THE CHALLENGES FOR FEMALE PARTICIPATION ON TRAINING AS TRAINEE IN TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING OF BUNO BEDELE ZONE

A RESEARCH REPORT SUBMITTED TO COLLEGE OF EDUCATION BEHAVIORAL SCIENCES DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT FOR PARTIAL FULFILLMENT AND REQUIREMENTS OF M.A DEGREE IN SCHOOL LEADERSHIP

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COLLEGE OF EDUCATION AND BEHAVIORAL SCIENCE

DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

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March, 2022

JIMMA, ETHIOPIA

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Abbreviations and Acronyms

DTPS: Development Technical and professional skill.

TEVT: Technical Education and Vocational Training.

MOE: Ministry Of Education.

NGO: None Governmental Organization.

TVET: Technical and Vocational Education and Training.

TVSD: Technical and Vocational Skills development.

UNESCO: United Nations Education, Social and Cultural Organization

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Table of Contents

Acknowledgements i
Abbreviations and Acronyms ii
Abstract v
CHAPTER: ONE 1
1. Introduction 1
1.1. Background of the Study 1
1.2. Statement of the Problem 3
1.3. Objectives of the Study 6
1.3.1. General Objective 6
1.3.2. Specific Objectives 6
1.4. Significance of the Study 6
1.5. The Scope of the Study 7
1.6. Limitation of the Study 7
1.7. Definitions of KeyTerms 7
1.8. Organizations of the Study 7
CHAPTER: TWO 8
2. LITERATURE REVIEW OF RELATED LITERATURE 8
2.1. Introduction 8
2.2. Concept of Technical, Vocational, Education and) Training (TVET) 8
2.3. Technical and Vocational Education and Training (TVET) in Ethiopia 9
2.4. Females in Technical, Vocational, Education and Training (TVET)) 10
2.5. Socio-economic challenges to female participation in TVET 12
2.6. Challenges for Female in TVET Sector 14
2.6.1. Education System and Policies 14
2.6.2. Parents' Influence 15
2.6.3. SchoolTteachers' Influence 16
2.6.4. Employment Inequalities 17
2.6.5. Cultural and Social Practices 18
2.6.6. Past Policy Failures 19
2.6.7. Student Attitudes and Interests 20
2.7. Empirical Rreview literature 21
2.8. Relation Between Variables 24
2.9. Conceptual Frame Work 24
2.9. Summary of The Review Literatures 25
CHAPTER THREE 26
3. RESEARCH DESIGN AND METHODOLOGY 26

3.1 Research Design 26
3.2.Research Method 26
participation in TVET. 26
3.2. Source of Data 26
3.3 Target Population Area 26
3.4. Sampling Techniques 26
3.5 Data Collection Instrument 28
3.5.1Questionnaires 28
3.5.2. Interview 28
3.6. Data Collection Procedure. 28
3.7. Checking Reliability of The Instrument 29
3.8. Methods of Data Analysis 29
3.9 Ethical Consideration 30
CHAPTER: FOUR 31
4. Data Analysis, Presentation and Interpretation 31
4.1. Background information of respondents 31
4.2. Analysis on The Responses Collected Through Questionnaires 32
4.3. Correlation analysis of school leadership practice and teachers commitment 58
4.4. Analysis on the qualitative that obtained through interview 60
CHPTER FIVE 61
5. Summary, Conclusions and Recommendations 61
5.1. Summary 61
5.2. Conclusions 62
5.3. Recommendations 63
REFERENCES 64
APPENDIXA 67
Appendix B 72

List of Tables

Table.4. 1.analysis on age respondents 31

Table 4.2. Analysis on Economic related challenges in technical and vocational education and training.....33

Table 4. 3. Analysis on Culture related challenges in technical and vocational education and training.....36

Table 4.4. Analysis on Environment related challenges in technical and vocational education and training 40

Table 45Analysis on Family related challenges in technical and vocational education and training 45

Table 4.6. Analysis on Family related challenges in technical and vocational education and training 47

Table 4.7 Analysis on Family related challenges in technical and vocational education and training 49

Table .4.8. Analysis on Economic related challenges in technical and vocational education and training.....51

Table .4.9. Analysis on Culture related challenges in technical and vocational education and training.....53

Table.4.10 Correlation analysis of female student participation and independent variables 59

Table .4.11. Analysis on Family related challenges in technical and vocational education and training.....57

Table .4.12Analysis on Environment related challenges in technical and vocational education and training 55

Abstract

The main objective of the study was to assess the challenges of o female participation in TVET in Buno Bedele zone. To achieve the intended objective of the study descriptive survey research method was used with quantitative and qualitative approaches. Quantitative approach was used for the quantitative data that were collected through questionnaire and qualitative approach was used for the qualitative data that were collected through interview.305 female trainees were taken as sample respondents through simple random sampling technique. Data were collected from 305 sample respondents of female and 4 deans. Data were analyzed using percentage, mean and standard deviation. Inferential statics, Pearson correlation was used to analyze the relation between the independent variable. The findings of the study indicated the economic challenges like, low income, low economic status of the family, source of income and economic activities in which their family engaged were challenges for female participation, cultural related factors like, cultural norms of the family ,society's customs, beliefs and attitudes towards girls' education, cultural and social practices of the family and cultural status of the community were challenges to female participation, the environmental relate factors like, school working environment, fast changing of the economic environment of the local community, cultural environment of the school, social environment of the local community and technological environment of TV school were challenges to female participation, family related factors like, inequalities imposed on female by their home, Peer influence, absence of parental support, guidance and encouragement were challenges to female participation. Finally, at the last part of recommendations were given based on the above findings of the study.

CHAPTER ONE

1. Introduction

Under this part of the study closely related to the topic of this study which have been previous works of scholars and researchers will be reviewed focusing on the concept of Technical and Vocational Education and Training (TVET) institutions, challenges to participation of female in TVET and related ideas were presented and discussed as follows.

This chapter presents the introductory part of the study including background, statement of the problem, objectives, scope, significances of the study and definitions of basic terms.

1.1. Background of the Study

There is an on-going conceptual debate on the definition and meaning of different terms used to describe the acquisition of employable skills. Terms such as "education and vocational training" (EVT), "technical and vocational education" (TVE), and "the development of technical and professional skills" (DTPS), Technical and Vocational Skills development (TVSD) and Technical and Vocational Education and Training (TVET) used in different countries and different contexts to mean "Technical and Vocational Education and training (Anaele, Isiorhovoja, Dele &Asoluka, 2014).

Technical and Vocational Education and Training (TVET) institutions leads to improved quality of life since it helps individuals to become economically productive. When individuals are equipped with skills, they become entrepreneurs, employable and informed citizens thereby contributing to economic development of a nation (Mwangi, 2011).

According to Muthima (2015).findings indicate that females play important roles as producers of food, managers of natural resources; income earners of household food and nutrition security. In short they are very important section of the society. So giving females access to all resources could contribute to increase in females' education, and improvement in females' educational status can contribute to improvement in social welfare. Therefore, educators, psychologists, sociologists and others have tried their best to avoid gender biased elements like, sexual harassment and sex discrimination that does not affect girls.

However, to increase in females participation there is challenges that had been identified through research on the female student participation in TVE. The challenges that challenge female participating in TVET are similar for both the developed and developing countries (UNESCO, 2010). These factors range from social, cultural, institutional to curricula related

factors. To begin with, a multitude of social and cultural norms can challenge the choices of young female whether or not to venture TVET. Factors like, economic factors, family related factors, cultural factors and religion related factors have been identified as major causes for the lower proportion of female students in TVET fields (UNESCo, 2010).These social and cultural norms, especially those that are biased against female can therefore greatly determine their opportunities in access and participation in TVET.

In addition, many cultures still hold traditional attitude of a female as a person who is expected to take care of the home and children. This means that even when female are employed, they are expected to balance work and home responsibilities. According the World Bank report (2014), social norms, especially with regard to the perceived role of women as caregivers, can impact their chosen fields of study and careers. For instance, the higher rate of women choosing to pursue professions such as teaching may be due to the perception that such professions allow more flexibility to balance family and work responsibilities.

Additionally, the same study indicates that problems like sexual harassment, the lack of confidence in aside female students, gender discrimination and organizational culture in handling female students greatly contributes to low female participation in TVET (Moletsen& Reddy, 2011).

The learning environment is also another challenge that promotes lower female participation in TVET. If the learning place can be a stressful environment, lead to lack of confidence among the female students as a result of lack of acceptance by faculty staff and male counterparts back in college when training (Njuguna, 2011).

The challenges that challenge training participation of female student can be categorized in a number of ways. Some of the major factors are related to institutional practices in the TVET and others are associated with society's customs, beliefs and attitudes towards girls' education. Particularly the TVET School related factors such as trainers' education, school facilities and guidance and counseling services could have been great challenge on female trainees' participation (Moletsen& Reddy, 2011).

On the other hand, from various surveys and articles reveals those sexual harassments have negative impact in trainings which finally leads lower achievement and loss of self-esteem (Moletsen& Reddy, 2011). Similarly, instructors and parent's related factors such as lack of being role model for female students and absence of different support that given for female

students and land low expectations from female education have challenge female trainees training performance(World Bank (2014).

This study is also expected to examine the challenges of female participation in TEVET of BunoBedele zone focusing on external challenges like economic related challenges, social related challenges and cultural related challenges and family related that challenging the participation of female students in TVET.

1.2. Statement of the Problem

The governments of different countries have a strong desire to improve enrolment in TVET for female students, especially at the policy level; efforts on the implementation level to improve access and participation in TVET which have been lagging behind. A major reason for this may be the low knowledge base with few good practices, absence of enough case studies and tools available to enable positive change on the grassroots level in female participation in TVET(Kamau, 2013).

UNESCO is strongly committed to promoting gender equality and female students' participation in TVET Guided by the Priority Gender Equality Action Plan for 2008–2014. In this Action Plan there is a powerful human rights organizations argument and a strong developmental case that helped to design the content action plan like promoting and motivating female students through providing them necessary materials for female students that helped them to attend their education for achieving gender equality in education, and attracting female students to TVET.

Previous studies that conducted in different countries by the researchers on female participation were reviewed from different. First the pervious study that was conducted in Nigeria was seen as follows. The participation of female in technical education programs in Nigeria institutions is very poor when compared to enrollment in general education programs (Lauren, 2014).

Despite successive governments' efforts directed at improving Technical Education at all levels to make technical Education attractive and sellable, gender gap still exist (Lourens, 2014).

Similarly, the previous study that conducted in the case of Kenya on the female participation in TVET was also reviewed. Gender and TVET in Kenya Today, TVET is regarded as an

instrument in creating new employment opportunities and income-generating activities in the in the country (Lourens, 2014).

The result of study that conducted in Kenya in 2015 was showed that the total enrolment in TVET institutions increased from 82, 653 in 2010, to 101,759 in 2014 which amounts to 23% increase. This is followed by an increase in enrolment of 25% in 2011 to 2012, 15% in 2012 to 2013 and 9% between 2013 and 2014. The result showed the presence of great disparities in enrolments according to gender with males dominating over the years. For example, in 2012, 60.5% of total enrolments in TVET were male while 39.5% were female, in 2013 59.49% were male while 40.51% were female and in 2014, 60.59% were male and 39.41% were female. It is therefore evident that female student participation lags behind with regard to enrollment in TVET.

In the context of Ethiopia, despite good intensions that stipulated in TVET policy in Ethiopia on access and equity for all marginalized groups, female student participation was low female enrolment continue to be the norm in TVET institutions .Female enrolment in Ethiopia was not increased at required rate in TVET institutions (Ministry of Education, Science and Technology, 2003). Therefore, the need to increase female participation in this discipline is to bridge the gap that exists between female and male student participation in technical education (Lourens, 2014).

In recent years in the context of Ethiopia, there has been considerable expansion of TVET institutions in Ethiopia, both in terms of public spending and increased provision by private institutions. During the years 2004 – 2009, average annual increase in enrolment in TVET was 30.5% (MoE, 2008). In the year 2008/09 (2001 E.C), there were total of 458 TVET institutions in Ethiopia. These institutions enrolled total of 308,501 students in regular, evening, summer and distance programs. In 2007, Ethiopia was the second in Africa in terms of number of training institutions Average Annual Growth Rate in gender was male 53.8% and female 46.2.the graduate rate in Oromia was male 14319 and female 9279totally 23,598. The numbers of male graduate was greater than female graduate by 5040 (Education Statistics Annual Abstract, 2010/11 (MOE, 2010). Therefore, there is the gap between the participation of male and female in Technical and Vocational Education and Training (TVET) institutions in Oromia regional state (MoE, 2010).

From the above statics we understood that the male participation was greater than participation of female enrollment in TVET. Identifying the challenges that brought this gap

between the participation of male and female in Technical and Vocational Education and Training (TVET) institutions in Oromia regional state will be seen in the context of Buno Bedele zone TVET that was motivate the researchers to conduct this study.

There is no large-scale assessment of the outcomes of TVET graduates in Ethiopia; there are insufficient studies that had been done by the training institutions themselves. These insufficient studies typically report short term outcomes for the small sample of beneficiaries. The questionnaire of such insufficient studies was not standardized. Therefore, the findings of different TVET inadequate studies are not comparable from which knowledge has been obtained about the participation of female in TVET enrollment (MoE, 2010). Therefore, there is knowledge gap that will be filled by this current study.

Many research findings that that identified in many developing countries including Ethiopia indicated that female participation education and Training was low compared to the number male (MoE, 2008). Therefore, identifying the problem that restricted the female participation in TVET through this study was very important to identify the problems.

Previous local study had not been conducted by researchers in the context of Buno Bedele zone on the female participation in Technical and Vocational Education and Training (TVET) institutions from which information was obtained on the challenges like economic challenges, cultural challenges, environmental related challenges and family related challenges that may challenge the participation of female students. Therefore, conducting this current study on the challenges for female participation focusing on variables like economic challenges, cultural challenges, environmental related challenges and family related challenges was the gap that filled by this study.

Moreover, there were inadequate global, continental, national and local studies on Technical and Vocational Education and Training (TVET) institutions of Ethiopia from which the knowledge has been obtained. Therefore, this study may fill the knowledge gap since information can be obtained on the current status of the challenges for female participation in Technical and Vocational Education and Training (TVET) institutions in Buno Bedele zone. Thus, the main objective of this was to assess the challenges to female participation in TVET of Buno- Bedele zone. To achieve the intended objective of this study the following basic research questions were designed.''

Basic Research questions

1. What are major economic challenges to female participation in TVET?
2. What are the major cultural challenges to female participation in TVET?
3. What are the environmental challenges to female participation in TVET?
4. What the family related challenges female participation in TVET?

1.3. Objectives of the Study

1.3.1. General Objective

The main objective of this is to assess the challenges of female participation in TVET of Buno Bedele zone.

1.3.2. Specific Objectives

The specific objectives of this study were to:

- Identify the economic challenges that hinder female participation in TVET.
- Investigate cultural related challenges that challenge female participation in TVET
- Assess environmental challenges to female participation in TVET.
- Examine family related challenges female participation in TVET.

1.4. Significance of the Study

The result of this study is important for the TVET teachers and TVET deans as well as for educational offices to get information about factors like economic, cultural, environmental and family related factors that challenge the participation of female trainees in TVET. Female students will be benefited since the TVET schools will provide them awareness, teachers will be benefited since they get information on challenges that can affect the female participation in TEVET. The deans will be benefited since they get information challenges of female participation in TVET. On the basis of the information that is obtained from the result of this study they will jointly plan to improve female participation to reduce the challenges of female participation. Additionally, the result of this study will be used as the sources of information for the future researchers those who will be interested to conduct research on this area.

1.5. The Scope of the Study

The study was conducted in Buno Bedele Zone selected TVETs and then delimited to Buno Bedele Zone selected TVETs geographically.. The study was delimited to assessing challenges to participation of female in TVET conceptually. The variables that were under focus in this study external challenges like economic, social and cultural challenges and family related challenges that challenging the participation of female students in TVET.

1.6. Limitation of the Study

They were limitations that were managed by the researcher. There was time constraint that the researcher faced since the researcher conducted the research side by side with regular work. However, the researcher managed the time constraint to conduct this study. Another limitation was respondents were reluctant to provide their responses. The researcher persuaded the respondents through addressing the objective of this study and managed to conduct this study at right time.

1.7. Definitions of Key Terms

Challenge is an objection to something as not being true, genuine, correct, or proper or to a person (as a juror) as not being correct, qualified, or approved. 2: a call or dare for someone to compete in a contest or sport. 3: a difficult task or problem memorizing the poem was a challenge (Moletsen& Reddy, 2011).

Participation is the action of taking part in something (Moletsen& Reddy, 2011).

Technical vocational education and Training (TVET) refers to a range of learning experiences which are relevant to the world of work and which occur in a variety of training context, including educational institution and world of work place (UNEVOC, 2006).

1.8. Organizations of the Study

The study was organized in to five chapters. The first chapter introduction part of the study were presented focusing on presenting, background of the study, statement of the problem, objectivities of the study, significance of the study and scope and limitation of the study. In the second of the study closely related literature reviews to the topic of this study were presented. In the third part of the study, under research methodology of this study, research design, data source and method of collection, population and sample design and method of data analysis were presented. In the fourth part of the study, the collected data were analyzed and presented in tables. In the last part of the study, major findings, conclusions and recommendations were presented under chapter five of this study.

CHAPTER TWO

2. Literature Review of Related Literature

2.1. Introduction

Addressing the concept of Technical, Vocational, Education and) Training (TVET) through reviewing the previous works of scholars and researches has been very important to give direction for activities of this study. Then the following ideas were taken from the works of scholars and researchers that were presented under topics and sub-topics as follows.

2.2. Concept of Technical, Vocational, Education and) Training (TVET)

Vocational-technical education (VTE) is defined as that aspect of education which leads to the acquisition of practical and applied skills as well as basic scientific knowledge. Technical Training teaches the skills needed to design, develop, implement, maintain, support or operate a particular technology or related application, product or service (Ezeji,2011)..

Technology is the scientific study and the application of scientific methods to practical tasks in industry for production of materials for the good and services of humans. It is a way. Of applying! Methods, tools, technical knowledge, machines and system sin the solution of! Human

Problems (Ezeji,2011). Technical, Vocational Education and Training (TVET) prepare people

For skillful performance on practical tasks. It involves the acquisition of skills and competencies that can help individuals to function productively in industrial and commercial occupations (Wapmuk,2011).Technical, Vocational Education and Training (TVET) have been recognized the world over as tool for empowering people. It is the type of education which provides Individuals with skills, knowledge and attitudes for effective employment in specific occupations. United Nations Educational Scientific and Cultural Organization UNESCO (2005) viewed Technical, Vocational Education and Training (TVET)! as a comprehensive term referring to those aspects of the educational process involving, in addition to general education, the study of technologies and related science, the acquisition of knowledge practical skills and attitude relating to occupations in various sectors of economic and social life (Lourens, 2014).

2.3. Technical and Vocational Education and Training (TVET) in Ethiopia

Technical and Vocational Education and Training (TVET) in Ethiopia seeks to create competent and self-reliant citizens to contribute to the economic and social development of the country, thus improving the livelihoods of all Ethiopians and sustainably reducing poverty. The Ethiopian technical and vocational education and training (TVET) system has well-organized components: an outcome-based system, cooperative training that involves industries and training institutions, and an assessment scheme that operates on the basis of nationally defined occupational standards. As set out in the 2008 national strategy, TVET aims at creating a competent and adaptable workforce that would serve as the backbone of economic and social development. This objective is echoed in other country-wide strategies and development plans set by the government. In terms of operational plans the policy directions further indicate that 80% of those who complete secondary education are expected to be absorbed into the TVET stream. While this target has not been met for many years now, a more worrying trend that is surfacing is related to the output of TVET institutions (Hicks, Mbiti, & Miguel, 2011).

One of the most common observations is related to the poor output of TVET institutions as regards addressing the demands of the economy and the low quality of graduates. The failure has been exhibited particularly in the mismatch between the skills needed in the job market and the training given at TVET institutions. This has led to a situation in which many TVET graduates are unemployed, even in areas where there is a particularly high demand for skilled manpower.

According to a 2013 employers' survey, despite vacancies in manufacturing firms, employers found it hard to recruit TVET candidates with the appropriate technical competencies and socio-emotional skills and behavior's such as a sound work ethic and commitment(Hicks, (Napikoski ,2014).

A 2014 related report from the Ethiopian Central Statistical Agency shows that despite being one of the biggest job creators in the country, the textile and garment industry remains one of the areas in which more than half of TVET graduates remain unemployed. The same appears to be true in areas like woodworking and carpentry, weaving and plumbing. This has been attributed to the lack of graduates with appropriate training and skills. The inadequate training of graduates is also regarded as a major constraint to the operations of foreign employers who are encouraged to invest in the country. Many companies are not happy with the quality of graduates coming out of the various sections of the school system including

TVET .According to a World Bank report this is a common phenomenon in foreign-owned large companies, manufacturing firms (particularly in textile, garments, and food producers), construction and export sectors(Hicks, Napikoski ,2014),

The poor availability of skilled manpower in certain sectors is forcing some companies, especially foreign ones, to import personnel – even those with low levels of skills – from outside the country. A small survey carried out on Chinese investors, for instance, indicated that a substantial percent of the positions for skilled production workers (67%) are taken up by the Chinese themselves. A related problem is the limited interest employers have in using TVET institutions as sources of skilled manpower when they need to recruit qualified candidates. This is mainly due to the low prestige of the institution (Napikoski ,2014),

2.4. Females in Technical, Vocational, Education and Training (TVET))

On this topic the previous studies that were conducted by different researchers like (Robert, 2005, Okeke, 2002), Nations Human Development Report (2008^2009), Napikoski (2014) and Wubon (2013) and others in different areas and countries were reviewed and included under this topic as follows.

Females in the context of this study denote girls and women. There has been gender disparity against females. Females have less access (opportunities) to education in Nigeria as compared To males. Fewer girls enroll and complete their education than boys. (Robert, 2005, Okeke, 2002).

Gender stereotyping exists in homes and school system. Most societies are patriarchal in nature; this is a situation where men are considered the most powerful. According to Napikoski (2014), patriarchal society consists of a male dominated power structure throughout organized society and in individual relationships. United Nations Human Development Report (2008^2009) noted that inequality between genders stands out as a key Policy challenge.

The female gender is generally disadvantaged in access to education, employment, wage and access to land, among other things. Gender inequality is fueled by many factors, including sociocultural practices, low economic status, patriarchy and low education. According to Wubon (2013) education has not necessarily been apriority for the girl child because of sociocultural beliefs and perverted mindsets. It misbelieved that the place of the girl child is in her husband's house. The male child is considered to be superior to the female child in

many aspects especially education and that is why in most cases; only the male child has access to education.

Vocational and Technical Education is conceived to mean the provision of relevant and functional education, which would lead to acquisition of practical and applied creative skills. It allows the individual to be productive and resourceful, so as to make progressive contributions to societal development. Nnabua (1996) listed some prevocational subjects to include woodwork, metal work, electronics, mechanics, local crafts, home economics and business studies. Olaitan (1996) asserts that in Nigeria, technical and vocational education is offered at the secondary and tertiary levels. Arikpo (2007) defined vocational education as that training which helps Nigerians to gain the needed skills and know-how for occupation.

Omoruyi and Osunde (2004) further contribution on the advantages of vocational Education, assert that, it is capable of ensuring gainful employment opportunities to other members of the society. It is pertinent to note that vocational education is a matchless and dynamic human resources development field of study. In effect, Dokubo (2010) revealed that numerous studies have shed more light on the relevance of vocational education programs on the empowerment of rural adults and poverty reductions in River State. Kolawole and Adepoju (2007) remarked that vocational education is the ability to use one's skills gainfully and display one's intellectual and economic horizon well enough to be able to effectively manage the many economic problems confronting individuals and the country as a whole. According to these authors, the state of affairs where many able-bodied men and women in the society are not gainfully employed in Nigeria, has led to various intervention efforts on the parts of the governments.

This state of unemployment has made researchers to question whether the people are actually vocationally empowered. This is for the reason that, in a fast changing and unpredictable environment, fostering flexibility relies on solid general education and broad vocational skills which can be updated and completed through vocational education programs (Kolawole et al., 2007).

Vocational education, according to Arikpo (2007) is that education which assists Nigerians to acquire the necessary skills and competence for occupation. Some studies suggest that girls and women receive less encouragement, experience and opportunities in these areas because teachers and school managers consider it a 'male' subject, for which women do not have skills, understanding or aptitude.

Subsequently, girls are discouraged from following what are traditionally viewed as 'male' subjects of science, engineering, technology or math's subjects (Daniel and Zsolt, 2015). Attitude of teachers, classroom atmosphere and learning methods all contribute to constructing gender stereotypes which are reproduced by both teachers and students. For example, male and female teachers may reproduce traditional male and female roles in the classroom - female teachers may follow the 'supportive sympathetic' archetype, whilst male teachers follow the 'authoritative (Hicks, Mbiti, & Miguel, 2011).

Female teachers give more attention to the boys than girls whatever their ages. The writers conclude that unconscious gender related processes which may be aggressive or even 'libidinous' in nature may play a role in teachers' approaches to their students. Teachers' gender roles may be perpetuated via the teacher-training system. Research reviewed describes vertical and horizontal segregation in the teacher-training institutions, with more men in secure and senior positions in the institutions' hierarchies. Gender segregation, both vertical and horizontal is also found to be a factor in higher education institutions. For example, research shows the subtle ways of expectations regarding how women dress and present themselves have a detrimental impact on women's career. Other research argues that management processes such as Quality Assurance in universities may contain 'disguised messages' which favored male identities and which disproportionately disadvantaged female academics (Saliba et al., 2008).

2.5. Socio-economic challenges to female participation in TVET

Challenges of women in technical and vocational education Hodges (2000) stated that there is serious gender bias in terms of education against girls in Nigeria, especially in northern part of Nigeria. He further stressed that, 47% of girls aged 6 to 15 years are enrolled in schools compared with 63% boys. A lot have been reported on the low enrolment and attendance of females in vocational and technical education (Saliba et al., 2008).

Women and girls, no doubt, are the most influential but often neglected group in most African societies. This neglect, to a large extent has made women one of the disadvantaged groups in developing countries of the world, where they are marginalized on account of gender, social and cultural bias, as well as other stereotypes (UNESCO, 1992).

The contention therefore, is that the way the society perceives woman especially the female child has placed a perpetual disparity between her and their male counterparts in respect to access to certain fundamental development opportunities; one of these opportunities is in the

field of education. In some cases, parents do not want to send their daughters to school because they take care of the younger siblings and help in some household chores.

Some families tend to be reluctant in sending their daughters to school for economic reasons. The daughters are involved in petty trading or hawking to support the parents due to poor background of the family (Saliba et al., 2008). Imarhigbe (1992) while documenting on the state of vocational and technical institutions in Nigeria reported the lack of tools, equipment's, and infrastructure in some institutions. The teaching and learning environment has remained the same after so many years in many schools, while the existing equipment are fast getting worn out, in spite of the growing need for vocational and technical education. There is the lack of modern library complex, workshops etc. (Ulinfun, 1999). The effect has been the increased lack of interest in the subject and the production of half-baked graduates. Some colleges that have equipment's lack trained skilled manpower to handle some of those equipment's. The beliefs of parents are reflected on the educational aspiration of their female children for it is what parents believe that they will pass to their children.

The present exploratory research attempts to address some of the gaps in the border literature identified by Rojewski (2005) by testing the nature of the relationships between female Agbara et al. 9 occupational aspirations, expectations, and aspiration/expectation discrepancies and traditional research variables of gender and occupational status, and extending this examination to include career development constructs, namely career decision status, career decision-making self-efficacy, the perception of barriers, the development construct of career maturity and career indecision(Prideux,2007).

The family is the first place where the child learns the appropriate behaviors patterns, attitudes, and activities of female secondary school, and higher institutions are significantly influenced by distinctive youth culture found among them. Many of them left their homes as adolescent for secondary school where they lack parents' adequate cultural socialization to mix up with other youths, values, attitude and modes of behavior (Prideux, 2007).

Significantly, most of these youth variables have considerable effects on their future vocational choices either positively or negatively. Prideux (2007) argues that, it is therefore important that these career constructs be examined in addition to the demographic, cognitive-personal and contextual variables that have received so much attention in the study of vocational choices. However, Lapan et al. (2000) reported that female seventh graders expressed higher self-efficacy when they believe that their vocational choices matched their

gender. Jatau and Davou (2000) reported that Islam is usually associated with female non-participation in the formal education as a result of the ignorance of some parents regarding the sound teaching of Islamic education. Some parents prefer sending their daughters to Qur'anic schools as reported by Odaga and Haneveld (1995) due to their belief that western education promotes values and behavior that are contrary to Islamic cultural norms. Some believed that to allow girls to get mature before they get married leads to moral decadence as expressed by Biola et al. (2002). However, it is observable that moral decadence today is common both among the educated and the uneducated girls in the society (Prideux, 2007).

