

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
DEPARTMENT OF CURRICULUM AND INSTRUCTION

FACTORS THAT AFFECT THE ENROLLMENT

OF HIGH SCHOOL FEMALES IN

ARSI ZONE

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**FACTORS THAT AFFECT THE ENROLLMENT OF HIGH
SCHOOL FEMALES IN ARSI ZONE**

**BY
WOLDU ASSEFA**

**A Thesis
Submitted in partial fulfillment for
the Degree of Masters of Arts in
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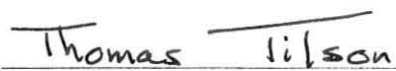
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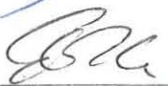

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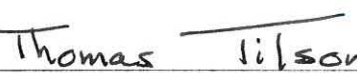
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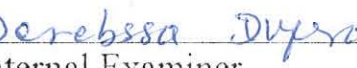
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Knowledge is a commutative treasure of many generations and not the creation of a single individual. If the individual manages to fresh knowledge, it is just a small fraction adding to society's treasure chest. Even on doing that, the successful completion of any survey study of this kind is only possible through the invaluable support of a number of people.

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ABSTRACT

The major objective of this study was to make an investigation into the current enrollment of female students in Arsi Zone High Schools, to identify the major causes i.e. school related factors (distance, teachers attitudes, sexual harassment, lack of guidance and counseling and school facilities) and to pinpoint the major areas of intervention by the school personnel, Zonal education bureau, regional policy makers and educational planners.

To achieve this objective, a descriptive survey method was used. Data from documents were secured from the annual abstracts of the MOE, OEB, Arsi Zone Educational Bureau and the high schools included in the study. Moreover, questionnaires, (structured and unstructured) were administered to 379 female students, 49 teachers and 13 school personnel. Structured and unstructured interviews were also presented to school personnel. Enrollment, promotion, repetition and dropout rates and percentage of female enrollment were calculated to examine the participation of female students in Arsi Zone High schools when compared with males in the region for the year 1987 to 1991 E.C. Besides this, percentages of Chi-square and Z-score were used to analyze the data obtained from questionnaires.

The study findings indicated that school-related factors such as location (distance to school), teachers attitudes sexual harassment, lack of guidance and counseling, pregnancy and inadequate school facilities in high schools were identified as a problem for low rate enrollment of female students in Arsi Zone high schools.

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The study findings indicated that school-related factors such as location (distance to school), teachers attitudes sexual harassment, lack of guidance and counseling, pregnancy and inadequate school facilities in high schools were identified as a problem for low rate enrollment of female students in Arsi Zone high schools.

Hence, it is concluded that, such school related factors are among barriers that contribute to low rate of female students enrollment in the region. Thus, it is recommended that the school heads and zonal educational bureaus need to look in to these problems. The regional policy makers and educational planners ought to pay more attention to minimize the impact of school related barriers in order to maximize the enrollment of female students in high school in the zone as well as in the region.

CHAPTER I

1. INTRODUCTION

1.1 BACKGROUND

Through the years, when issues about gender have been reflected in curriculum they have been clustered around several questions, such as; should females be educated at all? If they should be educated, should they have the same education as males? Is the presence of female teachers and students harmful to boys? (Nodding, 1992).

The bases for such questions were the traditional thoughts that females should have no equal rights to males in education.

Plenty of evidence indicate that the wrong perception of women goes back into the BC's. At that time, let alone the illiterate people, the consideration of the scholars for female role in the development of the community was not positive. Ancient scholars such as Confucius and Aristotle despite all their fame for their time, their perception about female education was negative. They were arguing for inequalities of women with men. The suppression of females in the society was mainly revealed in their denial for education. In spite of all these shortcomings, from the 1700s onwards, the gender issues have been given considerable attention. Consequently, their school enrollment has been increasing. Their role in the development (especially in the economically promising countries) has also been becoming important (Perry: 1997).

Nowadays, evidence shows that education is helping to improve health and productivity in developing countries. The poorest people appear to be benefiting the

most from it. For the attainment of the required productivity and health, considering the education of females is very necessary (King, 1990).

If enrollment is as wide to girls as to boys the benefit multiplies. Indeed, failing to invest adequately in educating women may reduce the potential benefits of educating men. However, women's education still lies far behind men's in most developing countries with far-reaching adverse consequences for both individual and national well-being (King, 1993). In most African countries, including Ethiopia, enrollment and participation in education is characterized by sexual disparities (Genet Zewdie in Tsehaye Berhane Silasie, 1991). The number of female students enrolled in elementary, secondary and tertiary education is lower than the number of boys. Accordingly, the 1989 United Nation World Survey has noted that while growth continues in the developed countries and several developing nations of Asia, underdevelopment is noted in Latin America and Africa. One of the main reasons for failure to reach the required standard of development has been lack of female participation. Failure to encourage female education seems to have contributed to the economic backwardness of these countries.

It is clear that such experiences by females in most developing countries of the world reflects on females of Ethiopia as well. In general, women were not regarded as important as males. They were denied of opportunities for schooling. Their denial for education goes back into the old (traditional) schooling systems. In traditional Ethiopia, the Orthodox Church and Mosque were the major institutions responsible for the discrimination of female education (Seyoum Tefera, 1987).

As it is noted in (MOE, 1984;) Ethiopian Education was in the hands of Church and Mosque for a number of years. In various parts of the country the schools were under

the Ethiopian Orthodox Church and used to teach the sons of clergy and aristocracy. Similarly, in areas where there were concentration of Moslem population, quranic schools were the only source of education and the attendants of such schools were mainly boys (Teshome, 1979). Thus, females were excluded from participation in religious education. Substantiating the same idea Seyoum (1986:6) noted that “... the participation of women in the traditional education had been negligible.” In short, the traditional school system was not encouraging female education.

Such discouraging conditions of female education has also been witnessed in the modern school system of the country, though relative improvement is observed when compared to that of the traditional ones. Even though efforts were made to increase the enrollment of female students after secular school was opened in the country, no promising progress have been achieved in female enrollment. For instance as it is noted by (Atsede and Kebede, 1988), in 1935, only 80 female students enrolled in the school. Finally, their participation in education was brought to an end by the Italian (Fascist) invasion.

Following the expulsion of the invaders, improvement of enrollment of girls was recognized in both reopened girls schools and in the newly opened provincial schools. For example of the total students enrolled in all levels of education in 1946, only 9.7 percent were females (Bejerkan,1970). According to Atsede and Kebede, 1988) the establishment of modern schools that were run by foreigners have brought some attitudinal change towards the schooling of females. Despite this fact the 1996/97 Ethiopian and Oromia Educational statistics Abstracts also clearly note that girls' enrollment is by far lower than that of boys at each educational level (MOE, 1998, OEB, 1997). In fact, apart from such exposure to modern ideas, various scholars argue that, there are other reasons that have contributed to the low level of female school

enrollment. In chapter two of this paper we will try to explore what different scholars have noted about female school participation and the factors often attributed to low female enrollment in schools.

1.2 STATEMENT OF THE PROBLEM

Substantial research results have noted the crucial need for improving the educational enrollment of females for development. There is no doubt that female involvement in development will multiply social benefits. An educated mother raises a healthier family, has fewer but educated children, is more productive in the work place and at home etc. (King, 1990). Failure to raise female education to par with males exacts a high development cost. They are the basis for the continuous existence of the human race and central to the development process. Thus, the full and complete development of any country (nation) demands the maximum participation of females who are about half of the world's population. (Jabre, 1988, World Bank, 1990, Dable, 1980). Nevertheless, their full participation in the development cannot be imagined unless they have the knowledge or required level of education.

Moreover, females are the primary teachers of children. Consequently, their schooling needs particular attention. Stressing this fact, the university education commission of India, 1948-49 in Aggrawal have noted:

their cannot be educated people without educated women. If generally education had to be limited to men or women, that opportunity should be given to women for then it would most surely be passed to the next generation.(in Aggrawal, 1982 : 285).

According to this view, female education is pre-requisite to an educated society. Apart from this, participation of females in schooling can end in increased total school enrollment. In this respect Kasaju and Manandhar (1985 : 330) note that, “ ... increment in girls-enrollment is a critical factor in attaining the high enrollment ratios described in development plans.” Therefore the participation of female in schooling should get paramount attention.

In Ethiopia it is only recently that female participation in development has been increasing. The country’s educational policy is not discriminatory to females. Article 3.7.7 of 1994 stipulates that special attention will be given to women in education and training (MOE, 1994).

Despite the policy however, the patterns of pupil enrollment and participation from primary grade to senior secondary schools shows that the increase in boys enrollment is at higher rate than that of girls.

Thus, in order to materialize the policy, the study of school related factors that are affecting female enrollment seems to be timely.

The main purpose of this paper is hence to examine some of these factors in Arsi Zone High Schools.

In order to attain its purpose, this study tries to answer the following basic questions.

1. Do school location and shortage of school facilities have significant impact on the school enrollment of females?

2. To what extent do teachers attitudes and lack of guidance and counseling in high schools affect the school participation of girls?
3. To what extent do sexual harassment and pregnancy affect the schooling of girls?
4. What can be done in order to minimize the impact of such school related factors and to promote the enrolment of female students?

1.3 SIGNIFICANCE OF THE STUDY

Other than its moral implication, the under representation of females in education is a loss both to the education system and the country. This study therefore becomes important for the following reasons.

1. Increasing and widening the number of educated females in the country would help to alleviate some of the problems that women in Ethiopia are encountering as a result of their gender.
2. Since one of the major objectives of the educational training policy of the Ethiopian Government is to upgrade the educational enrollment of females so that they may participate in every aspect of development, examining their enrollment at present is important.
3. It is also expected that this study might provide suggestions that could facilitate for better utilization of female manpower in the country.

Besides this, the study will provide recommendations and insights to planners and policy makers of the regional bureaus of education on the specific questions.

Furthermore, it is expected that the study will pave the way for other researchers who might want to pursue for further study in the area.

1.4 DELIMITATION OF THE STUDY

In order to have a more comprehensive information it would be good if the study could include high schools (Grade 9-11) in different settings of the country. However, due to time and other related constraints, it is confined to high schools (Grade 9-11) of Arsi Zone only.

Moreover, the study focuses on school factors, such as location, teachers attitudes, shortage of school facilities and guidance and counseling. It doesn't consider out of school factors (socio-economic, socio-cultural, religion etc.) which do often influence the enrollment (participation) of females.

1.5 DEFINITIONS OF IMPORTANT TERMS

Enrollment refers to being enrolled or registered in the school in order to acquire some theoretical and practical knowledge through teaching-learning process.

Senior-secondary school:- is the level of education in Ethiopian Educational system that covers grades nine to twelve before the new educational school profile is designed.

MOE :- Ministry of Education

OEB:-OromiaEducationBureau.

CHAPTER II

2. Review of Related Literature

Encouraging female contribution to development is not only economic but also a social issue. On the world wide scale today, the idea of why females are deprived of education and employment opportunities, is a burning issue and is being seriously researched up on. Recent research and empirical evaluation denotes that educating females yield far reaching benefits for girls and women themselves as well as their families and the society in which they live (Nodding, 1990).

In reality the contribution of females in the life of society was recognized even in the ancient world. As a result, female education was observed in some of the ancient countries. For example, in ancient Rome girls were provided with education and there was a case in which women were given important positions. Emphasizing the position of women in Ancient Rome Perry; 1997, has noted that,

The condition of women education gradually improved during the Republic. In the early days of the Republic, a woman lived under the absolute authority, first of her father, and then of her husband. By the time of the empire, a woman could own property and, if divorced, keep her dowry (properly brought by bride to her husband). A father no longer forced his daughter to marry against her will. Women could make business arrangements and draw up wills

without the consent of their husbands. Upper class women of Rome also had far greater opportunities for education than those of Greece. This history of the Empire, indeed Roman history in general, is filled with talented and influential women. For instance, by then Cornelia, the mother of Tiberius and Gaius Gracchus, influenced Roman politics through her sons. Livia, the dynamic wife of Augustus, was often consulted on important matters of state, and during the third century there were times when women controlled the throne. (Perry, 1997: 104)

Such ideas by Perry Vividly indicate that in ancient Roman Empire, the importance of women in development was well perceived. They were educated and given important positions in the society at that time. Of course, the history of their counter part (Greece) on the other hand teaches us the contrary. One of the limitations and weaknesses of Athenian Democracy was that women were denied of any legal, political, and educational rights. In Athens, since it was believed that a woman could not act independently, she was required to have a guardian normally her father, or her husband, to supervise her property and her behavior. This emanated from the belief that financial dealings were difficult for women and that they need to be protected from strangers. As a whole, Greek women were deprived of any formal education; their contribution in development was not perceived. Thus, despite her civilization which laid the bases for democracy, Athens had failed to realize the importance of educating women to participate in development (Perry, 1997).

It was such conservative ideas about females by the later society (Athenian) that had been carried on and used to rule in most parts of the world for century after century. However, beginning from the second half of the 18th century, the importance of the role of women in development has begun to be recognized. At the same time some radical people began to fight the system on behalf of women (for their freedom and for their education). For instance Johan Stewart in Perry (1997) has noted that the difference between the sexes were due far more to education than to inherited inequalities. He concluded that all females as well as males should be able to develop their intellects as fully as possible. In line with this Sahara (1838) in Perry 1997 published letters on the equality of the sexes and the condition of female. She stated emphatically "...men and women were created equally. They are both moral and accountable beings and what ever is right (such as education) for men to do is right for women ...". She had also criticized the religious institutions through which traditional constraints were imposed upon females in Europe by then. Condemning the religious institutions in Europe, she noted that, "...how monotonous, how anti-Christian, is the doctrine that woman is to be dependent on man..."

Following the foot steps of the 18 century scholars, the struggle for female freedom such as in educating them has been becoming the burning issues in many countries. Despite this fact, however; there are people at different levels (either at societal or individual level) who were (are) arguing by emphasizing the weak side of women. Consequently, women were deprived of education in most developing countries and their contribution in development is felt not to be fully actualized.

Such unhealthy perception of female education is based on the so called traditional constraints. These constraints include the following : Girls have special needs for physical protection and tradition often demands special concern for girls' privacy and

special reputations. In those cultures where female seclusion is practiced, the impact of that tradition on girls' enrollment after puberty is likely to be substantial (Kelly and Elliott, 1992 and Eisanabary, 1982 in world Bank 1990). Traditional constraints such as school related problems which lead to safety and culture concerns may force parents not to send girls to school. This could be possible even when the opportunity cost of girls, chore time is low, unless schools are located close to home, equipped with facilities such as separate toilets for boys and girls, etc. (Hyde, 1989).

Such negative perception for female education is predominantly observed in the modern schooling systems of most African countries with far-reaching adverse consequences for both individual and national well - being (King : 1993). The illiteracy and under- education of African women vividly hinder their ability to articulate and express their interests in a wide variety of fields, ranging from politics to the economy. Realization of the rights to education serves the goal of individual and reproductive health. Access to contraception, knowledge about different mechanisms of child spacing, health and welfare, invariability means that women are operating in a more liberated context. Denied of these benefits which are attained by education, women in Africa face the blunt end of aggression from the system (Rebecca Cook 1995).

Several research findings in Ethiopia have also confirmed the low rate of female students enrollment at different educational levels of the country. The major cause for such a low rate of female enrollment seems to be location (distance to school), teachers attitude, sexual harassment, lack of guidance and counseling, pregnancy and inefficient school facilities which act as constraints (Genet, 1991; Debele, 1980; Tilaye, 1997; Adane 1993; Stromquist, 1997; king, 1993 etc.). Thus, the following pages deal with the detailed review of these constraints.

2.1. Location (Distance to School)

Long distance (location problem) of school which is intensified by lack of transportation facilities is among the school related factors, that contributed to low rate of female students' enrollment in most of the developing countries. Various research results indicate that school location specified as the distance to the nearest school, is often an important determinant of student enrollment and drop out rates (King, 1993, 1992; Anderson, 1992; Cammish and Brock, 1994; Debele, 1980; Tilaye, 1997; Herz, 1991; etc.). For instance, Herz, 1992, noted that the closer the school to home, the less parents tend to worry about girls' safety or reputation, because girls can be kept under closer watch. Where transportation is difficult or costly and where population is dispersed, distance is likely to matter more. Much empirical evidence, exists on the binding nature of this constraint. For example, in Egypt the location of school within 1km. of a community resulted in an enrollment rate of 94 percent for boys and 74 percent for girls. When the distance was 2kms, boy's enrollment fell to 90 percent, while that of girls' dropped to 64 percent (Robinson and et al 1987 in Stromquist, 1987). According to Lavy forthcoming in Harz, 1991 in Gahana, long distance to primary school significantly deters girls' enrollment, but not that of boys. Location of secondary school (especially those for girls) was more erratic than location of primary schools. The closer the secondary schools, the more likely children are to be sent to primary schools, whether they are boys or girls. Even when the opportunity cost of girls' chore time is low, unless schools are close to home, parents may be reluctant to challenge tradition to educate their daughters (Caspo 1981; Callaway 1984 in Hyde 1989).

Debele, 1980; and Tilaye, 1997; have also noted that the geographical location of schools have a decisive impact on the chance of going to school and staying longer.

Long distance from school is, therefore, one of the main causes for dropping out from high schools.

However, researchers such as Coombs 1985, Tadesse, 1974; and Odagu, 1995; reported that in all developing countries, especially in Africa school zoning is a problem. Regarding the uneven distribution of schools in our country, Tadesse, (1974:98) noted that "In Ethiopia, schools are generally located in provincial cities, district and country towns, and along the main roads. Many students from the interior have to walk a minimum of four to five hours to reach school." Consequently, he concluded that a large number of students leave school from earlier grades, and for many rural children the opportunity of attending Secondary Schools is very remote.

Other researchers (see Anbesu, 1992; Dirriya 1993), have also elaborated that the network of secondary schools is still sparse to meet the needs, and many of the existing schools are located in urban areas, ignoring rural communities. Thus, distance has a strong effect on student enrollment in government schools (Anbesu and Barbara, 1988).

According to Mayland, 1994, such urban biased educational system, accentuated the dropout rates, by causing both direct and indirect cost of the schooling. This is to mean that the longer the journey to school, the more it contributes to low rate of student enrollment mainly affecting females.

Many research results (see United Nation Michael, 1996; Mabiling, 1991; Odaga 1995, etc..) have revealed that, in a number of African countries including Ethiopia, the long distance girls often have to travel to get to school is a serious problem in their participation and achievement in school, especially in rural areas. There are two

dimension's to this concern: one relates to the length of distance and the energy wasted to cover the distance, in many instances with an empty stomach. The other relates to the concern parents have for the overall safety of their daughters.

Furthermore, some of the studies by Dirrirza, 1993; Assefa, 1991, Mayland, 1994), clearly show that the proximity of schools greatly influences parental decision on the education of their children particularly that of their daughters. The greater the distance between a child's home and school (Debele, 1980, Ruotnen and Lebesech, 1996), the higher the drop out rate, particularly regarding girls. Therefore, distance is a significant factor for school enrollment of both rural and urban girls, but more so for rural girls (Soumare, 1994; and King 1993). Having to walk long distances discourages girls from going to school. In other words, the availability of a school in the community within a short distance promotes girls' enrollment. Befekadu 1998 noted that long distance from home to school was the major obstacle in promoting girls basic education.

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 the enrollment of both girls and boys. It is more serious in the case of female students. All research results cited above have documented that distance to school is directly correlated with the low enrollment of girls at all educational levels. If the school is within the community and within easy walking distance, enrollment is likely to be higher for both boys and girls. (King 1993)

2.2. Teachers Attitudes

Most feminists believe that schools are partly responsible for instilling sexist attitudes in children (Delmote, 1990, Good and Brophy, 1990, Thomas, 1990; Herz and et al, 1991; Genet, 1991 etc.). These scholars have argued that schools have developed and reinforced sex segregation, stereotypes and even discriminations which segregate the negative aspects of sex roles in the outside world, when they could be trying to alleviate them. In general, the school environment exerts its own influence on females.

Among the determinants of the low rate of female students enrollment in the school environment, teachers attitude is one.

A number of literature suggest that teachers' attitudes, behavior and teaching practice have perhaps the most significant implications for female persistence and academic achievement and attainment. Teachers attitudes to their students are a reflection of the broader societal bases about the role of women in society and the academic capacity of girls. Evidence form different African countries indicate that both female and male teachers believe that boys are academically superior to girls (Odaga, 1995; Appelbaun, 1995, James and Parker, 1987, Brook and Cammish, 1991, Hunt, 1987; Weiner 1994; Eisenhart and Holland, 1983 etc.). According to these authorities boys are given more attention than girls by both male and female teachers. "Boys are thought as more interested, more intelligent, more open and more creative, girls more industrious, tidier, less independent less interested" (Schulz-Zander 1990 : 144).

In the classroom study Eisenhart and Holland (1983) found that although teachers generally may not consciously seek to reinforce gender stereotypes, they do tend to

girls and being given priority in the distribution of school books and other learning materials (Graham-Brown 1991). The study by Palme, 1993/94 also noted that, in Mozambique the little communication between pupils and teachers in primary schools, exists outside the few urban schools, between boys and teachers. Then, it concluded that "the higher attrition rate for girls might to a considerable extent also be an effect of inequality of treatment within the classroom." (Ibid)

The above research results have clearly depicted that boys were involved in more interaction with teachers than girls. They receive more attention, praise, criticism and more remediation (help to correct or improve their responses). Emphasizing such behavior of teachers towards girls in the classroom, Krickshank, 1995 has also noted that; boys demanded more attention by calling answer and teachers tend to respond by accepting these answers. When girls called out answers, teachers were more likely to tell them to raise their hands. In other words, boys receive less disapproval and blame, while girls tend to be punished more promptly for aggressive behavior such as calling out answers without being acknowledged. Regarding such unethical behaviour of teachers, Good and Brophy 1990, have noted the following:-

Teachers give more bland feedback to girls and more animated, detailed feedback to boys. They sometimes perform complex tasks for girls but merely coach boys to task completion. They encourage girls in grooming and manners but boys in academic striving and accomplishment. Overall, teachers tend to interact more with boys than girls (Good and Brophy 1990 in Krickshank 1994 : 34).

The above ideas vividly noted that classrooms are divided into the "haves" and "have nots" with students in the same classroom, with the same teacher, studying the same subject (material) ... experiencing different educational environment. (James and Prker, 1987).

On the other hand, criticizing such unethical and inhumanely perception (attitudes) of teaches Tenn in Krickshank 1995 has suggested the following advice for teachers to help promote gender equality in classroom interaction.

Rather than ask students to "attack" an idea or a reading, sometimes ask them how they "feel" about the ideas or material being read. Rather than expect "hand raising" encourage students to jump into at will to express themselves.

(Tenn 1991, in Kruickshan 1995 : 34)

According to this writer an effective teacher is aware of gender difference and is able to establish classroom atmosphere where in which neither gender is at a disadvantage. Teachers are required to give equal opportunities to students in their access to materials and in classroom participation. In other words, teachers should not exclude (either boys or girls) from participation or success in school activities because of gender.

Another situation in which teachers attitudes discourage female participation is in marking. The studies by (Spear and Bradley 1994 in Thomas 1991) are a good example of this. The markers may be biased against girls when marking student work. Thomas, 1990, himself noted that male teachers are more likely to regard work

highly if they think it has been written by boys. Of course this is also a preferential treatment given to boys in the classroom by teachers.

Teachers are also reported to reward female students who 'cooperate', with grades and tuition waivers. They prey on their female students threatening to fail them, or publicly humiliate them, to prod them into sexual liaisons other than encouraging them in academic affairs (Hallam in Odaga 1995). Of course, such unethical phenomena is not carried out by every school teacher. It may be confined to some teachers.

Stressing the impact of teachers attitudes and school administrators on the schooling of female students, Genet 1991, has also noted the following. Teachers and school administrators try to influence female students emphasizing their usefulness for domestic life. As to her, such thought reflects their negative perception of girls. They think that their female students are submissive and incapable of succeeding at different levels of education. Most teachers seem to address questions only to boys, and give more feedback to boys than girls. Substantiating this view Alemtschai 1995 has also noted that gender typing recurs in teachers behavior, both inside and outside the classroom. Sommers 1989 : noted that, even if girls achieve as good as boys and tend to receive better grades, due to the negative perception of teachers, the gap in self-confidence between the sexes tends to grow in the course of secondary schools. In short, despite orientation to and success in academic achievement girls tend to be unable to make up for their deficit in self confidence in high school as well.

In general, all the above study results clearly show that teachers' differing treatment for boys and girls in the school environment do have considerable impact on the participation, performance and achievement of female students.

2.3 Sexual Harassment

"While the many social and economic constraints on women education in Africa are the subject of concern, the issue of sexual harassment has been largely neglected" (Hallam, 1994 in Odaga 1995 : 34).

Various studies on this issue have revealed that low rate of girls enrollment is remarkably attributed to sexual harassment in schools. (Appelbaun, 1995, Summers, 1992; Thomas, 1990; Odaga, 1995; Anderson - Levitt, et al 1994, etc.) . For example, the study by Appelbaun, 1995: on 1,600 students in 79 high schools across the country (in America) shows that four out of five students reported having been sexually harassed at least once during all the years they had been at school, mainly by other students. According to this study, about a quarter of the girls who had been harassed reported that the experience was distressing and it forced them to stay at home or drop out of class, there-by interfering with their studies. Thomas 1990 : 17 has also noted that girls are consistently subjected to harassment, sometimes sexual, by boys and that harassment is either ignored or treated as normal by the school teachers and administrators. As to these authorities, girls were harassed often sexually by school boys and the problem was either trivialized or ignored by the concerned people (such as teachers). Walkerdine 1987 in Thomas (Ibid) noted instances in schools where male students were using sexual abuse to challenge the female students, and female teachers however, dismissed it as normal boyish behavior. According to summers (1992) school sexual risks are also attributed to teachers. He has noted that some girls even choose to dropout to escape teachers harassment.

In line with this African Rights (1994), has noted that sexual abuse by teachers which exploits the trust of both students and parents is far more spread than most institutions care to admit. Such abuses range from sexual advances, threats of examination failure, to outright rape. Indeed, according to African Rights, "... the phenomena of sexual harassment has been perceived to be so common that many women have come to regard it as normal." (Ibid: 8)

Other studies have also confirmed that sexual harassment (rape) in educational institutions around the world has increasingly been deterring female schooling. Emphasizing this aspect of female problem in the school system, Odaga 1995, and African Rights of 1994, have revealed that, there is no doubt that the incidence of rape too has become a particularly potent tool in the arsenal of gender related attacks on female students by their male schoolmates at secondary schools of Africa. A good example for such assault was perhaps the most terrifying incidents of the Catholic St. Kizito mixed secondary school Massacre in Kenya in mid 1991. In the mass rape of 75 secondary schools, a total of 19 girls were killed and 71 reportedly raped by their male schoolmates. It was this phenomena which brought sexual violence and sexual harassment in educational institutions in Africa to international attention. (Odaga, 1995)

The above incidents have clearly noted the gloomy features of female education in Africa. Female students are confronted with sexual prejudices which abound among their male counterparts and the lack of a suitable framework within which they can articulate their concerns.

Researchers like that of Sommers, 1992; Hallam, 1994; Aderson-Levitt et al 1994 etc. have also noted that the learning environment is difficult for girls with harassment,

teasing and ridicule from boys for being un-feminine if one is intelligent and also when one is not too intelligent. For instance, Sommers 1992, found that boys sometimes used physical threats of violence, and personal teasing to keep girls quiet in class and discourage them from taking leadership roles. Hallam 1994 in Odaga 1995 has identified male students as major offenders. He noted that in groups, as members of clubs and cults, they prey on female students, abuse them verbally, cartoon them in absence in campus publications, harass, beat and rape them. A study in Guinea by Anderson Levitt et al 1994 indicated that boys are very aggressive towards girls and that they used physical force, threatened and teased girls to silence them in class. A similar study made in classrooms of Rwanda, also noted that male teachers encouraged the male 'ganging-up' and being abusive in verbal interaction (Prouty, 1991).

Such accounts of harassment (such as sexual) and violence denotes that female students face an extremely hostile and incompatible learning environment in their schooling. The lack of remedy by schools, parents and other concerned authorities and the abuse of female students within the school system, grossly undermine the efforts to increase female access and achievement in education. These acts have a profound and devastating effect on female students thus inevitably hindering their educational attainment and performance. According to Yusuf 1998, such problem in the school environment is also a point of discussion in our country.

As a whole, sexual harassment and violence against female students in educational institutions do have considerable effect on their attendance, school attainment and performance. This calls for any immediate investigation and solution by concerned people.

2.4 Lack of Guidance and Counseling

Generally, High School students face various problems such as physical, psychological, physiological etc, which often emanate from the nature and characteristics of being adolescent. They also face mental problems and subsequent emotional and psychological turmoils such as stress and strain, frustration, inferiority and superiority complexes, anxiety and tension. 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 such as early marriage, physical tattoos and maturation and unnecessary pregnancy, and illegal abortion". (Yusuf, 1998 :19). Obviously, these problems could contribute to withdrawal, dropouts, academic under achievement etc.

