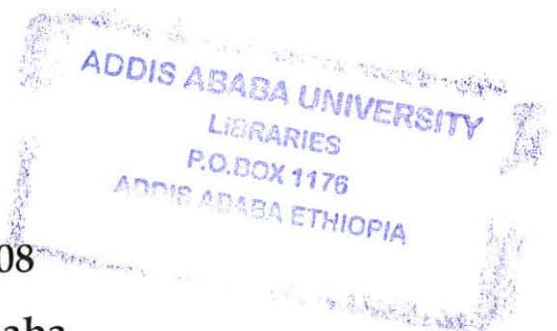


FEMALE STUDENT STREAM CHOICE AND ACADEMIC  
PERFORMANCE IN PREPARATORY SCHOOLS IN EAST  
WALLEGA ZONE, OROMIA REGION

BY  
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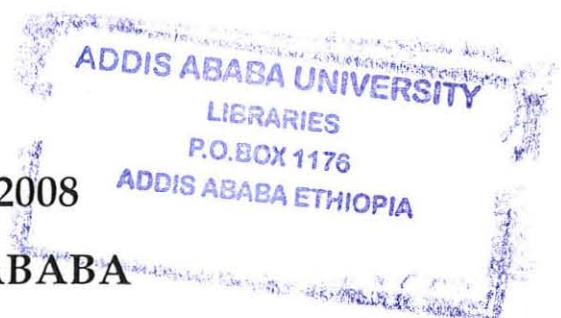
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**Addis Ababa University**  
**School of Graduate Studies**  
**Female Students Stream Choice and Academic Performance in**  
**Preparatory Schools in East Wollega Zone.**

By Degefe Kitila

**Department of Curriculum and Teachers Professional  
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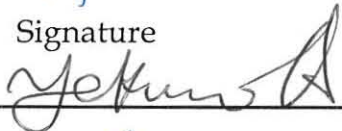
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# Table of contents

	<u>Page</u>
Acknowledgements.....	i
Table of contents.....	ii
List of tables.....	v
<i>Abstract</i> .....	vi
Chapter One.....	1
Introduction.....	1
1.1. Back ground of the study.....	1
1.2. Statement of the Problem.....	3
1.3 Aims / objectives of the study.....	4
1.4. Significance of the study.....	5
1.5. Delimitation of the study.....	5
1.6. Limitations of the study.....	5
1.7. Operational Definition of terms.....	6
Chapter Two.....	7
Review of Related Literature.....	7
2.1. Why female education?.....	7
2.2. The trend of female students academic choice.....	8
2.3. Female performance in secondary schools.....	9
2.4. Factors affecting (influencing) girls academic performance.....	10
2.4.1 Family influence.....	10
2.4.1.1 Parents socio Economic status.....	10
2.4.1.2. Parents educational back ground.....	12
2.4.1.3. Parents attitude.....	14
2.4.2 Societal influence.....	15
2.4.2.1 Socio cultural factor.....	15
2.4.3 Institutional factor.....	18

2.4.3.1 School organization and management .....	18
2.4.3.2 The effect of teachers / teachers attitude / .....	19
2.4.3.3 Peer groups.....	20
2.4.3.4 Lack of guidance and counseling.....	21
2.4.3.5 Curriculum materials and other facilities.....	22
2.4.3.6 School Location.....	24
2.4.3.7 Affirmative Action.....	25
2.4.3.8. Controversies and challenges in affirmative action.....	26
Chapter Three.....	29
Research Design and Methodology .....	29
3.1. Research Method .....	29
3.2. Sources of Data.....	29
3.3. Population and sampling techniques .....	29
3.4. Pilot test.....	30
3.5. Data organization and Analysis .....	31
Chapter Four.....	32
Presentation, Analysis and Interpretation of the data.....	32
4.1 Distribution of male and female students' across field of study (streams).....	32
4.2 Respondents' back ground.....	32
4.3 School Location (distance from students' home).....	33
4.4 Analysis of stream choice.....	36
4.4.1 Family Environment and Student respondents' families socio- Economic back.....	36
4.4.2. Reasons for selecting a field of study.....	39
4.4.3. Significant persons education in shaping field of study choice.....	40
4.4.5 Female students counseling related questions.....	41
4.4.7 Teachers' and female students' view on the area of study female students join.....	43

4.4.8. Extent of parents educational status influencing female students stream choice .....	44
4.4.9 Parents' educational status in influencing students stream choice .....	45
4.5. Factors influencing female students' performance.....	45
4.5.1 Female students response to factors influencing performance.....	46
4.5.5 Availability of teaching learning materials.....	55
Chapter Five .....	57
5. Summary, conclusions and Recommendations .....	57
5.1. Summary .....	57
5.2. Conclusions.....	61
5.3 Recommendations. ....	62
Reference.....	63
Appendices .....	67

## List of tables

	<u>Page</u>
Table 1. Distribution of respondents.....	31
Table 2. Age and marital status of female student respondents.....	33
Table 3. Distance of School from Students Residence.....	33
Table 4. Family residence of the students. ....	34
Table 5. Teacher respondents' qualification. ....	35
Table 6. Service year of Teacher respondents.....	36
Table 7. Educational status and Family occupation of parents of female students.....	37
Table 8. Reasons given for the choice of field of study by female students' respondents. ....	39
Table 9. Female students view regarding education of influential person in female students' stream choice.....	40
Table 10. Female students response to guidance and counseling services.....	41
Table 11. Teachers response on students counseling. ....	42
Table 12. Teachers' response on guidance and counseling services given to female students during stream choice.....	43
Table 13. Teachers' and female students' response.....	43
Table 14. Teachers' and female students' response to parents' educational status.....	44
Table 15. Teachers and female students view. ....	45
Table 16. Grade 12 first semester average Exam, result in 2007/2008.....	46
Table 17. Female students response towards the factors influencing their performance.....	47
Table 18. Teachers response to factors influencing female students performance.....	53
Table 19. Students' and teachers' response to the availability of teaching learning materials.....	56

## **Abstract**

*The purpose (objective) of this study was to examine the stream choice and performance of female students in preparatory schools of East Wallaga Zone Oromia region. To achieve this objective data were collected from 201 female students and 74 teacher respondents using instruments such as questionnaire, interview and documents analysis. The data obtained were analyzed in terms of percentage. Data from interview were analyzed using narration. Findings revealed that female students' stream choice was highly influenced by peer group advice, family expectation (specially mothers) and the individual interest of female students themselves, which had happened without having enough information about the streams. There was relative increment of social science female students in the last four years whereas, their achievement was lower than natural science stream students. Potential factors for female students' low performance were female students' less effort in studying, low confidence, lack of parental financial support, mothers poor educational back ground and parents' low expectations about female students academic performance. Generally female students' stream choice seems that had happened without having better knowledge about the streams and because of the pressure from peer group and family. This manifested itself in academic performance of female students' of social science stream than natural science in their 1<sup>st</sup> Semester grade twelve 2007/8 E.C. Examination result. For female students' stream choice, giving detailed orientation about each stream and making them free from external pressure, and to attain this, strengthening guidance and counseling services by professional counselors are suggested. Woreda Education office and preparatory schools should jointly work to change family attitude in order to invest material and finance for the successful achievement of female students and be convinced that female students can exert equal efforts as males in education are suggested.*

# Chapter One

## Introduction

### 1.1. Back ground of the study.

Education has been used as vehicle for national Economic Social and Political development as well as for individual advancement. The evidence from developing countries shows a close link between women's education and social and economic development and between the size of the Education gender gap and national development (King, 1990:12).

Hill and King (1993:29) argue that educating females yields far-reaching benefits for girls and women themselves, their families, and their societies in which they live. With this regard today girl's education is widely recognized as the most effective development investment a country can make. The education of girls enhances economic productivity, reduces fertility rates, lowers infant and maternal mortality and improves the health and nutritional status of children. It also promotes sound management of environmental resources and closely linked with the reduction of poverty through women's absorption in the economy as employees and in self employment (Edda 2000: 27). Therefore, the education of females has particular significance to Ethiopia's effort to economic and social development.

These impacts' of education can fully be realized when women in a country have equal opportunity and access to education with men. In her study of female students' performance and participation in high schools of Addis Ababa Genet,(1991) showed that in Ethiopia the participation and attainment of girls in all educational levels is lower than male counterparts. And the disparity between the two sexes becomes significant in secondary and tertiary education levels. Many of them concentrated in fields such as secretaries, home economics, nursing and teaching in elementary schools.

The pattern of enrollment in different countries clearly reveals that girls are under represented in science and technical subjects. It is clear that female generally account for significantly higher percentage of enrollments in courses and training profession oriented towards Commercial and service trades or occupations rather than courses towards industrials and engineering trades and occupations (Hoff man and others 1999: 113).

Moreover, it is common across in almost all countries that not only, the participation of girls in secondary level is low in terms of number compared to boys, but also the type of courses offered or opted for by them are traditionally accepted feminine courses (Ibid).It is believed that gender imbalance in different field of study is a result of a combination of factors such as cultural factors, school factors, home factors etc. The cultural factors that arise from gender specific beliefs and bases in a society don't allow females to aspire careers that all perceived as male domain due to being afraid of disapproval from others, (Hyde, 1993: 94).

The school environment such as teachers, peers, learning materials play vital role in transmitting all forms of beliefs that reinforce gender inequalities in natural science and technical fields. The image of subjects as male domains in school environment affects females' field of study choices (Wolpe,1997:72). This perception of some subjects as male domain in school environment in a form of psychological barrier limits female student's field of study. For instance female perception of mathematics and science as male domain make them reluctant to study these fields ( Betz, 1997:249).Among the school factors particularly teachers have powerful influence on the attitude, interest and achievement of students in a given subject. The gender stereotyping of subjects promoted by teachers appears to be the major constraints for females to a given field of study (Khale,1993:156).

In improving the status of women, the government has to pay special attention to the equal access of girls and women to scientific, technical / vocational education and training. At present the development of society is possible only when females have equal opportunity of participation in scientific and technological development as their male counterparts (Snyder and Mary, 1995:123).

As it was stated in overall goals of ESDP-III to address equity issues by narrowing the gap between male and female among regions and rural and urban areas (ESDP-III:28). Based on the above goals although relative efforts have been made by the Ethiopian government to increase female education opportunities, their enrollment, performance and academic choice in secondary education are generally limited and this is also similar in East Wollega zone.

It is, therefore, on the basis of this observation that, this study attempts to investigate the impact of these major factors on the academic performance and stream choice of female students in the zone to be studied. It also attempts to find out alternative and relevant solutions to alleviate problems in stream choice and academic performance of female students.

## **1.2 . Statement of the Problem**

Poor performance at primary and secondary level of education with particular reference to science, mathematics and technical subjects hinders girls' entry in to and success in higher levels of education (Edda, 2000:65).

It is true that girls tend to enroll in education and art subjects and to be under represented in science subjects and mathematics where boys and men dominate (Odaga and Heneveled, 1995). This condition in the future will lead to more gender imbalance in the labor force and brings negative impact on the national capacity building in various sectors. Thus it calls for improvement.

To improve girls' academic performance and achievement and their stream choice it requires a clear understanding of the societal, home and school factors (parents, teachers, curriculum material, distance, school type etc...) that influence and discourage them.

Hence, this study is a practical step to examine the current trend of girl's educational performance and participation with the emphasis of stream choice, investigate the in and out of school factors which affect girls' educational achievement and academic choice and finally to indicate the possible solutions which may help in alleviating the problems in preparatory education in East Wollega zone. Accordingly, the following research questions were formulated and answered in the course of study.

1. Which stream (area of study) do female students often prefer to join? And how is their performance?
2. What does the actual choice of female students look like?
- ✓ 3. What factors influence girls' academic performance and choice in different stream?

### **1.3 Aims / objectives of the study.**

The study aims at investigating the impact of stream choice on academic performance of female students

Specifically:-

- To describe the relationship between stream choice and academic performance.
- To identify the main factors which affect academic achievement and stream choice of female students?
- To point out some critical issues for further investigation academic achievement of female students.

- To suggest some recommendations that could make the school and the home environment conducive for female students to be successful in their academic achievement.

#### **1.4. Significance of the study**

Such studies are expected to have practical utility in the teaching and learning process in the preparatory schools. The study may help the academic and administrative staff to be aware of the variables which can have positive and negative effects on the stream choice and academic achievements of female students and try to alleviate problems. Educational experts, policy makers and other concerned bodies can use the results, in implementing educational policies. More over the study can be used as starting point for further research in the area.

#### **1.5. Delimitation of the study**

This study is delimitation to East Wollega Zone Oromia region, preparatory schools because of time, money and other resources constraints and all the findings and conclusions will reflect the state and real situation in preparatory schools with in the Zone. The subjects of the study were preparatory school students, teachers, principals, guidance and councilors.

#### **1.6. Limitations of the study**

One of the limitations in this study was lack of getting enough and well organized data at preparatory schools, and woredas. The methodology the researcher used was descriptive survey and tried to analyze the data in percentage and compare the result to reach at some conclusions, but it may lack revealing the relationships between stream choice and academic achievement in a better way. In spite of all these limitations the researcher has attempted to complete the study as much as possible and to make it as a stepping stone for further study.

## 1.7. Operational Definition of terms

Achievement;	Students' performance in relation to attainment of objectives.
Stream choice -	Preference of disciplines in education system of careers.
Preparatory program;	Second cycle of secondary education in which student prepare for higher education

## Chapter Two

### Review of Related Literature

This part of the study deals with the review of literatures. Accordingly, an attempt has been made to review about females' education, stream choice and academic performance (factors that affect their education) by giving an emphasis to the experience of developed countries and also developing countries which have relatively similar background to Ethiopia.

#### 2.1. Why female education?

Education is the right of every citizen. It contributes economically, culturally, and politically. Geiger (2002:3) also indicated that the benefits of education relates to more or less all aspects of development, it affects their ability to make informed decision, it empowers them to ; participate in the public and political life and develop skills.

Similarly Tirufat, (1998 : 150 ),says that the impact of females education can be seen from economic and social perspective. According to the writer, economically, educating females increase house hold production and national out put through food self sufficiency. Moreover, it leads to an increase in productivity of half of the labor force.

According to king, (1990:9), education makes females to be better mother; it helps them appreciate the importance of parental care and to be better informed about good nutritional practices. As a result, their children are likely to be healthier, more likely to stay school longer and quicker to learn. In relation to this Tirufat, (1998:150) further noted that education makes females to be active in the social, political and economical sphere of life.

It allows them question traditional practices which exposed them to life long suffering, enables them to look at various alternatives and control the environment they live in.

## **2.2 . The trend of female students academic choice.**

In the world both females and males have shown disparity in school subjects / field choices/. In line with this Finn and others ( 1982:118 ) stated that in all parts of the world boys are directed in to mathematics and technical curricula more actively than girls, when their education encouraged, are guided forward language and liberal arts. A study conducted in ten developed countries between the years 1983 - 84 on the participation of female students in science fields of upper secondary schools by Kavees and Kotte (1996 : 87 ) revealed that science courses become more masculine in secondary schools where large number of boys taking science and men teaching science increase with the exception of Italy from 1983- 84 , the study of biology is preferred by girls rather than boys in western countries including USA, Australia and Japan. While the study of Chemistry and physics are dominated by males with the exception of Hungary. In the United states of America and Australia although women are well represented among secondary biology teachers, teachers of the physical Sciences are predominantly male. Similarly, in England as reported by Kelly ( 1985 ) boys comprise 70 - 80% and 30 -50% of the physics, Chemistry and biology candidates respectively, in united states of America approximately 45% and 35% of university bound high school girls take chemistry and physics courses respectively. This situation, therefore has been able to identify that even in the most developed countries high school girls are less represented in core science courses. According to Betz N. (1997:112), in United States of America the under representation of female in Science and technology has been a serious problem.

In developing countries similar conditions are observed. There is strong evidence in the literature to support this view. Studies confirmed that there is a strong gender bias in subject choices available for girls and girls are often stream out science and mathematics fields in to the traditional female subjects that led them in to education; health and administrative support employment (Baden 1993 , Beoku Bett and Logan, 1993 ).

In secondary schools, the two tracks from which students can choose are social (art) and natural Science. The majority of female students tend to go to social sciences while in natural science fields their rate of participation is lower than their male counterparts. In this regard, the percentage of female students enrolled in science and technology Faculties at Addis Ababa in 2003/04 academic year was at the ratio of 29:9 in biology, 41:2 in chemistry, 166: 10 mathematics and 24:0 physics ( MoE 2003/04 ).Generally the above information reflects that female students are tilted to social science than natural science in their stream choice.

### **2.3. Female performance in secondary schools**

The case of poor performance of female students as opposed to boys varied and the challenges that influence their education are attributed to several factors. For instance, Kane (1996 :5 ) puts the challenges of a girl in the following manner.

“Education for a boy is often seen as a right, which is sometimes denied: for girls, it is privilege to be learned. If funds are available after her brothers are educated, if parents’ fears about her security and maintenance of traditional values can be met, if the school is not too distant, if she can continue to carry out her domestic tasks, if she does not have to marry early, if she does not become pregnant, if she does well on exams despite having little time to study then she may get an education.”

As Kane, (1996) indicated above, the participation and performance of girls are subject to a number of constraints.

Student’s performance can be measured through their achievement and repetition in the national examination, study time, attendance, assignments and home work.

Regarding achievement of girls in the Ethiopian national examination, MOE (2003/04) reported that in Ethiopia girls' performance in some subjects reveals wider gender gaps in performance than others, notably mathematics in an education system, where aggregate achievement for boys is slightly higher than for girls with some regional variation. In 2003/04 only 20% of girls passed grade 10 examinations compared with 53% of boys and 46% and 67% respectively passed the grade 12 Examination ( Rose, 2003 cited in UNESCO 2004).

## **2.4. Factors affecting (influencing) girls academic performance.**

### **2.4.1 Family influence**

#### **2.4.1.1 Parents socio Economic status.**

Socio - economic status is measured in terms of parents' occupations, educational level, and house hold income. Academic achievement of low-income students in urban area is greatly related to their level of socio economic advantage. Shultz (1993 ) argued that socio economic status appears to be affecting achievement motivation desire which in turn affects academic performance. As socio economic status of their family increased their academic performance will be increased because, if the socio economic status of parents is strong enough they are in apposition to provide sufficient materials for their children. Otherwise students from low economic status family engaged themselves to par time work and this influences academic achievement of students negatively. Jacques (1987) explained that students were engaged in part-time employment to cover school fees and to fulfill other materials. On his study the effect of part-time employment on academic achievement of high school students, he reported that the non - employed students, grade point averages were higher than the grade point averages of the employed students.

Parents socioeconomic - status has notably influence up on their children's education attainment and upon their performance. In this regard Teshome, (2003:6) states that girls who come from Socio Economically well - off families and living in urban areas are much more likely to enter, remain and perform in schools than disadvantaged families. The publication of OECD (1986: 37) pointed out that girls who are from lower economic back ground are engaged in household chores, which consequently affect their academic achievement negatively.

As it is stated in Elliott, and others (1982: 25) we can mention only a few salient patterns of social selectivity in education of girls. Perhaps the firmest generalization is that socio economic status of parents has more influence on the schooling of girls than boys.

This influence is often greater in rural localities or among disadvantaged ethnic groups than it is in favored segments of the population Elliott, and others.

Similarly Hedija, (2002: 13) described the influence of families economic status as under. Family plays a great role for the successful achievement of students at all levels of education. However the role of family is very crucial in the case of female students in terms of moral and material supports.

It is well known that female students need money to buy some cloths and other make ups in addition to purchase of stationary materials. If these things are not fulfilled, female students may feel inferior to their colleagues and may divert their attention from the education and try to get some way to fulfill their requirements. As a result these students become poor in their academic performance. According to summer (in Joiner 1977:262), the main influential factors that seriously affect the child's academic performance are the family and the school. He stated as follows,

The family and the schools are the two main social environments in which a school child lives. It should be recognized even more widely. Then it is at present that when a child has a special psychological needs and problems these involve an interaction in him or influences of both family and school, even though his difficulties may show themselves in only setting or the other. Stow and self (1989:63) also stated that, social and economic factors have been central issues in discussing a child's educational performance. This is because the variations in material circumstances, parental life cycle, attitude and values fundamentally affect the child's learning achievements.

Pupils from disadvantaged back ground perform better in schools with significant number of children from advantaged ones (Williams, 1992:38) this is to show that they share experiences and get support from the advantaged ones.

Thus socio economic status symbolizes a Varsity of values, attitudes and motivations related to academic performance. Indicating the impact of socio - economic status issue in education, smith, (1978 - 97) has this to say:-

"Learners from families and neighbor hoods and areas that are economically deprived or poor are different in some way from learners who come from middle class families or families with more than enough money .... Children from the poverty belt are found to be as group less eager to learn and generally less motivated to do the kind of thing that are expected of them in schools." As it is stated above socio -economic status is a significant factor in determining the achievement level of students

#### **2.4.1.2. Parents educational back ground**

Parents educational back ground is likely to be one of the factors that affect female students' educational performance. For instance if the head of the family is highly educated, his children are likely to receive some encouragement guidance and even help in academic work. Almost all educated parents wishes and expected better performance of their daughters.

King and Hills (1991 : 228 ) also stated that parents who are educated might have a positive attitude about female education or provide a more stimulating environment for education than other parents.

Phillips (1998) found that parental education and family socio economic status alone are not good predictors of student academic achievement. Ferguson (1991), posited that parental education accounted for about twenty four percent of the variance in students test scores, while socio economic status accounts for about twenty six percent. Other scholars contend that dysfunctional home environment, low parental expectations, ineffective parenting, language differences and high levels of mobility might account for low level of academic achievement among student from lower socio economic back grounds.

Parents educational back ground is likely to shape children's attitude towards education. Because educated parents know the benefit of education, they frequently send their children to school.

However, uneducated parents usually do not send their children to school, even if they do, they frequently insist on their children to dropout. To this end , Tesfaye ( 1997 :25 - 41), in his study, the impact of maternal status and success striving of female college students, has shown that mothers education is significantly associated with females' success striving and gender- role attitude. Yelfign and others (1995: 64) have also confirmed that mother's education increases the likelihood of girls education.

Students are expected normally to spend most of their time with parents acquiring the sense of togetherness, cooperativeness, helpfulness of each other mutual help and adjustment through observation and action.

From this perspective, one could judge that parents are the entire social milieu of the children providing them with physiological, psychological, and healthy growth and development. Concerning the importance of familiar support, aggarwal (1981: 116) describes that "it is the home more than the school that determines the quality and direction of any child's life and that ..... in the education of any child".

To provide the necessary assistance to learning children, the parents' educational background is to be very significant and plays a major role. Lack of encouragement and educational information from the parents to the students could likely cause certain technical deficiencies in their learning activities.

Tesfaye, (2001: 95) stated that literate parents tend to realize the value of education than do illiterate ones and one possible explanation for students' low academic performance and high drop out is the fact that most of those who perform lower are from families of low level of education or no education at all.

#### **2.4.1.3. Parents attitude**

It was Augustinian legacy which formed the consciousness and guided the gender behavior of most colonial and nineteenth-century Americans. At their best, white Americans were concerned with educating their sons to become productive workers, effective political agents, and independent rational actors. However, when they thought of education for their daughters, the concern was to prepare them as wives and mothers, not as independent, rational being. As long as the home remained the primary economic unit in society, most of the girl's education could be obtained there, emulating her mother and obeying her father, Tozer (1995: 130). According to Tilaye (1999:77) the quarrelsomeness of the home environment (for instance, between father and mother, between father and child, etc) could also create a serious emotional disturbance among school children in the form of tension, anxiety, fear or instability in their lives which intern are hindrances to their concentration in classes or school work in general.

On the other hand family's attitude plays significant role in female student's stream choice. They encourage their daughters to be docile and complaints so that girls are expected to play as wife and mother in their future life (Rubbo Ann, 1975:339).

The expected familial roles and responsibilities of girls will lead them to the domestic sphere duties such as child care, food preparation and other activities including the fetching of water, fuel, cleaning and agriculture.

Since girls learn to concentrate in domestic sphere they tend to think of those occupations that are almost the extension of their child hood roles. Thus, they tend to choose occupation closely related to caring like nursing, teaching etc. in line with this Yelfign, (1998: 10) suggested that attitude that prevails girls should be limited to the home and family activities and not to traditional male dominated development activities hinders their participation in science and technical /vocational careers.

## **2.4.2 Societal influence**

### **2.4.2.1 Socio cultural factor**

Reducing female male literacy disparities are harder to achieve because they are bolstered by social and cultural norms and practice that are difficult to change ( Dighe, 1998:419) Girls are often withdrawn from schools when they rich puberty.

This is explained by parents' fear of pregnancy outside marriage. To avoid this problem parents often urge their daughters to early marriage (Bendera, 1999: 123).

Socio cultural factors influence the decisions to enroll girls to school or to withdraw them from school. More over, girls' own decisions to drop out of school, their academic performance and their grade level attainment are also influenced by the socio cultural factors, (Odaga and Henveveld, 1995:22).

Similarly, Embet (2000: 20) indicated that culture influences the education of women in many ways one of which is the cultural division of labor.

Njeuma (1993) in Emebet (2000:20) stated that traditional division of labor in Africa society creates huge problems to females; they are often required to help their mothers with domestic activities and look after younger children. In Ethiopia, MOE (2004:23) indicated that families tend to influence the upbringing of their daughters based on the cultural values and religions norms.

At an early age girls are taught to be quiet, shy, and most importantly obedient, hence their inability to express, themselves and interact actively with teachers and students in class make them isolated. Likewise, many female students face difficulties in adapting the environment they are learning in which at the end causes poor academic performance.

Holloway and Itess (1985) in segid (1989:4) stated that cultural studies toward achievement in formal institutions like secular schools and legitimate gender roles, parents' expectations about their daughter's early cognitive development and later schooling also affect females' school performance.

Furthermore, MOE (2004:5) noted that different cultural factors influence female's education (Enrollment, persistent and academic performance) in many ways. The ministry added that females are encouraged to get married and establish families at a very early age.

In fact, early marriage and abduction for marriage are the major cultural problems hindering female's education and their performance, more over, many females are responsible for house hold duties and caring for their younger siblings: leaving little time for home work and studying. As a result, their educational performance suffers.

When girls grow up, they become more and more influenced by culturally set gender rules. Regarding this Mensch states: Girls and boys in cultures through out the world are treated differently from birth onward but, at puberty this gender divide widens. During adolescence, the world expands for boys and contracts for girls. Boys enjoy new privileges reserved for men; mobility opportunity and power ...girls are systematically deprived of these aspects, (Mensch,1998:2).

As Mensch explicitly put it, adolescent girls are made to be restricted to less life choices and opportunities by culturally sanctioned gender rules imposed by society and some times perpetuated by girls themselves. This situation is reflected by their reluctance to participate in the fields of study that are traditionally considered as male domains. Society's perceptions and attitudes towards gender roles and responsibilities have great impact on the educational choice of girls. Consequently girls do not tend to persue, mathematics, pure or applied science in schools.

Math, science and technical fields have always been perceived as male dominated field. Psychological research has shown us that children as young as 2 ½ know which jobs are for women and that stereotyping increases with the age of the child.

Furthermore, stereotypes are consistent with children's early choice for themselves. In several studies, the large majority of girls give nurse or teacher as their occupational choice, where as boys give a much wider range of traditionally male occupation representing the science, trade, and professions. Some girls and young women may avoid careers they perceive as male-dominated because they fear disapproval from others ( Betz, 1997: 112 )

### 2.4.3 Institutional factor

#### 2.4.3.1 School organization and management

The intimacy and interaction of people with one another necessitated the importance of organization. As a result, organization deals with the structure and assigning of task to the respective workers in order to achieve the objective.

Accordingly, the administrator has responsibility to coordinate both the task and the people in an organization (Masie, 1987 ) in Assefa ( 2006 : 39 ).

Basically educational administration is the arrangement of the human and material resources and programmers available for the achievement of the educational objectives. Thus, the educational administrator, at any level is essentially an organizer and implementer (executor) of plans, policies and programmes. The educational administrator is a contributor, in one way or another, to the planning, policy- making and programmed designing, but yet his major role rests with the effective and efficient implementation of such plans, policies and programmes for the benefit of the learners.

Regarding the importance of organizational effectiveness for learning and better performance, Murphy and Lovis, (1999 ) and ( Roman, in Goddard, sweet land and Hoy, 200 :683 ) have this to say:-

A major challenge for those who study schools and school administration is to learn how organization contribute to students' success. Where as teachers are directly responsible for teaching in the class room. Administrators are charged with development of organizations that facilitates teaching and learning.

Generally, principals play a decisive role in learners' academic achievement if they are well equipped with the necessary and adequate knowledge and skills of educational management.

#### 2.4.3.2 The effect of teachers / teachers attitude /

Teachers are the most important inputs in schools; teachers are indispensable actors in the teaching learning process. The quality and attitude of teachers has a direct impact on the academic performance of students in schools in general and females in particular. In support of this the World Bank (2000:4) writes:-

The role of teachers was passed as a fundamental success factor in terms of what happens at school and in classroom. Indeed, teachers determine the behavior, attitude and performance of girls as well as the quality of teaching. They also influence the relationship between the school and the family.

In the same way, Odaga and Heneveld (1995:31) stated that teachers' attitude and the teaching practices have perhaps the most significant implication for females' persistence and academic performance. Accordingly, trained teachers with better qualification and experience could make a positive contribution towards students' performance.

However, studies specially, in Africa revealed that both female and male teachers believe that boys are academically better than girls. Evidence from Cameron, Sierra Leone, Malawi, Guinea and Rwanda indicated this (Anderson levity and others 1994, Brock and Cammish, 1991 in Odaga and heneveld, 1995:31).

A study by Genet (1998:43) revealed that both male and female teachers believe that female students have poor aptitude for some subjects like natural science and mathematics; such generalizations could work against the effect teachers make to help female students. In the same way Emebet,(200:36 ) indicated that most female students believe that their teachers do not think that they were good students and as a result they think that they are not being given recognition by the teachers.

Houston (1996) in Mastewal (2005: 36) indicated that girls get little attention and teachers often respond to them negatively, the result of this may lead females to develop fear and negative attitude towards their lesson and perform poor.

In Cameron, teachers indicate that they preferred to teach boys and they focused more on boys than on girls in the class room (Odaga and Hereveld, 1995:31).

#### **2.4.3.3 Peer groups.**

Peer may contribute to children's academic achievement since they are one of the most potent influences on the day -to- day behaviors of children at school.

Research on peer relation reveals that the quality of children relationship with their classmates is associated with school achievement (Bandura, Barbanelli, caparara, and posterlli, 1996 wentzel, 1991). Went, (1997) showed that children who were rejected by their peers had lower academic achievement scores than more popular children.

Similarly, longitudinal evidence has shown that early peer rejection predicts decrease in academic performance, whereas making a new friend in the class room was associated with gains in school performance (ladd, cited in Gvey et, al 1999). Thus, it is possible to assume that children who encounter problems with their peer relationship are likely to experience a school climate less conducive to learning than those who are well accepted by their classmates. Peers are more influential in situations involving friendship choices, challenges to authority, interpersonal behavior, and personal or group identity, (Britain, 1963) while parents are more influential in job, preferences, academic choices further aspirations and moral development.

On the other hand older siblings and peer groups have their own share of influence though peer influence is not seen as a significant factor in career choice (Bender, 1994). Friends influence each other in general and studies indicate that girls are more influenced by their peer than boys especially, at early ages (B. Kandel, 1981).

Girls are more vulnerable to the types of comments given by older siblings on their abilities and the career path they can take as girls (Bender, 1994).

Older siblings in Ethiopia are mostly not able to complete high school and join University or higher education (UNDP, 2002). Older sibling's success in education has an impact on girls because; they believe that they can also make it through their education and eventually their career (Bender, 1994).

#### **2.4.3.4 Lack of guidance and counseling.**

Most students in secondary schools are in the age range of 15 to 21 years (UNESCO, 1987) psychologists called this period "adolescence age" as a high complex transitional period from childhood to maturity.

During adolescence period students in secondary schools are subject to complex 'life difficulties' the situation causes poor performance on the part of the students (Garman and Brown 1989). Cooks (1982), in his detailed study in Cameroon found that age of puberty as a factor for female wastage in schools. To confirm this, UNESCO (1987: 123) states that:

Secondary school deals with students at a high complex and irresponsible age when an evolving personality is preparing for entry in to adult life...as stormy process of building up the personality ensues and this will require the guidance, orientation and counseling of pupils at secondary school.

Thus the condition calls up on trained counselors who can provide effective counseling service for secondary school students to adjust themselves to their school environment their home and their peers.

In light of this conviction, Yusuf (1982) in Haregwain and Yusuf (1994:6) pinpointed the following goal of counseling.

- (1) To identify the ability of the individual.
- (2) To maximize individual potentiality.
- (3) To utilize available resources effectively.
- (4) To maximize production for the benefit of the individual and the society.

Generally properly organized counseling service promotes females students performance.

In schools with fully implemented comprehensive guidance programs, students reported higher grades, students were more likely to report a positive school climate i.e. defined in terms of safety, order lines and belongingness (Iepan, et.al. 1997) in Kemer, (2007 : 23 ). UNESCO (1987: 123) also confirms that "poor progress" of students can be reduced or corrected by means of properly organized guidance and counseling services in secondary schools.

#### **2.4.3.5 Curriculum materials and other facilities.**

Teaching materials are the devices with instruction content or functions that use for teaching purposes.

##### **Text books**

Text books are one of the most important instructional materials in school for effective teaching learning process. Text books take a dominant place in the physical school from the first grade to the college. Text books are the single most important instructional materials because they deliver the curriculum.

Hence, many teachers refer to the text book, the teacher's guide and other instructional materials as a curriculum package, acknowledging its impact (Ornstein, 1992:167). Lockheed and others (1991: 46) show the key role of text books in the quality of education as follows.

Because text books deliver the curriculum, they are the single most important instructional materials. Nothing has ever replaced the printed word as the key element in the educational process and, as a result, text books are central to schooling at all levels. When text books are available, instructional time is not wasted.

Callahan and Leonard (1988:447), further elaborated the importance of text books in instruction. According to their view, of all the materials of instruction, the text book has the most influence on teaching content and method.

For most teachers, it has been the be-all and ends-all of their instructional life. They further state that many teachers would be practically helpless without text books, particularly beginning teachers and older ones whose knowledge of the subject is no longer adequate to the need of modern life.

It is possible to conclude from what has been stated above that experienced teachers of good preparation and superior abilities may employ the text book as their major source of knowledge along with other aids such as, Lectures, discussion, problems and visual and auditory aids.

Clark (1986: 287) advises how a text book should be used as follows:-

If it presents only one point of view, we must find to present other view points: if it is dull, we must supply spices: if it omits essential information, we must supply another source that will furnish the missing data. And finally, if the students will not read the textbook as opposed to can not read it, you must find some way to entice them.

It has to be noted that a text book must be supplemented by a wide variety of instructional materials. Regarding this point, Eric,(1998:205) states that many best teachers do not rely solely on text books or permit their instructional activities to be limited by it. He further suggests that the text book has an important function to serve in schools and the harm comes when, (1) Schools follow it rigidly by excluding other types or experience (2) teachers rely extensively on a dull, routine, recitation type or teaching centered around the text book. He thus suggests that text books should be used in schools not as the only means but that can be supplemented by other teaching materials.

### **The use of Libraries**

A library is regarded as a reception center for the assembly of communication of every description covering books, pamphlets, news papers, periodicals, maps, microfilms, photographic slides, and video tapes (Dean, 1972:18) these materials are systematically organized and arranged to enable users to easily identify the needed documents.

A school library serves a school's needs in that it is the working tool of education. A lively and effective teaching program in any school depends on a well organized library. The essential purpose of school library is to help students find the media of information which they need to carry out class room assignments and to satisfy their own personal interests.

#### **2.4.3.6 School Location.**

Long distance between home and the school de-motivate girls more than boys in educational enrollment. This is because girls may expose to threats while they traveled long distance to get schools. Because of this, parents fear for the safety of their daughters and make them reluctant to allow girls to attend school.

Geographical location of schools has an impact on the chances of going to school. Coombs (1985:228) reported that due to the location of schools students from rural areas are obliged to leave their parents for town where schools are located. This forced students to live in the absence of boarding facilities in rented house which may lead to low performance because of lack of parental help and control.

On the other hand as it is stated by (Khan, 1993) in the Alemayehu, (2006:21) ..... school location specified as the distance to the nearest school is often used as a major school supply and thus of the cost of attendance. Distance to school implies expense for travel, board, and lodging. If these costs are prohibitive, parents may send their children to stay with relatives who live closer to the school, or they may simply give up. Among the most problematic factors for girls are cost of travel to school (in time or hazards). In general, a series of studies have shown that the school location is found to be a barrier (deterrent to) and has considerable impact on academic achievement of girls.

#### **2.4.3.7 Affirmative Action**

Affirmative action is a policy component used first in the United State in the 1960s to increase opportunities for minorities by favoring them in hiring, promotion and college admission. Affirmative action has been used by government, business, or educational for making remedy to effect the past discrimination.

President John F. Kennedy first used the term affirmative action in 1961 to ensure that applicants are employed, and employees are treated during the employment, with out regard to race, creed, color, or national origin ( Frinkleman, 2000:1).

Affirmative action is an extension of the notion of equality of opportunity and not-discrimination. Therefore the purpose of affirmative action is to" overcome the effects of a past discrimination by enabling the person or groups discriminated against either on level terms with the favored group, more controversially to achieve equality outright "equal result".

Affirmative action program has end to promote equal opportunity among citizens to eliminate the existing discriminatory condition (Wirth, 2001:441).

In the discussion about positive discrimination in education, Wang (1983:194) has outlined the reasons for positive discrimination as: first, when the group or groups in question have suffered significant negative discrimination in the past and society must therefore make restriction for this injustice: and second when the groups have special rights in the society by virtue of certain historical position or constitutional provision. The author further mentioned different form of positive discrimination in education, these are, one by developing different qualifying standard for admission in to selective institution: two quotas (affirmative action), which enable policy makers to define at the outset the proportion of different groups of students to be represented in a given level of schooling.

#### **2.4.3.8. Controversies and challenges in affirmative action.**

The idea of affirmative action faced controversies in its application from its beginning in the United States when preferential treatment to people on their membership in a group was considered as a violation of principle that all individuals are equal under law. The opponents of affirmative action regard preferential treatment as a form of reverse discrimination (Frinkelman, 2000:1).

Moreover, the rival of affirmative action argues basically on the basis of competition and meritocracy. The other argument is that when students are admitted with low academic background, they would perform low in the educational institution admitted through quota or affirmative action policy. Moreover, they develop low self-esteem and frustration that will also contribute for the future performance (Ray and poonowassie in Degarege, 1998: 27). In connection with the negative effect of the affirmative action, Wang (1983:195) has noted the following:

*When students with very different achievements levels are admitted and the levels and quality of instruction in the admitting institution are not adjusted downward so as to accommodate the needs of students with poorer preparation and/or abilities, the groups that are supposed to benefit from the positive discrimination will not benefit at all as their students most likely will fail dropout.*

High dropout and repetition in educational system has a direct implication in the capacity of the institution in terms of efficient utilizations of scarce resource. If more students, for example females, are admitted to an educational institution the an affirmative action or quota system and if these students are expected to achieve equally in academic achievements without especial support to male students admitted based on competition, it becomes a mere wish of policy makers and management of the institution to make effective action program as a whole.

The other critics of affirmative action and its implementation in the area of employment according to Aeberhard (2001:442) is that" such measures start out as temporary and narrowly tailored to the goal to be achieved but end up permanent and broad and that within the favored group the benefit of the measure group disproportionately to those already at the top of the group in employment status".

The writer goes on discussing the argument against affirmative action in that in most of the cases there is no adequate data that shows real success and failure of affirmative action program and result distortions and inefficient in achievement.

The supporter of affirmative action contained that affirmative action policies are the only way to ensure an integrated society in which all segments of the population have an equal opportunity to share in jobs, education and other benefits. Despite its advantage, however, it remains a controversial issue in its justification and application ( Finkelman, 200:5)

In Ethiopia positive discrimination has been used as one way of increasing the number of women progressing to tertiary education. Consequently, female students are admitted with lower grade as compared to male students.

However, once they are admitted little or not attempt is made to address the possible differences in the capability of some of the female students (VSO Ethiopia, 2002). Hence, one of the critics is that the preferential admission policies harm academic standards (Abebeyehuy, 1989)

## Chapter Three

### Research Design and Methodology

#### 3.1. Research Method

A descriptive survey method was employed to conduct this study. This method is appropriate when the aim of the study is to explore the current status of the problem using data collected from a relatively large sample. The study was longitudinal, 1996-2000 because it is possible to compare the changes if any.

#### 3.2. Sources of Data.

The research setting included four (4) preparatory government schools (namely Nekemte, Gida Ayana, Sibul Sire and Mekonnen Demesew ) of East Wollega Zone. Female students, school principals and teacher respondents were selected to fill in the questionnaire. An interview was conducted with female students', guidance and councilors. The status of female student's stream choice and academic performance was checked from the document analysis, (rosters) against the promotion policy.

#### 3.3. Population and sampling techniques

The researcher has chosen East Wollega Administrative Zone as sample area of this study, because he is familiar with the area and has also been working in the area for many years. In this administrative zone there are 17 woredas and 5 preparatory schools, out of these, Nekemte, Gida Ayana, Sibul Sire and Mekonnen Demesew were selected based on the purposive technique.

One preparatory school was excluded, because it has served as preparatory school only for two years (recently up graded and can not provide necessary data). The total population in this study was 638 female students, out of which 201 were selected by systematic random sampling technique.

Besides this, the study includes 68 teachers selected from 175 teachers by systematic random sampling, because the technique is efficient to select the required samples easily. 4 school principals were selected by purposive sampling technique and filled in the questionnaire. The researcher believes that these samples can represent the total population and provide (give) the required information for the study.

The researcher administered the instruments in such away that the questionnaire prepared for students was administered in their respective schools during regular class period. Before the students start to fill out the questionnaire, the purpose of the study was explained by the researcher. In addition to the specific and general directions in the questionnaire, oral instructions were also given. Students were made to fill out the questionnaire without time limit. They were made not to discuss on the items as the response of one student may be influenced by the other. All the questionnaire administered to 201 and students was filled and duly returned.

The teachers' questionnaire was also administered by distributing it to 74 teachers and to be returned the next day. Female students and guidance and counselors interview was made at their respective schools. Concerning female students questionnaire the researcher has translated it in to local language (Afan Oromo) to avoid communications barrier.

#### **3.4. Pilot test**

Before the actual data collection the instruments were tried out in small scale to test and improve the instruments in one of the study site ( Nekemte preparatory school ). The pilot test was used to check the relevance of each item and necessary rearrangement and modifications were made on some items and those items which were not related to the issue were cancelled from the questionnaire.

The instruments used in the study were used to measure stream choice and academic performance of female students in the area studied. The instruments were administered to female students, teachers, school directors, guidance and councilors.

### 3.5. Data organization and Analysis

The data collected was tallied, tabulated and analyzed in terms of percentage. Data from interview was analyzed using narration. Based on the data analysis, interpretations was made and reached at certain findings. Finally, conclusions and possible solutions were recommended.

**Table 1. Distribution of respondents.**

Respondents	Nekemte	Gida Ayana	Sibu sire	Mekonen Damesew	Total
School principals	1	1	1	1	4
Guidance and counselors	1	1	1	1	4
Teachers	22	17	14	15	68
Students	57	51	45	48	201
Total	81	70	61	65	277

As indicated in the table above, four school directors and four counselors were selected by purposive sampling technique, and 68 teachers and 201 students were selected by systematic sampling technique.

## Chapter Four

### Presentation, Analysis and Interpretation of the data

#### 4.1 Distribution of male and female students' across field of study (streams).

To examine male and female students' field of study, students' enrollment since 2007 in preparatory schools have been used. Thus, the information collected was summarized and presented in table two. It should be noted that in preparatory schools the percentage of female students in each stream is calculated in relation to the total number of female students. Similarly the percentage of male students in their respective field of study is calculated in the same way for comparison.

As shown in the table 2 the total enrollment data of female students in social science stream for the last four years indicate an increasing trend, while natural science stream students enrollment was decreasing. Of the total 738 female students registered in preparatory program in the last four years 432 (58.53% ) were enrolled in social science streams and the rest 302 ( 41.46% ) went to natural Science stream. On the other hand during the last four years (2004 - 2007) out of the total number of grade 12 preparatory students, girls represent 15.24% comparing to 84.75% male students.

#### 4.2 Respondents' back ground

The questionnaire was distributed to 201 preparatory female students and all of the respondents properly filled in the questionnaire and duly returned the paper. Table 3. below indicates students' respondents by, age and marital status.

**Table 2. Age and marital status of female student respondents**

Educational program	Age						Marital status		
	16-20		21-25		Total			Fe.	%
	F	%	F	%	F	%	Single	195	97.01
Preparatory	180	89.55	21	10.44	201	100	Married	6	2.98
							Separated	-	-
							Total	201	100%

All of the students who filled in the questionnaire responded to all items in the questionnaire. As shown in the table, majority of the respondents 180 (89.55%) were aged from 16 to 20 years. This shows that majority of the respondents seem to be with in the appropriate age for secondary second cycle.

### 4.3 School Location (distance from students' home)

Traveling long distance from home to school is one of the causes for low academic achievement of students in secondary schools. The magnitude of the influence tends to be more severe for girls than boys Coombs, (1985: 228).