Overcoming economic vulnerability embraces a much wider set of abilities than just conventional technical and managerial competency. These include basic literacy and numeracy, social and gender awareness and life skills. It is generally accepted that enterprise development and income-generating projects require a more complex combination of capacities with heavier emphasis on social and management skills than narrowly defined technical competencies (Bennell, 1999). Traditionally, male-dominated artisan training courses (plumbing, metalwork, carpentry etc.) have predominated in Technical and Vocational Education Training (TVET) in most countries. Training for women was offered in a narrow range of traditionally female-dominated activities. Training in social and business skills has also been fairly limited; particularly for women (Mayoux, 2005).

2.6. Challenges for Female in TVET Sector

Under this sub-topic Challenges for female in TVET sector that has been focusing on Education system and policies, Parents' influence, School teachers' influence, Employment inequalities, Cultural and social practices, Past policy failures and Student attitudes and interests, weak participation from other stakeholders, lack of industry experience for many TVET teachers and lack of motivation for students to invest in TVET education. These points have been reviewed from the previous works of scholars and researchers carefully and have been presented as follows.

2.6.1. Education System and Policies

Gender disparities originate at different points in the education system. According to UNESCO (2011), gender gaps start to open on the first day of a school career in many countries and intake into grade one is often skewed in favor of boys. UNESCO (2011) further found that three-quarters of the countries that had not achieved the gender parity goal at the primary level enroll more boys than girls at the start of the primary cycle. For example, in

Mali, the male gross intake rate is 102 percent while that for females is 89 percent (UNESCO, 2011).

According to UNESCO (2011), gender disparities in TVET education are a reflection of the disparities in secondary school. While there are exceptions, in most countries girls who have completed primary education have the same chance as boys of making the transition to secondary education (UNESCO, 2011). However, once in secondary school, girls are often more likely to drop out compared with boys (UNESCO, 2011). This means that the gender gap in enrolments is likely to widen at this level. This is true even for Bangladesh, where government stipends have helped turn a large gender gap in favor of boys in the transition to TVET school into a gap in favor of girls (Bangladesh Bureau of Educational Information and Statistics, 2008). However, the disparity in favor of girls shrinks rapidly with progression through school so that the completion rate is 23 percent for boys and 15 percent for girls. Moreover, boys outperform girls in the lower secondary school exam (Bangladesh Bureau of Educational Information and Statistics, 2008)

2.6.2. Parents' Influence

Research on the influence of parents and the family on children's career choice and development indicate that there are links between career development and such factors as socioeconomic status, parents' educational and occupational attainment, and cultural background (Kerka, 2000). Parental support and guidance can include specific career or educational suggestions as well as experiences that indirectly support career development, such as family vacations, provision of resources such as books, and modeling of paid and nonpaid work roles (Altman, 1997; Kerka, 2000). The absence of parental support, guidance, and encouragement can lead to the inability to develop and pursue a specific career focus. In addition it can lead to withdrawal of financial and emotional support for a career path not of the parent's choice (Kerka, 2000).

In Australia, Miralles (2004) found that parental background was an important factor in determining student participation in vocational education and training. Parents' level of education and occupation were related to students' enrolments in vocational education and training. A quarter of the students whose parents had only completed secondary school participated in vocational programs, compared with 14 percent of those with tertiary educated parents (Miralles, 2004). Similarly, a lower proportion (15 percent) of those students whose parents were in professional occupations participated in vocational education, compared with

27 percent of those whose parents were employed in manual occupations. Participation rates were lower among those students whose family background was from a non-English speaking country (18 percent as compared with 24 percent from Australian-born parents) (Miralles, 2004).

2.6.3. Schoolteachers' Influence

Teachers' knowledge about available careers and their capacity to deliver enabling sciences have been found to influence student career choices. According to Miralles (2004) teachers were the most often cited means of finding out about vocational education and training. In addition, they were also cited as the most trusted sources of information. This is because students of all ages spend much more of their time with the classroom teacher compared with the guidance counselor (Stitt-Gohdes, 1997; Miralles, 2004).

In addition to teachers' awareness of available careers, their capacity to deliver curriculum instruction including their qualifications, initial training and further professional development play a role in influencing student choice of careers. Many studies in the field of science and mathematics agree that teacher qualifications are inadequate (Prieto et al., 2011). It has also been pointed out that, on average, college graduates who become teachers have somewhat lower academic skills compared with those who do not go into teaching (National Science Board, 2006).

In addition, studies have shown that many teachers are not qualified to teach enabling sciences because they majored in other subjects at university. While reviewing STEM education issues and legislative options, Kuenzi, Matthews and Mangan (2006) found that among middle school teachers in the USA, about half (52.6 percent) of those who taught math and two-fifths (40 percent) of those who taught science had neither a minor nor major qualification in those subjects. The low qualifications of teachers indicate low quality of teaching and this may affect students' performance in secondary examination in these subjects, hence contributing to low transition to SMT courses at TVET and tertiary levels. Huggins and Randel (2007) cited the low number of qualified mathematics and science teachers and the poor facilities in schools as causes of the poor performance in mathematics and science at the secondary level in Rwanda.

2.6.4. Employment Inequalities

Gender imbalances in education and training are transmitted directly to the labor markets (UNESCO, 2011). The inequality in education and training implies that males have higher chances of employment skills compared with females. UNESCO (2011) noted that girls leaving school and seeking jobs carry the disadvantages that come with fewer years in education. This means that they not only have difficulty in gaining employment but also have the disadvantage of lower wages when employed. Both Kabubo-Mariara (2003) and Kapsos (2008) analyses of wage determination and the gender gap in Kenya and Bangladesh respectively, concur that in most developing countries, education is a key determinant of not only wages but also wage inequality.

Therefore, gender imbalances in choice of courses at tertiary and TVET levels contribute to wage differences between males and females. The same imbalance is witnessed in developed countries. Adams (2007), in a World Bank background paper exploring the role played by skills development in the transition from school to work, observed that gender stereotyped courses often channel females into areas characterized by low skills and low pay, fueling a cycle of restricted expectation and limited opportunity. This was also the case of Australia as indicated by the Australian National Training Authority (2003) finding that women were overrepresented in certain fields and underrepresented in others, and were employed in less-well-paid jobs after training than men.

Furthermore, the labor markets have been often found to reinforce gender disparities and not least the working environment, wages inequality, and recruitment practices which are tied to education level. The work environment in male-dominated engineering and technology fields has been found to be hostile to females. A mixed method study, analyzing data collected from interviews of 51 engineers and 96 professionals working in large engineering firms, and online survey responses from 367 engineers in Australia, found engineering workplaces to be uncomfortable environments for professional women, thus posing a challenge for enhancing gender equity in engineering education (Gill, Sharp, Mills and Franzway, 2008).

Another study by Male, Bush and Murray (2009), which investigated 300 engineers who had completed degree programs in Australia, and 250 senior engineers working in managerial positions, a majority of whom were males, also found that there was gender stereotyping within the Australian engineering profession. In a qualitative study involving interviews of 25 women working in information technology across the USA, Wentling and Thomas (2009,

p.25) found that the IT culture was mainly "white, male dominated, anti-social, individualistic, and competitive." However, they found that, "it was the collaborative and teamwork oriented aspect of their workplace environment and working together on projects and building close relationships with colleagues that benefited" women in IT "the most in their career development" (Wentling and Thomas, 2009, p.25).

2.6.5. Cultural and Social Practices

Women's pay and their employment conditions are influenced not just by the supply of labor and demand for skills, but also by social barriers, cultural practices and discrimination (UNESCO, 2011). For example, studies carried out in East Africa found that self-employed women in the United Republic of Tanzania earned 26 percent less than their male counterparts (Chen, Vanek, and Carr, 2004). Similarly, in Kenya, annual earnings for men who were self-employed or working in the private formal sector were more than double the earnings of women in the same sectors (Kabubo-Mariara, 2003). Bloom and Cohen (2005) mentioned lower market wages for women which can make investing in schooling for boys before schooling for girls a rational economic decision for a family as one of the barriers of gender equity in education in Africa. The discrimination in labor markets not only diminishes returns of schooling, but also weakens incentives for parents to keep girls in schools, hence reinforcing a vicious circle of gender inequality. In addressing these barriers, the Kenyan constitution and other laws and policies formulated in mid 2000s discourage wage discrimination in employment with a view to ensuring gender equity in labor markets.

The imbalance found in the labor markets could also be linked to social norms governing gender roles in economic life and culture. The traditional roles and responsibilities assigned to men and women create a gendered division of labor (UNESCO, 2011). In a report on child labor which analyzed choices between schooling works, the World Bank (2005) observed that in some countries, social and cultural practices were blamed for keeping young women from spending time outside the home. Such practices, which are linked to factors ranging from perceptions of family honor to concerns over female safety, heavily influence labor force participation patterns in many countries (World Bank, 2005).

Household labor arrangements diminish females' opportunities for participating in education and well paid employment. While analyzing educational challenges and policy measures undertaken, Gakusi (2010) observed that in Africa, girls still provide most of the household labor at expense of other employment opportunities. Adolescent girls and young women are

often expected to spend more time compared with boys and men in activities such as collecting water and firewood, cooking, and caring for children or sick relatives, which restricts their opportunities to earn income beyond the home (UNESCO, 2011). The domestic gender roles frequently lead to greater demand for women in jobs that pay less and require fewer skills. For example, Chen et al (2004) noted that in the informal sector men are often more likely to be employers and own-account workers with better pay than women, who are more likely to be informal wage workers and home workers.

2.6.6. Past Policy Failures

Vocational education problems emanate from a legacy of past policy failures that led to lower access, equity, relevance and quality of the programs compared with general education. UNESCO (2010) asserted that the access and quality of provision of vocational education in Africa suffered enormously with deep cuts in spending under structural adjustment programs in the 1980s and 1990s. Both Heyneman (2003) and Bloom, Canning, and Chan, (2005) noted that because of a longstanding belief that primary and secondary schooling are more important than tertiary education for economic development, the World Bank encouraged African governments' relative neglect of tertiary education. This policy was flawed (Bennell and Segerstrom, 1998) as it contributed to the neglect of TVET and post basic education (Fluitman, 2005). The neglect adversely affected the access to TVET programs with females being more affected compared with males due to lack of resources to address the barriers that were already in the system.

Even though there is international consensus to have an all-inclusive approach to education (African Economic Outlook, 2010a), the current policies still exhibit some limitations that lead to gender disparities in technical and vocational education. In a World Bank study, examining recent research on informal sector employment and skills development in sub-Sahara Africa, Adams (2008) observed that wider problems are evident in the current policies where vocational systems are designed to meet the needs of formal sector employers, notably in government. However, in the last three decades formal sector job creation has deteriorated while informal sector employment has matured in importance.

Adams (2008) noted that in most countries, informal employment and self-employment leads in both rural and urban areas, accounting for over 80 percent of total employment. Providing training to those employed in the informal sector involves reaching people with lower levels of education that do not give them qualifications required for enrolment in engineering,

technology or science based programs. Studies carried by Liimatainen (2002) and Haan (2006) in Kenya, Senegal, the United Republic of Tanzania, Zambia and 100 Zimbabwe reported that half the informal sector workers who had any education had reached only primary education level.

Another policy barrier in achieving gender equity in TVET as noted by Garcia and Fares (2008) is that most countries have failed to integrate technical and vocational education into strategies for reaching marginalized groups including youth and women. This finding concurs with that of Bunyi (2008) who noted that despite the apparent gender inequities and inequalities in education and training in sub-Saharan Africa, many countries have not developed comprehensive policies to address the issue. For instance in the United Republic of Tanzania, out of twenty-eight programs reviewed by Garcia and Fares (2008), only three targeted the poorest youth, one targeted youth with no education and three targeted rural areas where the massive majority of the poor live but none of the programs targeted the enhancement of gender equity in TVET. In Burkina Faso, only one-third of interventions involving technical and vocational education were focused on disadvantaged groups, primarily through microcredit programs.

Further, where policies have been developed by most sub-Saharan Africa countries to address gender equity in education and training, they have been found to be ad hoc with little effort to implement and monitor their effectiveness. Bunyi (2008) found that in most countries where ad hoc policies such as the re-entry policy to enable girls who become pregnant while still in school to re-enter the system upon delivery are articulated, they have not been followed by strict implementation and monitoring of their effectiveness. Consequently, such policies do not address effectively the relevant issues.

2.6.7. Student Attitudes and Interests

Studies have found that the lower proportion of students in TVET programs was as a result of the negative attitudes towards the programs. As noted in Chapter One, a UNESCO study involving 30 countries with seven (Botswana, Egypt, Ghana, Senegal, Seychelles, Tunisia and Zimbabwe) from Africa, found that TVET was viewed as inferior to general education and was meant to solve youth unemployment rather than have an educational focus (UNESCO (2006). Also described in Chapter One, Pimpa (2007) found that low regard to TVET and its inherent inequalities are common phenomena in Thailand. Additionally, female enrolment in Thailand is influenced by their attitudes towards the programs, curriculum,

potential employment, attractiveness of campus, tuition fees, parents and secondary school teachers, and negative attitudes towards manual work (Pimpa, 2007).

2.7. Empirical Review literature

The literature on TVET education is abundant, and many studies have attempted to analyze female students‟ motivation to TVET choice in a variety of country contexts. Variety of instruments, methodologies and techniques were employed by several scholars to determine the influencing factors to study in particular fields of study. There have, however, been very few researches on the interaction among informational methods and knowledge possession, interest and motivation of female students towards the TVET field. One of the primary focuses of TVET for female students is to involve in learning methods focusing on job-oriented activities and tasks. TVET female students are more likely to be visual learners, where they prefer to learn with images, diagrams, flowcharts and demonstrations to understand better the learning content (Mohamad et al., 2012). Consequently, technical and vocational education (TVE) is used as a broad concept applying to all dimensions of the educational cycle that involve, in addition to general education, the learning of technology, complementary sciences and the development of skill sets, knowing attitudes and information leading to employment in specific economic and social sectors (UNESCO-ILO, 2002).

Many studies also managed to prove that students' interest, parental influence and peer influence have a significant impact on female students' decision regarding TVET, for example, Hamid et al., (2016) and Buang et al. (2016) in the case of Malaysia; Ayub (2017) in the case of Pakistan; and Reuben et al., (2020) in the case of Kenya. Female Student interest in participating in the TVET program is important as it will encourage them to seriously follow the plan and ultimately contribute to a highly skilled Malaysian workforce. Besides, family influence in the form of moral support, advice, financial assistance and the like is also important as families, especially parents, have an enormous impact on the future of their children. Besides parents, peers also influence a student's behavior in everyday life as they are only second to parents in being close to students (Nursiah et al., 2020).