Thus, one of the alternatives that would help in upgrading the enrollment rate of female students are by promoting guidance and counseling. Various studies such as by Stoops and Johanson, 1981; Ediger, 1987, Asmeron, et al, 1989, German and Brown, 1989 all have noted that the presence of guidance and counseling service in high school and in higher institutions is an urgent issue. According to Edigar 1987 and Yusuf 1998, adolescents in high schools are faced with a number of problems (social, academic, personal, physiological, psychological etc.) that make counseling crucial. Hence the way the problems are handled differ accordingly. Edigar further explains that a pupil who is at risk of being a dropout due to anti-social behavior reveals the following behaviors:-

1. loses interest in school;
2. cuts classes frequently and shows tiredness in school;
3. enjoy being cruel to others in school and society;
4. desires to inflict physical pains to

others; 5. is extremely quarrelsome and aggressive; 6. reveals rebellious behavior to school officials and law enforcement agencies; 7. lack any form of control from parents; 8. eggs (urges) of student onto becoming involving in fighting; 9. steals from people and others in the society; 10. tells lies to cover up undesirable personal behavior; 11. indicates violent behavior on the play grounds; 12. carries knives and other object to inflict harm to peer and others in society (Ediger, 1987: 3-4).

Obviously, such students need help from school counselors and psychologists. Trained counselors need to support at risk pupils to attain adjustment to the school setting as much as possible on an individual bases. Emphasizing this view, Stoops and his associates 1981 argued that the school counselors can provide high school adolescents to adjust themselves to their environment, their home and their peers. Garman and Brown 1989 have also noted that since adolescents in high schools are subject to complex life difficulties that accentuate quitting school, the availability of guidance and counseling has a tremendous role to play in minimizing the dropout rate. Stressing the need for guidance and counseling by high school female students who had to face problems not necessarily faced by their counterparts Yusuf 1998 has noted that female students could seek help from different sources. For example:-

- i. From school counselors who are equipped with basic techniques of counseling;
- ii. they could be sent to visit other experts through a referral system;
- iii. they could visit traditional helping professionals.

Besides this, female students in high school might also seek counseling service from their classroom teachers, the school director, other students and peer groups etc.

Thus, according to Yusuf, in institutions or schools, where professionally trained counselors are not easily reached the involvement of others (such as teachers, peers etc.) is important. However, the effectiveness and relevance of the total program is to be felt only when the role of those different groups in the counseling services are integrated and well coordinated. i.e. the united harmonious contribution of each and every service in counseling program would add more to the understanding and development of each student (by far to girls) in a school.

However, researchers like that of Debele 1980; Asmerom 1989 and Yusuf 1989 and 1998 have reported that lack of guidance and counseling (counselors) has aggravated students (more of females) dropping out of high school and higher institutions in most of developing countries.

Emphasizing the crucial nature of guidance and counseling in Ethiopia Yusuf (1998 19-28) reported that, all females in Ethiopian high schools are suffering from withdrawal/dropouts, economic and personal problems, heterosexual problems such as not being ready in dealing with male aggression, being victimized, virginity problems, moonlighting prostitution to help one self or family, being exposed to all kinds of sexually transmitted diseases including AIDS/HIV's, lack of knowledge of contraceptives, communication problems with family members, teachers, peers and school personnel. According to Yusuf this is mainly because there are few counselors in the country's high schools who are professionally trained in the discipline and profession of counseling psychology. Most counselors are not equipped with the required concept, definition, objective, theories and techniques of counseling.

Besides this, he noted that some of these counselors seem to fail in making the necessary attempt in solving the problem by upgrading their professional skills. According to Yusuf's 1998 publication, rather they are complaining that they stand alone. They don't have the support from any one including the school personnel, teachers, the community/the students. They lacked facilities such as budget, office etc. They are also suffering from some kind of peculiar identity crisis.

As a whole, it is the feeling of this writer that the unique nature of the need of female students in high school has been given very little attention. Counseling has not been given the necessary attention by the country's educational policy makers. It is neither considered in the newly established educational policy 1994 nor is it incorporated in the newly designed curriculum.

2.5 Pregnancy

A number of studies have noted that pregnancy leads to girls dropout from schools (Odaga, 1995; Genet, 1991; Yusuf, 1998; Stewart, 1990 et al). "The great problem is school pregnancy. We struggle to raise school fees for them (daughters) but they disappoint us. This influences us to give priority to boys" according to a parent in rural Zimbabwe (Graham -Browne, 1991 : 195). Genet Zewdie 1991 also notes that in the opinion of the majority of secondary school teachers in Addis Ababa a number of girls dropout as a result of unintended pregnancy.

As girls become adolescent, pregnancy becomes a major factor in school dropouts. Indeed, pregnancy emerges as a major cause of adolescent school girls leaving school. Fear of pregnancy is another reason why parents remove their daughters from school

as they approach or reach puberty (Anderson-Levitt and others 1994) Brock and Camish 1991, Palme 1993, Prouty 1991, Serpell 1993). A recent study in Cameroon indicates that society's experiences with school girls pregnancies may negatively affect the prospects for educating young girls (Odaga 1995). According to him, girls become pregnant by school boys, teachers or other civil servants who do not follow the customary rules on marriages and families and do not marry the girls. Pregnant girls are forced to withdraw from school. To overcome such uncontrolled occurrences parents force their daughters to withdraw and marry. According to Holtedahl 1993, these experiences may explain a trend among Christian parents to arrange for their daughters to marry at puberty even if they have not finished primary education.

Another study by Youri 1993 also noted that the health implications of teenage pregnancy includes a very high risk of death and illness for the adolescent mother and child. For instance, his study in Kenya indicates that secondary school girls who had been pregnant were twice as likely to report poor health than those with no pregnancy history. The increasing indications of significant levels of illegal abortions, particularly in urban areas, and related health risk for young women are also frequently discussed in various literature, suggesting that pregnancies are not planned and that there is a significant demand for contraception amongst teenagers (See Odaga 1995 :36 and Yusuf 1998). The exposure to sexually transmitted diseases, infertility, and vulnerability to AIDS is also a matter of concern (Odaga 1995 : 37).

As far as AIDS is concerned evidence shows that men prefer young girls as sex partners. Their perception seems to be that they are AIDS - free. This is especially a worrying development because due to the harsh economic condition in several African countries school girls are trading sex as a means for money generating. Many studies in Africa indicate that a number of young girls engaged in such sexual duties are not

aware of the risks associated with not participating in safe-sex (Focus on Africa, April 1994 in Hallam 1994 and Appelbaum, 1995).

In other studies, pregnancy- related dropouts are reported for all levels of education mainly in higher primary and secondary levels (Brock and Camish 1991, World Bank, 1990, World Bank 1991, World Bank, 1992). Other studies in Africa suggest that the problem of school pregnancy may be exaggerated, especially by male teachers. For example, as it is noted by the Ministry of Health/GTZ support unit 1988 in Odaga 1995, study of school girl pregnancy in Kenya estimates that an annual average of approximately 10, 400 girls leave school because of pregnancy. Data from Tanzania also indicate that in 1983, 7,343 girls, approximately 30 percent of secondary school girls, were expelled because of pregnancy (World Bank 1991 : 58).

The findings by a study of secondary school girls pregnancy in Kenya indicate that in rural areas boys of the same age were most likely to be responsible for school girl pregnancy, but in urban areas mature men were most likely to be responsible (Youri 1993). Teachers are most often held accountable for school girl pregnancies. However, it remains difficult to get accurate information on who is responsible for school girl pregnancies, it is promising to see that researchers are broaching this sensitive topic (Odaga 1995 : 40).

As a whole a number of studies in developing countries especially in Africa have noted that school pregnancies have contributed a lot in repetition, dropouts or expulsion of girls from schools at all levels mainly, at higher primary and secondary schools. Obviously, this resulted in reducing the number of female students in the teaching-learning environment. This mainly emanates from lack of planning and

implementing family life/population education program by incorporating into their education system.

Therefore, in order to improve the enrollment of female students at each level of schooling, the study of such an area is becoming an urgent issue.

2.6 School Facilities

Several research results on the impact of school level factors on female education have noted that school facilities such as lack of basic amenities may discourage girls enrollment and attainment more than boys' (Befekadu 1998; King, 1993; Odaga, 1995; Bloc; 1994; World Bank 1991, and Tilaye, 1997). According to these authorities, lack of school facilities for example, separate toilet, inadequate provision of instructional materials and physical facilities and the dilapidation of those facilities available (example, classroom, chairs, tables, etc.), have more impact on the female performance and attainment in schools. Noting the effect of school facilities on female students King 1993 : 264 states that, "the availability of school facilities is important in determining levels of participation by both boys and girls. However, it may be more important for girls."

The study by Tilaye 1997, have also indicated that educational facilities and services are important tools for the teaching learning processes. They are the means by which instructional objectives are fulfilled. Lacking the provision of instructional materials and physical facilities is a major cause for dropping out of school (World Bank 1980). Another study by MOE, 1995 in CHEHA district noted that, school characteristics and school environment could either enhance or retard female performance. These include teaching methodology and approach, school physical facilities, play ground,

textbooks, instructional materials etc. A school that has inadequate resources (fail to provide relevant curricula) lead to low rate of enrollment, poor attendance, under achievement by students. In line with this, Heyneman and Loxley, 1983, and Fuller, 1986, found that school facilities are significantly linked to levels of educational achievement than were socio-economic characteristics of the family.

The findings of world Bank research report (1988) showed that the scarcity of learning materials in the classroom have been the most serious impediment to educational effectiveness in Africa. Elleni (1995) has also pointed out that, due to prevailing budgetary crisis in Africa, children have unpleasant time at school. She elaborates that the available instructional materials are inadequate; its school building are dilapidated, the classrooms are with broken desks, chairs, windows, with no sanitation etc. All these discourage pupils learning and aggravate early school leaving.

Researchers such as Adane 1993, Fuller 1987 and Anderson 1992 argues that inadequate supply of school instructional materials (for example, textbooks, libraries, laboratories, manuals, teachers guide, teaching aide (globs, maps) etc. can influence students performance and progress at school.

The availability of textbooks to students has been identified as a key determinant of student performance. But the extent to which girl's access to textbooks, with or without gender stereotypes, affect their academic performance has not been explored (Odaga, 1995). In such case student survival rates at school are short lived (Lockheed and Verspoor, 1991). Furthermore, Lockheed 1993 found that the overcrowded classrooms (often more than 50 children) brought about health problems on children which was resulting in parental with holding of their siblings from the school.

Tadesse's 1974 research findings have also revealed lack of adequate facilities as the main reason for early school leaving.

To sum up, the above studies have documented that inadequate school facilities can lead to low rate of female enrollment, deter them from being assigned to specific fields of study and reduce the extents of their performance(achievements). Consequently resulted in their dropouts/withdrawal from schools.

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

In order to have a clear concept of the nature of the problem (factors that produce effect on the participation of female students in high school), descriptive survey method was employed because it appears suitable for refining the research tools such as questionnaire, observation, interview and documentary analysis. The relevance of this method for such purposes has been confirmed by Koul (1984), Nachmias and Nachmias (1987), Seyoum and Ayalew (1989) and et al. This chapter then deals with sampling procedures of data collection and analyses..

3.1. Sample and Sampling techniques

The target population in this study were 386 sample female students selected from 1187 population of five High Schools (9-11) in Arsi Zone (i.e 33%). Besides this, the study also included 51 teachers selected among 155 teachers (i.e 33%) and 15 (100%) schools personnel (directors, unit leaders and counselors) of the high schools under study.

In case of female students and teachers, the sampling process was held based on the proportion of population in each high school. As far as the school personnel are concerned all were involved.

Out of 15 high schools in Arsi Zone, five were selected through simple random sampling technique. To ensure fair representation of female students from different grade levels (9-11), purposive and stratified quota sampling techniques

were employed. Teachers were selected by using simple random sampling technique depending on the population distribution of teachers in each high school. On the other hand, the school personnel were selected by employing availability sampling technique.

3.2 Instrumentation and Data Collection Procedure

The main data collection instruments in this study were questionnaire, observation, interview and document analysis because these are suitable to procure the necessary information, opinions and attitudes in a structured framework from the respondents. Document analysis was made to witness the present enrollment of girls' in Arsi Zone high schools. Data for document analysis were obtained from Oromia Education Bureau, Arsi Zone Education Bureau and high schools included in the study. The questionnaires were constructed in three parts, i.e. for students, teachers and school administrators. Questionnaires for all subjects were prepared in English. However, to minimize language difficulty for the female students, some of the difficult terms, phrases and sentences were translated into the local language "Afan Oromo". Moreover, structured and unstructured interviews were prepared for school administrators in English. So as to ensure the appropriateness of the items, a pilot study was carried out in one high school, i.e. Huruta Senior Secondary School. Based on the results obtained from the pilot study, the final questionnaire was revised to the final draft.

The following points were addressed to the respondents in the questionnaire and interviews.

1. Respondents' personality characteristics, including female students

parent (father and mother) educational level.

2. Major school- related factors affecting females' enrollment in high school, including:
 - 2.1. Distance
 - 2.2. School facility
 - 2.3. Pregnancy
 - 2.4. Sexual violence/harassment
 - 2.5. Teachers attitude
 - 2.6. Guidance and counseling

The questionnaire involves multiple choice-type, open ended ones, and items that were to be answered in five-point-scale ranging from strongly agree to strongly disagree and from very high to very low (Lickert scale method) were included. All subjects (students, teachers and school administrators) were presented with the above types of questionnaires. The interviews were designed to elicit information from the school administrators (directors).

3.3. Administration of the instruments

A visit was made to each school by the researcher after sample schools had been identified. The total number of students, teachers and school personnel were secured from school record. After the number of female students (grade 9-11), teachers, and directors were identified, questionnaire was distributed to 33% of the female students (grade 9-11) , and 33% of the teachers in the high schools. The necessary clarification was provided by the researcher for questions raised on some of the items from individual respondents. The completed questionnaire papers were collected in a duration of a week where as few respondents from each

group failed to return the questionnaire in time. The interviewing of the directors was conducted by the researcher.

3.4. Methods of Data Analysis

3.4.1. Variables used

The dependent variable in this study was the enrollment of female students in Arsi Zone high schools and the independent variables (decisive factors of girls enrollment) were school related factors such as distance, pregnancy, sexual harassment (violence), teachers attitude, guidance and counseling and school facilities.

3.4.2. Data Analysis

Depending on the number of groups involved and the type of measurement used to measure the dependent variable, the following statistical techniques (Nachmias, 1987) were used in the study.

