

**WOMEN'S PERFORMANCE IN DISTANCE  
EDUCATION IN THE ETHIOPIAN  
MANAGEMENT DEVELOPMENT PROJECT**

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**BY  
YARED GETACHEW**

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ADDIS ABABA UNIVERSITY  
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BY  
YARED GETACHEW

APPROVED BY THE BOARD OF EXAMINERS

Marew Zewdie  
CHAIRMAN, DEPARTMENT GRADUATE COMMITTEE

M. Shere  
SIGNATURE

Marew Zewdie  
ADVISOR

M. Shere  
SIGNATURE

Elizabeth Leu  
EXAMINER, EXTERNAL

Jabot Zee  
SIGNATURE

Derebssa Dyerera  
EXAMINER, INTERNAL

J. Dyerera  
SIGNATURE

## TABLE OF CONTENTS

	Page
<b>CHAPTER ONE</b>	
1. INTRODUCTION.....	1
1.1 Background of the Problem.....	1
1.2 Statement of the problem.....	5
1.3 Significance of the Study.....	8
1.4 Delimitation of the Study.....	9
1.5 Definition of Terms.....	10
<b>CHAPTER TWO</b>	
2. REVIEW OF RELATED LITERATURE.....	12
2.1 The Conceptual Background for Women Education.....	12
2.2 Distance Education and Women.....	16
2.3 Major Variables That Affect Women’s Performance in Distance Education.....	22
2.3.1 Background variables.....	22
2.3.2 Women Distant Learners’ Characteristic Variables.....	25
2.3.2.1 Lower Previous Educational Attainment.....	25
2.3.2.2 Lack of Study Skills.....	26
2.3.2.3 Greater Difficulty in Managing Life & Study Problems	26
2.3.2.4 Lower Self-confidence.....	27
2.3.2.5 Lower Academic Motivation.....	27
2.3.2.6 Problem due to Learning style.....	27
2.3.3 Institutional Variables .....	28
2.3.3.1 The Program and Course Objectives.....	29
2.3.3.2 The Instructional Materials.....	31
2.3.3.2.1 The Gender Sensitivity of The Self Instructional Materials.....	33
2.3.3.2.1.1 The Gender Sensitivity of The Contents of The Self Instructional Material .....	34
2.3.3.3 The Student Support System.....	37
2.3.3.3.1 The Gender-Sensitivity of the Student Support System.....	40
2.3.3.3.1.1 The Gender-Sensitivity of The Instructional Methods.....	41
2.3.3.3.1.2 The Gender-Sensitivity of The Tutors.....	44
2.3.3.4 Situational Variables.....	45
<b>CHAPTER THREE</b>	
3. RESEARCH DESIGN AND METHODOLOGY.....	48
3.1 The Population and Sampling.....	48
3.2 Data Collection Methods and Instruments .....	49

3.2.1	Documentary Analysis.....	49
3.2.2	Questionnaire.....	50
3.2.3	Interviews.....	51
3.3	Try Out.....	52
3.4	Data Collection Procedure.....	53
3.5	Data Analysis.....	54

## CHAPTER FOUR

4.	PRESENTATION OF THE FINDINGS AND DISCUSSION.....	57
4.1	The Data from the Documentary Analysis.....	57
4.1.1	The Status of Women's performance.....	57
4.1.2	Background Variables That Affect Performance.....	59
4.2	The Data from the Questionnaire & Interviews.....	64
4.2.1	Distance Learners' Characteristic Variables.....	64
4.2.1.1	The Prior-learning Variables.....	64
4.2.1.2	The Study Skills Variables.....	68
4.2.1.3	The Distant learners' Dispositional Variables.....	72
4.2.2	Institutional Variables.....	78
4.2.2.1	The Program and Course Objective .....	78
4.2.2.2	The Self Instructional Material .....	81
4.2.2.2.1	The Difficulty Level of The Self Instructional Material	81
4.2.2.2.2	The Relevance of the Self Instructional Material....	85
4.2.2.3	The Student Support System.....	89
4.2.2.3.1	The Convenience of the Study Center.....	89
4.2.2.3.2	The Responsiveness of the Study Center.....	91
4.2.2.3.3	The Appropriateness of the Academic Program.....	93
4.2.2.3.4	Tutor-Related Variables.....	97
4.2.3	Situational Variables.....	105