Most previous studies centered on factors affecting female student participation in the university rather than vocational education (Luke &Heyns, 2019; Hayter& Parker, 2019). Earlier studies, for example, indicated that high score achieving female students are more likely to follow an undergraduate institution (Alexander & Cook, 1982; Garet& Delany, 1988). It shows that low-level graduates are more inclined to seek vocational training.

Another research has shown that female students from racial and ethnic minority communities, students from underprivileged backgrounds, and students with behavioral issues are all more likely to seek vocational training (Ogbuanya, 2014). Several pieces of research explicitly examining the factors which drive participation of female students in vocational education support these findings (Campbell & Rolls, 2017).

Furthermore, Nursiah et al. (2020) claimed that female enrolment in Malaysia's technical and vocational education programs has remained low since the implementation of technical and vocational education system. Similarly, in Nigeria, Akanbi (2017) announced that there was less than three per cent of overall female enrolment in technical and vocational education programs as of 2016. He further claimed that this figure, around 50 per cent of female enrolment in technical and vocational education, is targeted in comparison with countries. According to Banik& Kumar (2017), the reasons for this scenario are; a. several of the technical education occupations and trades are considered undignified, b. the average South East Asian parent does not want their children to live decently as a full-time worker, plumber, brick/blackboard, carpenter and auto-engineer, and c. these job positions in Southeast Asian social setting are considered powerless (Ayonmike, 2014).

Regarding women student's participation in TVET, various scholars such as Amoor and Umar (2015) and Reyes (2018) established significant findings. Some major factors responsible for women's low participation of female in technical and vocational education have been a low societal perception of TVET, last choice of schooling; low smart quotient, low academic performance, and job insecurity. Ayub (2017) also added, in the past, neither conventional nor western education has enabled or provided equal opportunities for women to enter Pakistan's vocational and technical education. According to Ndahi (2013), the TVET professionals were known to be a mechanical or electronic machines fixer, (turning screws, nuts, and bolts) during the early stage of technological education in Pakistan. A female was not imaginable as a technician at the time, and therefore only boys attended this training institution for professional technical industrial education. (Ayub, 2017).

According to the International Rescue Committee (IRC, 2015), the findings of the interviews taken from female students on the evaluation of significant factors leading to the lower female participation in the TVET, in particular, training in a traditionally male industry, reported the lack of knowledge about the strengths of TVET, inadequate financial support, financial interest and doubts about future employment viewpoints. In the same manner,

(Alam&Forhad, 2020) argued that some of the factors influencing female involvement in TVET in Bangladesh include; low perception of society; weak entry-level; poor attitude towards society; lack of recognition; sexism towards TVE graduates and elitism. Previous literatures are noteworthy that of (see Ayonmike, 2014; Evans, 1995; Evans & King, 1991; Evans & Walter, 1993; Jyoti, 2012; Khan, 1993 citing in Shirley, 2014; Kember, 1981; UNESCO, 1999; Wapula, 2009) claimed various factors impacting the participation of women in general education and technical vocational training, in particular, have been identified by different international academics and organizations.

Yaakob and other (2020) identified the factors of household (economic position, household size and parental education), biological composition (genetic deficit), psychological disposition (mental environment, interests , and attitudes), policy-related (lack of goals and adequate gender equality monitoring) and school-related (school location, peer influence, facilities, role models, gender-biased curriculum materials) have impacted, particularly in developed and undeveloped countries, on TVET participation of female students.

The findings of Ayub (2017) research is that parental influence is statistically significant and has an impact on female students' decision towards TVET. Bukantaitė, Laužackas, and Sabaliauskas (2006) investigated from their research that 77.9 per cent of fourth-level students responded that their desire to "study anywhere" influenced the choice of the specialty. This figure can be explained by the fact that these students have failed to enter universities or colleges and have chosen vocational schools so as not to waste a year. The key reason is bad research results and awareness that learning at a high school would be too difficult. The students, therefore, choose a vocational school which believes it will be easier to study there than at a secondary or main school. Many classic studies also show that TVET’s educational decisions are influenced by several variables, such as preferences (Vroom, 1964), form of motivation (Clark &Trow, 1966), female students' attitudes towards universities (Long, 1977), parental involvement (Shoffner & Klemer, 1973; Werts, 1973) and effects of comparison community (Edleson& Crowe, 1960).

From the literatures reviewed above, the factors predominantly affect female students' participation in TVET program include: cultural factors (these factors reflect the cultural and cross-cultural, social norms and traditions by which subservient status of the family is maintained); attitudinal factors (The differences in employment skills and capabilities impelled by socialization in homes and families, exacerbated by education, career guidance,

workplace experiences, family pressure and lack of feminine role models can be seen in these); and situational factors (these factors include women's positions in the household, lack of adequate care of family members, financial situation and settlement place); institutional factors (this can arise from the way TVET institutions organized their program some of which are lack of female teachers, lack of child care facilities, lack of medical department, lack of particular TVET institution for female, inflexible selection and entry requirements). Against these backdrops, this present study seeks to identify the factors affecting the participation of Malaysian pre-secondary school students choosing TVET programs.

2.8. Relation between Variables

There is the relation between the economic status and female students' participation in schools. The female students from a good economic status family more participated in school enrollment than the female students from a low economic status(Prieto et al., 2011).

Similarly, there is the relation between the economic status and female students' participation in schools. Female student's conditions are influenced not just by the economic factors and demand for skills, but also by social barriers, cultural practices and discrimination (UNESCO, 2011).

Suitable environmental conditions p6omote the female students participation in school enrollment in contrast unsuitable environmental conditions has been affecting the female students participation in school enrollment (Miralles, 2004).

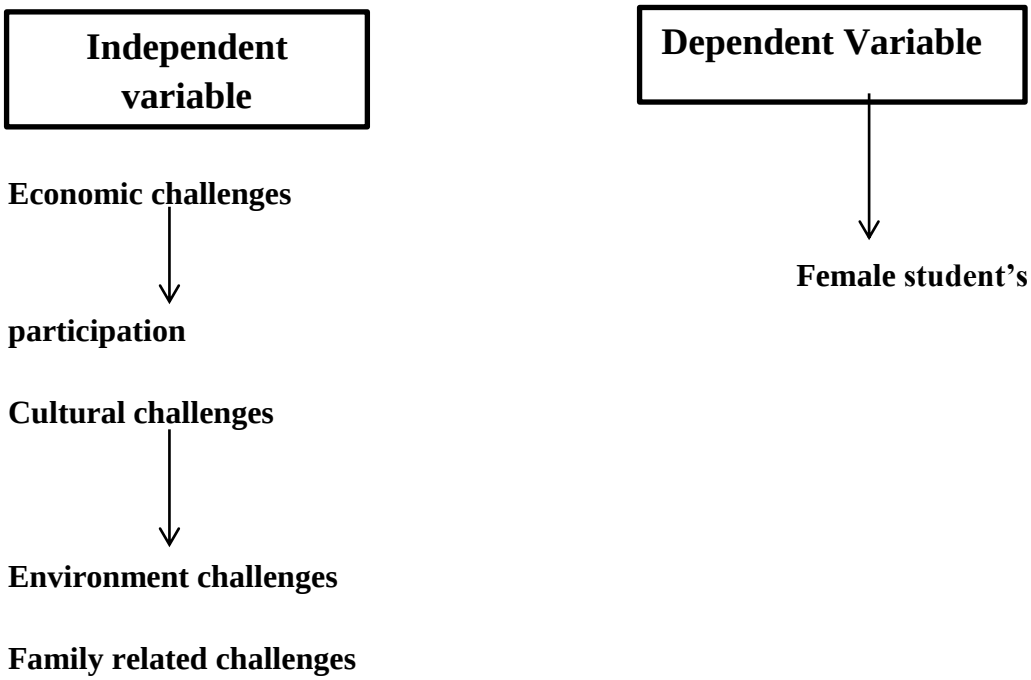
Family related factors have relation with female students' enrollment rate. The absence of parental support, guidance, and encouragement can lead to the inability to develop and pursue a female students enrollment in the school.. In addition it can lead to withdrawal of financial and emotional support for a career path not of the parent's choice (Kerka, 2000).

2.9. Conceptual Frame Work

A Conceptual framework is a visual representation that helps to illustrate the expected relationship between variables. The conceptual framework presented in figure2.6. 1 constitutes the rationale of the study. It highlights the linkage between the key concepts related to female participation realities and challenges that challenged female participation in TEVET. It highlights the linkage between the key concepts related of the dependent and independent variables were drawn up in the frames. Accordingly, the independent (economic challenges, cultural challenges, environmental challenges and family related challenges) were

variables under which items were designed to collect data that related to dependent variables relationship is shown conceptually as follows.

Conceptual frame work



2.9. Summary of the Review Literatures

The review was started in addressing the concept of Technical, Vocational, Education and) Training (TVET) focusing on definition of Technical, Vocational, Education and) Training (TVET). The context of Ethiopia the purpose of Technical, Vocational, Education and) Training (TVET). The other point that addressed in the above literatures was addressing situations of Females in Technical, Vocational, Education and Training and Challenges for female in TVET sector Education system and policies, Parents' influence, School teachers' influence, Employment inequalities, Cultural and social practices, Past policy failures and Student attitudes and interests, weak participation from other stakeholders, lack of industry experience for many TVET teachers and lack of motivation for students to invest in TVET education have been reviewed from the previous works of scholars and researchers carefully and have been presented in the above review literatures finally, .based on the above theoretical and empirical review literatures conceptual frame work of the study was designed and presented at the last part of the above review literatures.

CHAPTER THREE

3. RESEARCH DESIGN AND METHODOLOGY

3.1 Research Design

Research design is a plan to answer your **research question**. Descriptive survey design was used for the study. In the Descriptive research design the quantitative and qualitative data collecting approaches were used for the study. the quantitative data collecting approach was used to collect quantitative data through questionnaire qualitative data collecting approach was used to collect the qualitative data through structured interview question According to Krishnaswami (2001), descriptive design is a fact finding study which involves collecting data directly from the respondents of this study at a particular time. s..

3.2.Research Method

The main objective this study was to assess the challenges to female participation in TVET of Buno Bedele zone. To achieve this objective a descriptive survey method was used. A descriptive survey research method n is very valuable tool for assessing. it provides the researcher with detail descriptions of the existing conditions about the problem and survey studies aim at describing the characteristics of a population by examining a sample of that group (Dornyei 2007) through detail descriptions investigate the existing challenges of female participation in TVET were under focused in this study. The important components of variables related to challenges of female participation in TVET.

3.2. Source of Data

Primary data was sources of data for the study. The primary data was collected from the sample respondents of female trainers in four TVETs of Buno Bedele zone through lottery.

3.3 Target Population Area

The target populations1310 female students in four selected TVETs Chora, Dega, Dambi and Bedele TVETs in Buno Bedele zone in Oromia regional state.

3.4. Sampling Techniques

From ten wored as four sample wored as were taken through lottery method as sample woredas and similarly from ten TVETs four TVETs were taken through lottery as the sample TVETs. From 1310 female trainees 305 female trainees were taken as sample respondents through simple random sampling technique. There are ten deans in ten TVETs .From tent deans four deans were taken through purposive sampling technique.

The sample populations were taken from Four TVET Buno Bedele zone. First lottery method was used to select the Four TVET from the total TVET schools of Buno Bedele zone and after that sample respondents of female trainees were selected through simple random sampling technique proportionally. The sample population was taken Chora, Dega, Dambi and Bedele TVETs. 305 female trainers were selected from four sample TVETs of Buno Bedele zone as the sample population for the study. The sample populations were taken using (Yemane formula 1967)

$$n = N/1+N(e)^2$$

n =1310/1 +1310(0.05)2

n =1310/1+3.275

n =1310/4.275

n =305

N/n=sample population.

N=total population

N-sample population

N/n=give us the interval at which sample population were taken from each TEVT institution.

NO	Name of the TVET school	Total population of female students	sample population of female trainers	Deans of TVET	Finance head of TVET	PTAS
1	Chora,	320	75	1	1	1
2	Dega	250	58	1	1	1
3	Dambi	370	86	1	1	1
4	Bedele	370	86	1	1	1
	Total	1310	305	4	4	4

3.5 Data Collection Instrument

In order to collect pertinent data to the study questionnaire and interview were used as described below.

3.5.1Questionnaires

Questionnaires are suitable for survey research it makes a research less expensive and gives more accurate information. Because of this the researcher selects questionnaires as a part of data gathering tools for the study. Questionnaires was designed and distributed 305 sample female trainers .Questionnaires were five scales Likert closed ended items. Self-developed questions were designed to collect the quantitative data. The questions 37 close-ended were designed in English since the data were collected from female students.

3.5.2. Interview

Interview was a form of self-report that is a relatively simple approach to data collection; although simple it can produce a wealth of information. An interview can cover any number of content areas and is a relatively in expensive and efficient. Way to collect a wide variety of data does not require formal testing. One of the most common uses of interview is to collect life history and biographical data about the research participants (Anastas and urbina,1997,stokes, Mumford and owens,1994) interviews are also an essential component most types of qualitative research.

Because of this the researches select interview as a part of data gathering tools. Interviews were conducted with four principals who were taken as the interviewees to provide their responses through structured interview questions. Five interview questions were structured in English language and 4 deans.

3.6. Data Collection Procedure.

The researcher obtained research permit from the educational bureau of Buno Bedele zone an introduction letter to each TVET directors. The researcher then visited the selected schools and sought permission from the head teacher to conduct the study after which questionnaires were administered to the female students.

3.7. Checking Reliability of the Instrument

Although the term reliability' is a concept used for testing, according to Joppe (2000). Reliability is extent to which repeated measurements undertaken using a tool or instrument by different individuals given similar results. Reliability is the extent to which results are consistent over time and an accurate representation of the total population under study and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable. A measure is considers reliable if it would give us the same result repeatedly. A reliability test would be performed to check the consistency and accuracy of the measurement scales.

One of the methods to estimate the reliability of the scores on a test or measurements is Cornbach's coefficients alpha method. Hence, Cornbach's coefficients alpha refers to the extent to which there is interrelatedness among the responses to the multiple items comprising in the Likert scale. Hence, as explored by Field (2009), if Alpha Coefficients was above 0.750, consistency and suitability was high. Therefore, 30 sample respondents were taken from female studentsc and the designed questions were distributed and responses were collected. The collected responses were analyzed and the reliability was checked for the self-developed questions with the standard to confirm the reliability of data collecting instrument when the Cronbach's coefficients alpha was 0.875.