Percentages were used to explain the personality characteristics of the respondents and to show the disparity in responses among different group of respondents. Percentage is also used to indicate female participation in high schools. The extent of female enrollment was determined by calculating the proportion of female enrolled in terms of the total subject enrollment in each grade (9-11) during the five academic years. Which includes academic year in which the study is conducted. Depending on the percentage obtained from the computation a comparison of female and male enrollment in Arsi Zone high school in the five

years was made. Furthermore, rate of enrollment growth and percentages were used to determine the present status of female enrollment in high school education.

chi-square (χ^2) was employed where nominal and ordinal scales of measurement were used, that is, to examine the associations among the responses of teachers, administrators and female students on the school related factors that are affecting the enrollment of females in high school. Z-score was used to identify the statistical significance of possible difference between proportion of responses in the groups.

In all the above cases, the obtained difference was tested for statistical significance at 0.05 level. This level is conventionally used in social science researches.

CHAPTER IV

4. PRESENTATION AND INTERPRETATION OF DATA

In this chapter the analysis of the data collected from sample population (high school female students, teachers, personnel) and documents of school, zonal and regional education bureau are presented and interpreted.

Most of the data gathered were analyzed by using tables followed by discussions. For the sake of convenience related questions were treated together. Responses of school personnel were incorporated to substantiate the data obtained from students and teachers.

Accordingly, the respondents' characteristics, school related factors, the analysis of data and interpretation is presented in this order.

4.1 CHARACTERISTICS OF THE RESPONDENTS

As mentioned earlier, three groups of respondents were considered in this study namely, female students, teachers and school personnel, in the sample high schools of Arsi Zone. Out of 379 female students 199 (52.5%) reported to be from urban and 139 (36.7%) from rural, where as 41 (10.8%) did not specify. Regarding marital status 353 (94.1%) were single and only 22 (5.9%) students were married. In terms of Religion 309 (82.2%) of them were Christians and 67 (17.8%) of them were Muslims. Their age composition ranges from 13 to 22. Regarding their parents' education the fathers' of 171 (45.2%) and the mothers of 207 (54.8%)

students were educated. Where as, fathers' of 117 (31.1%) and mothers' of 259 (68.9%) students were not educated. The teacher respondents include 47 (95.9%) males and 2 (4.1%) females. In qualification, there were 2 teachers with 12+1 (ITI graduates), 26 with diploma and 21 teachers with a first degree. By their years of service, 6 teachers have 1-5, 14 teachers have 6-10, 20 teachers, have 11-15, and 9 teachers have 16-21 years of service.

Regarding the school personnel all of them were male and their age ranges from 27-44. By qualification, 4 personnel have a (first degree), 8 personnel have diploma and there is one director with 12+3 qualification. Their service year ranges from 3-17. The details of the respondents characteristics are given in Appendix 4.

On the other hand, the general trends of Arsi Zone high schools: enrollment, promotions, repetition and dropouts of female students are shown in table 1 follows.

Table 1 General Trends of Arsi Zone High Schools: Enrollment, Promotions, Repetition and Dropouts of Female students Vis-à-vis Male students in Five Consecutive years (1987-1991 E. C.)

		YEAR IN ETHIOPIAN CALENDAR																	
		1987			1988			1989			1990			* 1991			Total		
Pupils		M	F	%F	M	F	%F	M	F	%F	M	F	%F	M	F	%F	M	F	
Enrolled	9	3315	2964	47.20	3985	3122	43.9	4347	3009	40.91	5198	3255	38.51	5694	3724	39.54	22539	16074	
	10	1912	1263	37.78	2294	1382	37.6	2636	1478	35.93	3100	1659	34.86	3744	1884	33.48	13686	7666	
	11	1630	926	36.23	1996	913	31.4	2147	954	30.76	2683	1144	29.89	3444	1315	27.63	11900	5252	
Promoted	9				.63	.36		.59	.35		.63	.43		.62	.43				
	10				.93	.54		.79	.53		.83	.58		.85	.57				
	11				.73	.53		.57	.45		.66	.51		.62	.53				
	12																		
Repeaters	9				.26	.32		.29	.45		.19	.31		.21	.35				
	10				.11	.26		.13	.29		.13	.25		.16	.28				
	11				.13	.25		.17	.24		.24	.28		.30	.33				
	12																		
Drop outs	9				.11	.32		.12	.20		.17	.27		.16	.22				
	10				.4	.20		.8	.18		.4	.16		.1	.15				
	11				.13	.22		.27	.31		.11	.21		.8	.14				
	12																		

* The 1991 promotes, repeaters and dropout are referring to the first semester only

Source: Oromia Educational Bureau

As shown in table 1, though relative increment has been observed in the number of female students, percentages of female enrollment in each year reveals that, female students participation declined from year to year. This is assured by successive decline in percentage of female students enrollment from 47.20, 37.78, and 36.23 in 1987 to 39.54, 33.48 and 27.63 in 1991 in grades 9, 10 and 11. The respective proportion of females being 41.63%, 35.9% and 30.62% out of the 38613, 21352 and 17152 total (male plus female) students in grades 9, 10 and 11 also shows that female participation gradually declined. If we see the promotion rate of female students to that of males, in each year only 0.36 - 0.43 were in a position to be promoted. From this it can be noted that more than half of the registered female students couldn't pass from grade to grade either because of dropping out and repeating the grades. On the other hand, when we see into rate of male promotion in each year, it is by far greater than that of females (see the above table). Therefore, one can see that there was no year in which the male rate of promotion seen to be below 0.59 at each grade level.

Moreover, when we look into rates of repeaters and that of dropouts there is no year in which rates of either repetition or dropout even became equal with that of boys in each grade.

In general, it can be inferred that, the enrollment of female students in Arsi Zone high schools were increasing in absolute numbers. There were more female pupils in school. However, the rate of increment has declined when compared to that of males. The rate of increment is yet insufficient to respond at large to stem the growing numbers of out of school females. Such phenomena is observed while the new educational policy, is making effort to

increase girls schooling, emphasizing the interest of girls, amid the general need for more. The percentage of all female enrollment in five Arsi Zone high schools in the academic year of 1991 is shown in the following table

Table 2. Percentage of Female Enrollment In Five Arsi Zone High Schools

Schools	Year 1991 E.C.														
	Grades														
	9			10			11			12			Total		
	M	F	%F	M	F	%F	M	F	%F	M	F	%F	M	F	%F
1. SIRE S. S. School	131	127	49.2	112	70	37.46	113	50	30.67	53	18	25.35	409	265	39.32
2. HURUTA S. S. School	383	267	41.1	268	134	33.3	261	91	36.1	126	40	24.1	1038	532	33.9
3. ARBOYE High School	182	83	31.3	102	32	23.9	86	34	28.33	63	17	21.25	433	166	27.7
4. KERSA S. S. School	238	109	31.4	148	55	41.0	154	40	20.6	68	17	20	608	221	26.7
5. KETAR FUAFUATE S. S. School	281	63	18.3	137	19	12.2	126	13	9.35	105	12	9.5	649	106	14.0
Total	1215	649	34.8	767	310	28.8	740	228	23.55	415	103	19.9	3137	1290	26.7

Source: Arsi Zone Education Bureau

Table 2 indicates that condition of female students enrollment in the five-high schools is also the reflection of the over all enrollment in the region. The matter was more serious for schools which are far located from the zone capital city. Total percentages of 14.0, 26.7, 33.9 and 39.32 noted in the schools, from farther to nearer, imply that the problem of female enrollment is also associated with the distance of the school from more urban oriented areas.

Summary Diagram for Dropout Rates Among The Cohort Children (males&females) in the Region (1989-1994)

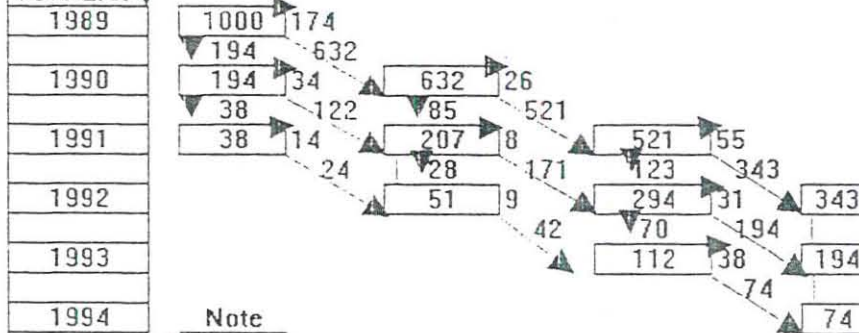
Diagram 1 :-The Reconstructed History of 1000 male pupils year-by-year and grade by grade

Arsi (Boys) 1989

Grades	9	10	11	12
Enr.89	4347	2636	2147	1130
Enr.90	5198	3100	2683	1413
Rep.90	842	353	508	

Prom rate	0.63	0.33	0.66	###
Rep rate	0.19	0.13	0.24	0.00
Drop rate	0.17	0.04	0.11	###

Year E.C.



Note
▲ Promotees

▼ Repeaters
→ Dropouts

Survival by Grade



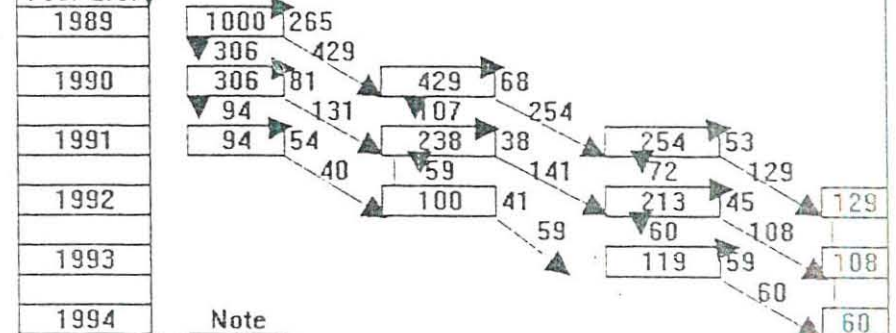
Diagram 2 :-The Reconstructed History of 1000 female pupils year-by-year and grade by grade

Arsi (Girls) 1989

Grades	9	10	11	12
Enr.89	3009	1478	954	407
Enr.90	3255	1659	1144	484
Rep.90	921	369	270	

Prom rate	0.43	0.59	0.51	0.00
Rep rate	0.31	0.25	0.28	0.00
Drop rate	0.27	0.16	0.21	1.00

Year E.C.



Note
▲ Promotees

▼ Repeaters
→ Dropouts

Survival by Grade



Source:- Oromia Education Bureau

As shown in diagram 1, out of 1000 male students who got the chance of continuing senior secondary education, about 610 (61%) of them are in a position to complete (graduate) grade 12. Whereas 390 (39%) are not in a position to complete the cycle. On the other hand, as noted in diagram 2, out of 1000 female students who got a chance of continuing senior secondary school, only 297 (29.7%) are in a position to complete the cycle or reach grade 12. However, majority (703 or 70.3%) of female students are not in a position to complete the cycle. This incident/clearly shows that, in high school dropout is more serious among girls than among boys. The following sections deal with various school related factors that might be attributed to low rate of female students enrollment as they go up through the ladder.

4.2 SCHOOL RELATED FACTORS

The study has looked into some of the school related factors that attribute to low rate of female students enrollment in Arsi Zone Senior Secondary Schools. The following discussions are made underlying some of these school related factors as hindering the enrollment of female students in high schools. Frequencies of item responses are displayed in different contingency tables.

4.2.1. Location (distance)

Table 3. Female students by their Distance (in hours) from Home to School and Present Residence

Distance (in hours)	Responses	
	No	%
30 minutes or less	295	78.2
31-60 minutes	56	14.9
61-90 minutes	9	2.4
91-120 minutes	12	3.2
more than 120 minutes	5	1.3
Total	377	100
Residence		
With family	261	69
With relative	50	13
At a rented lodging	68	18
Total	379	100

The above table indicates that the majority of female students (295 or 78.2 percent) travel 30 minutes or less to reach high schools. On the other hand 14.9 percent of the students were traveling 31-60 minutes. Only very few students (4.5 percent) had to travel 61-120 minutes and above. Besides this, as it is shown in the table, most of the female students (69 percent) were living with their family. 13 percent of them reported that they were living with relative and the rest (18 percent) at a rented lodging.

In summary as 78.2 percent were urban based, it is possible to say that chances of high school attendance by females from remote rural areas is very low.

Table 4. Responses of students whether it is safe to travel to school and the nature of problems.

Response	Residence	Response	
		No	%
Yes	Urban	103	31.7
	Rural	38	11.3
No	Urban	91	27.0
	Rural	99	30.0
Sub total	Urban	196	58.7
	Rural	139	41.3
Grand total	U+R	335	100
Reasons for No: Response by residence			
Problems of:	Residence	Response	
		No.	%
Security	Urban	102	31.0
	Rural	93	28.0
Transportation	Urban	5	2.0
	Rural	13	4.0
No response	Urban	90	27.0
	Rural	26	8.0
Sub-total	Urban	198	60.0
	Rural	134	40.0
Grand total	U+R	332	100

As shown in table 4, out of 335 students 31.7 percent and 11.3 percent of female students respectively from urban and rural areas noted that there was no problem on their way to school. On the other hand, 27 and 30 percents of females from urban and rural in order replied that it was not safe to travel to school. The problem of safety on the way to school and back was specified by females both from urban and rural areas. However, the problem seems more serious for girls from rural areas as 30 percent in table 4 indicates.

In the same table it is shown that out of 332 respondents 31 percent from urban and 28 percent from rural noted that there is security problem. These include: rape, abduction, threat from urban gangs, cow keeper (shepherd) and farmers. There were also few students saying that there is a problem of transportation. These account for 2 percent and 4 percent of female students from urban and rural respectively (see table 4). Of course, responses of interviewed directors were also in agreement with reasons stated by female students i.e. security problem. Most of the directors replied that rape and abduction are gravely accounted for the low rate of female enrollment in the school.

Table 5 Extent of Influence of unsafe long Distance

Item	Respondents		Response			x ²
			High	low	Total	
un safe long dista- nce	Students	No	245	114	359	*21.8
		%	68.2	31.8	100	
	Teachers	No	39	1	40	
		%	97.5	2.5	100	
	School Personnel	No	13	-	13	
		%	100	-	100	

* Significant at an alpha level < 0.05 and degree of freedom = 2

From Table 5 one can see that the impact of unsafe long distance on the schooling of female was high. This is ascertained by responses of 245 (68.2%) students, 39 (97.5%) teachers and 13 (100%) school personnel. This shows that there is a strong relationship between school distance and the schooling of female students. As the value of chi-square indicated the existing differences among female students, the teachers and school personnel views about distance as a school-related factor is not significant. That is, the table value of chi-square ($x^2=5.991$) for 2 degrees of freedom at 5 percent level of significance is higher than the calculated x^2 value noted in the above table.

As it has been noted in table 4, one of the problems associated with distance is security problem that is expressed in kidnapping , rape, fear created up on girls on their way to school. The responses of female students to open-ended items (no 3 and 6) have revealed various challenges which they had to face on their way to school. The following are quotations of some typical statements by female students, to illustrate on how distance brought about security problems.

