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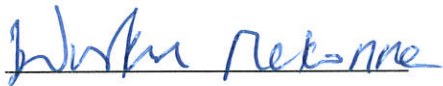
Department of Vocational Educational Management

Factors Affecting Female Students Participation in Industrial Fields of the
Study: The Case of Openo Technical Vocational and Educational Training
College

By

Tesfaye Birhane Lema

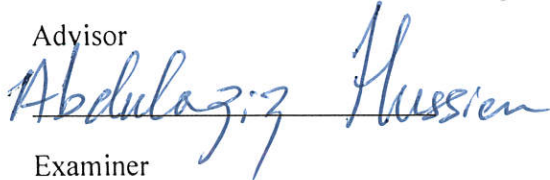
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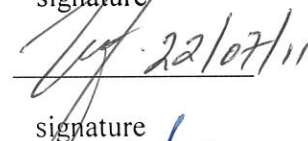


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ABRRIVIATIONS AND ACRONYMS

Art	Article
CEDAW	Convention on the Elimination of all forms of Discrimination against Women
ecbp	Engineering capacity building program
EU	European Union
FDRE	Federal Democratic Republic of Ethiopia
FGM	Female Genital Mutilation
GEM	Gender Empowerment Measure
GATVET	Gambela Agricultural and Technical Vocational and Educational Training.
NCTPE	National Committee on Traditional Practices of Ethiopia

ABSTRACT

The main objectives of the study are to assess the factors that affect female student's participation towards industrial fields at Openo TVET college in Gambella regional state. The subjects of the study were 132 female students of the colleges, three deans, five instructors, two individuals from women affairs bureau, one the college women affairs unit and one vocational counselors of the college. Simple random sampling methods were used to select students, and the remaining officials are selected by using purposive sampling techniques. For the purpose of the study, descriptive survey method was employed in order to get a clear picture about the factors. The data for the study was obtained from primary and secondary sources. The primary data was collected through questionnaires and interviews. Both open-ended and close-ended questionnaires were set and administered. In addition to this, documents, strategic plan and different published and unpublished materials were used as secondary sources. Tables, mean, grand mean and percentage followed by descriptive statements was used to analyze the collected data. Finally, the researcher forwarded the possible recommendation. Accordingly the research depicted that female students participation is affected by parent related factors like (family educational background, lack of moral and absenteeism), unavailability of teaching material and infrastructure, lack of awareness and harmful traditional practices. Generally, in Openo TVET college the number of female students is almost negligible as compared to business students. Hence, it is recommended that the college has to create a mechanism to aware the societies of Gambella about TVET and the laboratories and workshop should be equipped with the necessary materials.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Education is the major driving force for the development of one country. It is the most important tool that can improve the welfare of the given society that plays a significance role by increasing the economic, social and cultural development of a nation. The Ethiopian Educational System was started during the religious period when parents transmit knowledge for their son and daughter. Later on, modern school was introduced by Minilik the 1st in 1908 E.C. Minlike established the school for two purposes, his desire was to make the country modernize and to train people who can able to speak with foreigners. Even though the school trains peoples about foreign languages, it resembles vocational education because it designed for a specific occupation. Following this, after the Second World War, efforts were made to give priority to education and many schools and institutions were operational. Among this institution, the Ethiopian Technical Vocational and Educational Training system became the integral part of Ethiopian Educational System. Because the country introduced TVET in order to fulfill the rapid needs of skilled work force. It is clear fact that the presence of properly trained and skilled manpower is one of the most important assets and prerequisite of social and economic development. Technical and Vocational Educational Training is the main driving force for the development of a sustainable work force, to supply the skilled workforce for the production and service section of the economy.

Moreover, the term TVET combines both theory and practice: elements of education, such as specific calculation, knowledge about certain materials, working methods and so on, are combined with practical training through instruction in the workshop of a training institution or practical work in an enterprise. According to the blue page designed by ecbp in collaboration with chamber of commerce, the term TVET is defined as *“T (Technical) in TVET appeals to a different and higher education), the V (Vocational) is linked with specific practical occupations which include training and upgrading in all occupational fields of agriculture, industry, crafts and the service sector, E is stands for Education and T for Training.”*(Ecbp, 2006,9) generally TVET concerns about technical matters.

In connection to this, “Ethiopia’s modern TVET delivery system had started in 1950s by the establishment of the first TVET center: Tegibared in Addis Ababa (1941), to produce technically skilled man power for the country. In the same decade, non-formal skill training offered by major companies (e.g. Ethiopian Airlines) had also started to be provided” (shigeru, 2009).

Later on, many institutions were introduced in the country because the government considers TVET as a main driving force to fulfill the manpower needs of the country. To this end, “Openo is one of the Ethiopian TVET institutions which is located in Gambella Regional States and established in 2001/1994E.C as a TVET institution with the objective of creating competent, motivated, adaptable and innovative work force. In accordance with the proclamation (No 391/2004), the college designed to play a significant role in strengthening the culture of self-employment and innovation, which is the major concern and best strategic plan of the country. In addition to this, the college also helps the region in reduction of unemployment rate as well as for the social and economic development of the region by producing professionally and ethically capable middle level outcome based manpower that are capable of carrying responsibility in producing market oriented products.

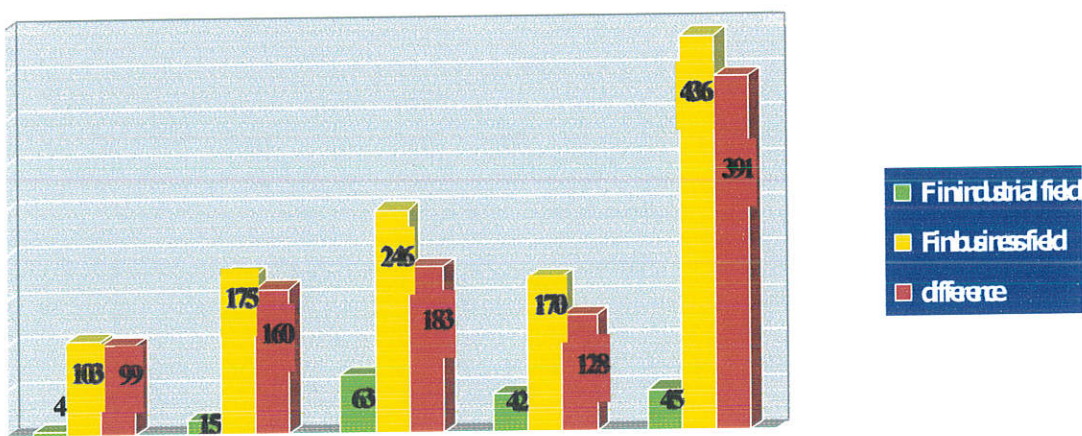
Therefore, initially the college has begun to provide training for middle level technician and vocational trainees under TVET institution with (3) three degree, (8) eight diploma and (1) one certificate holder teachers. At institute level, it also under takes 10+1 and 10+2 program in the occupational areas of General mechanics, Information technology, Accounting, and Purchasing and Supplies Management. Later on, after five years from its establishment on September 2006(1999 E.C). Openo TVET Institute has become a college and began to offer 10+3 program in the occupational areas of Information Technology, Purchasing and Supplies Management, Accounting and General Mechanics with 8(eight) degree and 12 (twelve) diploma holder teachers and it launched new departments that include Automotive Technology, Building Constriction, Electricity, Wood Work and Marketing Management and the college increases the number of teachers to 1/one masters,26/twenty six degree and 12/twelve diploma holder teachers.

Currently, the college offers level IV training program in the following occupational areas according to the newly launched Ethiopian TVET strategic system for both regular and extension

programs. In industrial fields of study, the college provides training like auto mechanics, electricity, building construction, general mechanics and woodwork. Moreover, under business fields of study accounting, purchasing management, marketing management and information technology have offered.

Among the above-mentioned departments, the numbers of female students who join industrial fields are almost negligible as compared to business education.

figure 1 the extent of the number of female students in industrial fields of study.



Therefore, conducting this research attempts to investigate the factors that affect female student’s participation towards industrial fields and to understand the main causes that affect interests of female.

1.2 Statement of the Problem

The fact that educating females play a significant role towards the development of one country is unlikely to be questioned. In addition, the Foundations for Gender and Youth Education are strongly determined in equal access to education for girls and boys. Good and quality education remains a key pathway to increasing women’s opportunities and to educate a woman is to educate families and societies. It is true that without quality education chances of getting a decent job are low. In some cultures however, when families have limited resources they may feel they have to choose between educating their sons or daughters, and the daughters tend to be

feel they have to choose between educating their sons or daughters, and the daughters tend to be excluded first and the chance is given to boys. Moreover, in our country female education is closely correlated with smaller family size, more decision-making responsibility, and higher income. In general, young women have even more difficulties in getting education than men. Even where young women's education is higher than men's it is when they try to find work they may discriminate by the organization. Such experience is occurred mostly the organization which offer practical work activities.

To this connection, evidence from ILO to school Work Transition (2008) surveys shows that in a number of countries young women have a more protracted and difficult transition to education and working life than young men. Very often, they have even more limited access to information channels and job search mechanisms than young men do, and importantly, employers in a range of countries revealed a striking preference to hire young men rather than young women for a variety of reasons especially in industrial sectors. These in turn discourage females to join industrial fields because they have less opportunity to be employed.

In addition to this,

There are still people who think that TVET is only for those who did not manage to go to university. Some do not have much respect for people who work with their hands and come home every evening with dirty clothes, sometimes bringing the smell from the work place or grease under their fingernails. Some even think that marrying a craft person is not a decent choice in a good family. Others think that craft persons and technicians will never earn enough to make a living and the career path appears to them like a dead end. (Ecbp, 2006:9)

Due to this and other considerable reasons, the society of Gambella has no good awareness about TVET, specially for industrial fields and parents are strongly dislike to let their daughter to join TVET and this in turn cause less number of female students to join in the industrial fields at Openo TVET college. This statement is ascertained by the data taken from the college. Addressing these imbalances has led to a growing awareness that the participation of women and the strengthening of their position in society (empowerment) are central requirements for sustainable development especially, in the transformation periods. Particularly, developments in education have contributed to the improvement of the social status of women around the world.

To this end, this study mainly emphasizes to indicate the nature and the extent of female participation in industrial fields at Openo TVET College. In addition to this, the purpose of conducting this research helps to identify the main barriers of female participation and to assess the attitude of females towards industrial fields of study. This also involves investigating various issues like economic, social, political and other potential problems whether it has an impact on their attitudes and needs towards industrial fields. Besides, the researcher feels that there is the need to conduct study on the issue. Therefore, the research attempts to answer the basic research questions:

1. What looks like the interests of female students towards industrial fields?
2. What factors affect female participation in industrial fields?
3. Do societies encourage female students to join industrial fields?
4. Are there special program designed to attract female students in industrial fields?

1.3 Objective of the Study

The general objective of this study was to identify the main barriers that affect female participation towards industrial fields. Furthermore, the specific objective of the study includes:

- To identify the main factors that affect female participation in industrial fields;
- To clarify the extent of female participation towards industrial fields;
- To examine the interests of female students towards industrial fields;
- To suggest measures to be taken in order to strengthen participation;

1.4 Significance of the Study

It is obvious that female participation in the industrial sector plays a significant role for technological advancement and socio-economic improvement of the country. Moreover, the Ethiopian government planned that well trained work force from TVET plays a vital role for the successful implementation of the 5 years strategic plan. Therefore, providing adequate training in industrial sector is the key pathway, to produce skilled trainee.

Inline to this, the need of female participation in industrial fields is not questionable for rapid and sustainable development of the country. To this end, the research attempts to assess the factor

that affects female participation in industrial fields. Even though much research has been done about the factors that affect female participation in education, yet it is not adequate for the issue of female participation towards industrial fields, especially in TVET College.

Due to this, conducting this research is very important generally for Gambella and particularly Openo TVET College. Therefore, the significance of the study is

- It identifies the major factors that have influences on interests of female and indicate the ways to improve their attitudes towards industrial fields and there by contribute to the knowledge of regional bureau's managers, women affairs bureaus and other concerned bodies when they are in need of such findings;
- It may give clue on measures to be taken and strategies to be devised in an attempt to realize improving interests of female students participation;
- The study may also help as a source of additional material for further study in the area;
- It is highly important in terms of providing a useful data to the existing knowledge base regarding the problem of female participation;
- To provide information to policy makers and stakeholders, in particular TVET providers and enterprises, about the extent of female participation towards industrial fields at Openo TVET College;

1.5 Delimitation of the Study

The research was delaminated to the government college, because in most case hard skill training needs more capitals to buy sophisticated machineries for practical work activities. Due to this in our country, such training is offered by Government College. For carrying out the investigation, Openo TVET College has taken as a target of the study because it was the only governmental TVET College, which offers industrial training in the region. Moreover, the study encompasses all female trainees of the collage.

1.6 Limitation of the Study

For the purpose of this research, the proposed study was limited to a certain areas of industrial fields of study, which currently conducting in Openo TVET College. While conducting the study

the researcher have faced various problems that have direct impact in the research reality. The followings are the reasons why the research was limited.

- Shortage of time due to maximum teaching load and other administrative work;
- Shortage of facilities like electric power, secretarial service;
- Economical problems;
- Distance from the university to contact with advisor;
- Communication problem

Moreover, inadequate record keeping practice, unwillingness of some respondents to fill the questionnaires, lack of recent literature in the field and also lack of work experience due to unstable position of deans and other concerned bodies head, were barriers for the research reality.

The stated factors was highly affect the researcher while conducting the study, specially some students were not able to talk in English and Amharic, they know only local languages. Hence, it was very difficult to communicate with them. Nevertheless, the researcher was select one instructor to translate the questionnaires. Moreover, the researcher also shifts from one place to other place where there is electrical power. Finally, these and other mechanisms helped the researcher to overcome the problems.

1.7 Organization of the Study

This study mainly contains five chapters. The first chapter presents background of the study, statement of the problem, objective of the study, significance, and delimitation, limitation of the study and definition of terms. The second chapter deals with review of related literature and methodology, population, sample size and techniques, source of data and gathering instruments are discussed in chapter three. The fourth chapter provides the analysis and interpretation of the collected data through gathering instruments and finally summary, conclusion and recommendation parts of the study are treated in chapter five.

1.8 Definition of terms

Academic staff:- employees of institutions of higher education engaged in lecturing at third level institution. (MOE-December 2005:1680)

Program: a selection of one or more courses (planned series of learning experiences) or a combination of courses, usually chosen for a syllabus with an expressed or implied aim (MOE; January 2005:126)

Gender equality: “equality refers to similarity of treatments as it is legally, constitutionally given. It is a fundamental right” UN fourth world conference for women, Beijing 1995

Reforms : is an action undertaken at the level of education system of a country, makes reference to non-education consideration, such as economic development, equality of opportunity,rural transformation, etc. Mbamba (1992:248)

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter discussed about some facts related to the research that have been done in different book by different authors.

2.1 Understanding the Social Construction of Gender

Gender is a socially determined cultural perception of muscularity and femininity traits, types, habits etc. it is the socio-cultural, political and economic aspiration of feminists and masculinity. Gender is a learnt behavior. It is learnt in the process of socialization or early orientation. Moreover, it is a social anthropological concept as compared to sex, which is natural and unchangeable. Gender can and should change by proper socialization and re-education of society. Social construction of gender refers to the systematic process and institution which society uses to ascribe attributes, roles, responsibilities and expectations to males and females within the cultural context. Barriers to equality are a result of a complex array of ideological, cultural, religious influences, economic and historical factors, which can be changed. (Momentum, 2009).

2.1.2 Checking Gender Relevance

The first step in a gender mainstreaming process is to establish whether gender is relevant to the policy on the improvement of industrial fields. In order to check gender relevance, we need to obtain and study sex-disaggregated data and to ask the right questions. In connection to this, Marianne set the following leading questions that have direct relation to know the relevance of gender.

Does the proposal concern one or more target groups? Will it affect the daily life of part(s) of the population? Are there differences between women and men in this policy field (with regard to rights, resources, participation, values and norms related to gender)?” (Marianne,1997: 7)

The writer also indicates that the relevance of the study is depending on the responses. If the answer to any of these two questions is positive, gender is relevant to your issue. An assessment should be made of the potential gender impact of the policy proposal. To this connection, after verifying the relevance of gender to the proposed studies it also advisable to conduct gender impact assessment.

2.1.3 Criteria for Gender Impact Assessment:

“**Gender impact assessment** means to compare and assess, according to gender relevant criteria, the current situation and trend with the expected development resulting from the introduction of the proposed policy” (Marianne,1997: 33)

According to (Marianne, 1997) conducting gender impact assessment should be the first steps in order to know the relevance and the impact of gender. In addition to this the assessment also very helpful to know the differences between women and men in the policy field, such as:

- * **Participation** (sex-composition of the target/population group(s), representation of women and men in decision-making positions
- * **Resources** (distribution of crucial resources such as time, space, information and money, political and economic power, education and training, job and professional career, new technologies, health care services, housing, means of transport, leisure)
- * **Norms and values** which influence gender roles, division of labor by gender, the attitudes and behavior of women and men respectively, and inequalities in the value attached to men and women or to masculine and feminine characteristics
- * **Rights** pertaining to direct or indirect sex-discrimination, human rights (including freedom from sexual violence and degradation), and access to justice, in the legal, political or socio-economic environment

2.1.4 Gender mainstreaming

Mainstream is defined as "not restricting efforts to promote equality to the implementation of specific measures, but mobilizing all general policies and measures specifically for the purpose of achieving equality".

Mainstreaming is the globally accepted strategy for promoting gender equality, mainstreaming g is not an end in itself but a strategy, an approach, a means to achieve the goal of gender equality. Mainstreaming involves ensuring that gender perspective and attention to the goal of gender equality are central to all activities policy development , research ,advocacy/ dialog, legislation , resource allocation and planning, implementation and monitoring of programs and projects needs to assess how policy impact on the life and position of both women and men and taking responsibility to readdress them if necessary. (Momentum, 2009, 16)

Mainstreaming refers to

- ✓ Ensuring that the gender issues are visible in situation analysis and problem statements.
- ✓ Explicit reference to the gender issues in policy statements and development goals
- ✓ Ensuring that program objectives explicitly address the identified gender issue
- ✓ The gender issue are explicitly addressed in program/project design and implementation
- ✓ Ensuring that the monitoring and evaluation instruments and data facilities visibilities of progress in dressing the gender related goals and objectives
- ✓ Result-to makes gender equality a concrete reality in the lives of women and men, creating space for everyone within the organization as well as communities.
- ✓ To contribute to the process of articulating a shared vision of sustainable human development and translating it in to reality.

2.2 Gender Equality

According to UNESCO,1996 publication gender equality mean that all human beings be free to develop their personal abilities and make choices without the limitations set by strict gender roles; that the different behavior, aspirations and needs of women and men are equally valued and favored. Formal equality is only a first step towards material equality. Unequal treatment and incentive measures (positive action) may be necessary to compensate for past and present discrimination. Gender differences may be influenced by other structural differences, such as race/ethnicity and class.

2.2.1 Gender Equality versus Equity

Gender equality

“Equality refers to similarity of treatments as it is legally, constitutionally and divinely given. It is a fundamental right.” UN fourth conference for women, Beijing 1995.

At the UN, fourth conference for women held in Beijing 1995, both DAC member and their partner countries made commitments to gender equality and women empowerment. The Beijing declaration adopted at the conference builds on the perspective and strategies outlined at the previous UN conference on education, Justine(1990), environment –Rio (1992), human right-Vienna (1993), population Cairo (1994) and social development. Copenhagen (1995) as well as CEDAW. It is based on the principle of human rights and social justice and clearly recognizes the gender equality and women’s empowerment are essential for addressing the central concerns of poverty and insecurity as well as for achieving sustainable, people centered development. (Momentum, 2009)

Gender equity

Is concerned with the promotion personal social, cultural, political and economical equality for all. The term gender equity emerged out of a growing recognition in society of pervasive gender inequities. Continuining traditions of stereotypical conceptions and discriminatory practices have resulted in the systematic devaluation of attitudes and activities.

Ability attributed to an associated with girls and women. The negative consequences of stereotypical conceptions and discriminatory practices adversely affects male as well as female. However, greater emphasis in the gender equity initiatives will be placed on improving conditions and attitudes as they affect girls and women. In the long term this these initiatives will also improve the situation for boys and men. Equity refers to a fair sharing of resources opportunities, and benefits according to given framework. It is one of the measures of equality, but not the only one. Equity is measurable and manifested in parity. This means that equity often undermines equality as women enter institutions on male terms without the equality process being fully explored and utilized. Equity is often viewed as a favor, whereas equality is a fundamental right. (Momentum, 2009)

Gender stereotype

The Council of the European Union has recognized that gender-stereotyping is one of the most persistent causes of inequality between women and men in all spheres and at all stages of life, influencing their choice of education, training and employment, the sharing of domestic and family responsibilities, participation in public life, and participation and representation in decision-making positions, both in political life and in the economy. A call is made for continuing and strengthening active cooperation with the social partners and other stakeholders in order to reduce gender segregation and gender gaps on the labour market, including by taking concrete actions to eliminate the gender pay gap and improving the recognition of the value of work in jobs and sectors predominantly occupied by women. (ILO, 2006)

2.2.2 Different Views of Gender Equality

2.2.2.1 European Institute for Gender Equality

European Socialists welcome the decision to set up an independent European Institute for Gender Equality at the beginning of 2007, which is one of the key actions put forward in the Commission's Road Map for equality between women and men 2006-2010, presented on the 1st March 2006 and encourage its establishment and effectiveness within the shortest timeframe possible.

The Group fully supports the idea of a body, which will deal exclusively with gender equality matters, to ensure that the overarching objective of gender equality, as set out in the Treaty, will not be second to any other anti-discrimination policy on an EU level. They have emphasized the need to enable the Institute to focus on analysis and delivery of expertise. There is also need for a Gender Equality Network, which would enable all pertinent actors to have a systematic knowledge exchange, focusing on best practices and the most innovative approaches to gender mainstreaming. Aside from collecting data, the role of the Institute should be proactive in order to enable the EU to effectively promote and implement gender equality policy. (UNESCO, 2006)

On the other hand Juliet v. miller and Louise Vetter, ensures that

...rapid socio-economic development requires greater participation of women in economic activities. In many countries, the adoptions of legislative measures have helped to remove discrimination employment and education. In respect to technical and vocational education, it is worth nothing that although legal steps have been taken to ensure that equal access of girls and woman's to such education, these measures are not frequently put in to practice... (1996, 1)

This implies that many member states require special measure in order to ensure the genuine equality of opportunity for both male and female. In addition to this, participating woman's in all sectors is unlikely to be questioned for the economic improvement of the country.

The writer also implies that at the end of the meeting all the participants argued to forward the following suggestion.

Aware of the individual difference of people and recognizing the equal value of men and women's contribution to socio economic development, it is well accepted that TVET plays a vital role in achieving social and economic equality for women. Women's should not only be adjusted to the existing structure and societal pattern, rather the structure and system must change to properly accommodate women. The empowerment of women's should be the goal for all interventions, which will lead to equality of gender status in society. (1996, 2)

This means that female students can equally participated in industrial fields for the rapid socio-economic developments of one country. In addition, TVET institutions are responsible for the implementation. Moreover, in order to have equal participation of female students in industrial sector, it is not only the society and culture to be changed and it is advisable to adjust the existing curriculum according to the interest of female.

2.2.2.2 Gender equality at the decent work

The foundations for gender and youth employment are strongly determined in equal access to education for girls and boys. “Good quality education remains a key pathway to increasing women's opportunities and to educate a woman is to educate families and societies.” (ILO, 2008, 3) Without quality education, a chance of getting a decent job is low. In some cultures however, when families have limited resources they may feel they have to choose between educating their sons or daughters, and the daughters tend to be excluded first. Especially in our country Ethiopia, families are not willing to let females in education because they thought that female tends to be stay at home to engage with domestic work. This make female to be

uneducated and even they have get a chance of education they will not be active participant in the class and they did not want to join industrial fields or hard skills due to family responsibilities. It is not just the level of education achieved, but the quality and relevance of education and training that is important. Indirect discrimination against girls results in stereotyping them as less interested or capable in certain subjects for example, maths and sciences, engineering and hard skill fields.

The report also indicates that Providing young women and men with formal and non-formal educational possibilities, including vocational training would lead to their empowerment. In the past several decades, more women than men have pursued higher education in some countries. However, this has not necessarily led to better labor market outcomes for women, as sex-based discriminatory practices may influence their recruitment. Investments during youth's life transitions are underlined as being particularly important for girls because they have very different trajectories from that of boys. Gender differences emerge sharply with the onset of puberty, signaling the potential of pregnancy and leading to concerns about protecting girls in some societies, sometimes to the point of overly restricting them. Puberty often marks when boys are expected to work for pay (ILO, 2006).

It is true that female education is closely correlated with smaller family size, more decision-making responsibility, and higher income. In general, young women have even more difficulties finding work than young men. Even where young women's education is higher than men's it is when they try find work that they experience labor market discrimination. Evidence from ILO School to Work Transition surveys shows that in a number of countries young women have a more protracted and difficult transition to working life than young men. Very often, they have even more limited access to information channels and job search mechanisms than young men do, and importantly, employers in a range of countries revealed a striking preference to hire young men rather than young women for a variety of reasons. Even though there are countries and regions where unemployment is lower for young women than for young men, this often only means that women do not even try to find a job but leave the labor market, altogether discouraged. When they do find a job it is often lower paid and in the informal economy, in unprotected low-skill jobs, which imply greater job insecurity, as well as lack of access to

training, social protection and other resources, making them comparatively more vulnerable to poverty and marginalization (ILO, 2006).

To this connection the council of European union has recognized that gender stereotyping is one of the most persistent cause of inequality between women and men in all spheres and at all stages of life, influencing their choice of education, training and employment, the sharing of domestic and family responsibility, participations in public life and participations and representational decision making positions both in political life and in the economy. A call is made for continuing and strengthening active cooperation with the social partners and other stakeholder has in order to reduce gender segregation and gender gap on the labor market, including by taking concrete action to eliminate the gender pay gap and improving the recognition of the value of work in jobs and sectors predominantly occupied by women.

2.2.2.3 The Feminist Critique of Industrial Relations

Much of this feminist critique originates outside Australia. In Canada, for example, based on their analysis of pay equity and trade unionism, Linda Briskin and Patricia McDermott argue, "*Gender is always significant in the study of industrial phenomena*"(1993,10). Making it visible liberate(s) a deeper understanding of the reality of gender-specific oppression and simultaneously challenge(s) the inherent naturalism, which often organizes the societal understanding of gender dynamics.

"The commitment to making gender visible rests on the assumption that women have gender specific needs, different ways of organizing, different expectations, and different priorities making gender visible requires a reconceptualization of the analytic tools used to study union and workplace practices gender specific analysis not only alters how we study industrial disputes involving women and assess strike tactics, but also has the potential to change how unions organize women" (Briskin and McDermott, 1993).

These writers agreed for the explicit consideration of women in industrial events. Research that fails to consider women is deficient and incomplete. For example, the study of shop stewards through analysis of workplaces from which women are absent, without commentary about this

feature, constitutes study of male shop stewards, although this qualification is rarely made (Forrest, 1991).

Anne Forrest argues that “the discipline of industrial relations and its scholars have been largely disinterested in the experiences of women: women’s activism has slipped through the fissure in industrial relations thinking (Forrest, 1993: 326).

2.3 Concepts of Vocational Education and Training

Different roles apply to women and men in all development processes. “Despite an almost universal equality before the law, factors like ethnic affiliation, social class and gender still determine access to resources, potentials for participation, and prospects for the future.” Addressing these imbalances has led to a growing awareness that the participation of women and the strengthening of their position in society (empowerment) are central requirements for sustainable development. Particularly developments in education have contributed to the improvement of the social status of women around the world. In recent decades, the general education sector has strengthened the promotion of equal opportunities for girls and boys. Overcoming the imbalances between women and men in vocational training and in the workplace nevertheless, seems a long way off. Rather than reducing differences in the status of men and women, vocational training has, in many cases, even contributed to gender-specific stereotypes and the economic discrimination of women. (Marianne, 1997)

Marianne gives a good example; vocational training still gives priority to technical professions and thus addresses mainly men. Courses for professional fields in which women predominate - like the service sector - as well as for large parts of the informal sector, are frequently not offered by the usually government-run training institutions. Programmers and curricula of existing training courses for women frequently fail to meet the demands of the labor market.

This does not mean that women should be supported as “hardship-cases”, but rather that the realities of the market economy are to be taken into account: It is a Blatant neglect of these realities if vocational training disregards essential sectors of the economy - such as the booming modern service professions - or if training is offered in fields for which there is no demand in the labour market.

Accordingly, the author writes this guideline to increase the awareness of the relevance of a gender-sensitive approach in vocational training. It focuses on the following central strategic elements for the promotion of women in vocational training:

- Labor market orientation and qualification for the different fields of action
- Target group differentiation and gender-specific life cycles
modification of training offered
- Further education of teachers and awareness building of information disseminators
- Diversification of executing agencies and system advice on policy level

2.4 Role of Teachers in Female Participation.

The quality of teachers has suffered from under qualification and/ or in efficiency, which may have a negative influence on their outcome. Most TVET teachers/instructors have relatively low formal qualification severely affecting TVET delivery at higher qualification level. Furthermore, these technical teachers are unmotivated. Ecbp (2006) and MOE (2006).

Even though highly skilled, qualified, flexible and creative TVET trainers or instructors are the backbone of any TVET system and creating conducive learning environments for different target groups, the survival of trainees in institution depend on whether they have performed well or in training area (MOE,2004). It is also true that well-qualified and experienced teachers will have good output.

There are very few or no female instructors in some fields of TVET program in the institutions. For this reason, strategy should be put in place to increase the number of female instructors. With this, regard MOE in its Education and Training Policy (1994) states, that special attention should be given to the participation of women in the recruitments, training and assignment of teachers. Moreover, factors affecting teaching learning process include the result of the home situations of the trainees and the value given to education by the society to participate and give support. Some these factors are educational background and economic status of the parents. To perform effectively in such complex process of work situation the strengthen of teachers profession is

very important. To realize educational objectives, quality is very important, which should require special attention (shegaw, 2008).

According to seyoum and Tirusew (1981), in addition to having profound knowledge in the subject matter field, the teaching profession requires specialization in pedagogical science. Therefore, teachers are usually trained in teachers training college and universities before they are certified licensed to teach in schools.

2.5 Factors affect female participation

Women in developing country particularly in Ethiopia face different types of problems as the result of various cultural practices, which gave low status for women in the society. Due to societal gender biased norms such as early marriage, female marital mutilation, high fertility rate, violence against women and other norms affects women participation and they are not give equal opportunity to enjoy their rights with their counterparts.

It can be observed on different levels that women remain excluded from activities of vocational training. According to the Marianne, the following are the main hindrances that may exclude females from vocational trainings.

- The concentration on technical professions increases the risk of detaching qualified vocational training from modern service professions, thus limiting it excessively to the industrial sector. However, industry is not necessarily the most dynamic area of the economy and, despite increasingly higher employment numbers; the chances for women for secure, continuous employment in this field remain limited.
- Since the support of vocational colleges concentrates on industrial and modern technical professions, typically female professions are often excluded. Qualified training for women, e.g. courses in nursing, social work and home economics conducted by government, church or private sector entities, is generally neglected when training offered in partner countries are is being assessed.
- The new scope in formulating project concepts is used in various ways but it is often not connected with a targeted promotion of women. The training of girls and women in so

called "male professions" barely improves their employment chances if it not complemented by extensive additional measures.

- The alternative of including professional fields to which women and men have equal access or in which women predominate, does not itself guarantee professional employment for women. Without additional measures, the employment chances for women remain limited.
- By upgrading the social status of certain professions, the danger arises that women will become excluded from these now more prestigious and better paid positions (for example occupations in the building-trade or the textile industry). At the same time, traditional female occupations (teacher, social worker) are being downgraded. Work, which requires technical qualifications, but is socially or culturally considered as inferior, is assigned to discriminated ethnic groups or to women (e.g. nursing).
- Concentrating on certain manual or industrial professions usually predetermines the choice of partner organizations, the centers to be supported, including the professional profile of experts and further training programmes for instructors. Thus possible other partners are excluded at an early stage of identifying potential implementing agencies. This strengthens existing hierarchies between institutions, and marginalizes weaker educational facilities, such as technical schools for women.

In principle, focusing on production leads to disregarding reproductive, collective and culturally oriented tasks of women and men. Across the world, it is usually women who assume these important, but usually not financially rewarded activities. The multiple responsibilities of women, which result from a combination of different tasks and functions, are relegated to the back-stage through a narrow perspective on income-generating activities. (Marianne, 1997). Moreover, women may exclude from participating in education sectors, among the causes the following are expected to be the main hindrance.

Educational Factors Affecting Women

According to (UNESCO, 1999 cited in shegaw) education as a social factor influences the position of women in three ways.

First, it provides them with awareness and helps them to build confidence, which enables them to define their position in the field in one or more active manner, coming out of the burdens of legacy, and equip them with necessary knowledge and skills to make them economically independent. Second education influences their disposition towards the other factors in the field of a great extent. This is clear from the difference in disposition exhibit by women who have had schooling and those who have not. Third, education is potentially capable of bringing about a general attitudinal change among their male counterparts and other bearers of the tradition to the extent that they begin to realize the need of redefining the man-woman relationship in the society on a more rational footing.

We are a living witness that education policies were highly influenced by religious, culture and other values, which discourages girls' participation in education. Though the formal education started as far as 1908 girls' school participation rate had remained very low except in recent years where there have been some changes introduced by the government to improve the situation. This includes the drafting and implementation of favorable policies, creating awareness in the public and identifying major issues regarding the problem. However, the sex difference in school participation is still significant (WAD Gender gap,2004)

According to Genet Zewdie (1989), African countries enrolment and participation in education is characterized by sexual disparities. The number of female students' enrolment in elementary, secondary and territory education was lower than the number of boys. Many girls and women dropout before they completed elementary and secondary schools. That includes nursing, home economics and secretarial skills. Ethiopian women pattern of enrolment and participation is similar to other African country women (Gender issue in Ethiopia).

According to Seyoum Teffera (1991) and other practical activities, the Ethiopian education were dominated by church and mosque education. These religious institutions are believed to discourage the participation of female in education. This is because in traditional Ethiopia in

general the personal worth of females was in their roles as mothers and housekeepers. However, training is a life long process in which the teacher is constantly learning and adapting to the new change to the job. The need for on the job training is being recognized by educational authorities and so the teacher may find himself selected to take in a longer training course that offer help in improving specific teaching skills or enables him to come to grip with new development such as new curricula, new methods and other innovation (MOE: Educational Journal,1997).

2.5.1 Harmful Traditional Practices

The studies reviewed above deal with traditional types of violence and .In the following sections ,the main types of traditional practices found in Ethiopia which were also identified in the present study are discussed .

2.5.2 Female Genital Mutilation

There is an increasing amount of evidence to suggest that wide variations of mutilation are performed on the normal vulva in different in countries and that and they have been classified in different ways over the years (NCTPE 2003 :76-77) According to NCTPE (2003:77-78),four different types of FGM are still practiced in Ethiopia .Type I (Clitoridectomy or sauna) refers

Different types of FGM still practiced in Ethiopia .type 1 (clitoridectomy or sunna) refers to the removal of the clitoral hood with or without excision of part or the entire clitoris."Clitoridectomy" refers to the partial or total removal of the clitoris. Type II (excision) refers to the removal of clitoral together with partial or total excision of the labia minor. Type III (Infibulations) is the removal of part or all the external genitalia and stitching/narrowing of the vagina opening leaving a small hole for urine and menstrual flow. Type IV (unclassified) includes pricking, piercing or incision the clitorises and or labia; cauterization by burning of the clitorises and surrounding tissues; scraping of the vaginal orifice or cutting of the vagina; Introduction of corrosive substance in to the vagina to cause bleeding or herbs in to the vagina opening with the aim of tightening or narrowing the vagina; any other procedures that fall under the definition of female genital mutilation.

In Ethiopia, traditional birth attendants or other traditional practitioner who also happen to be mostly older women perform the mutilation under unhygienic condition involving the use of the razor blade, a knife or other sharp objects. Little seems to have changed in the way this is done over the years since traveler from the 16th century reported similar procedures and implements (Pankhurst 1990a, cited in NCTPE 2003:80).

A woman is paid a small token in cash or kind for the service. In many instance, the mutilation is done at the girls home, but sometimes –if it entails a ritual where by many girls are involved (example in Afar), a separate place is allocated for the occasion (NCTPE: 2003,80). The procedure is varies depending on the type of FGM, the age of the girl, and the experience of the circumciser who in many cases is an old women who often also serves as a traditional birth attendance. When the circumcision is done an infant, as is the case in most Amhara and Tigray region and parts of Oromia, the baby is held in the arms of an accompanying woman and returned by the mother soon after wards. Where FGM is practiced on infants the occasion is similar to that of circumcisation of a boy, is not accompanied by any ritual, and is considered a families private affair. There are, however, variations among regions in the days of circusization. In Amhara, boys are circumcised on the eight-day or any even day thereafter while girls are circumcised on the seventh day or on any odd day thereafter. The reason is mostly mythological and traced to the Old Testament roots of the Ethiopian orthodox religion (NCTPE 2003, 83-84).

2.5.3 Early and Forced Marriage

Early Marriage

Many young girls in the developing world have little option but to get married which, given their poor family backgrounds, is most likely just a move from one poor household to the next. In some parts of the world, this reinforces the lack of parental investment in the education of girls since girls are perceived to leave the family upon marriage. In addition, early pregnancy may cause complications. Even in regions where there are drops in fertility rates, early pregnancy is one the pitfalls restricting access to productive jobs, particularly among poor women with little education. Whether married or unmarried, young women facing maternity

may find themselves with the additional tasks of caring for infants, extra household chores, increased financial burdens and curtailed chances of earning a decent income.

The acceptable age for marriage varies from country to country. According to the New Family Law of Ethiopia, the minimum is 18 years for both girls and boys. Early marriage is taken as a marriage carried out below the age of 18 years and it has a greater impact on female education.

Even though, there are no accurate data on the prevalence as well as the current trend in early marriage in Ethiopia, available sources show that the practice is evident throughout Ethiopia and it is most common in the Amhara region. According to NCTPE (1997), the prevalence rate of early marriage at the national level is 54%. However, early marriage is practiced widely in Amhara (82%), Tigray (79%), Benishangul Gumuz and Gambella (64%). Since early marriage is occur before they complete their education, the students are highly affected not continue their lesson and they may not go further their education. (MOE,2008)

In the study is also identified that there are five types of marriage arrangement in regions of Ethiopia where the practice of early marriage is prevalent:

1. **Promissory marriage** whereby a family promises it is newborn (or not yet born), daughter to another family which formally proposes marriage.
2. **Child marriage** whereby children under the age of ten are wedded in one of two ways:(i) the child bride is given to her in laws immediately after wedding ceremony; (ii) the girl stays with her parents until such time as the two families agree that she is mature enough to go to live with her husband;
3. **Early adolescence marriage** which takes place between the ages of 10 and 15;
4. **Marriage of the young girl to an elder man** where the man is typically between the ages of 40 to 50, but can be even 60. The main reason given for supporting this practice is fertility considerations, followed by the perceived better adaptability of young girls to married life, need for labour of a young girl and submissive wife to provide care in the husbands old age, desirability of a virgin and increased wealth;
5. **Late adolescence marriage**, which takes place between the ages of 16 to 20.

According to UNECA (1999), in each of the above-mentioned types of marriage, marriage is arranged after negotiation between two families. The bride who has no idea who her husband would be is required to prove she is a virgin.

Forced marriage

Forced marriage entails mental and psychological coercion, bribery, and harassment used to force a girl to enter into marriage. In this context, forced marriage differs from early-arranged marriage in the age of betrothal for girls might be even before birth takes place or after puberty. However, this can blur the fine line between forced and arranged marriage since the elements of consent from the girls is usually absent (Guday, 2004).

In Ethiopia according to Zenebework, cited in Guday, 2004), forced marriage is prevalent in Oromia and southern region, where girls are often forced to marry relatively better-off men against their will and through pressure from elders and religious leaders. In both regions, forced marriage also includes *widow inheritance* i.e., when a husband dies the widow is forced to marry one of his brother and closer relatives.

The fact that all the above-mentioned types of marriage affect women health and in the early age, they forced to stay at home without getting education. Due the prevalence rate who reach to higher education gets low and in turn affects their interest to industrial fields. To this connection forced marriage has the following negative effects: (1) the disempowerments of women resulting from lack of schooling, ability to earn a decent income and (2) women's inability to make a strategic decision resulting in marital instability, psychological trauma and limited alternatives which often end in a poor employment and even exposure to HIV/AIDS. Hence, forced marriage of young girls/adolescents can cause lifelong psychological as well as physical problems, especially those resulting from early pregnancy and childbearing.

2.5.4 Domestic Works

The home is generally considered a secure place for women to work in and the tasks assigned to them are said not to require particular skills or training. Domestic work is an avenue of employment for poor, rural young women who have had little access to education, often from

marginalized ethnic groups – those with otherwise low employability. If performed under fair working conditions, domestic work could make a vital contribution to poverty alleviation and provide an opportunity to earn in a socially acceptable manner. Domestic work draws large numbers of women migrants from countries with an oversupply of labour and with high unemployment. In countries such as Ethiopia, Guatemala, the Philippines and Sri Lanka, government policy and the spread of private employment agencies specialized in the placement of domestic workers has resulted in more than half of migrants from these countries being women. As much as 81% of all Sri Lankan women migrant workers and 38% of those from the Philippines are employed in domestic work. A situation analysis conducted by the ILO in the Philippines has shown that domestic workers who migrate internationally are drawn from a different pool of labour from those who migrate within the country. Those working overseas tend to come from urban areas, be more qualified and have prior work experience in different fields. Indeed, some have qualifications far superior to those required for domestic work. it is true that the reason why women's are forced to domestic work is due to lack of education. (ILO, 2006)

2.5.5 Abduction

In many parts of Ethiopia, abduction is considered as one form of marriage. Marriage by abduction, also called marriage by kidnapping or by capture, occurs to a varying degree allover Ethiopia (NCTPE 2003:154). Marriage by abduction is complex and intertwined (NCTPE 2003:159). Some of these include the desire to:

- Ensure that the girl of men choice will not run away,
- Avoid payment of bride-price in anticipation of a rejection of their marriage proposal by households with a relatively higher social status, and
- Avoid expenses for wedding parties (EWLA 2001,cited in Guday 2004,2007)

One of the root causes of abduction and other forms of forced marriage is masculinity and social expectation of masculine behavior. A major component of this ideology is the social perception of girls and women as commodities to be bought and sold in to marriage. Research findings

reveal that in the southern region, father openly and proudly boast how much they actually sold their daughter.

Abduction has the same consequence as early and forced marriage. Given the prevalence of HIV/AIDS pandemic in Ethiopia, the likely hood of spreading the disease through abduction is much higher. Abduction also perpetuates early marriage and inhibits parent from sending girls to school. Abduction often entails physical coercion followed by rape. Above all, marriage through abduction denies the right of girls to make choice for their own marriage. (MOE, 2008)

2.6 Women Participation of in Science and Technology

European Socialists become good evidence that the participation of women plays a greater role in science and new technologies. Equal participation of women and men in these fields increases innovation, quality and competitiveness of scientific and industrial research. In order to meet this target, European Socialists request a quota of at least 30% of women in leading positions in public sector research and the collection of data. It is obvious in our context also participation of women's in science and technology helps to increases productivity rate and helps the country to meet the coming 5 years strategic plan, that means to transfer successfully from the agricultural sector to the industrial sector.(UNESCO,2004)

2.61 What is Science and Technology?

Science and technology encompass a broad range of activities: how they relate to women depends on how they are defined. Science is often equated with knowledge that is concerned with the physical world and its phenomena, and that entails unbiased observations and systematic experimentation, whereas technology is the application of scientific knowledge to the practical aims.

Women's participation in science and technology therefore refers to the extent that women have been able to utilize this tool in capturing the same opportunities available to men, ranging from research to high-skilled employment in firms. New technologies are offering employment opportunities where intellectual and specialized skills matter more than physical labour.

According to the Bureau of Labour Statistics, the number of jobs requiring science and technology skills in the US labour force is growing by almost five per cent per year, whereas the rest of the labour force is growing at just over one per cent. However, the extent to which these increased opportunities are benefiting women is unclear. Data on the actual participation of women and the subsequent socio-economic impact on their development are scarce. Women's participation in science and technology through enhanced employment opportunities is mainly in those industries that are producing knowledge-intensive products.

In the same book the writer, argue that the involvement of women in knowledge production is through their participation in academic activities. The education phase is distinct in many ways from the later professional phase of academic life. At the education period, there is very little gender competition and women are free from motherhood responsibilities, whereas in the later professional academic life, family commitments make it harder for women to continue. This produces a continuum in which the number of women decreases up the academic ladder. This continuum has three characteristics: a high number of women at the level of basic degree and low number at the level of specialized degrees, gender differences in selection of academic fields, and a low number of women as professional academics.

2.6.2 Women in the Education Continuum

Education is the key to women's participation in science and technology. The overall global trend in education shows that women's literacy rate has improved, particularly in developing countries.

The gap between female and male literacy is narrowing. The adult literacy rate among women in developing countries stands at 75.9 per cent, compared to the corresponding male adult literacy rate of 89 per cent; the figure for young women is higher, standing at 85 per cent compared to the equivalent male youth literacy rate of 95 per cent, indicating an improvement in access to education by girls. But there are still many places, especially in the Least Developed Countries, where fewer girls than boys have access to primary education, and still fewer learn about science (M. Taeb, cited in Forrest A 2003:9).

Even if, these figure seems to be there is equal female students participation to male, but in territory education it is completely different and female students has no interests to join industrial fields. Hence, this cause greater gap.

2.6.3 Gender Differences in Selection of Academic Fields

Women do have different preferences from men in choosing their academic field, and the pattern is similar in developing and most industrialized countries. Women are more likely to enroll in humanities, arts and education, with social sciences the next preference, while natural science and engineering are the least favored fields.

Women in our country generally enjoy greater opportunities to enter universities, yet the tendency to pursue science and technology studies is low. On the other hand female students are interested to join humanities, and social science. In contrast, female students have a very restricted presence in the natural sciences and especially in engineering.

2.6.4 Women as Professional Researchers

The presence of women researchers in scientific fields is a reflection of the choice they made in selecting an academic discipline at the time of their education. Woman faculty members in EU universities are mostly in the fields of humanities, social science and medical science. "In most EU countries, the percentage of women faculty members in natural science is around 20-35 per cent, and in engineering and technologies around 10-20 per cent the exception is Portugal, where women account for almost half of the natural science faculty and about 29 per cent of the engineering faculty" (M.Taeb, 2005:10).

2.7 Why Women Fail to Develop Dully a Science and Technology Career?

"The path to career development starts at the time a person receives university education. Education is a key factor in deciding the future career path of students, and educational institutions are important in their success or otherwise in training individuals to make a living out of what they have learned. Societal and cultural factors are the key to defining which subject a woman might choose for her education. The existence of perceptions such as men's vs. women's academic disciplines skews the choice of women in early education." (M. Taeb, cited in Forrest, 2003)

Whether in academic professions or in industry, the number of women reduces further up the hierarchy. In order to promote women's participation in science and technology, it is essential

to understand the pattern of employment and the reasons behind it. Most statistical data in this regard are, however, from developed countries and the shortage of data from developing countries is a constraint in understanding this pattern and coming up with measures to correct it. Arriving at a higher rate of women's presence in science and technology fields requires a thorough understanding of the barriers they face at the time skilled women enter the job market

M. Taeb also indicates that among the factors that have restrained women's further involvement in science and technology, the following three could be the most common:

- (i) gender pay gap,
- (ii) culture and gender inequity ,
- (iii) lack of political will.

i Gender pay gap

The gender pay gap is wider for workers who completed upper-secondary education compared to those with a first-stage or lower-secondary education, and is widest for workers who received a higher education.

ii Culture and gender inequity

The knowledge economy is driven by innovation, which in turn is influenced by economic incentives, and objectives such as improving the competitiveness of firms. However, denying opportunities to women scientists and innovators to fully participate in the innovation process and the knowledge economy would be an opportunity loss for the nations. A greater integration of women's scientists in knowledge economy requires a conducive culture that recognize and value women's intellectual workforce.

iii Lack of political will

Political will from governments is essential for encouraging women's participation in science and technology. It can be assessed by use of the Gender Empowerment Measure (GEM), an important indicator that estimates women's empowerment through the number of seats occupied by women in the parliament or the number of female legislators, senior officials, professionals and technical workers; and the estimated ratio of female to male incomes. Political will could be demonstrated if governments improved their GEM.

“with the introduction of computers into banks in India, older women were not retrained: instead, preference was given to employing young workers who had some computer knowledge” this women’s employment opportunities if they are denied of equal opportunity to access education and empower themselves to new skill requirements. Similarly, these authors indicate that in Indian iron ore mines when manual loading gave way to mechanical loading, nearly all women were forced to retire, and new workers are recruiting. Due to this reasons technological advancement make female to be jobless.

2.9 Conceptual Recommendations

“Without corrective measures, the indirect marginalization of women and girls remains inevitable. Positive results already achieved in project work include the integration of business training, and of practical and job-relevant know-how into general education. Further important changes in project work are the promotion of "female professions" and training of people in the informal sector.” (Marianne, 1997, 3). To this connection, in order to improve the interests of female Marianne forwarded the following recommendations.

- Regional analyses should initially document the training needs in economic sectors in which women are primarily employed. The fact has to be taken into account that women have different opportunities to access training and further education, not only due to their qualification profile but also to the context of their daily life. A central question is therefore which training and further education is required by individual target groups to do what they are doing more successfully and more productively.
- In societies in which numerous activities are related to discrimination and where vocational training has little prestige in comparison with academic education, vocational training has to be supplemented with measures, which support a social reappraisal and upgrading of socially discredited activities.
- The training needs of women cannot be established effectively with traditional methods of inquiry. In workshops with target groups and local consultants, who command adequate gender know-how, women’s multi-layered training needs can be determined

more effectively. Since this would include a holistic view of training needs, it will lead towards indications for an improved definition and assessment of training needs.

- Besides knowledge specific to their vocation, women are especially interested in learning „negotiation skills“, for dealing with public authorities, municipalities administrators or non-governmental entities. Organization skills and management abilities are not only important for success in income-generating jobs. They also help to assert personal interests more effectively, and they facilitate self-organization (for example in co-operatives or self-help groups).
- When planning new projects, the choice of occupations in which training is to be promoted is increasingly kept open. In this way, gender-specific information can initially be gathered, e.g. during an open orientation phase, to enable a useful selection of occupations in cooperation with the partner and the interest groups. During this process, the socio-cultural background and its barriers and oppositions to women employees and trainees in certain job branches and fields of activity are to be given particular attention.
- It is less important that women work in "men's jobs"; rather, the training of women in economically efficient job branches is to be promoted. In qualified Women define their training needs from the context of their lives Within the "Women and Training Project - Qualification of Women in South Africa" a participatory planning approach was used, and new ways for assessing and defining their training needs were investigated. After a gender-specific evaluation of existing labour market and occupation studies by local women NGO (OLIVE), special planning workshops were held with the various target groups. During the workshops, the future beneficiaries defined their training needs based on the circumstances of their own lives. The planning of education measures for women was to be designed with the following questions in mind: "Where do women stand? In which of the areas to be strengthened on a priority basis, are they economically active?" First, the training needs were assessed in economic sectors with a high concentration of women. A regional labour analysis showed, that the majority of women worked in the rural economy (as subsistence farmers, or in income-generating measures of development projects) and in the informal sector. This led to the question: "What training is needed by

the different target groups, to do what they do, more successfully?" Their training needs encompass not only technical knowledge and skills, but also demands faced generally in their lives, i.e., so called community needs, how do lead negotiations, how to deal with authorities, as well as organization and management skills (OLIVE,1994).

A/ Develop Regionally Specific Training Offers and use Connectional Scope for Broadening Fields of Occupation.

Training programmes where access by women has traditionally been difficult (for example electronics) it is necessary to take into account technical changes and regional peculiarities, and to cooperate closely with enterprises, trade unions, and groups which represent the interests of women.

Supporting the broadening of vocational training for girls in "men's jobs," (e.g. automobile electricians) may be useful as a test case in certain regions. Success, however, will depend on auxiliary measures. Information and awareness about alternative life styles of girls and women should be linked to the social recognition of a qualified vocational training.

- Expanding training programmes to include professions, which are accessible to both men and women (for example, commerce and textile technology), can break up gender-specific segmentations. The equal inclusion of women requires additional measures (sex education, assistance during pregnancy and child-care), and possibly the introduction of quotas.
- Job diversification to include modern service occupations (professional sales woman, bank employee, office manager / administrator) enhances the employment chances for women with higher education (secondary school). The goal is to promote the training of women in the most dynamic sectors of a region (tourism, finance and insurance, commerce, etc.)
- Vocational training and further training are especially important for improving women's chances for advancement, provided they include professions in which women typically work (for example seamstresses, garment-cutters, and in areas of quality control or housekeeping).

- When-promoting training in traditional professions and informal sector activities, it is important to recognize that these are most often strictly divided along gender lines. Since micro-enterprises are usually family enterprises, training assistance must include female family members. Training measures, which support entrepreneurial initiatives, are mostly linked to the promotion of crafts and trades, or to urban, village or regional development.

b/ Include into professional training, women's occupations, or fields of occupation in which women are most active, at various qualifications levels. Consider women's activities in the informal sector when offering training assistance

- In job promotion programmes in the informal urban sector, the increased inclusion of poor women, especially women heads of household, depends on the particular consideration of their self-employment activities in personal services or trade. Instruction for specific professional qualifications should be combined with job placement measures, or with facilitating access to markets.
- Training in professional fields easily accessible to women (hairdressing, housekeeping) appears feasible with less technical equipment and is regarded as less cost intensive. Nevertheless, it also requires funds for an adequate level of equipment (sanitary installations, new machines, modern technical resources and materials, provision for repair expenditures, and even fashion magazines).
- Auxiliary measures (child-care, transport, lodging, sanitary facilities) are usually needed if different groups of women are to be included into vocational training. These measures not only require money but also awareness and political backing. Businesses, chambers of commerce, trade unions and others must be won over to this endeavor.

c/ Utilize the Dual System to modernize women's occupations and to adapt them to changed conditions

Because the access to employment is more difficult for women and girl trainees than for their male counterparts, dual approaches, which introduce the realities of work already during training, are especially useful for female participants. The Pullman School in Manila, The

Philippines, is a training institute for girls and women; it was founded by a girls-orphanage, which used to include a home-economics school. This traditional "women's school" was transformed into centre training for "Food and Beverage Services" for hotel and restaurants, in which today about 100 young girls are trained. The two year course qualifies them as assistant cook, waitress, barmaid, or for clerical positions in hotels and restaurants. Dual-System training is offered, i.e., about half of the two-year programme takes place at the Pullman School, the other half in hotels and restaurants (among them 5-star hotels in Manila). Almost all of the school's first graduates found satisfactory positions. The school/training centre and the managers of the hotel and food and beverage industries cooperate with each other on a continuing basis. The Pullman school is active through its board and its instructors to motivate and persuade people in the food and beverage industry to hire the young trainees. The job placement process for the school's graduates is also closely related to this activity.(Marriane,1997).

d/ Training of women must include adequate facilities and assistance adapted to the target groups. Integrated approaches to adapt training offers to the specific pressures on women

In a pilot programme for poor female heads of households, designed by the Chilean Ministry for Women (SERNAM) and implemented with the cooperation of professional training centers, single mothers receive vocational and further training. The programme was created because of the marginalization of women with children who are either unmarried, abandoned (divorce and alimony rights do not exist) or widowed. Their lives are characterized by precarious working conditions (usually house cleaners, seasonal workers in the agro or fish-processing industries, small traders), by unemployment, incompatibility between child-care and gainful work and insufficient job qualifications. Yet, their lack of education is only one factor of their gender-specific marginalization. Ill health and disabilities, as well as poor and insecure housing conditions, also block their access to the labour market. In addition, daily working life, especially for female heads of households, is characterized by problems with childcare, long distances and costly transportation, but also by male violence and uncertainty about the law. As a rule, facilities involved in vocational training lack staff and funds to develop programmers, which would do justice to the specific pressures on these women. Cooperation between training

institutions, the Ministry for Women and women NGOs - particularly at the local level - leads to creative solutions (UNICEF, 2003).

The programme in Chile comprises five integrated elements: housing, health (especially also dental health), legal advice, childcare, and training for non-traditional occupations. The Ministry for Women establishes the focus on poor, female heads of households, and influences the type of occupations for which training offered. Training in non-traditional fields or in activities which are not exclusively regarded as women specific, is given preference. The goal is to secure for women a broader range of job opportunities, and to offer them an alternative to the poorly paid and insecure jobs as house cleaner or cleaners. (Marianne, 1997).

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

This chapter clearly discussed methodology, source of data, population and sample size. And the instrument that the researcher have used to collect the relevant data.

3.1 Methodology

The purpose of conducting this research was to get a clear picture about factors that affect female participation towards industrial fields and to indicate the extent to which female participation has affected by these factors. To this end, descriptive survey methods was employed because employing this method deals with collecting data to gather relevant information about present and existing conditions without analyzing relationship among variables. Moreover, according to ecbp (2006), this type of research method enables researcher to treat as exploratory or normative survey. Thus, the assumption basic to select this type of method that explains the given phenomena usually following a common pattern or norm. It implies that whatever is observed at any given point is normal and the same conditions could be observed at any time thereafter. Since the research deals with the existing problem, the descriptive method was appropriate to show the main hindrances of female participation and both qualitative and quantitative methods have employed independently.

3.2 Source of the data

The main primary sources of the data for the study were female trainees of Openo TVET college, instructors, the college women affairs unit, deans of the college, vocational counselor and regional women affairs bureau. In addition to this, document from the registrar, TVET strategic plan and other published and unpublished materials have taken as secondary data.

3.3 Population, Sample Size and Sampling Techniques

For the purpose of the study all female students of the college that account 481 taken as a total population. Since the aim of conducting the study is to get a clear picture about the factor that affect female students participation in industrial fields, the researcher feels that all female

trainees in industrial fields have direct relation to the focus of the study and their response are greatly significant for making the research reality. Due to this, all female students in industrial fields that account 45 have purposely taken as at target population.

Moreover, for the success of the study different individuals were highly involved. The three deans of the college, two individuals from women affairs bureau, the college women affairs unit, vocational counselor and five instructors have interviewed and some female students from business fields. All concerned bodies have selected purposely by looking their relation to the study.

Finally, for making the research reality, 144 individuals were involved and both purposive and simple random sampling methods were used independently.

3.4 Data gathering Instruments

The data for the study was obtained by using both primary and secondary sources. The primary data were collected by using questionnaires and interview. The secondary data was obtained from different published and unpublished materials and observation.

3.4.1 Questionnaires

Primary data was collected by using questionnaire because of its appropriateness to gather relevant data for carrying out the study from many participants at a time. Another significance of using questionnaire is that, it is convenient for the respondents to express their feelings and opinions confidentially. Therefore, both open-ended and close-ended items are designed in English and translated in Amharic to make it more understandable for the respondents. The questionnaire has four parts. In which the first part is about trainees' personal information, the second part deals with trainees parent background, the third part is about infrastructure, materials and training related factors and the last part of the questionnaire is about culture and institutional factors.

3.4.2 Interview

Structured and unstructured types of interview were conducted with the respondents. It was the useful instruments to understand or identify reasons why and how things happened. Deans, vocational counselor, instructors and individuals from selected bureau were interviewed. From the interview the necessary information concerning cultural factors and, the factors that affect female trainee were obtained.

3.5 Data Collection Procedure

The questionnaire designed to gather relevant information were set in relation to review of related literature and to answer the basic research questions set by the researcher. During preparation of the questionnaire, greater emphasis was given to ascertain its appropriateness. The appropriateness of the questionnaire and its language clarity was assured by pilot study.

Before the actual questionnaire was distributed or immediately after preparation, pilot survey was conducted in Donbosco TVET institution trainees and instructors. Then data was collected from try-out test and the necessary correction was made. Next to this, the researcher calls all the respondents to give general information in order to reduce confusion that may occur during completion. Finally, the questionnaires was distributed to the respondents and as soon as they finished, the questionnaire were collected from the respondents.

3.6 Method of Data Analysis

The relevant data gathered from the selected participants through questionnaire and interview was organized by using tables and graphs, frequency count and percentage followed by descriptive statements.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

This part of the study deals with the presentation, analysis and interpretation the data gathered through questionnaire and interview. Analysis of the questionnaire are presented with the help of tables, charts and graphs followed by descriptive statements that can gave answers to the basic research questions designed by the researcher. Of the 132 questionnaires that were distributed to student respondents for completion, all 132 were properly filled and returned back and used for the research, because the researcher grouped the students in two classrooms to fill it and return back as soon as completing the items and collected all questionnaire immediately.

Part I Analysis of parent's background

Table 4.1 Educational background of student's family,

No	Level of education	Mother		Father	
		No	%	No	%
1	Illiterate	48	36.36	34	25.75
2	Basic literate	34	25.75	20	15.15
3	Primary education	20	15.15	42	31.18
4	Secondary education	19	14.39	19	14.39
5	TTI	7	5.30	11	8.33
6	Diploma	3	2.27	5	3.78
7	Degree (BSC/BA)	1	0.75	1	0.75

Table 4.1 presents the educational backgrounds of parents of female students. According to the responses given, 36.36% of mothers and 25.75 % of fathers are illiterate. The numbers of parents who reach in primary education are respectively 15.15% mothers and 31.18% fathers. While 25.75% the mothers and 15.15% of the fathers are respectively basic literacy. On the other hand, equal number of parents that account 14.39% for each of mothers and fathers are in secondary

education. It is also depicted that 5.3% the mothers and 8.33% of the fathers are certified from TTI. Moreover, among the total number of parents 2.27% the mother and 3.78% of fathers are Diploma holder. The smallest numbers of parents that account 0.75% for each of mother and fathers have 1st degree. On contrary, no parents have any educational background beyond the first degree. So, from the response given in table 4.1 majority of respondent family are illiterate and basic literacy.

Table 4. 2 Respondents parent monthly income

No	Income	Mother		Father	
		No	%	No	%
1	No income	40	30.30	17	12.87
2	Up to 400	52	39.39	44	33.33
3	401-800	27	20.45	36	27.27
4	801-1200	11	8.33	27	20.45
5	Above 1200	2	1.51	8	6.06

Table 4.2 shows that parents monthly income. According to the responses, 30.30% the mothers and 12.87% of the fathers have no monthly income. Majority of the student's parent have earned below 400 birr per month. This statement asserted by the response given in table 4.2, as it is shown in the table 39.39% of mothers and 33.33% of fathers' monthly income is between 401 and 800 birr. On the other hand, 8.33% the mother and 20.45 of the respondents' father have earned 801-1200 birr per month. Among the total parents, the smallest number that account 1.51% mothers and 6.06% of fathers have paid more that 1200 birr per month, but comparatively this figure is almost negligible.

Thus, according to the responses given in table, 4.2 female students of Openo TVET college have faced financial shortage, and this affects their education.

Part II Analysis of Parent, Instructors, Material and Training Related Factors.

Table 4.3. The need of female participation in industrial fields

No	Items	Responses	
		No	%
A	Female participation is very important		
	• Yes	118	89.39%
	• No	14	10.60%
	Total	132	100%
C	Female participation in industry has direct relation in economical improvement.		
	• Yes	128	96.96%
	• No	4	3.03%
	Total	132	100%
D	Female can work in industry as much as male.		
	• Yes	90	68.18%
	• No	42	31.81%
	Total	132	100%

As can be seen in table 4.3, different types of question items administered by the respondent, which shows the extent of the need of female participation towards industrial fields. As depicted 118 (89.39%) respondents are said female participation is very important, and the remaining 14(10.60%) replied that female participation is not very important.

Regarding the relationship between female participation and economical improvement, majority of the respondents that account 128(96.96%) asserted its relationship. On the other hand, a very small number 4(3.03%) do not support the relationship between female participation with economical improvements.

An interview has conducted with the selected participants regarding the contribution of female in industrial sectors. During the time all, the interview asserted that female participation in industrial sector has direct relation to the socio-economic improvement of a country.

“Female students can work as much as male.” The majority of the respondents that account 90 (68.18%) assure this statement and the remaining 42(31.81%) respondents do not support the

statements. According to the responses given in table 4.3, female participation is very crucial for sustainable developments of a country and they can work as much as male.

Table 4.4 Availability of additional training to support female students

Alternative	Frequency	Percent
Strongly Agree	5	3.78
Agree	10	7.57
Neutral	5	3.78
Disagree	48	36.36
Strongly Disagree	64	48.48
Total	132	100

Table 4.4 depicted that the availability of additional training to support female students of the college. In the responses which is taken from table 4.4 majority of the respondents that account 64 (48.48%) shows their strong disagreements and 48 (36.36%) of the participants did not agree to the provision of additional training to support female students of the college. On contrary, the smallest number of the respondents 5 (3.78%) remain neutral and another 5 respondents strongly agree to the above manner. Moreover, the remaining 10(7.57%) of the participants show their agreements. Accordingly, Openo TVET College the training provided to support female trainee does not much enough

Table 4. 5 Instructor related factors

No	Items	Responses	
		No	%
A	Shortage of female instructors • Yes • No	118	89.39
		14	10.60
B	Shortage of qualified and experienced teachers • Yes • No	115	87.12
		17	12.87
C	Sexual harassments by instructors • Yes • No	3	2.27
		129	97.72
D	Instructor's attitude towards female student's ability to succeed industrial fields. • Yes • No	97	73.48
		35	26.51

Table 4.5 presents that some factors that affect female student's participation in industrial fields that have direct relation to the instructors. According to the responses given in table 118 (89.39%) of the respondents are said that shortage of female instructors in industrial fields affects the student's motivation to join industrial fields and the remaining 14(10.60%) are not agree.

Regarding shortage of qualified and experienced teachers much more respondents that account 115(87.12%) revealed that unavailability of qualified and experienced teacher in industrial fields influenced the students interest and participation, on the other hand the rest 17(12.87%) argued the above manner. In line to this, 129 of the respondents said that no sexual harassment is shown in the college, even though the remaining 3(2.27%) of the respondent replied the availability of sexual harassment this figure is not considerable.

In table, 4.5 students asked about instructor's attitude towards the ability of female students. 97(73.48%) of the respondents said that in Openo TVET college instructors do not have good expectation towards the ability of female students to succeed in industrial fields. On contrary,

35(26.51%) of have good awareness towards female ability. Accordingly, the response depicted that those Instructors in the college have no good awareness about female ability. Moreover, unavailability of female instructors and shortage qualified and experienced teachers have direct influence on female students' interest, enrolment and participation.

Table 4.6 parent related factors

No	Items	Responses	
		No	%
1	Shortage of financial support		
	• Yes • No	118 14	89.39 10.60
2	Lack of moral		
	• Yes • No	115 17	87.12 12.87
3	Lack Awareness of towards industrial fields		
	• Yes • No	129 3	97.72 2.27
4	Absenteeism due to family responsibility		
	• Yes • No	99 33	75 25

In our country, Ethiopia different writers assured that different factors could affect female student's education, in most cases their education affected by factors that have direct relation to their family or environments. To ascertain these idea respondents asked different questions, as it is stated in table 4.6 most of the respondent's families are lower paid. In line to this, 89.39% of the respondents have shortage of financial support and this affects their education. 87.12% of the respondents faced lack of moral. In addition to this, 97.72% Of the respondents revealed that family lack of awareness about industrial fields affects their interest and participation. On the other hand, 75% of the respondents among the total population said absenteeism due domestic work and family responsibility is the main reason that affects their interest and participation.

Table 4.7 Material, Infrastructure and Training related factors

No	Items	Response	
		No	%
A	Lack of reference book and unavailability of good library service • Yes • No	112	84.84
		20	15.15
B	Unavailability of adequate teaching materials • Yes • No	122	92.42
		10	7.57
C	Unavailability of workshops equipped with training materials • Yes • No	119	90.15
		13	9.84
D	Lack guidance and counseling services • Yes • No	67	50.75
		65	49.24
E	Unavailability of industries for cooperative training • Yes • No	128	96.96
		4	3.03

In table 4.7 respondents asked different types of questions regarding material, infrastructure and training related factors. Much more respondents that account 112(84.84%) replied that in the there is shortage reference book and the library service is not well organized to attract students interest, and the remaining 20(15.15%) are satisfied with the availability of library service. In line to this, 122(92.42%) respondents revealed that unavailability of well-equipped workshop is affects female interest, enrolment and participation. On the other hand, 13(9.84%) argue to the statements for unavailability of well-equipped workshop.

Regarding lack of guidance and counseling services among the total population 67(50.75%) support the idea and the remaining 65(49.24%) said that lack of guidance and counseling do not affect female interest and participation. In table 4.7 it is also depicted that in Gambella regional state there no industries that helps to engage cooperative training, this statement is witnessed by 128(96.96%) from the total population and the remaining 4(3.03%) disagree to the statements. According to the responses taken from table 4.7 majority of the respondents revealed that, unavailability of equipped library and workshops, lack of guidance service and unavailability of industries for cooperative training affect female students interest, enrolment and participation.

Part III Analysis of culture and institutional related factors

Table 4.8. Equality of educational access between male and female.

Alternative	Frequency	Percent
Strongly Agree	6	4.54%
Agree	10	7.57%
Nuetral	3	2.27%
Disagree	44	33.33%
Strongly Disagree	69	52.27%
Total	132	100

It is obvious that in Ethiopia female students has no given equal chance to get education as compared to male. Even when families have limited resource to educate their son and daughter, the daughters will excluded first and the chance will give to the son. Because, they thought that female has to remain at home by doing domestic works. On the other hand, family responsibility, chilled care, and early marriage also affect female education.

In addition to this, the respondents who show their level of agreement support this idea. Among the total population six (4.54%) respondents strongly agreed on the statement and 10 (7.57%) show their agreement. On contrary, the largest numbers of the respondent that account 69(52.27%) were strongly disagreeing to the statement and 44(33.33%) participants were not agreed. Moreover, the remaining 3(2.27%) were not forward any idea rather they remain neutral and the aggregated mean is 1.78 this shows towards dissatisfaction. According to the responses taken from table 8 the researcher concluded that in Gambella regional state female students do not have equal chance as male. Thus, this unequal chance causes female student participation in TVET and higher institution to be low.

Table 4.9 Female students at Openo TVET colleges are equally treated with male.

Alternative	Frequency	Percent
Strongly Agree	75	56.81
Agree	36	27.27
Nuetral	11	8.33
Disagree	7	5.3
Strongly Disagree	3	2.27
Total	132	100

As it is stated in table 4.9, the largest number of the respondents among the total population that account 75(56.81%) were strongly agreed or more than the average participants revealed that at Openo TVET college females are equally treated with male. In addition to this, 36(27.27%) were show their agreements. According to table 4.9 the responses of 11(8.33) participants fall in between. On contrary,7(5.30%) of the respondents said that female students do not equally treated with male. Similarly, the remaining 3(2.27%) strongly disagree for the availability of equal treatments of female student to male. Thus, according to the responses female students equally treated with male in the college.

Table 4.10. Culture related factors

No	Items	Alternatives					Mean
		SA	A	N	NA	SNA	
1	Early marriage • No • %	126 95.45%	4 3.03%	2 1.51%	0 0%	0 0%	4.95
2	Forced marriage • No • %	111 84.09%	14 10.6%	0 0%	3 2.27%	4 3.03%	4.70
3	Female genital mutilation • No • %	44 33.33%	28 21.21%	2 1.51%	56 42.42%	32 24.24%	3.65
4	Abduction • No • %	32 24.24%	11 8.33%	21 15.9%	57 43.18%	11 8.33%	2.96
5	Sexual harassment • No • %	37 28.03%	43 32.57%	2 1.51%	30 27.72%	20 15.15%	3.28
Total mean		3.90					

Women in developing country particularly in Ethiopia face different types of problems as the result of various cultural practices, which gave low status for women in the society. Due to societal gender biased norms such as early marriage, female marital mutilation, high fertility rate, violence against women and other norms affects women participation and they are not give equal opportunity to enjoy their rights with their counterparts. (Marianne, 1997). In Ethiopia, there are different types of Harmful Traditional Practices, which can influence women education. In this section, the perception of the respondents towards early marriage, forced marriage, FGM, sexual harassment and abduction has discussed in detail. In addition to this, interview with the concerned bodies have conducted to know the extent to which these harmful traditional practice affect female education.

The responses taken from the respondents ensure that all the above stated factors highly affect female education and currently it has practiced in the region. The response also revealed that in the region early and forced marriage is the main reasons for female drop out. To support this idea the majority of the respondents show their agreements. Among the total population, 126

(95.45%) respondents said that female education is affected by early marriage, 4(3.03%) agreed to the idea and the remaining 2(1.51%) are kept neutral.

Similarly, 111(84.09%) respondents shows their strongly agreement for forced marriage and 14(10.6%) said that forced marriage has direct impact on female education. On contrary, the smallest respondents that account 3(2.27%) are not agree that the impact of forced marriage towards female education and the remaining 4(3.03%) shows their strong disagreement to the idea raised in item 2.

Regarding FGM, among the total population 44(33.33%) are strongly agreed and 28(21.21%) agreed that FGM affects female education. On the other hand, the smallest amount that account 2(1.51%) kept neutral and majority of the respondents 56(42.42%) are not agree to the effect of FGM in female education.

Item 4 in table 4.10 presents about the effect of abduction in female education. Majority of the respondents that account 32(24.24%) strongly agreed that among the other harmful traditional practices abduction influence female interest, enrolment, participation and 11(8.33%) agreed to item 4 of table 4.10. 21(15.9%) of the respondents neither agree nor disagree rather they remain neutral. On contrary, 57(43.18%) disagree and the remaining 11(8.33%) said that abduction has no negative influence on female interest and participation.

Finally, respondents asked about the availability abduction and its effect on female students' interest and participation. Among the total population respectively 37(28.03%) and 43(32.57%) shows their strong agreement and agreements to the idea stated in item 5. 2 (1.51%) remain neutral. On the other hand, 30(27.72%) said that abduction has no effect in female education and the rest 20(15.15%) shows their strong disagreement to item 5 of table 4.10. Accordingly, the response taken from table 4.10 and interview shows that all the stated factors have affected female education and the aggregate mean 3.9 indicates how much the stated factors affect female participation.

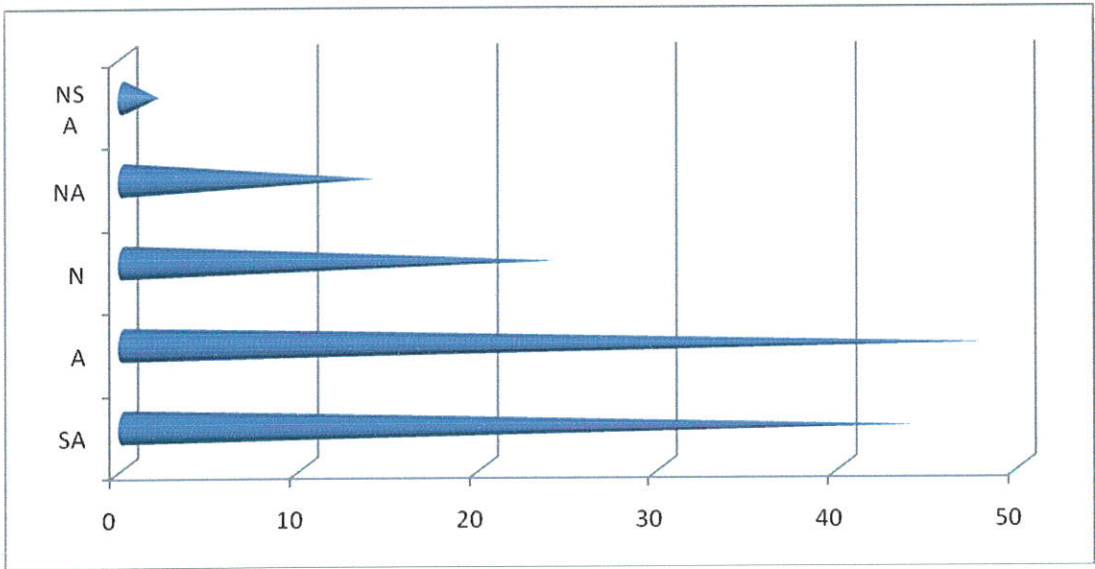
Table 4.11. The extent of number female students in industrial fields.

Alternative	Frequency	Percent
Strongly Agree	0	0
Agree	2	1.51
Nuetral	3	2.27
Disagree	8	6.06
Strongly Disagree	119	90.15
Total	132	100

As can be seen in table 4.11 none of the respondents were shown their strong agreement to the equality between number of female students in industrial fields as compared to business fields and only 2(1.51%) were agreed that there is equal number of female students in industrial fields as compared to business fields of studies. On the other hand, 3(2.27%) of the participants were neither agree nor disagree. On contrary, 8 (6.06%) of the participants were not agreed with the equality of the number of female students between industrial fields and business fields. The largest number of the participants that account 119 (90.15%) revealed that in Openo TVET college the number of female students in industrial fields is not equal to business fields.

Moreover, the response taken from the interview also assured that there is unequal number of female students in industrial field than business fields. In the response majority of the respondents shows their disagreements, this means in Openo TVET College there is unequal number of female students between industrial and business fields.

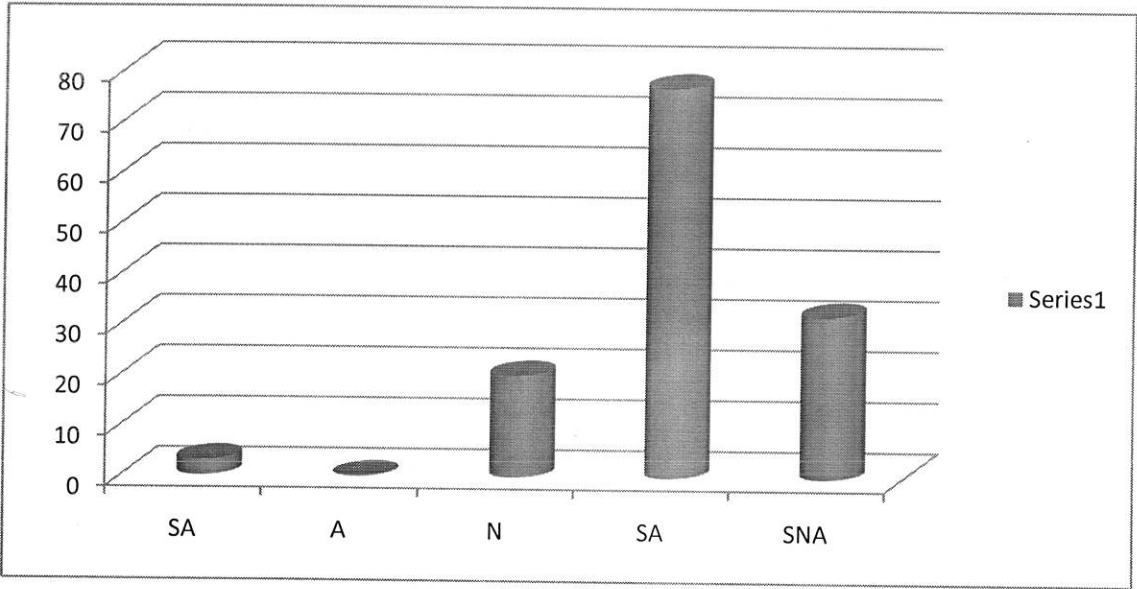
Figure 4.1Availability of fair department assigning mechanism in Openo TVET college.



According to the result obtained from figure 4.1, much more respondents feel that in Openo TVET college there is fair department assigning mechanism. On the responses 44 respondents were strongly agree that in Openo TVET college the students are assigned fairly according to their interest and the greatest number of respondents that account 48 shows their agreement. 24 respondents were not shown either their agreement or disagreements for the availability of fair departments assigning mechanism rather they remain neutral.

On contrary 14 respondents were not agreed and the remaining 2 are strongly disagree to the fairness of department assigning mechanism. So from the response the researcher feel that even if the students assigned fairly in each department, but the number of female student’s industrial field is comparatively negligible. This figure shows that female students at Openo TVET College have no interests to join industrial fields. In other expression since students assigned according to their interest, they choose to join business fields.

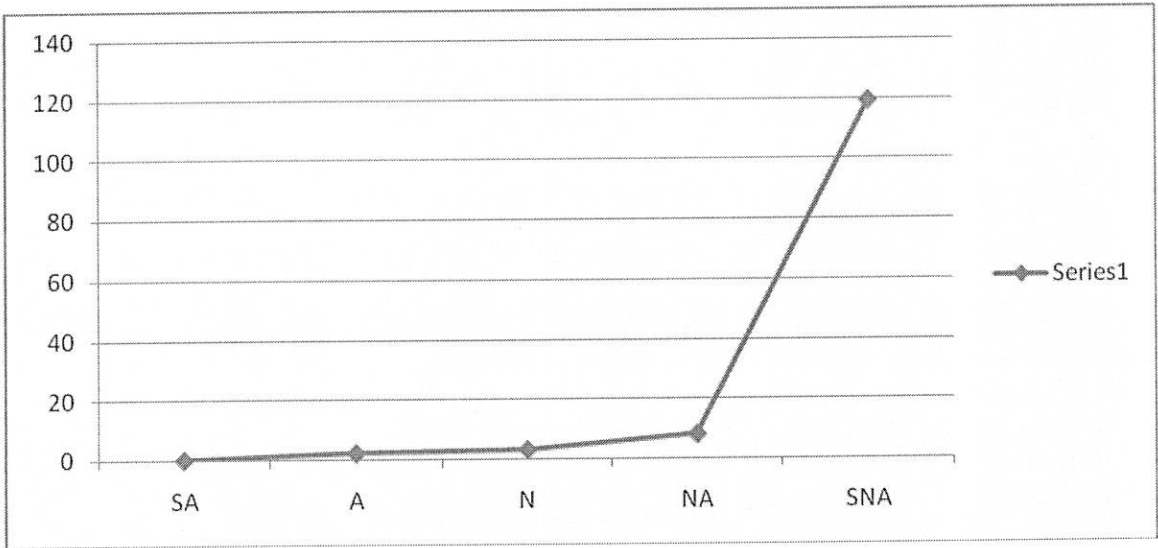
Figure 4.2. Provision of conducive environment to attract female students towards industrial fields.



It is obvious that female education is highly affected by different factors and it is clearly stated on the research problem. Among these factors female education also correlated with smaller family size, higher decision making ability, and family income. Therefore, to improve female student participation in industrial fields, different mechanisms should taken by the college.

To this connection, majority of the respondents that account 77(58.33%) said that the college do not provide conducive environment to attract female students. Similarly, 32(24.24%) respondents strongly disagree to the provision of conducive environment by the college. On contrary, 3(2.27%) support the idea raised in figure 4.2 and none of the respondents show strong agreement. Moreover, 20(15.15%) respondents kept neutral. Even though, the smallest number of participant supports the statement, this figure is comparatively almost negligible.

Figure 4.3 Effect of culture in education.



The fact that Gambella is among one of the emerging region of Ethiopia and different culture affects female education. To bring the research reality the researcher has been used different data gathering instruments. Thus, the data gathered by observation and document analysis ensures that in 1999 EC there was no native female students in industrial fields and the number of female students in business stream also not more than finger count.

Surprisingly the response taken from table 4.3 highly realized this idea. From the total population more than the average number of the respondents or 121(91.66%) were strongly agreed that; in Gambella regional state female education is affected by their culture. Moreover, another interesting responses were no participants were gave the response for the alternative agree and strongly disagree. On the other hand 10(7.57%) respondents kept neutral and inconsiderable response or only 1(0.75%) of respondent were agreed on the idea. According to the result, in Gambella culture is the main factor of female education.

Figure 4.4. The extent of female student’s participation in the class

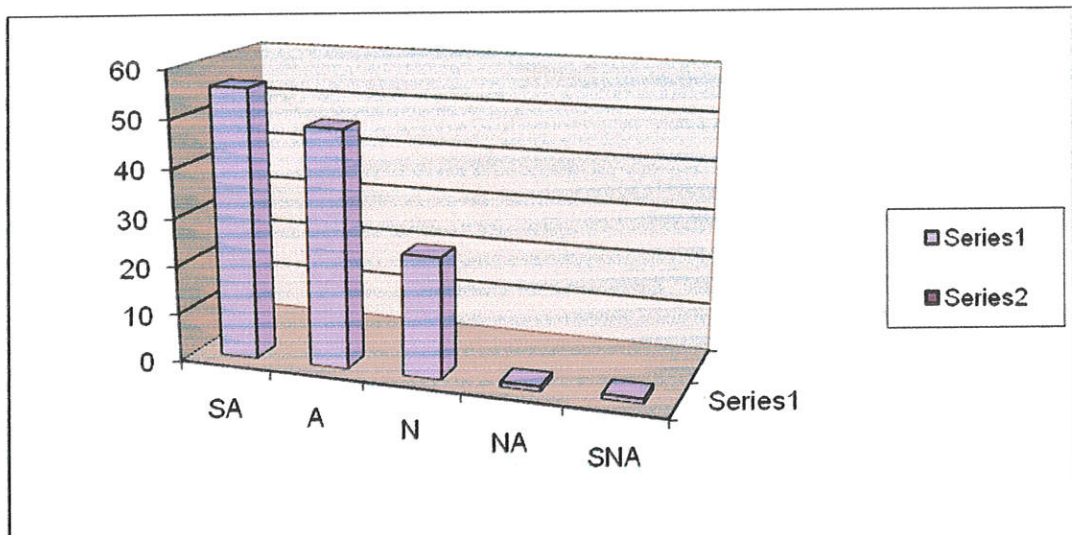


Figure 4.4 clearly indicates that in Openo TVET college female students are active participants. This idea ascertained by the responses taken from the respondents. The largest numbers of the respondents that account 56(42.42%) revealed that female students of the college are actively participated in the class. Moreover, 49(37.12%) of participants agreed to the above manner. On the other hand, 25(18.93%) respondents remain neutral.

On contrary, inconsiderable responses were given to the level of dissatisfaction that means among the total population only 1(0.75%) respondent said female students are not active participants and the remaining 1(0.75%) were strongly disagree to the idea.

factors that affect female participation. To this end, the respondents forwarded the following recommendations.

- The college has to provide a means to create awareness at high school level and for the society to know detail about TVET, and the training offered by TVET.
- The region has to invite private investors to build factories and industries to let students engaged cooperative training and this in turn create an opportunity for employments.
- Improve the number of qualified and professional teachers in the college.
- The college has to give greater emphasis to strengthen the production center, to produce more goods and sold them for society.
- The college has to provide placement services.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter summary the main ideas and the result obtained from the respondents are concluded in brief way. Finally, the researcher forwarded the possible recommendation.

5.1 Summary

The general objective of the study was to examine factors that affect female participation towards industrial fields of Openo TVET college. In so doing attempts have been made to identify the interests of female trainee and to indicate the extent of the number of female trainee as compared to their counterpart male in industrial fields. To this end, this study has the following specific objectives.

- To identify the main factors that affect female participation in industrial fields;
- To clarify the extent of female participation towards industrial fields;
- To examine the interests of female students towards industrial fields;
- To suggest measures to be taken in order to strengthen female participation;

In order to achieve the intended objectives the following basic questions has designed.

1. What looks like the interests of female student towards industrial fields?
2. What factors affect female participation in industrial fields?
3. Do societies encourage female students to join industrial fields?
4. Are there special program designed to attract female students in industrial fields?
5. What measures should be taken to strengthen female participation in industrial fields?

In order to answer these research question questionnaires, interview, observation, and document analysis used as a data collecting tools. The study is conducted at Openo TVET college in

Gambella region. The subject of the study was 132 female students and simple random sampling technique has used to select female students. Moreover, purposive sampling methods have employed to select the remaining 12 interviews.

Depending on the nature of data collected different statically tools were used. Of which percentage is the major statically tools employed throughout the study. Thus, the findings related to major impediments that cause low participation of trainees are.

1. Parental related factors

According to the research finding parent related factors like educational background, lack moral, absenteeism due to family responsibility highly affect female education. In the response, 31.5% of respondent's families are illiterate. In connection to this, it is also true that 51.5 % respondent's family have monthly income below 400 birr. On the other hand, 75 % of absenteeism is the result of family responsibility and domestic work.

2. Material and infrastructure related factors

In the study, it has revealed that lack of female participation is correlated with unavailability of equipped and well-furnished workshop, unavailability of training materials, lack of reference book, lack of guidance and counseling and unavailability of industries in the region affects female interests and participations in industrial fields. In the response, among the stated factors 96.7% of the respondents assured that it is the result of unavailability of industries in the region for placement and to conduct cooperative training affect interests of female students. In addition, the question regarding the unavailability of equipped workshop, 91.2% of respondents shows their agreements.

3. Harmful traditional practice related factors

In Ethiopia, there are different traditional practice, which directly affects female education and their life in future career. In the study it is clearly indicated that FGM, early marriage, forced marriage and abduction taken as a commonly occur traditional practice. Among these factors in Gambella regional state early and forced marriage are the main cause for the increments of female drop out rate, these is ascertained by the response taken from interview question. From

- the responses majority of the respondents respectively 95.45% and 84.09% said that forced and early marriages are mostly occur in the region;
4. According to the research findings, the number of female students in industrial fields of the study is too much low as compared to their counterpart's male. It has also revealed that in the college there is small number of female students in industrial fields than business fields;
 5. The study revealed that lack of female instructors and lack instructor attitudes towards female ability to resists things as much as male affects their interests. In addition, shortages of financial support, lack of moral, poor family educational background are the barriers. The study further revealed that awareness' of the society towards industrial fields influence female students interest, enrolment and finally participation;
 7. According to the responses, female students are not that much interested to join industrial field, even they dislike joining vocational training. The reason behind is because vocational training still gives priority to technical professions and thus addresses mainly men. Courses for professional fields in which women predominate (textile technology, hair dressing and teaching,) - like the service sector - as well as for large parts of the informal sector, have not frequently offered by the usually government-run training institutions. Programmers and curriculum of existing training courses for women frequently fail to meet the demands of the labor market. Moreover, even they have join training like hard skill fields; they are excluded from getting job.
 8. According to the finding, female students at Openo TVET college are equally treated with male and they have good participation in the classroom. Furthermore, this study ascertained that in the college students are assigned according to their interests;
 9. In study is assured that female participation in industrial fields is highly crucial for sustainable developments of the country and for economical improvements of the society. Furthermore, 68.18% of the respondents revealed that women could work as much as men could in industries;

5.2 Conclusion

According to the major findings of the study, it is concluded that in Openo TVET College there are small number of female students in industrial fields as compared to business fields of the study. Even though, there is unequal number of female students the college do not use any mechanism in order to attract female students towards industrial fields of the study.

Based on the analysis of the finding, female students' interest, enrolment and participations are affected by different factors. In the findings, it has clearly identified that parental related, instructor and material related factors has taken as a main cause. Furthermore, the college guidance and counseling departments is not well organized. In addition to this, shortage of female instructors, unavailability of qualified and experienced teachers, lack of well-equipped workshop and unavailability of industries in the region for cooperative training and placement services are the main factors that affect female student's interest and participation.

Finally, due to the above stated factors, the researcher concluded that in Gambella regional states female students have not given equal chance to get education as compared to their counterpart male.

5.3 Recommendation

Based on the findings and conclusion reached, the researcher forwarded the following suggestion for future improvements of female participation in industrial fields and to improve factors that affect female participation in industrial fields of the study.

1. It is not questionable to the necessity of creating awareness for the society about TVET in general and specifically industrial fields at all level. The college or regional TVET agencies have to provide a serious public discussion about TVET and the training offered by TVET. Moreover, it is also advisable to provide a mechanism to aware high school students before they have left the school;
2. The college has to provide all the necessary materials for practical work activities and build well-equipped workshop and libraries. Let the students to spend their time by doing practical work activities and create a mechanism to sell the goods produced by the

trainee. This helps to attract more female the students to look for industrial fields and create awareness in the society about industrial fields, this in turn helps those students who have no financial support;

3. There is insufficient qualified and female instructor in the college to offer good training. The college has to hire more qualified and women instructors.
4. The college has to provide placement services for the trainees after completing their training.
5. The colleges in collaboration with the region create a means to build industries and factories by inviting Non Governmental Organization, which can work cooperatively with the college. This helps to conduct good cooperative training and create employment opportunity.
6. It is also advisable to create girls club in the school to aware the school community about the right of girls and violence about school girls. Moreover, there the need to provide written rule and regulations on the notice board to stop violence against school girls.
7. The college has to create income generating activities (such as preparing snack, coffee and tea, hair dressing, shopping to sell the goods produced by the trainee) to support female students who have financial problem.
8. The college has to provide additional training to support female students, who already join industrial fields. Since female students have faced different factors, which may affect their education, it is better to create a means to get additional training.
9. The college has to encourage individual initiatives from the industrial field to motivate all the college community.
10. The college has to provides an opportunity of non-formal training for women who have no educational background and for those who drop out or who did not get the chance of further education;

11. In order to make the training offering by the college more attractive, it is advisable to hire professional and competent instructors. Moreover, the college has to build more furnished workshops, libraries and classrooms with well-organized and modern machineries;
12. The college has to provide the training in professional fields easily accessible to women like (hairdressing, cooking, and textile technology) which can be appears easily with less technical equipments;
13. Both academic and administrative staff of Openo TVET college have to treat female students equally with male and the instructors need to motivate female students in order to attract and retain one they join and to change their attitudes towards industrial fields of the study;
14. The college has to strengthen guidance and counseling services to encourage and orient female students about their problem, to aware them about the training offered by the college.

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Appendix A

ADDISS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

DEPARTMENT OF BUSINESS EDUCATION

MA-IN VOCATIONAL MANAGEMENT

This questionnaire contains 36 items and designed to identify factors that affect female participation towards industrial fields at Openo TVET college. Since your response is highly valuable to investigate this research, the researcher requests you to fill the questionnaires honestly. Your response will keep confidentially.

Thank you in advance for your prompt cooperation.

Part I

General Information

Here under some statements are listed that needs your personal information. Please read it carefully and fill the blank space or tick✓ mark on the box.

I. Department-----

Part II

Information related to parents

1. Tick "✓" mark to indicate your parent's level of education.

Level of education	Mother	Father
Illiterate		
Basic literacy		

Primary education		
Secondary education		
TTI		
Diploma		
BSC/BA		
MA		
PHD		

2. Tick "√" mark to indicate your parent monthly income

Monthly income	Mother	Father
No income		
Up to 400		
401-800		
801-1200		
Above 1200		

Part III

Parent, Instructor and Material Related Factors.

In consideration to your field of study indicate the extent to which of the following item satisfy or dissatisfy to you. Please tick "√" mark in the box for the scale of measurement.

3. The following statements show your attitude on female students towards industrial field

Statements	Responses	
	Yes	No
Female participation is very important		
Female involvement in industrial field is very crucial for transformation		
Female participation in industrial fields has direct relation for economical improvements		
Female can work in industry as much as male		

The following statements are factors, which may affect female enrolment, interest and participation. Please tick "√" mark on the box

6. Parent related factors

Statements	Response	
	Yes	No
Shortage of financial support		
Lack of moral		
Lack of awareness		
Absenteeism due to family responsibility		
Poor family educational back ground		

Part IV

Culture and Institutional Related Factors

In consideration to your field of study indicate the extent to which of the following item satisfy or dissatisfy to you. Please tick "√" mark in the box for the scale of measurement

SA Strongly Agree

A Agree

N Neutral

D Not Agree

SD Strongly Not Agree

7. Harmful traditional practice related factors

No	Items	Alternatives				
		SA	A	N	D	SD
1	Early marriage					
2	Forced marriage					
3	Female genital mutilation					
4	Abduction					
5	Sexual harassment					

9. There is equal number of female students in industrial fields as compared to business fields?

SA ☐ A ☐ N ☐ D ☐ SD ☐

10. The college prepares conducive environments to attract female students towards industrial fields.

SA ☐ A ☐ N ☐ D ☐ SD ☐

11. Female at Openo TVET college are equally treated with male?

SA ☐ A ☐ N ☐ D ☐ SD ☐

12. Culture in Gambella affects female education.

SA ☐ A ☐ N ☐ D ☐ SD ☐

13. Female education has equal chances to get education as compared to male

SA ☐ A ☐ N ☐ D ☐ SD ☐

14. Female students actively participate in the class.

SA ☐ A ☐ N ☐ D ☐ SD ☐

15. The department equally protects the interests of female.

SA ☐ A ☐ N ☐ D ☐ SD ☐

16. There is fair department assigning mechanism.

SA ☐ A ☐ N ☐ D ☐ SD ☐

17. The college provides additional training to support female students.

SA ☐ A ☐ N ☐ D ☐ SD ☐

18. What do you think to improve female participation towards industrial fields of the study?

.....

.....

.....

19. What do you advise to overcome factors that affect female participation?

.....

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.....

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Appendix B

ADDISS ABABA UNIVERSIT

SCHOOL OF GRADUATE STUDIES

DEPARTMENT OF BUSINESS EDUCATION

MA-IN VOCATIONAL MANAGEMENT

Interview questions for administrative staff and other concerned bodies

Part I General Information

Interviewer name _____

Name of the interview _____

Date _____

Sex male _____ Female _____

Part II Interview guide

1. The number of female students in industrial fields as compared to male?
2. What looks like interests of female towards industrial fields?
3. Do you think that the following harmful traditional practices has influences on female education?

Harmful traditional practices	Yes	No
FGM		
Forced marriage		
Early marriage		
Abduction		
Sexual harassment		

4. Among the above stated factors harmful, traditional practices which of them commonly practiced in Gambella regional states?
5. What do you think about the contribution of female in industrial sectors?
6. What factors impede female participation?
7. What do you advise to improve female participation?
8. Does the college provide additional training to support female students?

Appendix C

Respondent's mother educational background

Alternatives		Response	
		No	%
Illiterate		48	36.36
Basic literate		34	25.75
Primary education	1-4 grade	14	10.60
	5-8 grade	6	4.54
Secondary education	9-10 grade	7	5.3
	11-12 grade	12	9.09
TTI		7	5.30
Diploma		3	2.27
Degree		1	0.75
MA/MSC		0	0
PHD		0	0
Total		132	100

Declaration

This thesis is my original work and has not been presented for a degree in any other university. All the sources of information used for the purpose of this thesis have been fully acknowledged.

Name -----

Signature -----

Date -----

This thesis has been submitted for examination with my approval or university advisor.

Name Getachew Adugna

Signature [Signature]

Date 22/07/11