**Table 3.Distance of School from Students Residence**

Item	Female students responses.			
	Natural Science		Social Science	
School distance from your residence	F	%	F	%
Below 1 km.	32	32	12	11.88
1 km to 3km	41	41	27	26.73
3 km to 5km	27	27	59	58.41
More than 5 km	-	-	3	2.97
Total	100		101	

Table 3. indicates that 58.41% social science female student’s respondents travel three to five kilometers to school but only 27% natural science female students travel similar distance to school. On the other hand, about 32% natural science and 11.88% social science female students travel to school below one kilometer. Here, the data show that natural science female students travel short distance to school per day than social science students.

Generally, in the area under study female students from rural areas suffered from long distance to school due to the dispersed nature of secondary school placement in the area under study.

A number of students are forced to attend schools in other localities ( or woredas ) by leaving their homes for a week, months or semesters. Some of them visit their families on week ends to collect their food. Thus, a school distance found to have negative impact on the academic achievement of female students.

The back ground information about the respondents family residence obtained from the questionnaire is also summarized and presented in the table -5 - below.

**Table 4. Family residence of the students.**

Educational program	Residence										
	Natural science						Social science				
	Urban		Rural		Total		Urban		Rural		Total
	F	%	F	%	F	%	F	%	F	%	
Preparatory	59	59	41	41	100	100	38	37.62	63	62.38	101

About 59% natural science female students’ families were living in urban while only 41% of them live in rural. On the other hand about 37.62% of social science students’ families were living in urban and most families 62.38% were living in rural areas.

The presence of most of the social science students' families in rural areas would have negative effect on students' academic performance and field of study choice, since it is related to the long distance to be traveled and lack of information. In line with this, Teshome, (2003:6) states that girls who come from families in urban area are much more likely to enter, remain and perform in school than rural disadvantaged families.

**Table 5. Teacher respondents' qualification.**

Sex	Qualification					
	Diploma		Degree		Total	
	No	%	No.	%	No.	%
Male	10	13.51	59	79.72	69	93.24
Female	5	6.75	-	-	5	6.75
Total	15	20.27	59	79.72	74	100

Total number of teachers' respondents in preparatory schools was 74. Among the teacher respondents, the majority 69(93.24 %) were male and only 5(6.75%) were female. One may notably identify that females are under represented in educational programs. Regarding qualification of teacher respondents 59(79.72%) of them have BA or B.Sc. degree who are male.

The other back ground information about the teacher respondents was service years. The information is organized and presented below.

**Table 6. Service year of Teacher respondents**

Sex	Service Year													
	1-5 Year		6-10		11-15		16-20		21-25		>25		Total	
	N	%	N	%	%	No	%	No	%	No	N	%	N	%
Male	32	43.24	11	14.86	2	2.70	11	14.86	7	9.45	6	8.10	69	93.24
Female	3	4.05	2	2.70	-	-	-	-	-	-	-	-	5	6.75
Total	35	47.29	13	17.56	2	2.70	11	14.86	7	9.45	6	8.10	74	

As it is indicated in table 6. the over whelming majority, 48 (64.85%) of teacher respondents have ten and less than ten years service. Only about 35.15% of teacher respondents served more than 10 years. This shows that most of the teacher respondents have less experience which may have negative impact on the instructional process.

#### **4.4 Analysis of stream choice.**

##### **4.4.1 Family Environment and Student respondents' families socio- Economic background.**

The researcher questionnaire also contains items intended to obtain information regarding the Scio economic characteristics of the parents of female students. The rational behind was to identity whether the educational, occupational or economic status of parents had some influence on students' preference in selecting certain fields of study.

Thus, the response of female students to this item (question) is summarized below.

**Table 7. Educational status and Family occupation of parents of female students**

	Subject	Female students' stream choice					
		Parents educational status(mother and father )		Social science		Natural science	
				F	%	F	%
1	Do not read and write	118	30.56	62	16.06	56	14.50
2	Primary education	126	32.64	67	17.35	59	15.28
3	Secondary education	50	12.95	33	8.54	17	4.40
4	Diploma	82	21.24	31	8.03	51	13.21
5	Degree Level	10	2.59	4	1.03	6	1.55
<b>Occupation</b>				<b>No</b>	<b>%</b>	<b>No</b>	<b>%</b>
1	Government employed	79	20.46	29	7.51	50	12.95
2	Farmer	118	30.56	69	17.87	49	12.69
3	Merchant	65	16.83	30	7.77	35	9.06
4	House wife	56	14.50	35	9.06	21	5.44
5	Self Employed	68	17.61	34	8.80	34	8.80

As it is shown in table 7. about 30.56 % of both streams female students' parents (mother and father) have no education that means they can not read and write.

When we compare natural science and social Science female students' parents' education, about 25.29% social science students' parents do have primary or secondary educational status, while 14.76% natural science female students parents were diploma or degree holders.

Regarding female students' parents (Mother and Father) occupation 7.51% of social science students and 12.95% of natural science female students parents were government employed who were having monthly income. About 17.87% of social science and 12.69% of natural science female students parents were farmers. 9.06% of social science female students and 5.44% of natural science female students mothers were house wives without job and can not finance their daughters schooling.

From the summarized data we can generalize that regarding stream choices of social science students since 25.89% of their parents educational status was secondary and below secondary level students were not oriented what to choose or told to choose social science without considering daughters' interest or capability, 14.76% of natural science students' parents educational status were Diploma or Degree either the students were advised to join natural science stream and got the necessary financial, material support and academic work to remain in the stream or perform better.

Concerning families socio economic status according to the data gathered 12.95%, of natural science and 7.51% of social science female students' parents were government employees who have permanent monthly income to support the students schooling, here also natural science students' families were economically better than social science students' parents. Additionally about 9.06% of social science students' mothers were house wives without job.

In line with this Elliott and others, (1982:25) stated that, "socio economic status of parents has more influence on the schooling of girls than boys". The more educated the parents and the higher the status of their occupations and relatively high income the greater is the degree of influence they have up on individual's field of selection.

#### 4.4.2. Reasons for selecting a field of study.

Field selection was examined by asking female students to identify reasons in making decisions. In questionnaire, a total of six alternative reasons were given to the respondents. The responses were organized and presented in the table below.

Table 8. Reasons given for the choice of field of study by female students' respondents.

	Reasons	Respondents					
		Students			Teachers		
		F	%	Rank	F	%	Rank
a.	Because it suits their understanding level	69	34.32	1	23	31.08	1
b.	Because the stream relates to their daily activities.	8	3.98	6	9	12.16	4
c.	Because of the family advice	40	19.90	3	13	17.56	3
d.	Because of peer group advice	45	22.38	2	23	31.08	1
e.	Because of teachers' advice	27	13.43	4	5	6.75	5
f.	Because the stream is traditionally feminine course.	12	5.97	5	1	1.35	6

As indicated in the table above (Table 8) the most frequently identified reasons for selecting a field of study in preparatory schools were based on their understanding level, because of peer group advice and because of family advice.

More students, 69 (34.32 %) enter to the field based on their academic performance i.e. because it suits their understanding level. Some students indicated a preference for a field because of peer group advice 45, (22.38 %) others (19.90 %) declared that they chose the field because of the family advice.

As shown in table 8 above teacher respondents about 31% replied that why female students chose the stream they joined was, because the stream suits their understanding level, and the same respondents said because of peer group advice and family advice. Teachers opinion which says "they choose the stream because it suits their understanding level "is in line with the female students response.

**4.4.3. Significant persons education in shaping field of study choice.**

Female students were asked to rate the influence of significant person up on their decision on choice of field of study. The information obtained about the role of significant persons is presented in the table below.

**Table 9. Female students view regarding education of influential person in female students' stream choice.**

Whose education influences more in female students stream choice?	Response	
	No	%
Mother	135	67.16
Father	60	29.85
Both Mother and Father	6	2.98

According to table 9, the most significant education in shaping the female students' field choice is mothers' education. This finding is related to that of Tesfaye (1997: 25 -41) and Yelfign and others (1995: 64) which reported that mothers education is significantly associated with females' success striving, stream choice and gender role attitude.

#### 4.4.5 Female students counseling related questions.

Table 10. Female students response to guidance and counseling services.

Statements	Agree		undecided		disagree	
	No	%	No	%	No	%
(1). There is a professional guidance and counselor in Our school.	-	-	-	-	201	100
(2). I observed that our school counselor helps students on stream choice and academic problems.	57	28.35	70	34.82	74	36.81
3. When I face a problem, I consult the school counselor.	53	26.36	59	29.35	89	44.27
4. Our school counselor gives orientation to students on academic issues.	59	29.35	62	30.84	80	39.80
5. The counselor encourages me to do my best in the school.	64	31.84	58	28.85	79	39.30
6. The school counselor helps me to learn according to my interest and ability the stream I like.	60	29.85	55	27.36	86	42.78

High school students face various problems which often emanate from the nature and characteristics of being adolescent.

They also face emotional and psychological problems other than such problems that are shared commonly by high school students. High school girls have to face additional problems not necessarily faced by their male counterparts. Thus they seek help from variety of sources. Among this the school counselor is one. Lack of such a resource person seems to contribute improper stream choice and low academic achievement of female students.

All female students' 201(100%) respondents replied that there was no professionally trained guidance and counselor in their schools. But the counseling service was given by other subject teachers for example like civic and ethical education teachers as the researcher obtained information during interview with female students and counselors.

Even though non professional teachers were assigned for counseling services in the sample schools 74 ( 36.81% ) students respondents disagree with counseling rendered during female students stream choice and academic problems.

**Table 11. Teachers response on students counseling.**

Statements	Agree		undecided		disagree	
	No	%	No	%	No	%
1. There is a professional guidance and counselor in our school	-	-	-	-	74	100
2. I observed that our school counselor helps students on stream choice and academic problems	11	14.86	46	62.16	16	21.62
3. When they face problem students consult The school counselor.	19	25.67	36	48.64	18	24.32
4. Our school counselor gives orientation to students on academic issues	20	27.02	42	56.75	11	14.86
5. The counselor encourages students to do their best in the school.	15	20.27	43	58.10	15	20.27
6. The school counselor helps the students to learn according to their own interest and ability the stream that like.	14	18.91	45	60.81	14	18.91

As it can be observed in table 11. all teacher respondents 74 ( 100% ) confirmed that there were no professional guidance and counselors in their schools. This response relates to female students reply. About 46 (63.01%) also agree with students response i.e. non- professional teachers were giving counseling services but disagree with their counseling ability ( quality ) on female students stream choice and academic problems. Similarly the researcher formulated some questions to investigate how often female students were provided with guidance and counseling service during stream choice. Results from responses were summarized as follows.

**Table 12. Teachers' response on guidance and counseling services given to female students during stream choice**

Teachers response	Always		Some times		Not at all	
	No	%	No	%	No	%
How often female students get guidance and counseling service.	2	2.70	55	75.34	16	21.91

As shown in the table 12 above 55 (75.34 ) of the teachers responded that female students were given counseling services some times. This indicates that female students were not informed satisfactorily how they choose field of studies. Even though they were given counseling services as both counselors and females students replied during interview, teachers who gave the counseling service were not professionally trained ones.

**4.4.7 Teachers' and female students' view on the area of study female students join.**

Teachers and female students were asked to identify the study area which most female students prefer to join and the result is presented in the table below.

**Table 13. Teachers' and female students' response**

Subject	Teachers				Students			
	S. Science		N. Science		S. Science		N. Science	
	No.	%	No	%	No.	%	No.	%
Which stream do you think most female students prefer to join	64	86.48	10	13.51	182	90.54	19	9.45

According to table 13 teachers and female students responded to which stream most female students prefer to join and 86.48% of teacher and 90.54% female student respondents replied that female students prefer to join social science stream.

This is related to Baden. (1993,) Beoku Bett and Logan, (1993 ), who state in their study that girls are often stream out science and mathematics fields in to the traditional female subjects that led them in to education, health and administrative support employment.

#### 4.4.8. Extent of parents educational status influencing female students stream choice.

To identify the effects of parents educational status in influencing female students stream choice teachers and female students were asked in the questionnaire and their reply was as follows.

**Table 14. Teachers' and female students' response to parents' educational status.**

Item.	respondents	Very strongly	%	Strongly	%	Average	%	Little	%	Not at all	%
To what extent do parents educational status influences female students stream choice?	Teachers	12	16.21	36	48.65	14	18.91	9	12.16	3	4.05
	Students	48	23.88	104	51.74	27	13.43	17	8.45	5	2.48

As shown in table 14. above 48 (64.86%) of teachers and 152(75.62%)students replied very strongly and strongly for the question "to what extent do parents educational status influences female students stream choice? ".The response is in line with the study of King and Hills (1991:228) which stated that parents who are educated might have a positive attitude about female education or provide a more stimulating environment for education than other parents.

#### 4.4.9 Parents' educational status in influencing students stream choice

Table 15. Teachers and female students view.

Item	respondents	Father's		Mothers'		Both are equal.	
		No	%	No.	%	No	%
		teachers	20	27.02	45	60.81	9
Whose educational status do you think matters more in female students stream choice?	students	63	31.34	103	51.24	35	17.41

As can be observed in table 15. 60.81% teacher respondents and 51.24 % female students reported that mothers educational status matters more in female students stream choice. This response is related to the result of the study of Yelfign and others (1995:64) which states that mothers education increases the likelihood of girls education.

#### 4.5. Factors influencing female students' performance.

Table 16. Grade 12 first semester average Exam, result in 2007/2008.

Respondents range	Social science		Natural science	
	Frequency	%	Frequency	%
60-70%	90	44.77	44	21.89
71-80%	9	4.47	40	19.90
81-90%	2	0.99	16	7.96
91-100%	-	-	-	-
Total	101	50.23	100	49.75

Source sample schools record office.

As presented in table 16. above 44.77% of social science students achieved 60-70% while 21.89% of natural science female students achieved the same score. On the other hand 0.99% social science female students performed 81-90%. About 7.96% of natural science students achieved 81-90%. Generally natural science female students were better achievers according to the data.

#### **4.5.1 Female students response to factors influencing performance.**

Knowing the factors influencing performance of female students in preparatory school is important for the concerned body and to address the problem of female students in their education. There are several factors that impede the academic performance of female students. Thus female students were asked to indicate items that they believe as factors influencing

Table 17 Female students response towards the factors influencing their performance

Factors which may impede female student's academic performance.	Respondents																			
	Natural science										Social science									
	v.h		h.		av.		l.		v.l		v.h		h.		av.		l.		v.l	
A. Institutional factors.	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
1.Lack of text books	16		15		19		30		20		17		25		20		17		22	
2. Lack of reference book	20		17		20		25		17		26		20		19		19		17	
3. Lack of orientation.	25		19		19		20		17		20		16		18		26		21	
4. lack of counseling service	45	45	29	29	14	14	10	10	-	-	53	53	41	41	6	6	8	8	-	-
5. The school forces to join	-	-	-	-	-	-	2	-	98	-	-	-	-	-	3	-	5	-	93	-
6. Lack of library services	70	70	9	9	9	9	12	-	-	-	81	81	4	4	6	6	5	5	5	-
7. School distance from ...	43	43	11	11	20	20	15	15	11	11	51	51	15	15	20	20	13	13	2	2
8. Irrelevant curriculum to female students need.					8		20		72				4		12		17		68	
9. Application of affirmative action ( positive discrimination )					14		21		65				13		19		41		28	

Factors which may impede female student's academic performance.	Respondents																			
	Natural science										Social science									
	v.h		h.		av.		l.		v.l		v.h		h.		av.		l.		v.l	
B. Teacher's related factors	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
1. Teachers poor educational back ground.	-	-	-	-	59		21		20						62		17		22	
2. Lack of teacher's support.	64	64	19	19	7	7	10	10	-	-	66	66	15	15	14	14	6	6	-	-
3. Teachers ineffective instructional method.	-	-	54	-	12	-	10	-	24	-	-	-	6	-	15	-	29	-	51	-
4. Teachers' low expectation of females ability.	68	68	17	17	9	9	6	6	-	-	47	-	15	-	18	-	17	-	4	-
5. Too difficult exams set by teacher.	21	-	12	-	8	-	25	-	44	-	40	40	23	23	18	18	11	11	9	9

The result in table 17 (A and B) institutional (service and facilities) related factors convey that 94% and 74 % social and natural science female students respectively replied that lack of guidance and counseling service, and 85% and 79% lack of library services 66% and 54% of social and natural science respectively indicated school distance from female students' home very highly or highly influential factors for low academic achievement of female students.

Table 17. additionally presents the analysis of teacher related factors. Accordingly 83% and 81 % social science and natural science female students respectively agree with lack of teachers' support and 85% natural science students pointed out also teachers low expectations of female students' ability of getting good grade but 63% social science students reported too difficult exams set by teachers were the factors which highly contributes to female students' low performance.

Factors which may impede female student's academic performance.	Respondents																			
	Natural science										Social science									
	v.h		h.		av.		l.		v.l		v.h		h.		av.		l.		v.l	
C. Students related factors	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
1. Less effort in studying	20	-	16	-	18	-	19	-	27	-	51	-	34	-	11	-	5	-	-	-
2. Female students low interest					11	-	60	-	29	-	24	-	26	-	18	-	18	-	15	-
3. Absenteeism of female students							65	-	35	-	-	-	-	-	60	-	29	-	12	-
4. English language difficulty	43	-	31	-	14	-	12	-	-	-	42	-	24	-	17	-	11	-	7	-
5. Family responsibility	57	-	25	-	7	-	11	-	-	-	62	-	29	-	10	-	-	-	-	-
6. Poor primary school education back ground.	37	-	21	-	21	-	15	-	6	-	29	-	42	-	12	-	10	-	8	-
7. Low self confidence	12	-	18	-	31	-	30	-	9	-	49	-	47	-	5	-	--	-	-	-
8. Disciplinary problems	-	-	14	-	17	-	30	-	29	-	-	-	-	-	32	-	28	-	41	-

Factors which may impede female student's academic performance.	Respondents																					
	Natural science										Social science											
	v.h		h.		av.		l.		v.l		v.h		h.		av.		l.		v.l			
D. parents related factors	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%		
1. Lack of parental financial supp.	62	-	21	-	17	-	-	-	-	-	-	-	65	-	17	-	17	-	2	-	-	-
2. Lack of parental moral supp.	-	-	46	-	48	-	-	-	6	-	42	-	21	-	27	-	7	-	4	-	-	-
3. Mother's poor education.	51	-	16	-	27	-	6	-	-	-	54	-	19	-	20	-	8	-	-	-	-	-
4. Father's poor education	42	-	10	-	29	-	19	-	-	-	32	-	12	-	18	-	10	-	29	-	-	-
5. Mothers low occupa. Status.	-	-	-	-	67	-	9	-	24	-	-	-	-	-	45	-	25	-	31	-	-	-
6. Fathers low occupa. Status.	40	-	32	-	12	-	12	-	4	-	38	-	34	-	13	-	11	-	5	-	-	-
7. Lack of parental follow up	-	-	67	-	24	-	9	-	-	-	57	-	39	-	5	-	-	-	-	-	-	-
8. Parents low expectation about female academic performance.	-	-	-	-	45	-	27	-	46	-	71	-	19	-	11	-	-	-	-	-	-	-

Table 17 (C and D) students and parents related factors the researcher also tried to collect data on students and parents related factors in influencing female students academic performance. Both social and natural science female students responded on both factors differently.

Social science students replied on students related factors i.e. female students low self confidence 96%, family responsibility 91% and less effort in studying 85% were factors for low achievements of female students. Natural science students on the other hand responded the factors as 74% English language difficulty and 82% of them indicated female students share of family responsibility as potential factors.

Regarding parental related factors social science female students replied the following factors as major ones.

- Lack of parental follow up 96%, parents low expectation about female students' academic performance 90% and lack of parental financial support 82% respondents were replied that these factors being the reason for low academic achievement.
- Natural science students indicated other factors, like lack of parental financial support 83%, fathers' low occupational status 72% and mothers' poor educational back ground 67%

**Table 18. Teachers response to factors influencing female students performance**

	Very high		High		Average		Low		Very low	
	No	%	No.	%	No.	%	No	%	No	%
<b>A. Institutional ( service and facilities ) related factors.</b>										
1.Lack of text books	8		9		24		16		16	
2.Lack of reference books	13	17.56	24	32.43	18		12		6	49.99
3. Lack of orientation	16		17		28		6		7	
4.Lack of guidance and counseling service	35	47.29	15	20.27	10		9		5	67.56
5. forcing students to join the stream which is not their choice	16		9		8		15		24	
6. Lack of school library services	14	18.91	26	35.13	6		17		12	54.04
7.School distance from students home	18		10		26		13		6	
8. Irrelevant curriculum to the female students needs.	5		17		16		21		14	
9.Application of Affirmative action ( positive discrimination )	4		23		17		15		13	
<b>B. Teacher related factors</b>										
1. Teacher's poor education back ground	15		10		10		11		28	
2. Lack of teachers' support.	8		17		18		20		11	
3.Teachers' ineffective instructional method.	13	17.56	23	31.08	14		16		9	
4. Teachers low expectation of females'	11		12		14		15		22	
5. Too difficult exam, set by teachers.	3		6		10		33		22	

As can be observed from table 18. teachers were asked about factors influencing female students' academic performance and responded as follows.

Institutional (service and facilities) related factors. 49.99% of teacher respondents indicated that lack of reference books, 67.56% of them replied lack of guidance and counseling services and 54.04% of teachers agree that lack of school library services very highly or highly influence female students performance. On the other hand 48.64% teacher respondents also responded to teacher related factors i.e. teachers' ineffective instructional method highly influences academic performances of female students.

	Very high		High		Average		Low		Very low	
	No	%	No.	%	No.	%	No.	%	No.	%
<b>C. Students related factors</b>										
1. less effort by female students in studying	40	54.05	25	33.78	6		2		1	87.83
2. Female students low interest	16		33		17		7		1	
3. Absenteeism of female students	25		10		20		16		3	
4. English Language difficulty	40	54.04	21	28.37	10		3		-	82.42
5. Family responsibility	31		22		14		6		1	
6. poor primary school education back ground.	51	68.91	12	16.21	6		5		-	85.12
7. Female students' low self confidence	41	55.40	25	33.78	4		4		-	89.18
8. Students disciplinary problem	16		22		14		16		4	
<b>D. Parental related Factors</b>										
1. Lack of parental financial support.	17	22.97	26	35.13	15		9		7	58.10
2. Lack of parental moral support.	21	44.59	30		14		7		2	
3. Mother poor educational background.	33		26	35.13	10		5		-	79.72
4. Father poor educational back ground	20		29		19		3		3	
5. Mother's low occupational status	15		29		23		6		1	
6. Fathers' low occupational status	15	52.70	20		28		9		2	
7. Lack of parental follow up.	39		27	36.48	7		1		-	89.18
8. Parents low expectation about female students academic performance	24	32.43	35	47.29	12		3		-	79.72

Table 18. also indicates that teachers response to student related factors and replied that female students' low self confidence, female students low interest, female students poor primary school education back ground and English language difficulty influences females' academic performance.

Parents related factors were also examined and 89.18% of teacher respondents reported that lack of parental follow up 79.72% respondents confirmed that mothers' poor educational back ground and parents' low expectation about female students' academic performance and 58.10% respondents responded to lack of parental financial support are the potential factors very highly or highly influence female students' academic performance.

#### **4.5.5 Availability of teaching learning materials.**

Exposure to curriculum materials will develop sex role, which will bring impacts on the students' discipline choices and there by put a pressure on their future careers (Obura, A. 1991). The researcher then tried to measure availabilities of teaching learning materials asking students and teachers.

**Table 19. Students' and teachers' response to the availability of teaching learning materials**

	Teaching learning materials	Students			Teachers		
		Adequately available	Moderately available	Not Available	Adequately Available	Moderately Available	Not available
1.	Reference books	-	141	60	-	56	18
2	Hand outs	-	70	131	1	20	53
3	Text books	89	82	31	48	26	-
4	Charts/ Diagrams	-	84	117	7	44	23
5	Black board	121	44	36	45	24	4

The quality and availability of educational materials is the most important factor in the success of teaching process. Students should be supplied with the necessary teaching materials, (Combs 1985: 117). In line with this the above table presents students and teachers response.

One can easily observe from table 19 that 131(65.17%) female students and 53(71.62%) teachers reported that handouts were not available in their preparatory schools and 117(58.20%) students and 23(31.08%) teachers replied that charts/diagrams were not available. Even though these teaching learning materials are essential for instructional purposes, the schools could not provide the students.

## Chapter Five

### 5. Summary, conclusions and Recommendations

#### 5.1. Summary

One of the aims of this study was to identify the impact of stream choice on academic performance of female students in preparatory schools of east Wollega Zone. In order to attain the desired objectives, the following procedures were undertaken: relevant documents were investigated from various relevant sources; questionnaires were prepared and distributed to relevant source of population, dependent and independent variables were identified and defined: tools for data collections were developed: and finally, the data was analyzed and interpreted.

The study was carried out in four preparatory schools' of east wollega zone that were purposively selected. The subjects of the study were a sample of female students, teachers, school principals and guidance and counselors. To gather the necessary data from the sample population, questionnaires were provided to female students, teachers, school directors and counselors. Moreover, unstructured interview were carried out with the female students and school counselors. The status of the female and male academic achievement in the sample schools were assessed from documents of sample school record offices. The data obtained were analyzed using percentage, to see whether the response of female students and teachers on identical items were consistent or not. Depending on the results of the analysis made, the following major findings were obtained.

1. Female students in social science stream for the last four years indicate an increasing trend while natural science stream students' enrollment was decreasing. Of the total 738 female students registered in preparatory program in the last four years 432 ( 58.53% ) were enrolled in social science streams and the rest 302 ( 41.46% ) went to Natural Science stream. (see Appendix D)

2. In grade twelve 2007/08 first semester class examination 44.77% social science stream female students scored 60-70% as only 21.89% of natural science scored similar marks. About 7.96% natural science female students scored 81-90% but 0.99% social science female students scored the same result. Generally the data show that natural science female students are better achievers than social science students.
3. More than half 62.38% of social science female students were living in rural area while families of natural science who were living in rural areas were 41.00%. This difference indicates that more social science female students were exposed to long distance travel to school and lack of information which may result in problem of choice of stream and low performance due to lack of study time.
4. Regarding family occupation 7.51% and 7.77% social science female students occupation were government employee and merchants respectively while families of natural science students' occupation were 12.95% government employee and 9.06% were merchants who may have constant income to support students schooling. It is observable from the data that natural science students' families were more than social science students' families in having constant income to support their daughter.

Concerning female students stream choice both stream (social and natural science) students and teacher respondents agree with the fact that female students stream choice suits to their understanding level, peer group advice (influence) and family advice. Peer group advice and family advice without considering interest, educational back ground and current capability of the student may have negative effect on performance.

Responses on counseling related questions according to the data gathered, both teacher, female students and appointed counselors at sample schools pointed out that there were no professionally trained teachers in all preparatory schools. But counseling services were given by non-professional teachers. About 44.27% female students respondents disagree that they never consult the counselor on any academic issues. But during adolescence period students in secondary schools are subject to complex life difficulties, such situation may cause poor performance on the part of the students, and it calls for trained (professional) counselor.

UNESCO also confirms that “poor progress” of students can be reduced or corrected by means of properly organized guidance and counseling services in secondary schools.

5. Institutional related factors such as lack of guidance and counseling service, lack of library services and school distance from female students’ home were the major factors for the low academic performance. Concerning teacher related factors both stream students indicated lack of teachers’ support and natural science students additionally pointed out teachers low expectation of female students’ ability of getting good grades Social science students agree with the problem of too difficult exams set by teachers were factors for low performance.

Family related factors were replied by female students as follows.

6. Social science students believe that students’ related factors which contribute to low performance were female students’ low self confidence, family responsibility and less effort in studying. On the other hand natural science female students indicated English language difficulty and family responsibility. In line with this Njeuma (1993) in Emebet (2000) stated . . . female students are required to help their mothers with domestic activities and look after young children.

7. Family related factors which both stream students agree with, was lack of parental financial support. But natural science students supplemented mothers' poor educational back ground. Social science students indicated that lack of parental follow up and parents' low expectations about female students academic performance as the other factors.

In line with this, Teshome, (2002:41) states that the community in general and parents in particular have little hope that females can be successful in their education.

Teacher respondents' response on the factors affecting female students' academic performance are found to be lack of reference books, lack of counseling services, lack of school library services, female students low self confidence, low interest, English language difficulties, mothers' poor educational back ground, lack of parental follow up and parents' low expectations about female students' academic performance as potential factors for low performance.

Generally both students and teacher respondents, which they agree as the factors for low female students academic performance were,

- lack of guidance and counseling service,
- lack of reference books
- lack of adequate library services
- female students low confidence and interest
- english language difficulty
- mothers poor educational background; and
- parents low expectations about female students academic performance.

Concerning stream choice, individual students' interest peer group influence and family pressure or influences were the main factors for female students' stream choice.

## 5.2. Conclusions

Based on the analysis of findings, it can be concluded that in grade twelve 2007/08 first semester class examination 44.77% social science stream female students scored low marks where as only 21.89% of natural science students scored low marks. This indicates that natural science female students were better in achievers than social science students of the same grade. For this low performances of social science students the contributing factors seem to be, most of their families living in rural areas and lacking information and exposed to long distance to be traveled which results in shortage of time for study.

Natural science students' families educational status were 14.76% Diploma or Degree level, but the social science students' families educational status were 9.06% Diploma or Degree level. This shows that natural science students having more educated families performed better than social science students as it was showed in grade twelve class examination result of 2007/08 academic year.

Other factors which contributed for better academic performance of natural science female students were,

- More of their parents were government employed and merchants who have constant income to support students' schooling.
- More than half of their families were living in urban areas where access of information and basic facilities are sufficient.
- Lack of teaching materials like handouts and charts and diagrams were replied as other related factors. Similarly library services and counseling rendered by non professional teachers were poor and contributed to low performance of female students who joined social science stream and perform lower than female students who joined natural science stream, but more female students preferred to join social science stream in the last four academic years.

Therefore stream choice and academic performance of female students in Preparatory schools of east wollega Zone was the function of selected school related and out of school variables.

### 5.3 Recommendations.

On the basis of the findings and the conclusion drawn, the following recommendations were put forward:

1. Preparatory schools should discuss with woreda and Oromiya regional state education bureau and train counseling teachers to provide students detailed orientation about each stream during stream choice.
2. Preparatory schools should work on avoiding external pressures during stream choice and letting free female students by counseling female students' families and the peer groups.
3. Preparatory schools are expected to advice female students before stream choice that they have to be based on their general high school performance and their capacity in managing the stream
4. Woreda education office and schools should jointly acquaint the families in order to invest their money and material as much as possible for the successful achievement of their daughters and convince that they have to believe that female students can exert equal effort as males in education.
5. Preparatory schools should enrich their libraries with reference books and necessary materials to nourish the students with sufficient knowledge for the well being of better performance.
6. Schools should organize discussion panels with students families to reduce gender disparities and reflect that female students are capable and can succeed in education if provided with necessary familiar, school and societal support.
7. Oromia regional state Education Bureau, Zonal education office and Woreda education office together with the community should jointly work to resolve problems of access of preparatory schools in Woredas, as many female students in rural areas are walking for a day in search of preparatory schools.

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# Appendices

## **Appendix A**

Addis Ababa University

School of Graduate Studies

Faculty of Education

Department of curriculum and Teachers

Professional Development studies.

Questionnaire to be filled by teachers and school principals of preparatory schools in East Wollega Zone.

### **Dear teachers and school principals**

The purpose of this research is to study Female student's stream choice and academic performance in preparatory schools. The result of the study is expected to indicate problems related to female students stream choice and performance which will help to provide some suggestions / recommendations on how to overcome the problem. Your experience and suggestions are worth while for the study and I am confident you appreciate the efforts and cooperate by offering honest and frank responses.

**Thank you for your cooperation in advance.**

Direction

- No need of writing your name.
- Put "X" mark in the box where alternative answers are given.
- If you do not get any satisfying answer among the given alternatives, you can write your answer, on the space provided for the options " other please, specify"

1)Back ground Information

Name of the school \_\_\_\_\_

(a) Sex

(a) Male \_\_\_\_\_ (b) Female \_\_\_\_\_

(b) Age \_\_\_\_\_

(c) Academic qualification

(a) T.T.I \_\_\_\_\_

(b) Diploma \_\_\_\_\_

(c) B.A/ B.Sc. \_\_\_\_\_

(c) M.A. / M.Sc. \_\_\_\_\_

(d) Service year \_\_\_\_\_

1. Indicate the extent of availability of the following teaching. Learning materials in the school use “x” mark to the corresponding answer.

Teaching learning materials	Adequately available	Moderately Available	Not avail.
Reference books			
Handouts			
Text books			
Charts / Diagrams			
Black board			

2. Indicate the conditions of the following services in your school use “x” mark to the corresponding answer.

Services	Excellent	Very good	good	poor	Not Available at all
Library					
Guidance and Counseling					
Telephone					
Refreshment					

- (3) Which stream ( area of study ) do you think most female students join?

(a) social science  (b) Natural science

- (4) Why most female students prefer to join that stream. Put the following alternatives in sequential order (from the least to the highest)

- (a) because it suits their understanding level
- (b) because the stream relates to their daily activities
- (c) because of the family advice
- (d) because of per group advice
- (e) because of teachers' advice
- (f) because the stream is a traditionally feminine course

**(5) How often do female students get guidance and counseling service during stream choice?**

- (a) Always  (b) Some times   
(c) Little  (d) Not at all

**(6). To what extent do parents educational status influences female students stream choice?**

- (a) Very strongly  (b) strongly  (e) not at all   
(c) average  (d) little

**(7) If your response to question number -7- is "A" or "B" whose education do you think matters more?**

- (A) Father's education  (B) Mothers' education   
(C) Both have equal influence

**(8). Do you think that peer groups influence stream choice in female's education?**

- (a) Yes (b) No (C) Don't know

**(9) What factors influence female students stream choice in preparatory schools.**

**Please, specify them according to their levels.**

- (a). \_\_\_\_\_  
(b). \_\_\_\_\_  
(c). \_\_\_\_\_  
(d). \_\_\_\_\_  
(e). \_\_\_\_\_

10 The following are factors that may affect the academic performance of female students in preparatory schools. Indicate the extent to which each impede the academic performance using “X” mark.

5- Very high

4- High

3- Average

2- Low

1- Very low

Factors that affect the academic performance of female students		5	4	3	2	1
<b>A</b>	<b>Institutional ( services and facilities ) related factors</b>					
	- Lack of text books					
	- Lack of reference books					
	- Lack of orientation ( education program)					
	- Lack of guidance and counseling service					
	Forcing the students to join the department which is not their choice					
	Lack of school Library services.					
	School distance from student’s home					
	Irrelevant curriculum to the female students’ needs					
	Application of Affirmative action ( Positive discrimination )					

<b>B. Teacher related Factors</b>	5	4	3	2	1
Teachers' poor educational back ground					
Lack of teachers' support					
Teachers' ineffective instructional method					
Teachers low expectation of females' ability of getting goods grades					
Too difficult exams set by teachers					
Others please specify _____					
<b>C. Student Related Factors</b>					
- Less effort by female students in studying					
- Female students low interest					
- Absenteeism of female students					
- Language difficulty ( English )					
- Family responsibility ( Child care )					
Poor primary school education back ground					
Female students' low self confidence					
Students disciplinary problem					
Others please specify _____					
<b>D. Parent related factors / socio economical /</b>					
- Lack of parental financial support.					
- Lack of parental moral support					
- Mother poor educational back ground					
- Father poor educational back ground					
- Mother's lower occupational status					
- Fathers lower occupational status					
- Lack of parental follow up					
-Parent's low expectation about female academic performance					
- Others please specify					

**(11) Counseling related questions**

No	Statement	Response categories		
1.	There is a professional guidance and counselor in our school.	Agree (3)	Undecided (2)	Disagree (1)
2.	I observed that our school counselor helps students on stream choice and academic problems			
3.	When they face problem students consult the school counselor			
4.	Our school counselor gives orientation to students on academic issues			
5.	The counselor encourages the students to do their best in the school.			
6.	The school counselor helps students to learn according to their own interest and ability the stream they like.			

## Appendix B

Addis Ababa University

School of Graduate Studies

Faculty of Education

Department of curriculum and Teachers

Professional Development

Questionnaire to be filled by female students of preparatory schools in East Wollega Zone.

Dear Students

The purpose of this research is to study Female student's stream choice and academic performance in preparatory schools. The result of the study is expected to indicate problems related to female students stream choice and performance which will help to provide some suggestions / recommendations on how to overcome the problem. Your experience and suggestions are worth while for the study and I am confident you appreciate the efforts and cooperate by offering honest and frank responses.

**Thank you for your cooperation in advance.**

## Direction

- No need of writing your name.
- Put "X" mark in the box where alternative answers are given.
- If you do not get any satisfying answer among the given alternatives, you can write your answer, on the space provided for the options " other wise please, specify"

### 1- Back ground information.

1.1 Name of the preparatory school you are attending \_\_\_\_\_

#### 1.2 Age

- 16 - 20
- 21 - 25
- 26 - 30
- 31 - 35
- Above 35 years

#### 1.3 Marital status

- Single
- Married
- Separated / divorced /

#### 1.4 Place of your residence before joining the preparatory school.

- Rural area / Country side
- Town

#### 1.5. How long is the school distance from your residence in km?

- a) Below 1 km                      b) 1 km to 3km                      c) 3.5 km to 5 km
- d) 5.5 km and above

**1.6 What is your department /stream/?**

- a) Natural science
- b) social science

**2. Information on students' parents**

**2.1 Indicate your parents' level of education. If they have graduated from more than one educational institute indicate the highest one.**

Level of education	Mother's	Father's
Do not read and write		
Primary Education		
Secondary education		
Diploma		
Degree level		

**2.2 Indicate your family's Occupation by using "x" mark**

	Occupation	Mother	Father
1	Government employed		
2	Farmer		
3	Merchant		
4	House wife		
5	Self employed		

3. What was your grade ten National examination result? \_\_\_\_\_

4. What is your result at present (in the preparatory school)?

Semester average \_\_\_\_\_

5. Indicate the extent of availability of the following teaching learning materials in the school use "x" mark to the corresponding answer.

Teaching learning materials	Adequately available	Moderately Available	Not available	Don't know
Reference books				
Handouts				
Text books				
Charts / Diagrams				
Black board				

6. Indicate the conditions of the following services in your school use "x" mark to the corresponding answer.

Services	Excellent	Very good	good	Poor	Not available
Library					
Guidance and Counseling					
Telephone					
Refreshment					

7. Which stream ( area of study ) do you think most female students join?

- (a) social science      (b) Natural science

**8. Why most female students prefer to join that stream. Put the following alternatives in sequential order.**

- (g) because it suits their understanding level
- (h) because the stream relates to their daily activities
- (i) because of the family advice
- (j) because of per group advice
- (k) because of teachers' advice
- (l) because the stream is a traditionally feminine course

**9. How often do female students get guidance and counseling service during stream choice?**

- (a) Always  (b) Some times   
(c) Little  (D) Not at all

**10. Whose education do you think influences more in female students' stream choice?**

- (A) Father's education  (B) Mothers' education   
(C) Both have equal influence

**11. Do you think that peer groups influence stream choice in female's education?**

- (a) Yes  (b) No (C) Don't know

**12. What factors influence female students' stream choice in preparatory schools?**

**Please, specify them according to their levels.**

- (a). \_\_\_\_\_  
(b). \_\_\_\_\_  
(c). \_\_\_\_\_  
(d). \_\_\_\_\_  
(e). \_\_\_\_\_

13. The following are factors that may affect the academic performance of female students in preparatory schools. Indicate the extent to which each impedes the academic performance using “X” mark.

5- Strongly agree

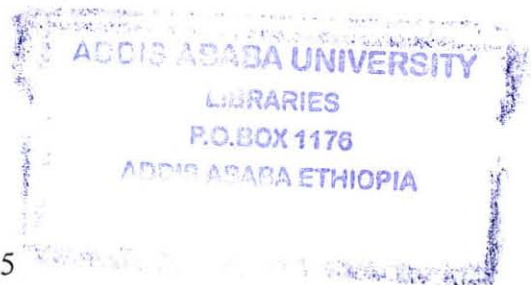
4- Agree

3- Undecided

2- Disagree

1- Strongly disagree

	Factors that affect the academic performance of female students	5	4	3	2	1
A	<b>Institutional ( services and facilities ) related factors</b>					
	- Lack of text books					
	- Lack of reference books					
	- Lack of orientation ( education program)					
	- Lack of guidance and counseling service					
	Forcing the students to join the department which is not their choice					
	Lack of school Library services.					
	School distance from student’s home					
	Irrelevant curriculum to the female students’ needs					
	Application of Affirmative action ( Positive discrimination )					



<b>B. Teacher related Factors</b>	5	4	3	2	1
Teachers' poor educational back ground					
Lack of teachers' support					
Teachers' ineffective instructional method					
Teachers low expectation of females' ability of getting goods grades					
Too difficult exams set by teachers					
Others please specify _____					
<b>C. Student Related Factors</b>					
- Less effort by female students in studying					
- Female students low interest					
- Absenteeism of female students					
- Language difficulty ( English )					
- Family responsibility ( Child care )					
Poor primary school education back ground					
Female students' low self confidence					
Students disciplinary problem					
Others please specify _____					
<b>D. Parent related factors / socio economical /</b>					
- Lack of parental financial support.					
- Lack of parental moral support					
- Mother poor educational back ground					
- Father poor educational back ground					
- Mother's lower occupational status					
- Fathers lower occupational status					
- Lack of parental follow up					
-Parent's low expectation about female academic Performance					
- Others please specify					

**(14) How do you assess the effort of male students in doing assignments**

- Female exert equal effort as males in doing assignments.
- Females exert less effort than males in doing assignments.
- Females exert more effort than males in doing assignments
- I can't decide

**(15) How do you assess females' participation in asking questions?**

- Females ask questions as frequently as males.
- Females ask questions less frequently than males
- Females ask questions more frequently than males .
- I can't decide.

**(16) How do you assess females' participation in answering questions**

- Females answer questions as frequently as males
- Females answer questions less frequently than males
- Females answer questions more frequently than males
- I can't decide

**(17) Counseling related questions**

No	Statement	Response categories		
1.	There is a professional guidance and counselor in our school.	Agree (3)	Undecided (2)	Disagree (1)
2.	I observed that our school counselor helps students on stream choice and academic problems			
3.	When I face a problem, I consult the school counselor.			
4.	Our school counselor gives orientation to students on academic issues			
5.	The counselor encourages me to do my best in the school.			
6.	The school counselor helps me to learn according to my own interest and ability the stream I like.			

## Appendix C

### Interview for Female students

- (1) Do you believe that you are equal to boys in this school?
- (2) How do you join the stream you are attending know?
- (3) Was there any pressure to join the stream?
- (4) Which stream do you think female students prefer to join? Natural science or social science?
- (5) What does your performance look like?
- (6) What is the effect of affirmative action on female students performance?
- (7) Whose education influences in female students performance, mother or father? How?
- (8) What is the school distance from your home?

### Interview for school guidance and counselors

- (1). Are you professional trained in students counseling?
- (2). Do you give orientations on the importance of counseling at your school for the students?
- (3). How do you solve stream choice problems of female students in your school
- (4). Have you come across with problems of female students stream choice in Preparatory school?
- (5). What are the major practical activities of counseling services in your school?
- (6). As a professional person what factors do you think affects female students stream choice and performance?

## Appendix D

### Distribution of preparatory students by streams form 2004 - 2007 in sample schools

Stream	Sample Schools	1996/2004					1997/2005					1998/2006					1999/2007				
		Male		Female		Total	Male		Female		Total	Male		female		Total	Male		Female		Total
		No.	%	No.	%		No.	%	No	%		No.	%	No	%		No.	%	No.	%	
Social Science	Nekemte	250	84.45	46	15.54	296	232	81.69	52	18.30	284	154	66.66	77	33.33	231	176	77.87	50	22.12	226
	Gida	260	93.86	17	6.13	277	307	92.47	25	7.53	332	270	93.75	18	6.25	288	110	85.93	18	14.06	128
	Arjo M.D.	104	87.39	15	12.60	119	68	90.66	7	9.33	75	19	95.00	1	5.00	20	82	90.10	9	9.89	91
	Sire.	41	82.00	9	18.00	50	40	78.43	11	21.56	51	122	83.56	24	16.43	146	126	70.39	53	29.60	179
	Total	655		87		742	647		95		742	565		120			494		130		624
Natural Science	Nekemte	216	76.59	66	23.40	282	217	81.88	48	18.11	265	146	74.87	49	25.12	195	167	81.86	37	18.13	204
	Gida	230	96.63	8	3.36	238	298	93.41	21	6.58	319	44	84.61	8	15.38	52	65	89.04	8	10.95	73
	Arjo M.D	52	88.13	7	11.86	59	28	84.84	5	15.15	33	33	84.61	6	15.38	39	57	87.69	8	12.30	65
	Sire	38	95.00	2	5.00	40	28	80.00	7	20.00	35	26	68.42	12	31.57	38	97	87.38	14	12.61	111
	Total	536		83		619	571		81		652	249		75		324	386		67		453
	Grand Total	1191		170		1361	1218		176		1394	814		195		1009	880		197		1077


Source: Sample schools record office

## Declaration

I, the undersigned, declare that this is my original work, has not been presented for Degree in any other university, and all sources of material used for the thesis have been dully acknowledged.

Name Degefe Kitila

Signature 

Place  09/7/2008

Date of submission \_\_\_\_\_

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

Name \_\_\_\_\_

Signature \_\_\_\_\_

Date of submission \_\_\_\_\_