## CHAPTER FIVE

5.	SUMMARY AND CONCLUSION.....	112
5.1	Summary.....	112
5.2	Conclusion.....	120
5.3	Recommendations.....	123

<b>BIBLIOGRAPHY.....</b>	<b>127</b>
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## APPENDICES

Appendix – A	The Background of The Sampled Distant Students.....	133
Appendix – B	The Multiple Regression Analysis Result of The Background variables.....	134
Appendix – C	Questionnaire to be Filled Out By the Distant Students ....	136
Appendix – D	Interview Schedule For The Tutors.....	142
Appendix – E	Interview Schedule for the Center Coordinators.....	145

## LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. The Status of Women's Performance .....	58
2. Prior Learning Variables .....	65
3. Study Skills Variables .....	69
4. Distant Learners; Dispositional Variables .....	73
5. The Worthwhileness of The Program & Course Objectives .....	79
6. The Difficulty Level of the SIM.....	82
7. The Relevance of the SIM .....	86
8. The Convenience of the Study Center .....	90
9. The Responsiveness of the Study Center.....	92
10. The Appropriateness of the Academic Program .....	94
11. Tutors' Use of Lecture Vs other Methods in the Face-to-Face Sessions .....	101
12. Tutors' Classroom Behaviors in the Face-to-Face Sessions .....	103
13. Situational Factors Affect Performance .....	107

## LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. The Status of Women's Performance .....	58
2. Prior Learning Variables .....	65
3. Study Skills Variables .....	69
4. Distant Learners; Dispositional Variables .....	73
5. The Worthwhileness of The Program & Course Objectives .....	79
6. The Difficulty Level of the SIM.....	82
7. The Relevance of the SIM .....	86
8. The Convenience of the Study Center .....	90
9. The Responsiveness of the Study Center.....	92
10. The Appropriateness of the Academic Program .....	94
11. Tutors' Use of Lecture Vs other Methods in the Face-to-Face Sessions .....	101
12. Tutors' Classroom Behaviors in the Face-to-Face Sessions .....	103
13. Situational Factors Affect Performance .....	107

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## Abstract

The purpose of this study was to find out the major variables that affect the academic performance of women distant students in the distance training program of the Ethiopian Management Development Project, with specific reference to the study centers in Regions 4 & 14. To this end, three data collection methods and instruments (documentary analysis, questionnaire and interview) were employed. Furthermore, sixty four women and sixty four men distant students of the certificate-level training program, their tutors (twelve in number) and the coordinators of the three target study centers were used as subjects of the study. Percentages, chi-square, weighted mean, t-test, multiple regression analysis and one-way ANOVA were employed to analyze the data.

Findings made clear that in both regions the sampled women distant students perform significantly lower than their men counterparts on their Tutor-Marked Assignments. Whereas the post secondary education level of Region 4 women distant students (which is largely below a diploma level) found to have significant impact on their performance in the Tutor- Marked Assignments, that of Region 14 women distant students (which is mostly a diploma level) failed to have significant impact upon their performance in the Tutor Marked Assignments. Besides, lack of adequate English language proficiency was found to be the most common variable among women distant students of both regions that appear to affect their performance. The sampled women distant students' lack of willingness to initiate calls to tutors is still found to be a common barrier that could affect their performance in their distance training.

On the other hand, the tutors' apparent lack of awareness in gender-sensitive tutorial practice & the process of women's desired way of learning (interpersonal exploration) appear to have limited their role in facilitating the learning of their women distant students. Moreover, the greater family responsibilities of most women distant students (involvement in household chores and child care) seem to have hindered their academic performance more seriously than their men counterparts. In connection with this, most women distant students were found to be engaged in various social commitments (more than their male counterparts) which appears to have been another impediment to their academic performance in their distance training.

Finally, the following recommendations were forwarded to improve the performance of women distant students in the distance training: conducting a preliminary needs assessment as to the educational background, needs and problems of the target women distant students prior to offering distance training; changing the medium of instruction of the training from English to the regional languages (i.e. Amharic & Oromifa); introducing special student support initiatives for women distant students (i.e. increasing tutorial hours; preparatory weekend) that counteract their various gender-related barriers to their distance training; introducing a tutor-recruitment system that encourage more qualified female tutors; arranging workshops, seminars etc. for the tutors on gender-sensitive teaching-learning process and women's desired way of learning.

# CHAPTER ONE

## 1. INTRODUCTION

### 1.1. Background to the problem

Despite the great expansion of educational opportunities worldwide during the past thirty years, women in most developing countries still receive less schooling than men (King and Hill: 1993:1). Yet, there is a compelling evidence that the education of girls and women promotes both the individual well being of the member of a society (Shultz, 1989:25; Almaz 1991:9) and national development (USAID, 1991:7; Hill & King, 1996:13).

This seems the major reason why most developing countries like ours recently have put women education as one of their top priority areas in their agenda of education policy and national development scheme (DAE<sub>a</sub>, 1995:3). However, women in many of the developing world continue to lag behind men in measures of educational attainment including literacy, length of schooling and educational achievement (king and Hill, 1993:6).

Although the number of research attempts that have been made on the status and problems of women education in Ethiopia are few (USAID, 1994) their findings have clearly reflected the wide gender gap that existed at every level of education.

The participation rate of girls in both primary and secondary schools, particularly in the rural parts of Ethiopia is lower than boys' (Tsehai, 1991; (Seyoum, 1991; Befekadu, 1996; UNDP, 1997; MOE 1997) Similarly the dropout and repetition rate is higher among girls than boys in schools (USAID, 1994, Gennet, 1991). The situation in the tertiary level of education is more serious. The participation of female students at this level of education in the last ten years before 1992 had been only 13 per cent (Habtamu, 1992:14). A more recent study indicated that the female participation rate at this level is now 15 per cent (Ababayehu, 1998:169). Besides the attrition rate among girls in institutions of higher learning is also higher than boys (Ababayehu, 1998:172).

With this substantially lower status in the participation of girls in schools as well as Colleges and the accompanying higher repetition and dropout rates, it is not surprising to find similar trend in the educational level of the Federal Government women employees. To begin with, women constitute only about 23 per cent of the total public service employees in Ethiopia (MOLSA, 1991). According to a recent document of the Federal Civil Service Commission, the percentage of women employees who have BA degree and above is below 15 per cent whereas the remaining 85 per cent goes to their male counterparts (FCSC: 1998).

Meanwhile, it seems that the position & status of women is determined by their level of education. The

Similar gender imbalance can also be observed in the government scholarship. The percentage of Ethiopian students sent abroad through government scholarship for short term advanced training programs, undergraduate and postgraduate degree in the selected sample years before 1995/96 constitute below 10 per cent (MoE:1996).

Yet another living example on the extremely lower participation of women in the Ethiopian government civil service training programs comes from the college which is primarily established to cater the trained manpower needs of the federal & regional civil service, i.e.. Ethiopian Civil Service College (ECSC). In ECSC, the participation of women (enrollment) has never exceeded 9 per cent since its establishment in 1995. (ECSC: 1998)The same document attest that the attrition rte for women students is higher than men students.

More importantly, the participation of women in one of the Federal Government's largest civil service training projects, the Ethiopian Management Development Project (hereafter, EMDP), is below 10 per cent (EMDP,1999).

The fact that EMDP offers the training through distance education has given it the additional and peculiar researchable element in the training condition of women civil servants in Ethiopia. In fact, this is the main reason why EMDP is identified

as the target of the study. This is because distance education has been believed to have certain advantages over the conventional form of education for women adult learners particularly in:

1. expanding access mainly through avoiding fixed academic entry requirements and transcending the geographical barriers for college attendance which have both been the major problems for the majority of adult women to pursue higher learning in the conventional college education.
2. reducing opportunity cost for the majority of adult most women who have to shoulder numerous traditional family responsibilities than their male counterparts.
3. reducing direct cost which addresses the relatively lower economic power of most adult women. (Faith, 1988; Jenkins, 1989; NIACE, 1991; UNESCO, 1998)

## **1.2. Statement of the problem**

EMDP is a management training project initiated by the Ethiopian Government and sponsored by UNDP. (EMDP<sub>a</sub>, 1997) As stated in the information leaflet of the project (EMDP<sub>b</sub>, 1997) the management training program of EMDP was launched by the Federal Democratic Government of Ethiopia, in collaboration with the British Open University's Business school and local higher education institutions. The document further

noted that the methodology to be used in offering the courses is the combination of self-study, using high quality material developed and used by the British Open University's Business School and intensive tutorials and residential schools run by experienced Ethiopian tutors.

From the above description of EMDP and the substantially lower status of women's educational level in the Ethiopian civil service system, it might be argued that a better opportunity has been created to bring distance education to the service of the Ethiopian women employees. The first reason for this assumption is the involvement of United Kingdom Open University (UKOU) in the training of the Ethiopian civil service employees through distance education with its international reputation and extensive experience in the area (UNESCO, 1998) and with its 'gender sensitive' distance education programs & practices (Faith, 1988) The second reason is the reportedly unprecedented strong policy support of the Ethiopian Government for the promotion of women education (TGE<sub>a</sub>, 1994, TGE<sub>b</sub>, 1994)Gennet, 1991).

However, the performance of women participants in EMDP for the last three years in all of the ten local study centers is in a profoundly low state (EMDP, 1999). More specifically, in the three study centers found in the two target regions of the study (i.e. Regions 4 and 14) the performance of women participants in the

last two completed rounds of the certificate program is very low. For instance, in the Addis Ababa study center which has the highest student population, out of 36 women participants in the first round, 15 women participants failed to get the minimum passing mark. In the second round, out of 22 women participants 13 participants couldn't get the minimum passing mark (EMDP, 1997, 1998). What are the factors that are responsible for this low academic performance of women participants in EMDP's certificate program? This is, in fact, the centerpiece of the study.

Therefore, against the backdrop of what has been discussed thus far, the study tries to find answers to the following basic questions.

1. What is the status of women's performance in the certificate distance training program of EMDP in the study centers found in Regions 4 and 14?
2. Do the background factors of these women distance students of EMDP's certificate program account for their performance status in<sup>the</sup> training?
3. What major learners' characteristic variables, institutional and situational variables affect the performance of these women distant students in the EMDP certificate program?

4. Is there any significant difference between women distant students of the two regions with respect to these factors?

### **1.3. Significance of The Study**

Distance education in Ethiopia is in its infancy (Tilson & Getachew, 1998) Even worse, it can well be argued that distance education doesn't exist in Ethiopia except for the correspondence education which is currently being run by the Educational Mass Media Agency of the Ministry of Education for grades 9-12 and a private correspondence education initiative which is being offered by the National vocational correspondence Enterprise (NVCE) (DAE,1990). Furthermore, except for few reports on Ethiopian 'distance education', (DAE,1980, DAE, 1982, EMA, 1997, Getachew, 1997 Tilson & Getachew 1998) no major research attempts have been made on distance education as a system of education in general and in connection with women education in particular.

Although, the distance education of EMDP is mainly run by the United Kingdom Open University, the examination into the causal factors for the extremely low women's performance needs immediate research attention. Because, such research in addition to helping in preventing wastage and ensuring the success of EMDP & other similar projects for the future; contributes in

improving adult women's education in Ethiopia through the promising distance education modality. Needless to say, the study being one of the first research attempts in distance education in Ethiopia possibly initiates further research in the area.

More specifically, however, the following institutions in Ethiopia might find the results important in attaining their organizational objectives.

1. The federal and regional (especially regions 4 and 14) civil service commissions in their human resource development plan to bridge the existing wide gender gap in the educational level of the civil service employees through distance education
2. The Educational Mass Media of MOE to identify the causal factors that affect the performance of its women students and design workable solutions.
3. All higher learning institutions in Ethiopia might find the results of the study quite useful for they are currently introducing distance education in their programs. (MOE, 1998)

#### **1.4. Delimitation of the Study**

From among the ten study centers of EMDP established in almost all regional states in the country, the study centers found only in Region 4 (at Jimma and Nazareth) and Region 14 (at Addis Ababa) will be considered in the study. The major reasons for this are shortage of time and financial constraint.

Besides, out of the two programs which are currently being run by EMDP (i.e diploma and certificate programs), the study is delimited to the certificate program. This is because the number of women students in the diploma program is quite insignificant (for example, women diploma students in Jimma and Nazareth study centers are one and three, respectively).

### **1.5. Operational Definition of Terms**

The major terms that are used in the study are operationally defined as follows:

1. **Performance of the students:-** the students' continuous assessment result in the present training which is the average score the students have obtained on all completed tutor-marked assignments or their course-end final examination result or both.
2. **Background variables:-** An aspect of the students' profile (e.g. age, sex, income, previous educational level etc) that has been found to be correlated with their performance in the distance training
3. **Distance Learners' characteristic variable:-** an aspect of the students' personal characteristics (i.e. disposition, skill, ability etc) the inadequacy of which has found to be a barrier to the students' learning in the present distance training.

4. **Institutional variable:-** any learning barrier that has been faced by the student in their present course of study in relation to the major aspects of the distance teaching project i.e. EMDP (these include the program and course objectives; the instructional materials; the student support and lack of gender sensitivity in each of the above listed aspects of the training).
  
5. **Situational variable:-** any problem situation or incidence in the students' living, work and study contexts that has existed before or happen to occur during the students' present course of study and found to be a barrier to their learning in the distance training program.

## CHAPTER - TWO

### 2. REVIEW OF RELATED LITERATURE

Much effort has been made by a number of researchers, educators, and the concerned organizations in promoting women education through distance education. Considerable bodies of recommendations have been suggested to this end. There is also a range of literature dealing with the gender-related problems of women in distance education, which might affect their performance. In this chapter, literature that is relevant to the study will be discussed. The presentation will be made under the following three headings: the conceptual background for women education; distance education and women and major variables that affect the performance of women's performance in distance education.

#### 2.1 The conceptual Background For Women Education

Guaranteeing equal educational opportunity for women is currently one of the most important global aims in education (Shultz, 1985; Hill and King, 1996; UNESCO, 1998) However, scholars in women education (Woolf, 1963; Gillian 1982; Poff, 1985; Belanky et al., 1986) argue that the ideal of equal opportunity for women in education deceptively taken to be straightforward by many people.

These scholars contend that the issue of women's equal access to educational opportunity has a far reaching significance as well as a deeply ingrained problem of realization.

According to Woolf (1963:9) women's access to education is essential for their economic independence. This in turn, is essential for a critical intellectual autonomy of women in the world. Nevertheless, Woolf argued, the existing conventional education is inhibiting both the access to and development of independence because of the limits of its intellectual resources for learning. This inhibiting Woolf's portrait of education is described by Pierson (1984:7) as:

Language Structures, Categories of analysis and criteria of what was worth knowing (arising from male domination of knowledge production and use) was so androcentric as to severely handicap women's capacity for self understanding and communication

As a practical solution for the problem of women in the above described education Fennema and Ayer (1984:10) suggested that we should be seeking equity in the education of women. That means, in addition to ensuring equitable access of women to education, allow for curriculum diversity which addresses the needs of women and which takes the socially inherited inequities into

account. For Fennema and Ayer failure to do this would result in what Thompson (1983:93) warned: "...the notions of 'equality of opportunity' become essentially rhetorical".

The recommended equitable access for ensuring women's equality of opportunity in education, gives women academic freedom. The conception of 'access' so conceived was described by McCormak as 'affirmative access' which gives women:

the right to speak and be heard in a language that is women's own. To define an agenda, and set priorities and to set standards of performance. (1986:2)

According to Belenky, et al (1986) the above kind of access is needed because it is believed that the female experience of education differs from the male experience. However, many scholars (Fennema and Ayer; 1984 Martin 1986) introduce a note of caution that this difference cannot be explained adequately by arguments about inherent male and female characteristics, but rather by the impacts of very early gender-biased socialization, the consequent sets of achievement expectations and condition of schooling. That is why, as Clinchy et al (1985) noted women's ways of learning are challenging educators to rethink how they can help women learn.

According to Martin (1986) the most commonly held approach in contemporary education which has been adopted as a solution for the problem in women education is what is called "gender-sensitive approach" Martin (1986:10) gives a description of this approach by noting.

Taking gender into account when it makes a difference and ignoring it when it does not. Such an ideal allows us to build into curricula, instructional methods, and learning environments ways of dealing with trait genderization and with the many and various other gender-related phenomena that enter into education today.

The above exposition of Martin appeals to imply how it has to be proceeded in trying to make the system of distance education gender-sensitive. More specifically, this might mean examining each and every aspect of a distance education system if it is gender sensitive or it has, in fact, been affected by gender-related factors that determine the learning outcome of distant student. For instance the objective, the self instructional materials, the student support etc. of a distance education system should be checked for having been subjected to gender-related variables that have been working against the learning of the disadvantaged sex members and accounting for their current educational outcome. Thus, in this way, the ideal of gender-sensitivity helps to identify and alleviate the gender-

related variables from each and every aspect of a distance education system that might affect negatively the performance of women in distance education. But before going into exploring the gender-related.

Variables in distance education, a clear understanding of what distance education is all about and its role in promoting women education is in order. The following section addresses these issues.

## **2.2. Distance Education and Women**

The institutionalized practice of teaching students at a distance has a history of about two hundred years (Moore, 1987; Holmberg 1989). Over the past years, this form of education has gone through what Viridium and Clark, (1991: 6)described as "evolutionary changes both in its conception and practice"

However, the use of one commonly agreed upon term to represent this form of education has been confounded by alternatively using

- a term which distance education is not (Open education) (Rumble, 1986; Holmberg, 1989)
- a term which has failed to describe adequately the current conception of distance education that basically involves recent interactive communication technologies (correspondence education) (Manjulinka and Reddy, 1996);

- terms which have evolved from and cannot the distance education practices of different countries (Independent study in USA; Extramural study in Australia etc) (Holmberg, 1989; Keegar, 1990).
- terms original used to reflect the views of different authorities about distance education ('telematic teaching by Moore (1975)' 'distance study' by Delling (1976) etc)

Although the controversy over the proper terminology don't totally disappear a growing number of recent literature in the area use the term 'distance education ' somewhat commonly and consistently (UNESCO: 1998)

Keegan (1990) having made a comprehensive review and analyses of the numerous existing definitions of distance education came up with the following formal definition of distance education:

... a form of education characterized by the quasi-permanent separation of the teacher and learner; the influence of an educational organization; the use of technical media; the provision of two-way communication and the quasi-permanent absence of the learning group through out the length of the learning process  
Keegan, (1990:40)

With this comprehensive definition of distance education in mind an attempt will be made to discuss the role of

distance education for women. Distance education is primarily meant to offer educational opportunities to people who would not otherwise have access to schooling. Keegan (1990) The reality of women's under representation at any level of education in developing countries was stated to be a major justification by UNESCO, (1988) to put women as one of the prior target beneficiary groups of distance education. More importantly, as indicated below, the arguments in most literature that have been written on the particular role of distance education for women are developed based on the rationales provided for the establishment of distance education in developing countries

Generally, there are three rationales consistently forwarded by scholars (Kuhanga, 1981; Srisa-An 1981; Jenkins, 1989; Manjulinka and Reddy, 1996) for establishing distance education in developing countries.

The first rationale, is the marked increase in cost-effectiveness through distance education particularly in capital expenditure. This is largely for offering a massive educational program for widely dispersed population. According to the above authors, the significance of such rationale for women is strongly felt in planning to address the learning needs of most adult rural women in developing countries.

The second rationale is the need in the developing countries for an alternative route to the traditional education, which in reality, inadequate to accommodate the ever increasing demand for education (UNESCO, 1998). Since more women than men believed to have been disadvantaged by the educational inequalities (King & Hill, 1993) greater number of women are expected to seek for a second chance for education through distance modality (Faith 1988; Jenkins, 1989).

The third rationale is addressing the learning needs of the majority of working adults who essentially need formal training for their professional advancement while at the same time maintain their career opportunity. According to Kahunga, (1981), Srisa-Anj (1981), Jenkins, (1989), the fact that the average educational level of women working adults is by far below their male counterpart, distance education potentially offers special educational opportunity for a greater pool of women candidates than male candidates.

The authors finally concluded that three of the above rationales centrally harbour the apparent solution for the unmet learning needs of most women in developing countries, which account for the existing problem of women education in such countries.

Several studies (Hill & King 1996, UNESCO, 1998) confirmed that the problem in women education in

developing countries is more severe than in the industrialized world. The commonly given reason for this is that women in developing countries have still been subjected to more serious traditional socio-economic and political gender-bias that militate against their education. Such women, as Faith (1988: 7) observed, are 'put under double or multiple jeopardy' in promoting their formal education. For Faith (1988) this hard fact is adequate to establish that women in developing countries are one of the most needy consumers of distance education. To this effect, Evans (1994: 53) wrote.

distance education has been nominated in many societies as key means of providing educational opportunities for women who have been previously disadvantaged

Manjulinka and Reddy (1996: 51) on their part, reinforced the foregoing idea by noting:

distance education enables women in developing countries to make up vocation and skills for economic and individual development. It gives them a second chance to step into the mainstream of education... enabling them at the same time earn and learn as well as to fulfill their family responsibilities.

In the same vein, Faith (1988:10) laconically remarked that distance learning mode is a means for disadvantaged women to expand their horizons.

Many other authors (Mathewson, 1971; Konwar, 1990; Manjulinka and Reddy, 1996;) also argue the prime importance of distance education for women particularly in developing countries. Perhaps, the most common theme that runs through all of the above works is that such women have severe constraints of time space, resources and socio-economic limitations thus distance education can help them with its outreach to their home and mainly with its flexibility, adjustability to their learning need & problems. Kirkup (1988: 106) forwarded the evidence for this by stating "...most distance institution around the world strongly identified women as a primary target group in their founding documents"

However, for any distance teaching institution to attain the above stated aim of enhancing women education, it has to ensure the academic success of its women distant students. Obviously, this calls for identifying the gender-related factors that affect the academic performance of women distant students. Therefore, the remaining entire part of this chapter is devoted to the discussions of the variables that affect women's performance in distance education.

### 2.3. Major Variables That Affect Women's Performance in Distance Education

In this section, the major variables that are believed to affect the performance of women distant students will be discussed. For the sake of convenience, the findings on these major variables were analyzed under four broad categories. These are: the background variables, the distant learners' characteristic variables, the institutional variables and the situational variables.

#### 2.3.1. Background Variables

In an attempt to improve the success and retention rate of distant students in the various distance education programs several research works have been made to identify the background variables in the distant students' profile that determine their academic performance. (Cross, 1982; Bertels, 1982; Holmberg, 1989 and others)

In these works, it seems that every involved researcher in the issue has her/his own hypothesis as to which specific background factors determine the performance of distant students. Hence, the background variables that have been identified as determinants of performance in the previous studies are so varied. More importantly, most of these research works don't identify the background variables that particularly determine the

performance of women distant students. Thus, in this section, all the available research works on the background determinants of the distant students' performance (without considering the sex of the distant students) will be reviewed. This is done to identify further in this study those background factors that particularly affect more significantly the performance of women distant students than their men counterparts.

Holmberg (1989: 187) having reviewed many research works on distance students' performance concluded that older, mature, better qualified enrollees have better chance of succeeding in distance education. Meanwhile, McIntosh, Woodley and Morrison (1989:54-5) found that there are positive correlation between the levels of previous education and both the persistence and achievement of distance students. These authors also supported the above findings of Holmberg by noting that older and better qualified students and students already familiar with intellectual work of some kind are related to higher rate of completion and better achievement.

A more recent research piece (Burnt and Bugbee, 1993:37) identified three factors as major determinants of successful learning in distance education. These are: Previous completion of a college degree; willingness to initiate calls to tutors/conselors for assistance and possessing a more serious attitude toward the courses. A somewhat similar findings (Schlosser and Anderson, 1994)

confirmed that most successful distance students have post-secondary education goals and expectation of higher grades.

Yet another research by Holm (1988: 14) revealed that proximity of students residence, previous post secondary education and length of professional experience are correlated with the performance of distance students.

Focusing his research on the personal variables of distance students, Chacon-Dugue(1987:93) found that the level of learners motivation as well as perseverance and also the students perceived course difficulty were good predictors of student performance on the Pennsylvania State University's Independent course. On the other hand, Bertels (1982:16) asserted that the agreement between personal interest and course or degree structure is a decisive factor in the determination of students' persistence and performance in distance education.

Against the backdrop of the above discussed research results documented non performance-related background variable one can easily proceed to identify those variables that particularly affect women distant students. In the following sections a modest will be made in this regard.

### 2.3.2. Women Distant Learners' Characteristic Variables

It seems quite difficult to obtain a research finding which has identified the characteristic variables unique to women distant students that affect their academic performance in distance education. But, several empirical studies to be discussed below, have identified those performance-determining distant learners' characteristic variables which have been observed to be more common or more severe among women distant students than among men distant students.

#### 2.3.2.1. Lower Previous Educational Attainment:-

According to Kirkup, (1988) although most distance education institutions do not require students' previous educational attainment, some level of academic proficiency of students have proved to be essential to pursue their education in distance education programs. Similarly McIntosh et al (1977) stressed that the participation and performance of several women to the British Open University have been affected by the lower average educational level of women in UK during that time.

Subsequent research works (McIntosh, 1981; 1984) also confirmed that women's lower prior learning level account for their lower academic success rate in the distance education programs of the British Open University. In the same vein, Manjulinka and Reddy (1996) contend that the average lower

educational level Indian women affected not only their participation in the India Gandhi National Open University but also their academic status in that institution.

**2.3.2.2. Lack of Study Skills:-** a study by Mandie-Filer (1985) revealed that women distance students in the Dutch Open University generally reported greater problem in lacking the necessary study skills and study habit for successfully pursuing their education in the various distance programs.

In a related research work to the students' lack of study skills, Schlosser and Anderson (1994) reported that poor time management and procrastination of the distant students as important factor related to their academic failure in distance education programs.

**2.3.2.3. Greater Difficulty in Managing Life and study Problems**

There are study results Coulter et al (1982) Kelly and Eliot (1982) that indicated that women distance students are more likely concerned than men students on how to contend with the disruption in their family lives caused by their return to education. The above authors also found out that more women students than men students report

problems in balancing their multiple responsibilities in their course of distance study.

**2.3.2.4. Lower self-confidence:** Sturrock's (1987) study result attested that more women distance students than men students reported to feel less adequate and sometimes uncertain about their ability in successfully completing their higher lever education. She also noted that this problem of women distance students is more serious among those women without prior experience of college education.

**2.3.2.5. Lower Academic Motivation:** Studies that have confirmed student motivation to be one of the most decisive factors in determining academic performance in distance education programs are many (Bertels, 1983; Chacon Dugue, 1987; Holmberg, 1989). The available research report that indicate women distance students' lower academic motivation (Oudshroun, 1986; Kirkup 1988) cite the wide gap' that apparently exists between the daily life activities of most married women and the mental requirement of academic study as important reason for women's lower academic motivation in distance courses

**2.3.2.6. Problem due to Learning Style:-**Bertels (1983) described the character of most students who fail in distance education programs as student who suffer

from learning in isolation. