university, conducting a research on the problems faced by women/female in Technical and Vocational Education.

You are requested to respond to the questionnaire as possible as you can, your suggestions and opinions will be used to improve the content of this research.

Yours faithfully

Marin

Department of Technical and Vocational Education (TVE)

Islamic University of Technology (IUT)

QUESTIONNAIRE

Section: A: Institutional information

NOTE:

It is under ethnical requirement that all your personal information will be kept confidential.

Section: A (Background Information)
Nationality:
State/Town:
Sex/Gender: Male Female
Age:
Status: Student 🗌 Teacher 🗌 staff
Email:
Level of study/Program (For student):
Date:
Please put a tick mark ($$) expressing your opinion in the instrument

Section: B

RESEARCH QUESTION I

To identify the problems faced by female students and female teachers and special facilities provided for them in TVET institutions particularly in the classroom environment, and institutional context.

(to be filled in by Current Female Students)

S/NO.	ITEMS	SA	А	U	D	SD
1	Female students usually face verbal harassment					
	(i.e Eve Teasing) from male students in your					
	institutions					
2	Female students faced usually verbal harassment					
	from male teachers and other staffs in your					
	institutions.					
3	Female students are well satisfied with					
	classroom environment.					
4	Non-resident female students are facing					
	problems while travelling between their home					
	and institution.					
5	Sexual harassment continues to spread in your					
	institution or any other institutions because					
	victims are always afraid to make report.					
6	Some teachers are failed female students in					
	order to force them to their own sexual need.					
7	Lack of appropriate discipline from the					
	management and administrators of TVE increase					
	gender discrimination.					

8	Because of poverty some parents are unable to			
	send their daughters to study technical education.			
9	Absence/Lack of active Guidance and			
	Counseling center increases uncomfortably to			
	continue education or gender discrimination			
	your institutions.			
10	You are happy to be student of TVET institute.			

Section: C

(To be filled in by female teachers & Staffs).

S/NO.	ITEMS	SA	А	U	D	SD
1	Female teachers or staffs usually face					
	verbal harassment from male students,					
	male colleague and others staffs at					
	TVET institutions.					
2	Female teachers and staffs can easily					
	communicate with her higher					
	authority (Principal/head of					
	department) at institution for work					
	troubleshooting.					
3	Separate female teacher common					
	room is essential for TVET institution.					
4	A TVET institution should have special					
	facilities for female teacher and staffs					
	such as maternity leave, child care center.					

5	Sexual harassment continues to spread in			
	TVET institutions because victims are			
	always afraid to make report.			
6	Some colleagues are blackmailing female			
	teacher in order to force them to their			
	own sexual need. Your institute has child			
	care center			
7	Women are unfairly treated and they face			
	a lot of barriers in progress and			
	promotion at their working places			
8	Lack of appropriate discipline from the			
	management and administrators of			
	TVET institutions increase gender			
	discrimination.			

Section: D

RESEARCH QUESTION II

To identify special problems and/or facilities in case of married female students, teachers and staff

S/N 0.	ITEMS	Yes	No
1	When did you get married? after admission or before admission	After Admission	Before Admission
2	As a married students, did/do you balance your education with your household life.		
3	Do you think your result would be relatively better if you were not married		
4	Are you facing any barrier from your husband/husband family? If yes , please mention what kind of barrier. Ans:		
5	Does your institute have any child care center? If yes, please specify how it runs? Ans:		

Section: E

RESEARCH QUESTION III

To identify problems faced by female students at Industrial Training/Internship Training.

S/N	ITEMS
1	During your training program, where do/did you live?
	Please tick on the following <i>option(s)</i> :
	i) With family/ relative; ii) at Student Hostel/ rented House.
2	If you live away from your family. Do/did you face any difficulty
	in living away from your family?
3	Do/ Did you face any problem while traveling to attend
	your training?
4	Do/ did you or any of your fellow female trainee students faced
	verbal harassment or any other kind of harassment from
	male in the training organization you are doing/ did your
	internship training.
	If Yes, please specify:

Thank You