“They (boys) trouble us. They intend to abuse a girl through beating or violence when she comes to school; they knock on our doors at night; waiting at school, they beat me; snatch my books; these are problems we face when we live apart from our families.

“Urban vagabonds (gangs) trouble me since I learn by leaving in rented house away from my family. My class mates also beat me at school.”

“Certain urban gangs create problems, waiting on my way to school.”

“When we return from school, there are tendencies of harassment by gangs and students saying that a female student would have no where to reach in learning.”

“Yes, male students spoil the lives of female students who come from other locations be it on the road or any other place.”

“Male students request a female for various things; if the girl shows no will, they want to abuse her by using force or obligation.”

“Female students have no right to go alone. Because when they go alone, they (boys) wait for them on the road and delay them, and they can not go.”

“Yes, I encounter many problems when I return from school. These are insults from herdsmen and throwing of stones.”

“As the distance is too long, even at this time, in this age of mine [18], what I am worried about is the journey problems rather than my learning because there are abductions, rapes etc..”

The above statements by female students indicate that in Arsi Zone High Schools female students (mostly those from rural areas) suffered from multiple problems. They were worried of rape, abduction (which is traditionally perceived as a norm), and other related matters. Those living at rented lodging were also not safe. They were troubled by agony caused by urban gangs at home during the night and on their way to school during the days. They were abused, insulted, harassed by urban gangs who knew that they were unprotected. Reports by some females have also indicated that school boys abuse, beat, harass, rape and often snatch their exercise books both on their way to school and in the school compound. All of these reports show the gloomy features of female education in Arsi zone High Schools.

The seriousness of such a problem was also demonstrated by the interviewed school personnel. According to them, distance or school location had to play a remarkable role in determining the level of female participation in education. Hence, a school distance is found to have paramount impact on the enrollment, achievement and sustained life of females in school.

Dealing with the effect of distance upon the schooling of students Dirrisa, (1993), Adane (1993), Debele (1980), Hyde (1989) and others have noted that distance of school has a direct connection with dropouts. Unless the schools are close to home, parents may be reluctant to challenge tradition and to educate their daughters (Caspo, 1981, Callaway, 1984, in Hyde 1989.) Statements by these scholars have clearly noted that proximity of schools influences parental decision on persistence of children's (mostly of daughters) schooling. Walking long distance from home to school is accentuated by poor transportation, and unsafe road conditions. Since they have to walk through bushes, cross steep slopes, rivers, marshy grasslands, etc., problems associated with distance are becoming serious for girls from rural areas at large.

To sum up, the result of the present study corresponds to what has been already documented by other scholars. The problems connected to long distance or unsafe road condition might force parents either to with hold their daughters at home or to withdraw from school. When the road security problems became unbearable, girls might resort to dropping out of school.

4.2.2. Teachers Attitude (Perception)

The bulk of the research focusing on teacher-student interactions reveal that teachers treat boys and girls differently. In the school, boys are said to be disciplined more often but they also receive moral recognition and attention. Teachers, both female and male, engage in differential treatment of their pupils according to sex. These teachers are generally not conscious of the ways in which females are treated differently in the classroom and in the school. This part of the paper deals with female students perception of their teachers and the teachers'

perception of their female students. The extent of teachers' influence on performance or achievement of female students and the extent of their effect on girls' low rate of enrollment. Table 6 presents the data on female students views about their teachers.

Table 6. Female Students Judgment of Teachers

Description of Items	Responses							
	Agree		Unknown		Disagree		Total	
	No	%	No	%	No	%	No	%
11.1 Most teachers help boys and girls equally in their subjects	148	39.2	32	8.5	198	52.4	378	100
11.2 Most teachers give equal regards to girls and boys performance	142	37.6	20	5.3	216	57.7	378	100
11.3 Most teachers discourage girls more than boys when students fail to provide appropriate responses (answer)	166	44.1	58	15.4	152	40.4	376	100
11.4 Most teachers would like to interact with girls in grooming	125	33.2	77	20.5	174	46.3	376	100
11.5 Most teachers would like to interact with boys than girls in academic affairs	207	54.8	46	12.2	1125	33.1	378	100
11.6 Most teachers give more feed back to boys than to girls	173	46.4	44	11.8	156	41.8	373	100
11.7 Most teachers give more praise to boys than to girls	162	43.0	51	13.5	164	43.5	377	100
11.8 Few teachers would like to give feed back and praise to girls	283	76.1	31	8.3	58	15.6	372	100
11.9 Most teachers encourage boys more than girls in the classroom	188	50.0	37	9.8	151	40.2	376	100
Most teachers have low expectation for girls performance	272	71.8	22	5.8	85	22.4	379	100
11.11 Most teachers tend to consider high performance by boys	284	75.3	28	7.4	65	17.2	377	100

As shown in Table 6, 198(52.4%) and 216 (57.7%) respondent of female students in order noted that, most teachers help in their subjects boys and girls unequally. Besides this, 166(41.1%), 207(54.8%) and 173(46.4%) of female responses also

indicate that, most teachers, discourage girls more than boys when students fail to provide appropriate responses, would like to interact with boys, than girls in academic affairs and give more feedback to boys than to girls.

Their responses also indicated that most teachers encourage boys more than girls in the class room, have low expectation for girls performance and consider high performance by boys. These are shown by 50, 71.8 and 75.3 percents respectively. According to their response, however, there are few teachers who would like to give feed back and praise to girls. this is assured by 76.1 percent of female respondents.

Generally, as it can be observed in the above table, most of the teachers have low expectation for girls performance; tend to attribute high performance to boys; encourage boys more than girls in the classroom; would like to interact with boys than girls in academic affairs; do not help both sexes equally in their subjects; do not give equal regards to girls and boys performance; discourage girls more than boys for failure to provide appropriate response; give more appraisal to boys than to girls, and only few would like to give feed-back and praise to girls.

From the responses of the students, it is possible to say that teachers in co-educational setting of schooling, tend to regard girls as less able to learn than boys. And consequently, girls may be pushed to learn or reproduce in the classroom and in the school environment sex-role stereotypes they acquired at home and in the society at large. Teachers tend to give girls less useful feedback, less attention and less regard. In general, boys seem to benefit more from the co-educational schooling systems. On the other hand, girls are lead to perceive that they are degraded by their teachers.

On the other hand, the teachers views of their female students is summarized in the proceeding table.

Table 7 Teachers' Judgment of their Female Students

Description of Items	Responses							
	Agree		Unknown		Disagree		Total	
	No	%	No	%	No	%	No	%
1.1 Girls do not like learning as boys	11	23.0	2	4.2	35	73	48	100
1.2 Girls have less confidence than boys in their academic performance	39	81.2	2	4.2	7	14.5	48	100
1.3 In classrooms boys are more interactive than girls	43	87.8	1	2.0	5	10.0	49	100
1.4 Academically girls are more independent than boys	5	10.0	2	4.1	41	85.4	48	100
1.5 Academically boys are more independent than girls	41	85.4	-	-	7	14.6	48	100
1.6 Academically both sexes are independent	7	14.6	2	4.2	39	81.3	48	100
1.7 Academically boys achieve more than girls	44	89.8	-	-	5	10.2	49	100
1.8 Academically girls achieve less because of their nature	8	16.3	6	12.2	35	71.4	49	100
1.9 Academically boys are better than girls in all subjects	30	61.2	-	-	19	38.8	49	100
1.10 Academically boys are better than girls in some subjects such as science and mathematics	39	79.6	1	2.0	9	18.4	49	100
1.11 Girls are better than boys in subjects such as language and home economics	25	51.0	4	8.2	20	40.8	49	100
1.12 In the classroom boys and girls are equally interactive	10	20.0	32	6.6	7	14	48	100
1.13 In the classroom girls don't ask question as frequently as boys	44	89.8	-	-	5	10.2	49	100
1.14 In the classroom girls are better disciplined than boys	36	74.0	3	6.0	10	20.0	49	100
1.15 Boys answer more question than girls	46	93.8	-	-	3	6.1	49	100
1.16 Guidance and counseling is necessary for girls than to boys	41	83.7	-	-	8	16.3	49	100
1.17 Boys give good response frequently	40	83.3	-	-	8	16.7	48	100
1.18 Girls show low interest in schooling than boys	19	39.6	4	8.2	25	52.0	48	100
1.19 Girls make more effort in school than boys.	12	25.0	3	6.2	33	68.8	48	100

As shown in table 7, most of the teacher respondents seem to have unfavorable perception about female students. They largely hold that girls have less confidence in academic performance, achieve and perform less, make less effort than boys in school. This has been confirmed by 81.2, 89.8, 68.8 percents of responses of teachers.

By contrast, boys are perceived to be more confident, more interactive, more independent, answer more questions in class, and perform better in all subjects. These are also shown by 87.8, 85.4, 93.87, 61.2 percents of responses by school teachers. In short, it can be said that teachers in Arsi Zone High Schools treat their students differently according to sex. The forthcoming table then deals with the extent of influence of teachers attitude on girls participation in schooling.

Table 8 Extent of Influence of Teacher Attitude on School

Participation of girls

Item	Respondents		Response			
			High	Low	Total	X ²
The degree of influence of Teachers attitude	Students	N	274	38	312	*3.16
		o				
		%	87.8	12.2	100	
	School Personnel	N	9	3	12	
		o				
		%	75	25	100	

* Significant at an alpha level less than 0.05 df=1

The data in the above table shows that the influence of teachers attitude on the enrollment of female students is high. The responses of 274 (87.8%) females and 9 (75%) school personnel confirmed that teachers treat students differently according to sex. The chi-square value also indicate that the difference between the responses of female students and school personnel in this respect is not statistically significant at an alpha level <0.05. The table value of chi-square ($x^2=3.841$) is higher than the calculated chi-square ($x^2= 3.16$).

This shows that school personnel and students similarly noted the impact of teachers attitude on the schooling of female students.

From student judgment of their teacher, it can be seen that the impact of teachers perception on females schooling is of great importance. Teachers judgment of their students also revealed that they don't have equal consideration for boys and girls. Moreover, response of school personnel and students indicate that the influence of teachers attitude/perception on the participation of girls in education is high. One way in which this might work is through the quantity and quality of interaction between teachers and students (Appelbaum 1995). According to him teachers might subtly affect student's self-concept, communicating to some that they are competent and to others that they are not. Teachers address more mild feed-back to girls and more lively feed back to boys. They also seem to give difficult tasks for females, however, instruct boys to task completion (Good and Bruphy in Krikshank, 1995).

As a whole, the results of the present study indicate that differential treatment of students by their teachers according to sex do have a considerable impact on the school participation of females.

4.1.3 Sexual Harassment

Another condition in schools that affects female students is, sexual harassment. In various African countries sexual harassment is a fairly widespread phenomenon in upper primary and secondary co-educational schools, and involves both boys and girls as well as female and male teachers. In general, However, more victims of sexual harassment are girls and most perpetrators of the harassment are males

(sexual jokes, repeated propositions, leering, touching, in addition to more extreme forms of behavior such as rape or sexual assault) (FEMED, 1996). In most developing countries, where the majority of secondary schools are located in urban areas, girls report high vulnerability to sexual abuse, as they often come to be under the tutelage of older men outside the school who exploit them sexually. This section of the analysis hence focuses on the impact of sexual harassment and the next table presents the summary of the data.

Table 9. Extent of Influence of Sexual Harassment on the school participation (Enrollment) of Females.

Item	Respondents		Responses			
			High	Low	Total	χ^2
Sexual Harassment	Students	No	188	142	330	*2.177
		%	57	43	100	
	Teachers	No	20	21	41	
		%	49	51	100	
	School Personnel	No	9	4	13	
		%	69	31	100	

* Significant at an alpha level < 0.05 df=2

As shown in table 9, 188 (57%), 9 (69%), and 20 (49%) of the students, school personnel and teachers respectively indicated that sexual harassment had remarkable effect on the education of girls in Arsi Zone High Schools. Even though 21 (51%) of the teacher respondents maintained the opposite view, the value of chi-square indicates that the difference in views of the three groups is statistically insignificant. That is, the table value of chi-square ($\chi^2=5.991$) with 1 degree of freedom at 5 percent level of significance is greater than the calculated χ^2 value (2.177).

Moreover, responses of the interviewed school personnel have also noted that the incident of sexual harassment is common in Arsi-zone high schools.

Even though girls report frequent harassment by their male school mates, they merely report to the office. They mainly failed to report either to office or to other responsible bodies, in anticipation of consequences worse if those agents failed to deal with the problems. In fact, there had been occasions in which measures were taken against the deeds of bully boys. They also told that there were cases in which they reported to the wereda court when the issues had gone beyond the scope of the school. However, the reactions of the law court was said to be inactive. For instance, one of the school directors noted the case of a girl who had been raped and which was set under investigation with out getting any solution. Even there were cases in which high school directors who seriously followed up the problem were given warning at their offices. As a result some high school directors seemed to be less concerned on such issues. Reports by some female students also noted that sexual harassment tended to increase as the school personnel failed to take immediate measures when it was reported to them.

The results of this study are also similar with what has been noted by Thomas, (1990), Summer, (1992), African Rights (1994), Odaga,(1995), Yusuf, (1998), Stromquist 1997 and others. All have noted that incidence of harassment (sometimes sexually) is distressing and it often forced females to stay at home or dropout or be out of class, thereby interfering with their studies. Some of these scholars have also documented that harassment of girls by school boys (often sexually) is either over looked or ignored or taken as a normal boyish character (behavior) by the school communities such as teachers and school personnel. As it

has been reported by these scholars. sexual harassment such as rape, touch, insult, repeated proposition etc. have become a potent tool in the arsenal of gender related attacks on girls by their male school mates at senior secondary schools.

The present findings have shown that harassment in high school has a high magnitude in hindering the school participation of females. Hence, sexually abused/harassed female students in Arsi Zone high schools might be forced to remain at home or those at school might also resort to withdrawal (dropping) from the school. The low number of those promoted and in contrast, the high number of repeaters and dropouts (see table 1) of female students in the region might be attributed to harassment. Thus, harassment is found among school related factors that account for low rate of female enrollment in Arsi Zone high schools.

4.1.4 Lack of Guidance and Counseling

At secondary school level adolescent females do experience various personal and social problems. Adolescence is a critical period of development of emotional needs which may bring about pathological conditions for which the adolescent needs counseling. According to Yusuf (1998), some of the problems that may arise during high school years may stem from adolescent's open resistance of authority. Even though the students in High Schools (males and females) share a lot of common problems, it seems that females are the primary victims of harmful traditional practices prevalent in the country. Thus, they seek help from a variety of sources. Among these the school counselor is one. However, in most of our high schools, lack of such a resource person seems to contribute to lower achievement, high dropouts and low rate of enrollment. Table 10 shows the lack of such services in Arsi Zone High schools.