3.8. Methods of Data Analysis

In order to conduct data analysis both quantitative and qualitative methods were used. Data collected through close ended question were organized in table and analyzed using percentage and frequency to analyze the distributions of responses , mean was to analyzed the average of the distributions of responses , slandered deviation was used to analyze the distributions of responses around the mean to the samples and Pearson correlation was used to analyze the relation between the independent variable and dependent variable. Qualitative data collected through interview were analyzed using narration, verbatim and summary of respondents words.

Descriptive statistical analysis was used to analyze the data. Mean was used to calculate the average value of the responses of the respondents. The standard deviation was used to shows the relation that set of scores has to the mean of the sample. Percentages and frequency distribution was used to analyze the distribution of responses for each item of choice. Pearson correlation was used as inferential statistics to give meaningful conclusion for the data that were analyzed in descriptive statistical analysis. Data were analyzed in SPSS 21

software and qualitative analysis was used to analyze the data that were collected through interviews. Text explanation was used to analyze the qualitative data.

3.9 Ethical Consideration

The researcher has a responsibility to care of all possible ethnical issues that might arise during the study, such as obtaining the consent of the participants for the necessary data and the respondents will be understood of the purposes of the study through the instruction given on the cover page of the questionnaire and orally discussed briefly. In any form, in this study respondents were not influenced to change their responses in favor of the researcher.

CHAPTER FOUR

4. Data Analysis, Presentation and Interpretation

In this chapter the data analysis, presentation and interpretation were done. In the analysis part of this study the quantitative data were presented in descriptive statistics numerically in frequency, percentage, mean, and standard deviation and in inferential particularly in Pearson correlation and presented in tables and followed with discussions. In the interpretation part the implication of the analyzed data was presented. In the first part of the analysis the demographic information of the sample respondents were analyzed and followed with text explanations. In the second part of the analysis the305 questionnaire that were distributed and collected through 35 close-ended questions were analyzed and followed with text explanations In the last part of the analysis the qualitative data had been collected through interview questions were discussed in words.

4.1. Background information of respondents

The respondents' personal information like age and educational level were analyzed and presented in the tables below.

Table.4. 1.analysis on age respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Age	below 20	185	60.7	60.7	60.7
	21-25	106	34.8	34.8	95.4
	26 and above	14	4.6	4.6	100.0
	Total	305	100.0	100.0	
Level	Level one	105	34.4	34.4	34.4
	Level two	80	26.2	26.2	60.7
	Level three	64	21.0	21.0	81.6
	Level four	56	18.4	18.4	100.0
	Total	305	100.0	100.0	

As it was indicated in the above table 4.1.1, the ages of the respondents were identified and presented in the above table, the age of the respondents has been ranged below 20 and 50 and above years.185 (60.7%) of the respondents age was ranged below 20 year. 106(34.8%) of the respondents age was ranged between 21 and 25 years. 14(4.6%) of the respondents age was ranged between 26 and above years.

105(34.4%) of the sample respondents of female students educational was level one, 80(26.2%) of the sample respondents of female students educational level was level two,64(21%) of the respondents educational level was level three and 56(18.4%) of the respondents educational level was level four

This implies that respondents of different educational background were provided their responses for this study. Responses that obtained from these respondents were very important for this study.

4.2. Analysis on The Responses Collected Through Questionnaires

Close ended questions have been designed and data were collected for this study. The collected data were analyzed quantitatively and presented in the tables and followed with discussions. The descriptive atavistic like frequency and percentage that were used to analyze the distributions of responses for the given alternative choices of items , mean that was used to analyze the average of the distributions of response and standard deviation that was used to analyze the distributions responses around the to the sample as well as inferential statistics like correlation analysis was used to give meaningful conclusions for the data analyzed in descriptive statistics to identify that the independent variables were explained by the dependent variable of this study.

Table 4.2. Analysis on Economic related challenges in technical and vocational education and training

Items	Alternative choices	Frequency	Percent	Valid Percent	Cumulative Percent
Low economic status of family was challenged female participation in TVET.	Strongly disagreed	12	3.9	3.9	3.9
	Disagreed	38	12.5	12.5	16.4
	Undecided	92	30.2	30.2	46.6
	Agreed	149	48.9	48.9	95.4
	Strongly agreed	14	4.6	4.6	100.0
	Total	305	100.0	100.0	
The economic activity in which the family engaged was challenged female participation in TVET.	Strongly disagreed	3	1.0	1.0	1.0
	Disagreed	27	8.9	8.9	9.8
	Undecided	88	28.9	28.9	38.7
	Agreed	109	35.7	35.7	74.4
	Strongly agreed	78	25.6	25.6	100.0
	Total	305	100.0	100.0	
Weak participation from other stakeholder in supporting female in education was challenged female participation in TVET.	Strongly disagreed	9	3.0	3.0	3.0
	Disagreed	27	8.9	8.9	11.8
	Undecided	88	28.9	28.9	40.7
	Agreed	101	33.1	33.1	73.8
	Strongly agreed	80	26.2	26.2	100.0
	Total	305	100.0	100.0	
Inadequate financial support of family in education was challenged female participation in TVET.	Strongly disagreed	12	3.9	3.9	3.9
	Disagreed	38	12.5	12.5	16.4
	Undecided	77	25.2	25.2	41.6
	Agreed	150	49.2	49.2	90.8
	Strongly agreed	28	9.2	9.2	100.0
	Total	305	100.0	100.0	
Parental economic management system was Challenged female participation in vocational education and training.	Strongly disagreed	102	33.4	33.4	33.4
	Disagreed	30	9.8	9.8	43.3
	Undecided	83	27.2	27.2	70.5
	Agreed	59	19.3	19.3	89.8
	Strongly agreed	31	10.2	10.2	100.0
	Total	305	100.0	100.0	
The poor availability of material resource was challenged female participation in TVET.	Strongly disagreed	14	4.6	4.6	4.6
	Disagreed	30	9.8	9.8	14.4
	Undecided	143	46.9	46.9	61.3
	Agreed	94	30.8	30.8	92.1

	Strongly agreed	24	7.9	7.9	100.0
	Total	305	100.0	100.0	
Female students' money management system was challenged female participation in TVET.	Strongly disagreed	9	3.0	3.0	3.0
	Disagreed	15	4.9	4.9	7.9
	Undecided	72	23.6	23.6	31.5
	Agreed	172	56.4	56.4	87.9
	Strongly agreed	37	12.1	12.1	100.0
	Total	305	100.0	100.0	

Source: own survey

As it was presented in the above table 4.2.1, data were collected on seven items under Economic related challenges in technical and vocational education and training**.** Based on data collected on the basis of these items analysis was made and the analyzed data were discussed as follows.

The first item asked was to assess that low economic status of family challenges female participation in TVET .The results of the responses indicated that 12(3.9%) of the respondents strongly disagreed, 38(12.5%) of the respondents disagreed and 92(30.2%) of the respondents undecided, however ,149(48.9%) of the respondents agreed and14 (4.6%) of the respondents strongly agreed on that low economic status of family challenges female participation in TVET this implies the significant percent of responses indicated as low economic status of family was challenged female participation in TVET.

The second item asked was to investigate that the economic activities in which the family engaged challenges female participation in TVET.. the results of the responses indicated that 3 (1%) of the respondents strongly disagreed , 27(8.9%) of the respondents disagreed and 88 (28.9%) of the respondents undecided, Nevertheless, 109(35.7%) of the respondents agreed and 78(25.6%) of the respondents strongly agreed on that the economic activities in which the family engaged challenges female participation in TVET. This implies that the significant percent of responses indicated as the economic activity in which the family engaged was challenged female participation in TVET.

The third item asked was to identify that weak participation from other stakeholders in supporting female in education challenges female participation in TVET.. the results of the responses indicated that 9 (3%) of the respondents strongly disagreed , 27(8.9%) of the respondents disagreed and 88(28.9%) of the respondents undecided. In the other hand, 101(33.1%) of the respondents agreed and 80(26.2%) of the respondents strongly agreed on that weak participation from other stakeholders in supporting female in education

challenges female participation in TVET. This implies that the significant percent of responses indicated as weak participation from other stakeholder in supporting female in education was challenged female participation in TVET.

The fourth item asked was to assess that inadequate financial support of family in education challenges female participation in TVET. The results of the responses indicated that 12 (3.9%) of the respondents strongly disagreed, 38(12.5%) of the respondents disagreed and 77 (25.2%) of the respondents undecided. However, 150(49.2%) of the respondents agreed and 28(9.2%) of the respondents strongly agreed on that inadequate financial support of family in education challenges female participation in TVET. This implies that the significant percent of responses indicated as Inadequate financial support of family in education was challenged female participation in TVET.

The fifth item asked was to investigate that parental economic management system was an important factor in determining female participation in vocational education and training. The results of the responses indicated that 102(33.4%) of the respondents strongly disagreed, 30(9.8%) of the respondents disagree and 83 (27.2%) of the respondents undecided. However, 59(19.3%) of the respondents agreed and31 (10.2%) of the respondents strongly agreed on that parental economic management system was an important factor in determining female participation in vocational education and training. This implies that the significant percent of responses indicated as Parental economic management system was Challenged female participation in vocational education and training.

The sixth item asked was to identify that the poor availability of material resources challenges female participation in TVET. The results of the responses indicated that 14 (4.6%) of the respondents strongly disagreed, 30 (9.8%) of the respondents disagreed and 143(46.9%) of the respondents undecided. In contrast 94(30.8%) of the respondents agreed and 24(7.9%) of the respondents strongly agreed on that the poor availability of material resources challenges female participation in TVET. This implies that the significant percent of responses indicated as the poor availability of material resource was challenged female participation in TVET.

The seventh item asked was to assess that female students' money management system challenges female participation in TVET. The results of the responses indicated that 9(3%) of the respondents strongly disagreed , 15(4.9%) of the respondents disagreed and 72(23.6%) of the respondents undecided. In the other hand 172(56.4%) of the respondents

agreed and37 (12.1%) of the respondents strongly agreed on that Female students' money management system was challenged female participation in TVET. This implies that the significant percent of responses indicated as Female students' money management system was challenged female participation in TVET.

The result of the above analysis indicated that the significant percent of responses of the respondents

Table 4.2.2. Analysis on Culture related challenges in technical and vocational education and training

Items	Alternative choices	Frequency	Percent	Valid Percent	Cumulative Percent
Cultural practice of the family was challenged the choices of young female.	Strongly disagreed	10	3.3	3.3	3.3
	Disagreed	46	15.1	15.1	18.4
	Undecided	121	39.7	39.7	58.0
	Agreed	88	28.9	28.9	86.9
	Strongly agreed	40	13.1	13.1	100.0
	Total	305	100.0	100.0	
Marriage was one of the challenges for female participation in TVET.	Strongly disagreed	17	5.6	5.6	5.6
	Disagreed	35	11.5	11.5	17.0
	Undecided	53	17.4	17.4	34.4
	Agreed	157	51.5	51.5	85.9
	Strongly agreed	43	14.1	14.1	100.0
	Total	305	100.0	100.0	
The stereotype reflected by the community that a female as a person who is expected to take care of the home and children challenged female participation.	Strongly disagreed	27	8.9	8.9	8.9
	Disagreed	35	11.5	11.5	20.3
	Undecided	64	21.0	21.0	41.3
	Agreed	110	36.1	36.1	77.4
	Strongly agreed	69	22.6	22.6	100.0
	Total	305	100.0	100.0	
School working culture was greatly contributed to low female participation in TVET.	Strongly disagreed	23	7.5	7.5	7.5
	Disagreed	51	16.7	16.7	24.3
	Undecided	127	41.6	41.6	65.9
	Agreed	86	28.2	28.2	94.1
	Strongly agreed	18	5.9	5.9	100.0
	Total	305	100.0	100.0	
Socio-cultural beliefs of the community was challenged the female participation.	Strongly disagreed	20	6.6	6.6	6.6

	Disagreed	28	9.2	9.2	15.7
	Undecided	89	29.2	29.2	44.9
	Agreed	134	43.9	43.9	88.9
	Strongly agreed	34	11.1	11.1	100.0
	Total	305	100.0	100.0	
Poor societal attitude towards technical Education was challenged female participation.	Strongly disagreed	13	4.3	4.3	4.3
	Disagreed	30	9.8	9.8	14.1
	Undecided	144	47.2	47.2	61.3
	Agreed	86	28.2	28.2	89.5
	Strongly agreed	32	10.5	10.5	100.0
	Total	305	100.0	100.0	
Cultural and social practices of the family was challenged female participation in TVET.	Strongly disagreed	11	3.6	3.6	3.6
	Disagreed	27	8.9	8.9	12.5
	Undecided	73	23.9	23.9	36.4
	Agreed	159	52.1	52.1	88.5
	Strongly agreed	35	11.5	11.5	100.0
	Total	305	100.0	100.0	
Low perception of society towards female participation in TVET was challenged female participation in TVET.	Strongly disagreed	34	11.1	11.1	11.1
	Disagreed	53	17.4	17.4	28.5
	Undecided	46	15.1	15.1	43.6
	Agreed	137	44.9	44.9	88.5
	Strongly agreed	35	11.5	11.5	100.0
	Total	305	100.0	100.0	
Cultural status of the community was challenged female participation in TVET.	Strongly disagreed	8	2.6	2.6	2.6
	Disagreed	42	13.8	13.8	16.4
	Undecided	74	24.3	24.3	40.7
	Agreed	139	45.6	45.6	86.2
	Strongly agreed	42	13.8		100.0
	Total	305	100.0	100.0	

Source: own survey

As it was presented in the above table 4.2.2, data were collected on nine items under Culture related challenges in technical and vocational education and training. Based on data collected on the basis of these items analysis was made and the analyzed data were discussed as follows.

The first item asked was to assess that cultural norms of the family can challenge the choices of young female. The results of the responses indicated that 10 (3.3%) of the respondents strongly disagreed , 46(15.1%) of the respondents disagreed and 121(39.7%) of the respondents undecided. However,8(28.9%) of the respondents agreed and 40(13.1%) of the

respondents strongly agreed on that cultural norms of the family can challenge the choices of young female. . This implies that the significant percent of responses indicated as Cultural practice of the family was challenged the choices of young female.

The second item asked was to investigate that Marriage was one of the challenges for female participation in TEVET. the results of the responses indicated that 17(5.6%) of the respondents strongly disagreed , 35(11.5%) of the respondents disagreed and 53(17.4%) of the respondents undecided. In the other hand, 157(51.5%) of the respondents agreed and 43(14.1%) of the respondents strongly agreed on that biased against female in the local community can greatly determine their opportunities in participation in TVET. This implies that the significant percent of responses indicated as Marriage was one of the challenges for female participation in TVET

The third item asked was to identify that The stereotype reflected by the community that a female as a person who is expected to take care of the home and children challenged female participation. The results of the responses indicated that 27(8.9%) of the respondents strongly disagreed , 35(11.5%) of the respondents disagreed and 64(21%) of the respondents undecided. However,110(36.1%) of the respondents agreed and69 (22.6%) of the respondents strongly agreed on that male Cultures still hold on to the stereotype of a female as a person who is expected to take care of the home and children. . This implies that the significant percent of responses indicated as

The fourth item asked was to assess that school working culture greatly contributes to low female participation in TVET. The results of the responses indicated that 23 (7.5%) of the respondents strongly disagreed, 51(16.7%) of the respondents disagreed and 127 (41.6%) of the respondents undecided. In the other hand, 86(28.2%) of the respondents agreed and 18(5.9%) of the respondents strongly agreed on that school culture greatly contributes to low female participation in TVET. . This implies that the significant percent of responses indicated as school working culture greatly contributes to low female participation in TVET.

The fifth item asked was to investigate that Socio-cultural beliefs of the community was challenged the female participation. The results of the responses indicated that 20 (6.6%) of the respondents strongly disagreed , 28(9.2%) of the respondents disagreed and 89 (29.2%) of the respondents undecided. However, 134(43.9%) of the respondents agreed and 34(11.1%) of the respondents strongly agreed on that education has not necessarily been apriority for the girl child because of sociocultural beliefs and perverted mindsets. This

implies that the significant percent of responses indicated as Socio-cultural beliefs of the community was challenged the female participation.

The sixth item asked was to identify that Poor societal attitude towards technical education was challenged female participation. The results of the responses indicated that 13 (4.3%) of the respondents strongly disagreed , 30(9.8%) of the respondents disagreed, and 144(47.2%) of the respondents undecided .Nevertheless, 86(28.2%) of the respondents agreed 32 (10.5%) of the respondents strongly agreed on that society's customs, beliefs and attitudes towards girls' education challenges female participation in TVET. This implies that the significant percent of responses indicated as Poor societal attitude towards technical Education was challenged female participation.

The seventh item asked was to assess that cultural and social practices of the family challenges female participation in TVET .the results of the responses indicated that 11 (3.6%) of the respondents strongly disagreed , 27(8.9%) of the respondents disagreed and 73(23.9%) of the respondents undecided. However, 159 (52.1%) of the respondents agreed and35 (11.5%) of the respondents strongly agreed on that cultural and social practices of the family challenges female participation in TVET. This implies that the significant percent of responses indicated as Cultural and social practices of the family was challenged female participation in TVET.

The eighth item asked was to point out that low perception of society female participation in TVET challenges female participation in TVET. The results of the responses indicated that 34 (11.1%) of the respondents strongly disagreed , 53(17.4%) of the respondents disagreed and 46 (15.1%) of the respondents undecided. In the other hand 137(44.9%) of the respondents agreed and 35(11.5%) of the respondents strongly agreed on that low perception of society female participation in TVET challenges female participation in TVET. . This implies that the significant percent of responses indicated as Low perception of society towards female participation in TVET was challenged female participation in TVET.

The ninth item asked was to investigate that cultural status of the community challenges female participation in TVET. The results of the responses indicated that 8 (2.6%) of the respondents strongly disagreed, 42(13.8%) of the respondents disagreed and 74(24.3%) of the respondents undecided. However, 139(45.6%) of the respondents agreed and 42(13.8%) of the respondents strongly agreed on that cultural status of the community challenges female

participation in TVET. This implies that the significant percent of responses indicated as Cultural status of the community was challenged female participation in TVET

Table 4.2.3. Analysis on Environment related challenges in technical and vocational education and training

Items	Alternative choices	Frequency	Percent	Valid Percent	Cumulative Percent
Business environment of the local community was challenged female participation in TVET.	Strongly disagreed	23	7.5	7.5	7.5
	Disagreed	36	11.8	11.8	19.3
	Undecided	56	18.4	18.4	37.7
	Agreed	128	42.0	42.0	79.7
	Strongly agreed	62	20.3	20.3	100.0
	Total	305	100.0	100.0	
The school working environment is also another challenge that promotes lower female participation in TVET.	Strongly disagreed	15	4.9	4.9	4.9
	Disagreed	42	13.8	13.8	18.7
	Undecided	59	19.3	19.3	38.0
	Agreed	129	42.3	42.3	80.3
	Strongly agreed	60	19.7	19.7	100.0
	Total	305	100.0	100.0	
a stressful the work place environment leads to lack of confidence among the female students.	Strongly disagreed	32	10.5	10.5	10.5
	Disagreed	23	7.5	7.5	18.0
	Undecided	91	29.8	29.8	47.9
	Agreed	84	27.5	27.5	75.4
	Strongly agreed	75	24.6	24.6	100.0
	Total	305	100.0	100.0	
Fast changing of the economic environment of the local community was challenged female participation in TVET.	Strongly disagreed	17	5.6	5.6	5.6
	Disagreed	14	4.6	4.6	10.2
	Undecided	84	27.5	27.5	37.7
	Agreed	117	38.4	38.4	76.1
	Strongly agreed	73	23.9	23.9	100.0
	Total	305	100.0	100.0	
Cultural environment of the school was challenged female participation in TVET.	Strongly disagreed	15	4.9	4.9	4.9
	Disagreed	23	7.5	7.5	12.5
	Undecided	80	26.2	26.2	38.7
	Agreed	110	36.1	36.1	74.8

	Strongly agreed	77	25.2	25.2	100.0
	Total	305	100.0	100.0	
Technological environment of TVET school was challenged female participation in TVET.	Strongly disagreed	10	3.3	3.3	3.3
	Disagreed	30	9.8	9.8	13.1
	Undecided	83	27.2	27.2	40.3
	Agreed	120	39.3	39.3	79.7
	Strongly agreed	62	20.3	20.3	100.0
	Total	305	100.0	100.0	
The religion environment of the community was challenged female participation in TVET.	Strongly disagreed	12	3.9	3.9	3.9
	Disagreed	36	11.8	11.8	15.7
	Undecided	55	18.0	18.0	33.8
	Agreed	101	33.1	33.1	66.9
	Strongly agreed	101	33.1	33.1	100.0
	Total	305	100.0	100.0	
The geographical environment of the family residence was challenged female participation in TVET.	Strongly disagreed	10	3.3	3.3	3.3
	Disagreed	32	10.5	10.5	13.8
	Undecided	47	15.4	15.4	29.2
	Agreed	124	40.7	40.7	69.8
	Strongly agreed	92	30.2	30.2	100.0
	Total	305	100.0	100.0	
The social environment of the local community was challenged female participation in TVET.	Strongly disagreed	7	2.3	2.3	2.3
	Disagreed	27	8.9	8.9	11.1
	Undecided	57	18.7	18.7	29.8
	Agreed	114	37.4	37.4	67.2
	Strongly agreed	100	32.8	32.8	100.0
	Total	305	100.0	100.0	

Source: own survey

As it was presented in the above table 4.2.3, data were collected on nine items under Environment related challenges in technical and vocational education and training. Based on data collected on the basis of these items analysis was made and the analyzed data were discussed as follows.

The first item asked was to assess that business environment of the local community challenges female participation in TVET. The results of the responses indicated that 23 (7.5%) of the respondents strongly disagreed , 36(11.8%) of the respondents disagreed and 56(18.4%) of the respondents undecided. However, 128(42%) of the respondents agreed and

62(20.3%) of the respondents strongly agreed on that business environment of the local community challenges female participation in TVET. This implies that the significant percent of responses indicated as Business environment of the local community was challenged female participation in TVET.

The second item asked was to investigate that the school working environment is also another challenge that promotes lower female participation in TVET. The results of the responses indicated that 15 (4.9%) of the respondents strongly disagreed , 42(13.8%) of the respondents disagreed and 59(19.3%) of the respondents undecided. However, 129(42.3%) of the respondents agreed and 60(19.7%) of the respondents strongly agreed on that the school working environment is also another challenge that promotes lower female participation in TVET. . This implies that the significant percent of responses indicated as The school working environment is also another challenge that promotes lower female participation in TVET.

The third item asked was to identify that the work place can be a stressful environment and lead to lack of confidence among the female students.. the results of the responses indicated that 32 (10.5%) of the respondents strongly disagreed ,23 (7.5%) of the respondents disagreed and 91 (29.8%) of the respondents undecided. In the other hand, 84(27.5%) of the respondents agreed and 75(24.6%) of the respondents strongly agreed on that the work place can be a stressful environment and lead to lack of confidence among the female students. .
This implies that the significant percent of responses indicated as Fast changing of the economic environment of the local community was challenged female participation in TVET.

The fourth item asked was to assess that fast changing of the economic environment of the local community challenges female participation in TVET. the results of the responses indicated that 17 (5.6%) of the respondents strongly disagreed , 14(4.6%) of the respondents disagreed, and 84(27.5%) of the respondents undecided. However, 117(38.4%) of the respondents agreed and 73(23.9%) of the respondents strongly agreed on that fast changing of the economic environment of the local community challenges female participation in TVET. This implies that the significant percent of responses indicated as Fast changing of the economic environment of the local community was challenged female participation in TVET.

The fifth item asked was to investigate that cultural environment of the school challenges female participation in TVET .the results of the responses indicated that 15(4.9%) of the respondents strongly disagreed , 23(7.5%) of the respondents disagreed and 80(26.2%) of

the respondents undecided, in the other hand,110(36.1%) of the respondents agreed and 77(25.2%) of the respondents strongly agreed on that cultural environment of the school challenges female participation in TVET. This implies that the significant percent of responses indicated as Cultural environment of the school was challenged female participation in TVET.

The sixth item asked was to identify that technological environment of TVET school challenges female participation in TVET. The results of the responses indicated that 10(3.3%) of the respondents strongly disagreed ,30 (9.8%) of the respondents disagreed and 83(27.2%) of the respondents undecided. However, 120(39.3%) of the respondents agreed and 62(20.3%) of the respondents strongly agreed on that technological environment of TVET school challenges female participation in TVET. This implies that the significant percent of responses indicated as Technological environment of TVET school was challenged female participation in TVET.

The seventh item asked was to assess that the religion environment of the community challenges female participation in TVET. The results of the responses indicated that 12 (3.9%) of the respondents strongly disagreed, 36(11.8%) of the respondents disagreed and 55(18%) of the respondents undecided. Nevertheless, 101(33.1%) of the respondents agreed and 101(33.1%) of the respondents strongly agreed on that the religion environment of the community challenges female participation in TVET.

This implies that the significant percent of responses indicated as The religion environment of the community was challenged female participation in TVET.

The eighth item asked was to point out that the geographical environment of the family residence challenges female participation in TVET. The results of the responses indicated that10 (3.3%) of the respondents strongly disagreed , 32(10.5%) of the respondents disagreed and 47(15.4%) of the respondents undecided. However, 124(40.7%) of the respondents agreed and92 (30.2%) of the respondents strongly agreed on that the geographical environment of the family residence challenges female participation in TVET. This implies that the significant percent of responses indicated as The geographical environment of the family residence was challenged female participation in TVET

The last item asked was to investigate that the social environment of the local community challenges female participation in TVET. The results of the responses indicated that 7(2.3%) of the respondents strongly disagreed , 27(8.9%) of the respondents disagreed and 57(18.7%) of the respondents undecided.in the other hand,114(37.4%) of the respondents agreed and 100(32.8%) of the respondents strongly agreed on that the social environment of the local community challenges female participation in TVET. This implies that the significant percent of responses indicated as the social environment of the local community was challenged female participation in TVET.

Table 4.2.4. Analysis on Family related challenges in technical and vocational education and training

Items	Alternative choices	Frequency	Percent	Valid Percent	Cumulative Percent
Parental influence has significant impact on female students' decision regarding TVET.	Strongly disagreed	6	2.0	2.0	2.0
	Disagreed	8	2.6	2.6	4.6
	Undecided	69	22.6	22.6	27.2
	Agreed	100	32.8	32.8	60.0
	Strongly agreed	122	40.0	40.0	100.0
	Total	305	100.0	100.0	
Gender stereotyping exists in home was challenged the female participation in TVET.	Strongly disagreed	7	2.3	2.3	2.3
	Disagreed	20	6.6	6.6	8.9
	Undecided	64	21.0	21.0	29.8
	Agreed	86	28.2	28.2	58.0
	Strongly agreed	128	42.0	42.0	100.0
	Total	305	100.0	100.0	
The absence encouragement from the family for female student was challenged female participation in TVET.	Strongly disagreed	7	2.3	2.3	2.3
	Disagreed	29	9.5	9.5	11.8
	Undecided	58	19.0	19.0	30.8
	Agreed	87	28.5	28.5	59.3
	Strongly agreed	124	40.7	40.7	100.0
	Total	305	100.0	100.0	
Parent’s related factors such as lack of being role model for fame student was challenged the female participation in TVET.	Strongly disagreed	16	5.2	5.2	5.2
	Disagreed	13	4.3	4.3	9.5
	Undecided	47	15.4	15.4	24.9
	Agreed	99	32.5	32.5	57.4
	Strongly agreed	130	42.6	42.6	100.0
	Total	305	100.0	100.0	

As it was presented in the above table 4.2.4, data were collected on four items under Family related challenges in technical and vocational education and training. Based on data collected on the basis of these items analysis was made and the analyzed data were discussed as follows.

The first item asked was to assess that parental influence has significant impact on female students' decision regarding TVET. The results of the responses indicated that 6 (2%) of the respondents strongly disagreed, 8(2.6%) of the respondents disagreed and 69(22.6%) of the respondents undecided. However, 100(32.8%) of the respondents agreed and 122(40%) of the respondents strongly agreed on that parental influence has significant impact on female students' decision regarding TVET. This implies that the significant percent of responses indicated as Parental influence has significant impact on female students' decision regarding TVET.

The second item asked was to investigate that Gender stereotyping exists in home was challenged the female participation in TVE. The results of the responses indicated that 7 (2.3%) of the respondents strongly disagreed, 20(6.6%) of the respondents disagreed and 64(21%) of the respondents undecided.in the other hand, 86(26.2%) of the respondents agreed and 128(42%) of the respondents strongly agreed on that gender stereotyping exists in homes challenges the female participation in TVET. This implies that the significant percent of responses indicated as

The third item asked was to identify that The absence encouragement from the family for female student was challenged female participation in TVET. The results of the responses indicated that 7 (2.3%) of the respondents strongly disagreed , 29(9.5%) of the respondents disagreed and 58(19%) of the respondents undecided. Nevertheless, 87(28.5%) of the respondents agreed and124 (40.7%) of the respondents strongly agreed on that female students receive less encouragement from their family. This implies that the significant percent of responses indicated as

The last item asked was to assess that Parent's related factors such as lack of being role model for fame student was challenged the female participation .the results of the responses indicated that 16 (5.2%) of the respondents strongly disagreed , 13(4.3%) of the respondents disagreed and 47 (15.4%) of the respondents undecided. However, 99(32.5%) of the respondents agreed and 130(42.6%) of the respondents strongly agreed on that parent's related factors such as lack of role model challenges the female participation in TVET. This implies that the significant percent of responses indicated as Parent's related factors such as lack of being role model for fame student was challenged the female participation in TVET.

Table 4.2.5. Analysis on Family related challenges in technical and vocational education and training

Items	Alternative choices	Frequency	Percent	Valid Percent	Cumulative Percent
Families tend to be reluctant in sending their daughters to school for economic a reason was challenged the female participation in TVET.	Strongly disagreed	20	6.6	6.6	6.6
	Disagreed	45	14.8	14.8	21.3
	Undecided	68	22.3	22.3	43.6
	Agreed	120	39.3	39.3	83.0
	Strongly agreed	52	17.0	17.0	100.0
	Total	305	100.0	100.0	
Parents' educational level was challenged the female participation in TVET.	Strongly disagreed	26	8.5	8.5	8.5
	Disagreed	51	16.7	16.7	25.2
	Undecided	88	28.9	28.9	54.1
	Agreed	96	31.5	31.5	85.6
	Strongly agreed	44	14.4	14.4	100.0
	Total	305	100.0	100.0	
Lack of Parental support was challenged female participation in TVET.	Strongly disagreed	31	10.2	10.2	10.2
	Disagreed	44	14.4	14.4	24.6
	Undecided	92	30.2	30.2	54.8
	Agreed	94	30.8	30.8	85.6
	Strongly agreed	44	14.4	14.4	100.0
	Total	305	100.0	100.0	
The absence of parental support, guidance, and encouragement were lead to the inability in participation in TVET.	Strongly disagreed	77	25.2	25.2	25.2
	Disagreed	33	10.8	10.8	36.1
	Undecided	61	20.0	20.0	56.1
	Agreed	79	25.9	25.9	82.0
	Strongly agreed	55	18.0	18.0	100.0
	Total	305	100.0	100.0	

As it was presented in the above table 4.2.5, data were collected on four items under Family related challenges in technical and vocational education and training. Based on data collected on the basis of these items analysis was made and the analyzed data were discussed as follows.

The first item asked was to investigate that families tend to be reluctant in sending their daughters to school for economic reasons. The results of the responses indicated that 20(6.6%) of the respondents strongly disagreed , 45(14.6%) of the respondents disagreed and 68(22.3%) of the respondents undecided.120 (39.3%) of the respondents agreed and 52(17%) of the respondents strongly agreed on that families tend to be reluctant in sending their daughters to school for economic reasons. This implies that the significant percent of responses indicated as Families tend to be reluctant in sending their daughters to school for economic a reason was challenged the female participation in TVET.

The second item asked was to identify that parents' educational level challenges the female participation in TVET. The results of the responses indicated that 26 (8.5%) of the respondents strongly disagreed, 51(16.7%) of the respondents disagreed and 88 (28.9%) of the respondents undecided.96 (31.5%) of the respondents agreed and 44(14.4%) of the respondents strongly agreed on that parents' educational level challenges the female participation in TVET. This implies that the significant percent of responses indicated as Parents' educational level was challenged the female participation in TVET.

The third item asked was to assess that lack of Parental support and guidance challenges female participation in TVET. The results of the responses indicated that 31 (10.2%) of the respondents strongly disagreed, 44(14.4%) of the respondents disagreed and 92(30.2%) of the respondents undecided. However, 94(30.8%) of the respondents agreed and 44(14.4%) of the respondents strongly agreed on that lack of Parental support and guidance challenges female participation in TVET. This implies that the significant percent of responses indicated as Parents' educational level was challenged the female participation in TVET.

The last item asked was to point out that the absence of parental support, guidance, and encouragement can lead to the inability in participation in TVET. The results of the responses indicated that 77 (25.2%) of the respondents strongly disagreed and 33(10.8%) of the respondents disagreed, 61(20%) of the respondents undecided. 79(25.9%) of the respondents agreed and 55(18%) of the respondents strongly agreed on that the absence of parental support, guidance, and encouragement can lead to the inability in participation in TVET. This implies that the significant percent of responses indicated as the absence of parental support, guidance, and encouragement were lead to the inability in participation in TVET.

Table 4.2.6. Analysis on Family related challenges in technical and vocational education and training

Items	Alternative choices	Frequency	Percent	Valid Percent	Cumulative Percent
Occupational attainment was challenged the female participation in TVET.	Strongly disagreed	68	22.3	22.3	22.3
	Disagreed	34	11.1	11.1	33.4
	Undecided	80	26.2	26.2	59.7
	Agreed	76	24.9	24.9	84.6
	Strongly agreed	47	15.4	15.4	100.0
	Total	305	100.0	100.0	
Peer influence has a significant impact on female students' decision regarding TVET.	Strongly disagreed	69	22.6	22.6	22.6
	Disagreed	37	12.1	12.1	34.8
	Undecided	69	22.6	22.6	57.4
	Agreed	74	24.3	24.3	81.6
	Strongly agreed	56	18.4	18.4	100.0
	Total	305	100.0	100.0	
The inequalities imposed on female by their home was challenged the female participation in TVET.	Strongly disagreed	15	4.9	4.9	4.9
	Disagreed	41	13.4	13.4	18.4
	Undecided	74	24.3	24.3	42.6
	Agreed	110	36.1	36.1	78.7
	Strongly agreed	65	21.3	21.3	100.0
	Total	305	100.0	100.0	

Source: own survey 2021

As it was presented in the above table 4.2.6, data were collected on three items under Family related challenges in technical and vocational education and training. Based on data collected on the basis of these items analysis was made and the analyzed data were discussed as follows.

The first item asked was to investigate that occupational attainment challenges the female participation in TVET. The results of the responses indicated that 68 (22.3%) of the respondents strongly disagreed, 34(11.1%) of the respondents disagreed and 80(26.2%) of the respondents undecided. However,76(24.9%) of the respondents agreed and 47(15.4%) of the respondents strongly agreed on that occupational attainment challenges the female participation in TVET. This implies that the significant percent of responses indicated as Occupational attainment was challenged the female participation in TVET.

The second item asked was to assess that peer influence has a significant impact on female students' decision regarding TVET. The results of the responses indicated that 69 (22.6%) of the respondents strongly disagreed, 37(12.1%) of the respondents disagreed and 69(22.6%) of the respondents undecided. in the other hand, 74(23.3%) of the respondents agreed and56 (18.4%) of the respondents strongly agreed on that peer influence has a significant impact on female students' decision regarding TVET. This implies that the significant percent of responses indicated as Peer influence has a significant impact on female students' decision regarding TVET.

The last item asked was to identify that the inequalities imposed on female by their home challenges the female participation in TVET. The results of the responses indicated that 15 (4.9%) of the respondents strongly disagreed , 41(13.4%) of the respondents disagreed, 74(24.3%) of the respondents undecided. However, 110(36.1%) of the respondents agreed and 65(21.3%) of the respondents strongly agreed on that the inequalities imposed on female by their home challenges the female participation in TVET. This implies that the significant percent of responses indicated as the inequalities imposed on female by their home was challenged the female participation in TVET.

Table .4.2.7. Analysis on Economic related challenges in technical and vocational education and training

Items	N	Minimum	Maximum	Mean	Std. Deviation
Low economic status of family was challenged female participation in TVET.	305	1.00	5.00	3.3770	.90255
The economic activity in which the family engaged was challenged female participation in TVET.	305	1.00	5.00	3.7607	.96574
Weak participation from other stakeholder in supporting female in education was challenged female participation in TVET.	305	1.00	5.00	3.7082	1.04351
Inadequate financial support of family in education was challenged female participation in TVET.	305	1.00	5.00	3.4721	.95974
Parental economic management system was Challenged female participation in vocational education and training.	305	1.00	5.00	2.6295	1.38023
The poor availability of material resource was challenged female participation in TVET.	305	1.00	5.00	3.2754	.91203
female students' money management system was challenged female participation in TVET,	305	1.00	5.00	3.6984	.85503
Valid N (list wise)	305				

Source: own survey

As indicated in above table 4.2.7, respondents agreed that (M=3.3770, SD=.90255) low economic status of family challenges female participation in TVET. Similarly as it was stated in the above table 4.2.7, respondents agreed that (M=3.7607, SD =.)96574weak participation from other stakeholders in supporting female in education challenges female participation in TVET.As it was shown in the above table 4.2.7 respondents agreed that (M=3.7082, SD=1.04351)inadequate financial support of family in education challenges female participation in TVET.As it was described in the above table respondents agreed that

(M=3.4721, SD=.95974) parental economic management system was an important factor in determining female participation in vocational education and training.

As it was presented in the above table 4.2.7, respondents agreed that (M=2.6295, SD=1.38023)the poor availability of material resources challenges female participation in TVET.As it was indicated in the above table 4.2.7, respondents agreed that (M=3.2754, SD=.91203.)female students' money management system challenges female participation in TVET..As it was indicated in the above table 4.2.7, respondents agreed that (M=3.6984,SD=..85503) the economic activities in which the family engaged challenges female participation in TVET.

Table .4.2.8. Analysis on Culture related challenges in technical and vocational education and training

Items	N	Minimum	Maximum	Mean	Std. Deviation
Cultural practice of the family was challenged the choices of young female.	305	1.00	5.00	3.3344	.99321
Marriage was one of the challenges for female participation in TVET.	305	1.00	5.00	3.5705	1.04619
The stereotype reflected by the community that a female as a person who is expected to take care of the home and children challenged female participation.	305	1.00	5.00	3.5213	1.21139
School working culture was greatly contributed to low female participation in TVET.	305	1.00	5.00	3.0820	.99166
Socio-cultural beliefs of the community was challenged the female participation.	305	1.00	5.00	3.4393	1.02458
Poor societal attitude towards technical education was challenged female participation.	305	1.00	5.00	3.3082	.93722
Cultural and social practices of the family was challenged female participation in TVET.	305	1.00	5.00	3.5902	.93149
Low perception of society towards female participation in TVET was challenged female participation in TVET.	305	1.00	5.00	3.2820	1.20546
Cultural status of the community was challenged female participation in TVET.	305	1.00	5.00	3.5410	.97962
Valid N (listwise)	305				

Source: own survey

As indicated in above table 4.2.8, respondents agreed that (M=3.3344, SD=.99321) cultural practice of the family was challenge the choices of young female. Similarlyas it was stated in the above table 4.2.8, respondents agreed that (M=3.5705, SD =1.04619.) Marriage was one of the challenges for female participation in TVET.

As it was shown in the above table 4.2.8 respondents agreed that (M=3.5213,SD=1.21139) The stereotype reflected by the community that a female as a person who is expected to take care of the home and children challenged female participation.

As it was described in the above table 4.2.8,respondents agreed that (M=3.0820, SD=.99166). School working culture was greatly contributed to low female participation in TVET.

As it was presented in the above table 4.2.8, respondents agreed that (M=3.4393, SD=1.02458) Socio-cultural beliefs of the community was challenged the female participation.

As it was indicated in the above table 4.2.8, respondents agreed that (M=3.3082,SD=..93722). Poor societal attitude towards technical education was challenged female participation.

As it was shown in the above table 4.2.8 respondents agreed that (M=3.5902, SD=.93149)cultural and social practices of the family challenges female participation in TVET.

.As it was described in the above table 4.2.8, respondents agreed that (M=3.2820,SD=1.20546) Low perception of society towards female participation in TVET was challenged female participation in TVET.

As it was described in the above table 4.2.8, respondents agreed that (M=3.5410,SD=.97962) cultural status of the community challenges female participation in TVET.

Table .4.2.9. Analysis on Environment related challenges in technical and vocational education and training

Items	N	Minimum	Maximum	Mean	Std. Deviation
Business environment of the local community was challenged female participation in TVET.	305	1.00	5.00	3.5574	1.16026
The school working environment is also another challenge that promotes lower female participation in TVET.	305	1.00	5.00	3.5803	1.10066
A stressful the work place environment leads to lack of confidence among the female students.	305	1.00	5.00	3.4820	1.23564
Fast changing of the economic environment of the local community was challenged female participation in TVET.	305	1.00	5.00	3.7049	1.05669
Cultural environment of the school was challenged female participation in TVET.	305	1.00	5.00	3.6918	1.08068
Technological environment of TVET school was challenged female participation in TVET.	305	1.00	5.00	3.6361	1.01729
The religion environment of the community was challenged female participation in TVET.	305	1.00	5.00	3.7967	1.14046
Distance of the family residence from TEVT school was challenged female participation in TVET.	305	1.00	5.00	3.8393	1.07166
The social environment of the local community was challenged female participation in TVET.	305	1.00	5.00	3.8951	1.03339
Valid N (listwise)	305				

Source: own survey

As indicated in above table 4.2.9, respondents agreed that (M=3.5574, SD=1.16026) business environment of the local community challenges female participation in TVET. Similarly as it was stated in the above table 4.2.9, respondents agreed that (M=3.5803, SD *=1.10066.*)the school working environment is also another challenge that promotes lower female

participation in TVET.As it was shown in the above table 4.2.9 respondents agreed that (M=3.4820,SD=)1.23564the work place can be a stressful environment and lead to lack of confidence among the female students.

As it was described in the above table 4.2.9 respondents agreed that (M=3.7049, SD=1.05669) fast changing of the economic environment of the local community challenges female participation in TVET.As it was presented in the above table 4.2.9, respondents agreed that (M=3.6918, SD=1.08068)cultural environment of the school challenges female participation in TVET.As it was indicated in the above table 4.2.9, respondents agreed that (M=3.6361,SD=1.01729.)technological environment of TVET school challenges female participation in TVET.

As it was shown in the above table 4.2.9, respondents agreed that (M=3.7967, SD= 1.14046)religion environment of the community challenges female participation in TVET.As it was described in the above table 4.2.9, respondents agreed that (M=3.8393,SD=1.07166) the Distance of the family residence from TEVT school was challenged female participation in TVET..As it was described in the above table 4.2.9, respondents agreed that (M=3.8951,SD=1.03339) the social environment of the local community challenges female participation in TVET.

Table .4.2.10. Analysis on Family related challenges in technical and vocational education and training

Items	N	Minimum	Maximum	Mean	Std. Deviation
Parental influence has significant impact on female students' decision regarding TVET.	305	1.00	5.00	4.0623	.95252
Gender stereotyping exists in home was challenged the female participation in TVET.	305	1.00	5.00	4.0098	1.04970
The absence encouragement from the family for female student was challenged female participation in TVET.	305	1.00	5.00	3.9574	1.08889
Parent's related factors such as lack of being role model for fame student was challenged the female participation in TVET.	305	1.00	5.00	4.0295	1.10729
Families tend to be reluctant in sending their daughters to school for economic a reason was challenged the female participation in TVET.	305	1.00	5.00	3.4557	1.13214
Parents' educational level was challenged the female participation in TVET.	305	1.00	5.00	3.2656	1.15492
Lack of Parental support was challenged female participation in TVET.	305	1.00	5.00	3.2492	1.17409
The absence of parental support, guidance, and encouragement were lead to the inability in participation in TVET.	305	1.00	5.00	3.0066	1.45094
Occupational attainment was challenged the female participation in TVET.	305	1.00	5.00	3.0000	1.36931
Peer influence has a significant impact on female students' decision regarding TVET.	305	1.00	5.00	3.0361	1.41724
The inequalities imposed on female by their home was challenged the female participation in TVET.	305	1.00	5.00	3.5541	1.11414
Valid N (listwise)	305				

Source: own survey

As indicated in above table 4.2.10, respondents agreed that (M=4.0623, SD=.95252) parental influence has significant impact on female students' decision regarding TVET. Similarly as it was stated in the above table 4.2.10, respondents agreed that (M=4.0098, SD =1.04970) Gender stereotyping exists in home was challenged the female participation in TVET.

As it was shown in the above table 4.2.10 respondents agreed that (M=3.9574, SD=1.08889).

The absence encouragement from the family for female student was challenged female participation in TVET.

As it was described in the above table 4.2.10, respondents agreed that (M=4.0295, SD=1.10729). Parent's related factors such as lack of being role model for fame student was challenged the female participation in TVET.

As it was presented in the above table 4.2.10, respondents agreed that (M=3.4557, SD=1.13214) families tend to be reluctant in sending their daughters to school for economic reasons. As it was indicated in the above table 4.2.10, respondents agreed that (M=3.2656, SD=.1.15492) parents' educational level challenges the female participation in TVET.

As it was shown in the above table 4.2.10, respondents agreed that (M=3.2492, SD= 1.17409) lack of Parental support and guidance challenges female participation in TVET..As it was described in the above table 4.2.10, respondents agreed that (M=3.0066, SD=1.45094) the absence of parental support, guidance, and encouragement can lead to the inability in participation in TVET.

As it was presented in the above table 4.2.10, respondents agreed that (M=3.0000, SD=1.36931) occupational attainment challenges the female participation in TVET.As it was indicated in the above table 4.2.10, respondents agreed that (M=3.0361, SD=.1.41724) peer influence has a significant impact on female students' decision regarding TVET.As it was indicated in the above table 4.2.10, respondents agreed that (M3.5541=,SD=1.11414.) The inequalities imposed on female by their home challenges the female participation in TVET.

4.3. Correlation analysis of school leadership practice and teachers commitment

The section includes the analysis of data related to challenges and female participation in TVET. To investigate the relationship between challenges and female participation Pearson product correlation coefficient was used. The Pearson product moment correlation coefficient is a statistic that indicates the degree to which two variables are related to one another. The sign of correlation coefficient (+ or -) indicates the direction of the relationship between -1 and +1.Variables may be positively or negatively correlated. A positive correlation indicates a direct and positive relationship between two variables. A negative correlation, on the other hand, indicates an inverse, negative relationship between two variables (Leary, 2004). Measuring the strength and the direction of a linear relationship that occurred between variables is, therefore, important for further statistical significance.

This basic questions were tested using Pearson Correlation Coefficient at $p \leq 0.05$ significance level. Table 4.3.1 on interpretation of the strength of the correlation coefficient is based on Amins (2005) approach. This approach emphasizes that at 0 there is no relationship, above 0 to .2 it is a very weak relationship, above .2 to .4 it is a weak relationship, above .4 to .6 it is a moderate relationship, above .6 to .8 it is a strong relationship, and above .8 to 1 it is a very strong relationship. Similarly, the negative values imply negative relationship as enumerated above.

Table.4.3. 1. Correlation analysis of female student participation and independent variables

Female challenges	participation	economic challenges	cultural challenges	environmental challenges	family related challenges
economic challenges	Pearson correlation				
cultural challenges	Pearson correlation	.408.**\\\\	.627**		
environmental challenges	Pearson correlation	.394.*	.489.**	.426**	
(family challenges	Pearson correlation	. .439**	.621**	.446**	.661**
	Pearson correlation	**.675****	**.671****	**.726****	**.779****

**. Correlation is significant at the 0.01 level (2-)

As table 4.3.1 shows that, all the variables are positively correlated to each other. Family related challenges have a strong positive correlation ((r =**.779****, $p < 0.05$)) followed by the correlation between environmental related challenges and female participation (r =**..726****, p-value<0.05), the correlation economic related challenges and female participation and have strong correlation at r=**.675****p-value<0.05) and also cultural related challenges and female participation have a strong positive correlation.

4.4. Analysis on the qualitative that obtained through interview

Structured interview questions were designed to collect qualitative data from 4 principals. The designed interview questions focused on the economic related, cultural related , environmental related and family related challenges that challenged female participation in TVET.

The responses those given by the four principals were similar. According to this group OF principals economic related challenges like low income, low economic status , source of income and economic activities in which their family were challenges for female participation in TVET.

According to this group of principals Cultural related challenges like Cultural norms of the family ,Society's customs, beliefs and attitudes towards girls' education, Cultural and social practices of the family and Cultural status of the community were challenges to female participation in TVET. Similarly, the responses of the principals showed that environmental related challenges like the school working environment, fast changing of the economic environment of the local community, cultural environment of the school and technological environment of TVET school were challenges to female participation in TVET.

Finally , the responses that given by the interviewees revealed that family related challenges like inequalities imposed on female by their home, Peer influence,. Absence of parental support, guidance, and encouragement, Parents' educational level challenges and Female students receive less encouragement from their family were challenges to female participation in TVET.

CHPTER FIVE

5. Summary, Conclusions and Recommendations

5.1. Summary

The main objective of the study was to assess the challenges to female participation in TVET. To achieve the intended objective of this study descriptive survey research method was used with quantitative and qualitative approaches. Quantitative approach was used in the study for collecting the quantitative data from 305 female students .Simple random systematic simple random sampling technique was used to select the sample respondents of female students. Data were collected from sample respondents through five scale likerted close-ended questionnaire. The qualitative data were collected through interview from 4 principals. The collected quantitative data were analyzed in percentages, mean standard deviation and Pearson correlation to analyze the relation between challenges to female student and female student participation in TVET. The qualitative data that were collected through interview questions were discussed in text explanations. On basis of the analysis made of this study, the conclusions were made and the findings of this study were identified and presented with the research questions side by side as follows.

The first research question was asked to identify major the economic challenges to female participation in TVET, The result of this indicated that major the economic challenges to female participation in TVET were low income, low economic status , source of income and economic activities in which their family were challenges for female participation in TVET.

Second research question was asked to assess the major cultural challenges to female participation in TVET .the finding of this study revealed that the major cultural challenges to female participation in TVET were Cultural norms of the family ,Society's customs, beliefs and attitudes towards girls' education, Cultural and social practices of the family and Cultural status of the community were challenges to female participation in TVET.

The third research question was asked to identify the environmental challenges to female participation in TVET. The finding of this study revealed that the environmental challenges to female participation in TVET were the school working environment, fast changing of the economic environment of the local community, cultural environment of the school, social environment of the local community and technological environment of TVET school were challenges to female participation in TVET.

The last research question was asked to investigate the family related challenges female participation in TVET. The finding of the study showed that the family related challenges female participation in TVET were inequalities imposed on female by their home, Peer influence,. absence of parental support, guidance, and encouragement, Parents' educational level challenges and Female students receive less encouragement from their family were challenges to female participation in TVET.

5.2. Conclusions

Based on the above findings of this study the conclusions were made and addressed as follows. 1.The researcher concluded that that major the economic challenges to female participation in TVET were low income, low economic status , source of income and economic activities in which their family were challenges for female participation in TVET.

2. In the same the researcher concluded that the major cultural challenges to female participation in TVET were Cultural norms of the family ,Society's customs, beliefs and attitudes towards girls' education, Cultural and social practices of the family and Cultural status of the community were challenges to female participation in students receive less encouragement from their family were challenges to female participation in TVET.

3. Similarly, the researcher concluded that the environmental challenges to female participation in TVET were the school working environment, fast changing of the economic environment of the local community, cultural environment of the school, social environment of the local community and technological environment of TVET.

4. Finally, the researcher concluded that the family related challenges female participation in TVET were inequalities imposed on female by their home, Peer influence, absence of parental support, guidance, and encouragement, Parents' educational level challenges and Female TVET.

5.3. Recommendations

Based on the above findings of this study the following recommendations were given as follows:

1. Economic challenges to female students should be identified by the family, the principals, educational offices of different levels and the government should be solved to increase the female participation in TVET.

2 .Cultural challenges to female students should be should be identified by family, community the principals, educational offices of different levels and the government should be solved to increase the female participation in TVET.

3. Environmental challenges to female students should be identified the principals, educational offices of different levels and the government should be solved to increase the female participation in TVET.

4. Family should support and guide their female students to increase the female participation in TVET.

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APPENDIXA

JIMMA UNIVERSITY

COLLEGE OF EDUCATION AND BEHAVIORAL SCIENCES

DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

Dear respondents

This questionnaire is designed to assess the challenges of female participation in technical and vocational education and training in the case of Buno bedele zone. The information and responses gathered through this questionnaire will be used only for academic purpose and treated with utmost confidentiality.The findings of the study and recommendations forwarded are believed to provide valuable input for secondary schools to improve female participation in technical and vocational education and training. I hope, completing the questionnaire will take you only few minutes and your kind assistance, genuine and timely response is crucial for the success of this study.

Thank you

General information

Don't write your name

Use a "√" tick mark or circle to indicate your responses for each item

Contact address

Tel:

Section one: Personal characteristics

Direction: Indicate your response by putting this mark(x) on the space provide.

1. Name of the school:----------

2. Sex: 1) Male ☐ 2) Female ☐

3. Age : 1) Below 20 ☐ 2) 21-25 3) ☐and above ☐1

4. education:level 1one 2/level two 3 level three 4)level four

Section Two: Questions

This part of the questionnaire deals with specific questions related to respondents perception on t the challenges of female participation in technical and vocational education and training.in the case of Buno bedele zone. Please, genuinely indicate your level of agreement (or disagreement) on the following statements. The rating scale continuum range from 1 to 5 (1= strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, and 5 = strongly agree).

Economic related challenges in technical and vocational education and training

No	Items	1	2	3	4	5
1	Low economic status of family was challenged female participation in TVET.					
2	The economic activity in which the family engaged was challenged female participation in TVET.					
3	Weak participation from other stakeholder in supporting female in education was challenged female participation in TVET.					
4	Inadequate financial support of family in education was challenged female participation in TVET.					
5	Parental economic management system was Challenged female participation in vocational education and training.					
6	The poor availability of material resource was challenged female participation in TVET.					
7	Female students' money management system was challenged female participation in TVET.					

Culture related challenges in technical and vocational education and training

No	Items	1	2	3	4	5
1	Cultural practice of the family was challenged the choices of young female.					
2	Marriage was one of the challenges for female participation in TVET.					
3	The stereotype reflected by the community that a female as a person who is expected to take care of the home and children challenged female participation.					
4	School working culture was greatly contributed to low female participation in TVET.					
5	Socio-cultural beliefs of the community was challenged the female participation.					
6	Poor societal attitude towards technical education was challenged female participation.					
7	Cultural and social practices of the family was challenged female participation in TVET.					
8	Low perception of society towards female participation in TVET was challenged female participation in TVET.					
9	Cultural status of the community was challenged female participation in TVET.					

Environment related challenges in technical and vocational education and training

No	Items	1	2	3	4	5
1	Business environment of the local community was challenged female participation in TVET.					
2	The school working environment is also another challenge that promotes lower female participation in TVET.					
3	A stressful the work place environment leads to lack of confidence among the female students.					
4	Fast changing of the economic environment of the local community was challenged female participation in TVET.					
5	Cultural environment of the school was challenged female participation in TVET.					
6	Technological environment of TVET school was challenged female participation in TVET					
7	The religion environment of the community was challenged female participation in TVET.					
8	Distance of the family residence from TEVT school was challenged female participation in TVET.					
9	The social environment of the local community was challenged female participation in TVET.					

Family related challenges in technical and vocational education and training

No	Items	1	2	3	4	5
1	Parental influence has significant impact on female students' decision regarding TVET.					
2	Gender stereotyping exists in home was challenged the female participation in TVET					
3	The absence encouragement from the family for female student was challenged female participation in TVET.					
4	Parent's related factors such as lack of being role model for fame student was challenged the female participation in TVET.					
5	Families tend to be reluctant in sending their daughters to school for economic a reason was challenged the female participation in TVET.					
6	Parents' educational level was challenged the female participation in TVET.					
7	Lack of Parental support was challenged female participation in TVET.					
8	The absence of parental support, guidance, and encouragement were lead to the inability in participation in TVET.					
9	Occupational attainment was challenged the female participation in TVET.					
10	Peer influence has a significant impact on female students' decision regarding TVET.					
11	The inequalities imposed on female by their home was challenged the female participation in TVET.					

Appendix B
Interview questions

Four interview questions were designed to collect qualitative data from principals. Four interview questions were designed as follows.

1. What are the economic related factors that have challenged the female students' participation in TVET?

2. What are the cultural related factors that have challenged the female students participation in TVET?

3. What are the environmental related factors that have challenged the female students participation in TVET?

4. What are the family related factors that have challenged the female students participation in TVET?