Table 10 Extent of Influence of Lack of Guidance and Counseling on School Enrollment of Female Students

Factor	Respondents		Responses			X ²
			High	Low	Total	
Lack of Guidance & Counseling	Students	No	256	80	336	*5.57
		%	76.2	23.8	100	
	Teachers	No	37	6	43	
		%	86	14	100	
	School Personnel	No	13	-	13	
		%	100	-	100	

* Significant at an alpha level less than 0.05 and Df=2

As it is presented in table 10, responses of 100, 86 and 76.2 percents of the school personnel, teachers and female students indicated respectively that lack of guidance and counseling in Arsi Zone high school is high. According to some of the female students, though they do have good orientation on the benefits of counseling in their school, nothing has been done to minimize their problems. If there were such a service, they would have shared their problems and benefited from advice given to them. However, due to either of its absence or non-functioning of the existing one, they lacked where to look for when they need help in the schooling process.

The chi-square also indicated that (i.e. , the calculated value of χ^2 is 5.57 whereas the table value of χ^2 for 2 degrees of freedom at 0.05 level significance is 5.99 which means the differences in responses of students, school personnel and teachers on the influence of guidance and counseling on the school participation is statistically insignificant.

Reports by the interviewed school personnel were also consistent with what has been noted by the students. They also explained that they knew (either formally or

informally) various problems (such as social, economic, cultural, psychological, personal etc.) from which female students are suffering. However since the schools don't have professionally trained counselors, efforts made in dealing with female issues were minimal. In some schools the counseling program is run by teachers nominated among the school staffs. As they were busy in academic activities, the counseling service given by these people is also inefficient. Thus, the schools are unable to provide full-fledged counseling service. Had it not been for lack of such a program, the condition of female participation at High school level would have been better. Because the program could help them by providing necessary orientation on their problem and reduce number of female dropout and repeaters. Moreover, provision of effective guidance and counseling will result in promoting the school participation of females. The means that would help in upgrading the enrollment of females at all level of education is strengthening of guidance and counseling services in schools (Edigar, 1987; Asmerom, 1989; et al.). Since adolescent females in high school are faced with various problems that makes counseling very necessary. Thus, adolescent students in high schools, (mostly females) are subject to complex life difficulties that aggravate quitting of school. The availability of guidance and counseling has a great role in reducing, repetition, dropout rates; and in maintaining females in the schooling process and in attracting those out of the school environment. In high schools, they could seek it from different sources such as peers, teachers, professionally trained counselors, by visiting experts through referral system (by visiting traditional helping professionals). However, no evidence of female students access to any such sources was noted in Arsi Zone High Schools. Thus, side by side with other school related factors, the scarcity of guidance and counseling services seems to accentuate students (more of females) dropping, repetition etc. in high schools.

In summary, the present findings also indicate that absence of guidance and counseling services seems among school related factors for the high rate of dropouts, repetition and low rate of enrollment as a whole. Because of the lack of such sources, high schools in the region have no way to intervene and deal with female students problems.

4.1.5 Pregnancy

The findings regarding the condition of school pregnancy are, presented in the following table.

Table 11 Extent of Influence of Pregnancy on the School Participation of Girls

Item(Factor)	Respondents		Responses			x ²
			High	Low	Total	
School Pregnancy	Students	No	212	126	338	*10.95
		%	62.7	37.3	100	
	Teachers	No	19	19	38	
		%	50	50	100	
	School Personnel	No	13	-	13	
		%	100	-	100	

* Significant at an alpha level < 0.05 as Df=2

As a whole, 50 percent, 67.7 percent and 100 percent of the responses by teachers, students and school personnel respectively indicated that pregnancy is some what serious for low rate of girls participation in the high schools. In this respect the calculated value of x² is 10.95. However, the result of chi-square analysis indicated that the differences between the views of the three groups of respondents is of paramount significance (i.e. the calculated value x² 10.95 is more than the table value 5.99). Comparison among teachers, students and school personnel responses is shown in table 12.

Table 12. Comparison of Proportion

Factor		Student	Teacher	Total	Student	School personnel	Total	School Personnel	Teacher	Total
Pregnancey	High	212	19	231	212	13	225	13	19	32
	Low	126	19	145	126	-	126	-	19	19
	Total	338	38	376	338	13	351	13	38	54
		$p_1=0.627$	$p_2=0.5$	$p=0.614$	$p_1=0.627$	$p_2=1$	$p^{\wedge}=0.641$	$p_1=1$	$p_2=0.5$	$p^{\wedge}=0.372$
	*Z-escape	*Z=1.52			*Z= -2.590			*Z= 3.188		

* Significant at an alpha level 0.05 when $-1.96 < Z_{cal} < +1.96$

As it is shown in table 12, the calculated values of Z were 1.52 for teachers and students, 2.590 for students and school personnel and 3.188 for school personnel and teachers. But the table value of Z at alpha 0.05 of significance is 1.96. Thus, such significant difference is observed between teacher and school personnel respondents and between school personnel and student respondents. However, the calculated value of Z (1.52) indicate that the difference in responses of teachers and students is not significant.

As far as pregnancy is concerned, all (100 percent) of the school personnel invariably responded that pregnancy emerges as a major cause for adolescent girls leaving school. According to them, parents remove their daughters from school as they approach puberty. They also noted that health implication of teenage pregnancy such as high risk of death and illness for their adolescent daughters also forced some parents to remove girls from school. In the same way, Youri (1993) has suggested that secondary school girls who had been pregnant were twice as likely to report poor health than those with no pregnancy history.

Though the proportions of responses between school personnel and female students seemed to be varied, school pregnancy is a major immediate cause for girls dropping out from school. As girls reach adolescence, pregnancy becomes a more important factor in quitting their education. As pregnancy is unplanned, there is a significant demand for contraception among teenagers.

4.1.6 The Availability of School Facilities and Provisions and their Impact

The school facilities and provisions are prominent instruments in the process of teaching learning activities and are the tools through which educational objectives are achieved. Table 13 shows the conditions of school facilities.

Table 13 Adequacy of School Facilities

	Facilities	Responses									
		Adequate		Fairly Adequate		Inadequate		Not at all		Total	
		No	%	No	%	No	%	No	%	No	%
7.A	Library	79	20.9	110	29.1	151	39.9	38	10.1	378	100
7.B	Laboratory	54	14.3	62	16.4	178	47.1	84	22.2	378	100
7.C	Classrooms	173	45.9	110	29.2	87	23.1	6	1.6	377	100
7.D	Desks	113	29.9	136	36.0	100	26.5	29	7.7	378	100
7.E	Chairs	103	27.2	133	35.2	118	31.2	24	6.3	378	100
7.F	Recreational Services	29	7.2	23	6.1	56	14.9	268	71.3	376	100
7.G	Clean drinking water	135	35.6	65	17.2	46	12.1	133	35.1	379	100
7.H	Study Hall	6	1.6	26	6.7	65	17.1	282	74.4	379	100
7.I	Guidance and Counseling Services	57	15.1	65	17.2	143	38	112	29.6	377	100
7.J	Clinic	5	1.3	21	5.6	48	12.8	301	80.3	375	100
7.K	Toilet	4	1.1	15	4.0	280	74.7	77	20.5	375	100

In addition to what was proposed by the target population, observation was made on different school facilities such as the condition of library, laboratory, classrooms, desks, chairs, tables, recreational services, clean drinking water, study hall, clinic and toilet. In most cases, the above listed school facilities and related ones are either inadequate or totally absent. From the above data, 50 percent of the respondents noted library was either inadequate or not at all present. And 69.3 percent of the respondents said that laboratory was either inadequate or not at all present. By the observation made it was found that some of the libraries were

functioning without having enough reference materials such as dictionaries, Encyclopedia, World books etc. In some schools, libraries are totally closed or have ceased to function. The students are thus denied of using the few available reference materials. The same was true of laboratory conditions where most of the equipment are over-used. At present they are giving service nominally. Most of them are working without lab-tables, chairs, sink, work table or bench, lab-cupboard, filing cabinet, black-board, store-shelf, display cupboard, testing tables etc. In some schools laboratories are completely closed. For instance, in Kersa senior Secondary School the laboratory has ceased to function for over five years.

The circumstance was worse when it comes to recreational services, study hall, clinic and toilet. As it is indicated in table 13, about 86.2 percent, 91.5 percent, 96.1 percent and 95.2 percent of the responses indicate that recreational service, study hall, clinic and toilet are either inadequate or not available. Most of the female respondents have noted that they would like to have a separate toilet. Befekadu's (1998,) findings have also revealed that the inefficient toilet service is among school facilities that are obstructing female participation in rural schools.

Similarly, 67.6 percent of female respondents have noted that guidance and counseling service was either inadequate or totally absent. However, the availability of guidance and counseling services is important in determining the level of participation of boys and girls (but more important for girls) (king, 1993; Stromquist, 1997). According to these scholars, offering guidance that include counseling is among strategies to modify the school climate for girls.

Data was also gathered on the impact of school facilities on female education which is summarized as follows

Table 14 Extent of Effect of School Facilities on the School Participation of Girls

Item (Factor)	Respondents		Responses			
			High	Low	Total	X ²
Lack of School Facilities	Students	No	182	171	353	
		%	51.6	48.4	100	*1.51
	Teachers	No	26	17	43	
		%	60.5	39.5	100	
	School Personnel	No	5	3	8	
		%	62.5	37.5	100	

*Significant at an alpha level < 0.05 with Df=2

As a whole, 51.6 percent, 60.5 percent and 62.5 percent of the students, teachers and school personnel noted that the problem of inadequacy or inavailability of school facilities on the school participation of girls is high. The existing difference among the responses of females, teachers and school personnel are not significant. Vis-à-vis this, the calculated value of χ^2 is 1.51. But the table value of χ^2 for 2 degrees of freedom at an alpha level 0.05 level significance is 5.91 which means responses of the three groups on the impact of lack of school facilities on the school participation of female is more or less similar.

By and large, the present findings also revealed that the availability of school facilities is a factor in determining levels of participation of students, but more important for girls. Because inadequate resources bring about low rate of enrollment, poor attendance, under-achievement by students. As it is noted by Heyneman and Loxery (1983) and Fuller, (1986), school facilities are significantly linked to levels of educational achievement than were socio-economic characteristics of the family.

CHAPTER V

Summary, Conclusion and Recommendation

The study was intended to examine school related factors that affect the enrollment of female students in Arsi Zone High Schools. In order to attain the desired objectives, the following procedures were under-taken: relevant documents were gathered from various relevant sources; questions were set, dependent and independent variables were defined; tools for data collections were developed; and finally, the data was analyzed and interpreted.

The study was carried out in five Arsi Zone High Schools. The subjects of the study were a sample of female students, the teachers and all school personnel. So as to procure the necessary information from the sample population both structured and unstructured questionnaires were provided. Moreover, structured interview was made with the school personnel. The status of enrollment of girls in the high schools of the region was assessed from documents at the regional and zonal bureaus of education and the schools.

The data obtained were analyzed using percentage, chi-square and Z-score. Chi-square was used to see whether the responses of female students, teachers and school personnel on identical items is consistent. Whereas Z-score was used to confirm whether possible differences (variations) were significant.

5.1. Summary of Findings

1. As indicated by overall percentages, the annual growth rate of female students enrollment in Arsi Zone High Schools is low. This is true when compared to the enrollment of their counter-parts /male students/ in each grade level (9-11).

- Calculated percentage showed that female rate of enrollment decreases up the ladder, i.e. 39.54 percent in grade 9, 33.48 percent in grade 10 and 27.63 percent in grade 11. This show that as the grade increases, the level of female participation decreases.

- Compared to that of males, rates of female promotees is low. During the last five years the lowest promotee rates for boys was. 0.59 where as, the highest promotee rate for female students have never exceeded 0.43. On the other hand, compared to that of males rate of repeaters and dropouts, there is no any year and grade in which rates of female repeaters and dropouts even become equal with that of males. Though, an increment in absolute numbers enrollment is noticed, the increment rate has declined in grade 9, 10, and 11 since 1987 E. C. except the increment of 1.03 percent noted in grade 9 in 1991.

- As it is indicated in table 2, the total calculated percentages of 34.8 for grade nine, 28.8 for grade ten, and 23.55 for grade 11 have also shown that rates of enrollment of females in each grade is by far lower than that of males.

2. The calculated percentages have also shown that the major school related factors that negatively affect the enrollment of female students are:

- Lack of guidance and counseling, unsafe long distance is highly stressed by all respondent /students, teachers and school personnel/.
- Both students and school personnel confirmed that teachers attitude (perception) does have a profound effect on the school participation of girls.
- The effect of school pregnancy and sexual harassment on the schooling of female in high schools are highly stressed by school personnel, and by students and teachers too.
- Moreover, all groups (teachers, students and school personnel) highly noted the effect of the inadequacy of school facilities.
- Of the school facilities, lack of guidance and counseling, toilet, clinic, study hall and recreational services are highly emphasized by female student respondents.

5.2 Conclusions

Based on the major findings of the study, the following conclusions were reached.

As it is observed in the present study, the enrollment of female students in Arsi Zone High Schools is very low compared to that of males. Among the problems that attributed to such low enrollment of females, are school related factors. Thus, the major school related barriers to female participation in Arsi Zone High Schools were distance of schools, lack of guidance and counseling, teachers' attitude or differential treatment according to sex, sexual harassment, unintended pregnancy and inadequate school facilities. Moreover, their impact do have great implications for planners and policy makers in the Region.

Thus, planners at the zone and policy makers in Oromia Region are required to search mechanisms to reduce the impact of school related factors on the education of females in the High Schools of Arsi Zone.

5.3 Recommendations

Depending on the conclusions reached from this study, the following recommendations are suggested to reduce the level of school related factors and thereby up grade the level of enrollment (participation) of female students in Arsi Zone High Schools.

1. As observed in this study, distance of school is one of the major barriers for girls low rate of enrollment in Arsi Zone High Schools. There are two dimensions to this concern: one is related to distance, the other is the safety problem which has a direct link with distance. Therefore, in the region under study, there are still large numbers of young pupils (by far females who have completed their primary schooling) who are not in school as a result of which the need for more high schools is a problem to be addressed. Enabling more students to have access to school also tends to favor the access of more girls to schooling. In order to overcome the road conditions (security problems) policy based measures should be set both at zone and regional level. This would help in dealing with rape, abduction and improve the condition of female students at rented lodgings and to make environments more favorable for the education girls.

2. In the findings of this study, teachers engagement in differential treatment of students based on sex is also found to be high. Teachers seemed to give high regards to boys than to girls. They do not seem to give equal attention to boys and

girls performance. They tend to give girls less useful feed back and less attention. They are not conscious of the ways in which girls are treated differently in the classroom and in schools, etc.

Such unethical deeds of teachers are noticed where as their major objective should be to ensure that girl's self confidence and self esteem are promoted through out the schooling experience.

According to various research findings girls often stay longer in school when they are taught by female teachers. Teacher experience, attitude and teaching style are also found to be major contributing factors to girls' persistence and achievement. Therefore, in order to change teachers' perception of their female students, policy based gender sensitive training ought to be conducted and efforts /mechanism/ for promoting the number of female teachers should also be created. The presence of female teachers in the schools contributes to the provision of role models and subsequently higher motivation for girls. The presence of female teachers would also motivate parental support of girls' education.

3. In this study the impact of sexual harassment on attendance, performance achievement and school participation of female students is found to be considerable. Boys subject girls to non-verbal abuse and physical annoyance. Physical harassment, verbal and visual abuse are routinely faced by adolescent girls in Arsi Zone high schools. Thus, such aspect of school condition also calls for both policy and school based measures. This would help in overcoming unhealthy environmental situation at school level.

4. The findings in this study also show that lack of guidance and counseling at school level is found to be among the major school related factors that are

hindering girls school attendance, better performance (achievement) and school participation. Such problems emanated mainly from lack of professionally trained persons, and lack of well-coordinated guidance and counseling program. Thus, in order to tackle the problem of counseling in high schools, the engagement of others /teachers, directors, student/ within the school system and the community is very important. To overcome the shortage of professionally trained counselors, the involvement of these people, would be of tremendous help for the wellbeing of students.

5. Moreover, in the present study pregnancy is also found to be among the causes for girls dropping out of school and which consequently resulted in their low rate of enrollment in high schools. Fear of pregnancy is another reason why parents remove their daughters from school as they approach or reach puberty. Such a problem seems to come mainly from lack of ample orientation on how to use contraceptives. Thus, it would be good if more effort is made in creating awareness among adolescents on how to use contraceptives. In order to attain this objective the training of staff for this purpose and the provisions of the necessary material is needed.

6. Above all, in the preset study, findings indicate that inadequacy or unavailability of school facilities are also found to be among school related factors that are deterring the schooling of females. Though the impact of lack of school facility is commonly shared by both sexes (males and females), it seems more crucial for females. Making school facilities appropriate for mixed gender(sex) environment will provide more positive images for girls. Therefore, school personnel, teachers and other responsible bodies are required to create means of fund raising and to build separate toilets for girls, strengthen recreational services, prepare study hall etc. in the existing schools.

- ◆ Graham - Browne, Sarah (1991) Education in Developing World: Conflict and Crisis. London: Longman.
- ◆ Hallam, S (1994) Crimes Without Punishment Sexual Harassment and Violence Against Female Students in Schools and Universities in Africa. Discussion paper No.4. African Rights.
- ◆ Herz, B.k. Subbarao M. Hahid and L. Raney (1991) Letting Girls Learn Promoting Approaches in Primary and Secondary Education. The World Bank.
- ◆ Hyde, K.A.L. (1993), Sub-Saharan African in E.M. King and M.
- ◆ Kakwenzire, J (1996), Pre-conditions for Democratizing Women and Youth in Uganda Politics. OLOKa-On-Yango et al.
- ◆ Kelly, Gall P. and Carolyn M. Elliott (1982), Women in the third world State university of New York Press Albany.
- ◆ Kilo, M. (1994) Family Support for Education. Explaining Gender differences in Academic Performance in Cameroon. Sanford University
- ◆ King, Elizabeth and M. Anne Hill (1993), Women's Education in Developing Countries: Barriers Benefits and Politics .USA: A World Bank Book.
- ◆ Koul, Lokesh (1984) Methodology of Educational Research (2nd ed.) NewDelhi: Vikas Pub-House Put Ltd.
- ◆ Lockheed, M. E. (1993), "The Condition of Primary Education Dropouts in Developing Countries" In Levin H. Mand M. E. Lock heed(eds.) 1993. Effective school in Developing Countries London: The falmer Press.

- ♦ Maglad, M.E.A. (1994) "School Supply Family Background and Gender Specific School Enrollment and Attainment in The Sudan." East African Social Science Research Review Vol.10. No.2.
- ♦ Mbilinyi.M. and P. Mbghuni (eds.) (1991) Education in Tanzania With gender Perspective. Summary Report . Dar es Salam /Stockholm/ SIDA
- ♦ Measor, Liand P. Sikes (1992), Gender and School. London: CASSEL
- ♦Meeting Basic Learning Needs: A Vision for the 1990s: World Conference on Education for all 5-9 march 1990, Jomtien, Thailand
- ♦ Ministry of health, Division of Family Health-GTZ Support Unit (MOH/GTZ). (1998) Schooling Pregnancy in Kenya, Report of a Study of Discontinuation Rates and Associated Factors. Nairobi, Kenya: Ministry of Health, Division of Family Health GTZ Support Unit.
- ♦ Mosse, J. Cleves (1993), Half the World Half a Chance: An Introduction to Gender and Development Oxfam.
- ♦ Nachmias, David and Chava Nachmias (1987). Research Methods in the Social Science (3rd ed) .New York: St. Martin's Press.
- ♦ Nigussie Tamiru (1996), Gender Difference in Academic Professional Competence Among the Perspective Primary School Teachers. Addis Ababa University School of Graduate Studies.(Unpublished Masters Thesis)
- ♦ Nodding, N (1994). Caring: A Feminine Approach to Ethics and Moral Education. Berkely and Los Angeles: University of California Press.
- ♦ Odaga, Adhimbo and W. Hencueld (1995), Girls and School in Sub-Saharan: From Analysis to Action Washington DC. the World Bank

- ♦ (1996) Oromia Educational Bureau Educational Statistics Annual Abstract: Planning and Project Service Education Statistics Section.
- ♦ (1997) Oromia Educational Bureau Educational Statistics Annual Abstract.
- ♦ Palme, M (1993) The Meaning of School Repetition and Drop-out in the Mozambican Primary School. Education Division Documents. No. 60. Stockholm, SIDA
- ♦ Perry, Marvin (1997). Western Civilization: A Brief History (3rd ed.) New York: Houghton Mifflin Corp.
- ♦ (1995). Primary School Female Participation and Performance in CHEHA District. MOE Addis Ababa 1995.
- ♦ Prouty, D. (1991) "Selective Education: Issue of Gender, Class and Ideology in Northern Nigeria; review of African Political Economy No. 48: 7-25.
- ♦ Robinson, W., Makary and A. Rugh (1987) "Fourth Annual Report of the Study of USAID Contribution to the Egyptian Basic Education Program" Washington DC. Office of Women in Development Agency for International Development.
- ♦ Serpell, R. (1993) The Significance of Schooling: Life Journeys in an African Society. Cambridge: Cambridge University Press
- ♦ (1987). Sex Difference in Education: Journal of Comparative Education Vol. 23 No. 1-3, 1987 UNESCO.
- ♦ Seyoum Teferra (1988) "The Education of Women in Ethiopia A Missing Piece in Development Puzzle" The Ethiopian Journal of Education Vol. 10 No. 1.
- ♦ Seyoum Teferra and Ayalew Shibeshi (1989). "Fundamental of Educational Research: For Students and Beginning Researcher" Unpublished Instructional Material, Addis Ababa University.
- ♦ Shultz, T-P (1992) The Role of Education Human Capital. An Empirical Assessment. Discussion Paper No. 670. New Haven, CR. Economic Growth Center, Yale University

- ◆ Sommers, Lawrence (1992), Investing in all the People Educating Women in Developing Countries ANEDI Seminar Paper No. 45 ED1 of World Bank.
- ◆ Spear, M. (1984), The Biasing Influence of Pupil Sex in a Science Marking Exercise; Research in Science and Technology Education. New York Press Albany
- ◆ Spender, D(1982), Invisible Women: The School Scandal. London: Writers and Readers.
- ◆ Stoops, E, M Raffety and R.E Johnson (1981) Handbook of educational Administration. 2nd Ed, Boston Allyn and Bacon, Inc.
- ◆ Stromquist, Nelly P. (1988), Empowering Women Through Knowledge: Policies and Practices in International Cooperation in Basic Education. Paris: International Institute for Educational Planning.
- ◆ Stromquist, Nelly P. (1989), Recent Development in Women's Education Closer to A Better Social Order? in Rita Gallin, et al (eds). The Women and International Dat. Boulder Westview Press.
- ◆ Stromquist, Nelly P. (1997), Increasing Girls' and Women's Participation in Basic Education. UNESCO. Institute for Educational Planning.
- ◆ Tesfaye Semela (1996), The Impact of Gender, Attitude, and Sex Appropriateness of profession on Women Achievements Behavior: The case of Ethiopian Female Student in Higher Institution of Learning. Addis Ababa University School of Graduate Studies.(Unpublished)
- ◆ Teshome G/Wagaw (1979), Education in Ethiopia : Prospect and Retrospect Ann Arbor: Michigan University Press.
- ◆ Thomas, Kim (1990), Gender and Subject in Higher Education. Great Britain: The Society of Research into Higher Education and Open University Press.

- ♦ Thonstad, Tore (1979), Analyzing and Projecting School Enrollment in Developing Countries. A Manual Methodology: statistics Report and Studies No. 24 Paris UNESCO office of Statistics.
- ♦ Tilaye Kassahun (1997), Gender Specific Investigation: The Problem of High School Dropouts in Amhara Region. Addis Ababa University School of Graduate Studies. (Unpublished Masters Thesis)
- ♦ Tsehaye Berhane Silassie (1991), Gender Issues in Ethiopia: Institute of Ethiopian Studies A.A.U
- ♦ UNECA (1989), African Women in Development .Addis Ababa. UNECA
- ♦ United Nations (1995), African Women Report: Participation of Women in Economic Sector. New York United Nations.
- ♦ Walkerdine (1987), Some Issues in the Historical construction of the Scientific truth About Girls'. in Kelly(ed.) 1987 PP. 37-44.
- ♦ Weiner, Gaby (1994), Feminisms in Education: An Introduction . USA: University Press Buckingham Philadelphia.
- ♦(1996), Women's International Forum: Special Issues Link Across Differences: Gender, Ethnicity and Nationalism Vol. 29 No. 1 and 2, 1996.
- ♦ World Bank (1980), Education Sector Policy Paper (3rd ed.) Washington DC. World Bank.
- ♦ The World Bank (1988), Education in Sub-Saharan Africa: Policies for Adjustment, Revitalization and expansion W.DC. The World Bank.

Appendix 1

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
FACULTY OF EDUCATION
DEPARTMENT OF CURRICULUM AND INSTRUCTION

Questionnaire to be filled by high school female students.

Dear Respondents, this questionnaire is intended to investigate why the enrollment rate of female students in high school are lower than boys.

If this questionnaire is to be useful and accurate, it is important that you answer each question as thoroughly and frankly as possible in giving your reasons for female students low rate of enrollment and related matters.

Therefore,

1. Most questions can be completed by making a tick mark in the boxes provided.
2. Please answer all questions in order
3. No need of writing your name

Thank you for your co-operation

1. Address:

Wereda _____ Urban Rural

2. Present grade you are attending _____

3. Age at present _____

4. Marital status: married Single

5. Your religion: Christian Muslim Other

6. Your families: Father educated Uneducated

Mother educated Uneducated

Would you specify, level of mother's education _____
level of father's education _____

Questionnaire (Gaaffilee)

1. How long does it take you to walk from home to your high school?
A. 30 minutes or less B. 30-60 minutes
C. 61 – 90 minutes D. 91 – 120 minutes
E. More than 120 min.

2. At present where do you live?
A. with my family B. With a relative
C. At a rented lodging (shelter) D. Others
specify _____

3. If your answer to question number '2' is either B or C (i.e. because of long distance of your high school from your family's home), is there any problem you encounter in your schooling?

4. How often do you arrive at school on time?
A. Always B. Often C. Some times D. Never

5. Is it safe to travel to school?
A. Yes B. No

6. If your answer to question '5' is "No" what is the problem?

7. To what extent are the following teaching facilities (services) available in your school? Please indicate your opinion/their level of availability by making a tick (✓) mark corresponding to the following school facilities.

	Facilities	Responses			
		Adequate	Fairly Adequate	In Adequate	Not At All
A.	Library				
B.	Laboratory				
C.	Classrooms				
D.	Desks				
E.	Chairs				
F.	Recreational services (Tajaajila bashananaa)				
G.	Cleandrink water				
H.	Study hall (Galma qu'annoo)				
I.	Guidance and counseling (Tajaajila gorsaa)				
J.	Clinic				
k	Toilet				

8. Among the above listed school facilities, lack (rakina) of which ones do have the most adverse effect (dhibbaa cimaa kan qabu) on your schooling?

how _____

9. Following are various statements expressing teachers' differential treatment of male and Female students. Indicate your level of agreement to the statements by marking a tick (✓) mark with one of the five alternatives given correspondingly.

Statements	Alternatives				
	Strongly agree	agree	unknown	disagree	strongly disagree
9.1 Most teachers help both boys & girls equally their subject					
9.2 Most teachers give equal attention to girls and boys					
9.3 Most teachers discourage girls more than boys when students fail to provide appropriate answers					
9.4 Most teachers would like to interact with girls in grooming (fraasa) teasing (kolfisiisuu) than academic affairs					
9.5 Most teachers would like to interact with boys than girls in academic affairs. (Haajaa barumsaa irratti)					
9.6 Most teachers give more feedback to boys than to girls					
9.7 Most teachers give more praise (badhaasu/jaajabeesu) to boys than girls					
9.8 Few teachers would like to give feed-back and praise to girls					
9.9 Most teachers encourage (jajabeesu) boys more than girls in the classroom					
9.10 Most teachers have low expectation (ilaalcha gad antummaa hujii dubartii) of girls' performance					
9.11 Most teachers tend to consider high performance by boys (olaantummaa hojii bartoota dhiiraaf qabu)					
9.12 Teachers give equal regard to girls' and boys' performance (hojii bartoota dubartii fi dhiiraa wal-qixa ilaalu)					

10. As various literatures suggests, the following are some of the factors that might contribute to low rate of enrollment (participation) of female students. Indicate your opinion/ the extent to which these factors play their role in your situation by making a tick (✓) mark corresponding to the following statements.

Statements	Respondents				
	Very high	high	uncertain	low	very low
10.1 teachers' attitudes/expectations (ilaalcha barsiisaa)					
10.2 lack (hanqina) of school facilities such as classroom, table desks, books, clean water, lack of separate toilet for boy and girls etc.					
10.3 Hatred of teacher (jibbinsa barsiisaa)					
10.4 Biased school services provided to girls					
10.5 Sexual violence/ harassment (mudduu) by school boys					
10.6 Made fun of and laughed at by boys					
10.7 Teachers want girls made fun of and laughed at (barsiisoni dubartii taphaaf fedhuu)					
10.8 Unsafe long distance from home to school (rakinna fageyna mana barumsaa irraa maduu)					
10.9 Unplanned pregnancy(osoo itti hinyaaddiin ulfaa'u)					
10.10 Failure of girls to study hard (duartiin ciminaan qu'achuu dhabuu)					
10.11 Failure in exams(qorumsa kufuu)					
10.12 Lack of guidance and counseling services which could have helped girls more than boys(tajaajila gorsa dhabuu)					
10.13 Girls low interest in school(dubartiin barumsaaf fedhii dhabuu)					

11. What efforts have been made in your school to maintain/improve/increase the number of female students.(akkaate/ haala/ barumsa dubartoota fooyesuuf mana barumsa keessan keesat tataaffiin godhamee/ yaalamaa jiiru jiraa? Gabaabsi ibsi) _____

12. What do you think can be done to improve female students participation inschool? (Mana barumsa keesatti hirmanaan barartoota dubartootaa fooyesuuf yaada maal qabdaa?) _____

Appendix 2

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
FACULTY OF EDUCATION
DEPARTMENT OF CURRICULUM AND INSTRUCTION

Questionnaire to be filled by high school personnel (director, Unit leaders and counselors)

Dear Respondents, this questionnaire is designed to investigate why the number of female students in high schools is lower than boys.

Thus, if this questionnaire is to be useful and accurate it is important that you answer each question as frankly as possible

- (i) Most questions can be completed by filling or writing a tick (✓) mark on the blanks/in one of the boxes provided.
- (ii) Answer all questions in the order presented
- (iii) No need of writing your name

1. Address: Wereda _____ Your school _____

2. Sex: Male Female Age at present _____

3. Your qualification _____

4. Field of study a) Major _____ b) Minor _____

5. Year of service a) Total _____ b) in this school _____
as a director _____ as a teacher _____ as a unit leader _____
or as counselor _____

Statements		responses				
		Very high	high	uncertain	low	very low
8.1	unintended school pregnancy					
8.2	sexual violence/harassment by school boys					
8.3	unsafe school distance from home to school					
8.4	lack of school facilities					
8.5	teachers attitude towards girls					
8.6	lack of guidance & counseling					
8.7	lack of appropriate knowledge how to use contraceptive					

9. What other school related factors do you think might contribute to the low rate enrollment of female students?

10. What efforts have been made in your school, to maintain or increase the number of female students in your high schools?

11. As a professional what steps would you recommend to be taken by schools, Zone and Regional Educational Bureaus and other concerned bodies to improve the situation.

Interview for school Administrators

1. Why do you think the enrollment rate of female students in the high schools is lower than boys?
2. In your school, how many students enrolled repeated and dropped out in the following years?

		Year in Ethiopian Calendar																		
		1987			1988			1989			1990			1991			Total			
Pupils	Grade	M	F	% F	M	F	% F	M	F	% F	M	F	% F	M	F	% F	M	F	% F	
enrolled	9																			
	10																			
	11																			
Repeaters	9																			
	10																			
	11																			
Dropouts	9																			
	10																			
	11																			

3. At present do you (your school) have any kind of committee in which girls are participating?
4. How many, monitories of female students are there in your school?
for example in: grade 9th _____
" 10th _____
" 11th _____
5. What sexual risks do girls who are attending school face?
for example, sexual abuse, sexual harassment, and losing virginity?
How well founded are these fears? How do government, school personnel etc. deal with the issues?
6. Is the distance to school a factor in explaining why some girls do not attend school and dropout early? If so, why (for example, time to travel, risk of travel). Is distance equally or less important for boys?
7. Does your school have facilities to respond to girls need (for example, separate toilet, providing instructional materials, etc.)

8. Are there any special safety and security risks for female at your school?
9. Is there active parents and teachers association?
10. Is there a strong girls/boys network involvement in the school?
If yes, how does it influence school activities?
11. Is teachers expectation of girls different from those of boys?
If so how?
12. How do teachers expectation affect female participation in class?
13. Is career counseling available: If so, does it serve females as well as boys? At what grade does it begin? Who provided it?
14. Do your school provide special counseling to teachers, students or parents females' and males' regardless their intellectual, emotional and physical development?
15. How often do girls leave their school because of pregnancy?
16. What do teachers, students as well as yourself think can be done to improved female participation in school?

**ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
FACULTY OF EDUCATION
DEPARTMENT OF CURRICULUM AND INSTRUCTION**

Questionnaire to be filled by school teachers

Dear Respondents,

The purpose of this questionnaire is to examine some factors that contributed to the low rate enrollment of female students in high schools and to forward solutions that may be looked - for by schools, Zone and Regional Education Bureaus, and others concerned and responsible bodies. To this end, your genuine cooperation in completing this questionnaire is very important.

It is also important that you answer each question as frankly as possible if this questionnaire is to be helpful and accurate in describing the reasons for low rate of female students enrollment and related matters.

1. The questionnaire can be filled either by writing in the space provided or by making a tick (✓) mark in the boxes.
2. Please answer all questionnaires (items) in the order presented
3. There is no need of writing your name.

Thank you for your cooperation

1. Address:

Name of your school _____
Wereda _____ Your status in the school (at present) _____

2. Sex: Male Female

3. Your qualification _____

4. Field of study a) Major _____ b) Minor _____

5. Year of service: a) Total _____ b) in this school _____

1. Following are various statements regarding your students. Indicate your level of agreement to the statement by making a tick (✓) mark corresponding to one of the five alternatives.

I.	Statement	Alternatives				
		Strongly agree	agree	unknown	Disagree	Strongly Disagree
1.1	Girls don't like learning as boys					
1.2	Girls have less confidence than boys in their academic performance					
1.3	In the classroom boys are more interactive than girls					
1.4	Academically girls are more independent than boys					
1.5	Academically boys are more independent than girls					
1.6	Academically both sexes are independent					
1.7	Academically boys achieve more than girls					
1.8	Academically girls achieve less because of their nature					
1.9	Academically boys are better than girls in all subjects					
1.10	Academically boys are better than girls in some subjects such as science and Maths					
1.11	Girls are better than boys in subjects such as language and home economics					
1.12	In the classroom boys and girls are equally interactive					
1.13	In the classroom girls don't ask questions as frequently as boys					
1.14	In the classroom girls are better disciplined than boys					
1.15	Boys answer more questions than girls					
1.16	In your school there is a separate toilet for boys and girls					
1.17	Guidance and counseling is more necessary for girls than boys					
1.18	Boys give good responses frequently					
1.19	Girls show low interest in school than boys					
1.20	Girls make more effort in school than boys					

2. As various literature indicate (reveal), the following are some of the school factors that might contribute to have few girls in the school. Indicate the extent to which these factors deter their school participation by making tick (✓) mark to the statement corresponding is given.

Statements	Responses				
	very high	high	uncertain	low	very low
2.1 Lack of school facilities such as separate toilet, instructional materials					
2.2 Unsafe long distance from school to home					
2.3 Unwarranted school pregnancy					
2.4 Sexual violence/harassment by school boys					
2.5 Lack of guidance and counseling					
2.6 Lack of attention by school personnel					

3. What do you think can be done to improve female participation in school?

Appendix 4

Table 1. Student respondents by their Residence, Grade, Age, Marital status and Religion.

		No	%
Residence	Urban	199	52.5
	Rural	139	36.7
	Missing cases	41	10.8
Total		379	100
Grade	9th	220	58.0
	10th	89	23.5
	11th	67	17.7
	Missing cases	3	.8
Total		379	100
Age	13-16	278	73.4
	17-20	99	26.1
	above 20	1	0.3
	Missing cases	1	0.3
Total		379	100
Marital status	Single	353	93.1
	Married	22	5.8
	Missing cases	4	1.1
Total		379	100
Religion	Christian	309	81.5
	Muslim	67	17.7
	Others(Protestant)	3	0.5
	Missing cases	1	0.3
Total		379	100

Note: Missing cases are referring to those who failed to respond to the specifically asked question.

Table 2. Student respondents by their school and parents (father and mother) education.

Respondents by their schools	Parent Education											
	Father Education						Mother Education					
	Educated		Uneducated		Total		Educated		Uneducated		Total	
	NO	%	No	%	No	%	No	%	No	%	No	%
Size senior sec. school	23	6.1	46	12.2	69	18.3	13	3.5	56	14.9	69	18.4
Arboye high school	24	6.4	16	4.2	40	10.6	11	2.9	29	7.7	40	10.6
Huruta seniors sec school	82	21.7	102	27	184	48.7	68	18.1	114	30.3	182	48.4
Kutar Fuafuare senior sec. school	7	1.9	23	6	30	7.9	1	0.3	29	7.7	30	8.0
Kersa senior sec. school	35	9.3	20	5.3	55	14.6	24	6.9	31	8.2	55	14.6

Table 3 Teacher respondents by their sex, year of service, qualification and status

Respondents		No	%
Sex	M	47	95.9
	F	2	4.1
Total		49	100
Year of service	1-5	6	12.2
	6-10	14	28.6
	11-15	20	40.8
	16-21	9	18.4
Total		49	100
Qualification	- first degree (B.A./BS.C.)	21	42.9
	- Diploma	26	53.0
	- 12+1 (TTI)	2	4.1
Total		49	100
Status	- Teacher	46	93.9
	- Dept. Head.	3	6.1
Total		49	100

Table 4 School personnel respondents by their sex, age, qualification and year of service

Respondents		No	%
Sex	M	13	100
	F	-	-
Total		13	100
Age	25-30	2	15.4
	31-35	5	38.5
	36-40	5	30.7
	41-45	2	15.4
Total		13	100
Qualification	B.A/Bs.C	4	30.8
	Diploma	8	61.5
	Others (12+3)	1	7.7
Total		13	100
Year of service	3-10	8	61.5
	11-20	2	15.4
	no response	3	23.1
Total		13	100

Anex 5

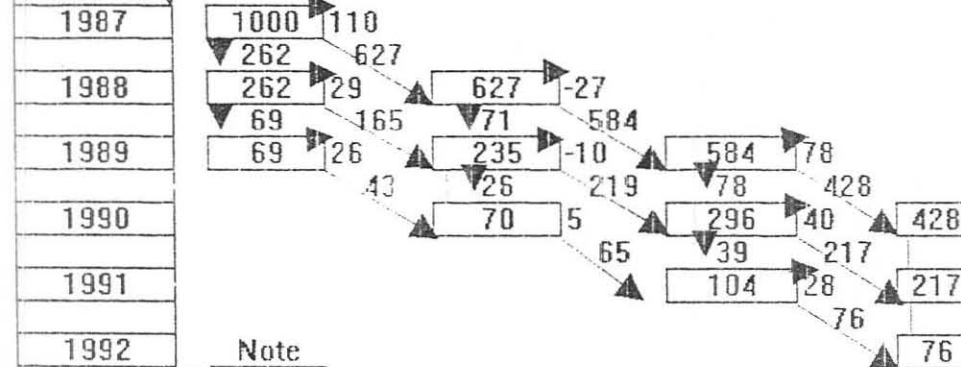
Diagram 1 :- Working table for grade projections of 1000 male pupils year-by-year and grade by grade in the region

Arsi (Boys) 1987

Grades →	9	10	11	12
Enr.87	3315	1912	1630	1196
Enr.88	3985	2294	1996	1195
Rep.88	870	215	217	

Prom rate	0.63	0.93	0.73	###
Rep rate	0.26	0.11	0.13	0.00
Drop rate	0.11	-0.04	0.13	###

Year E.C. ↓



Note
▲ Promotees

▼ Repeaters
→ Dropouts

Survival by Grade

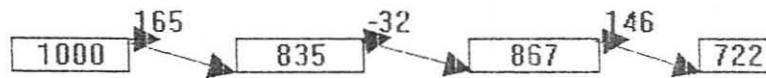


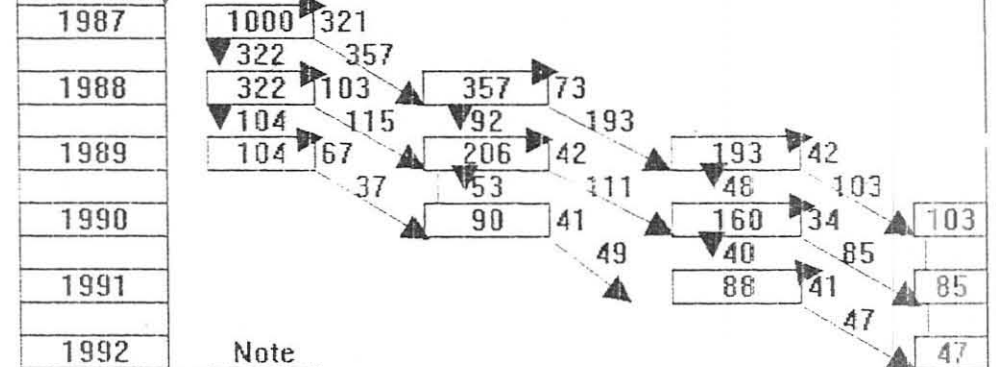
Diagram 2 :- Working table for grade projections of 1000 female pupils year-by-year and grade by grade in the region

Arsi (Girls) 1987

Grades →	9	10	11	12
Enr.87	2964	1263	926	457
Enr.88	3122	1382	913	495
Rep.88	954	324	231	

Prom rate	0.36	0.54	0.53	0.00
Rep rate	0.32	0.26	0.25	0.00
Drop rate	0.32	0.20	0.22	1.00

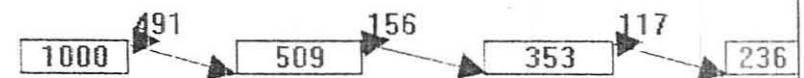
Year E.C. ↓



Note
▲ Promotees

▼ Repeaters
→ Dropouts

Survival by Grade



Appendix 6

Sample Schools and Weredas

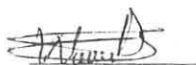
	<u>Name of School</u>	<u>Wereda</u>
1.	Sire Senior Secondary School	Dodota-Sire
2.	Arboye Comprehensive High School	Jeju
3.	Huruta Senior Secondary School	Hetosa
4.	Katar Fuafuate Senior Sec. School	Zuway Dugda
5.	Kersa Senior Secondary School	Munesa

Declaration

I, the undersigned, declared that this thesis is my work and that all sources of material used for the study have been duly acknowledged.

Name Woldu Assefa

Signature

A handwritten signature in black ink, appearing to read 'Woldu Assefa', is written over a horizontal line.

Place and Date of Submission
Addis Ababa University
May, 1999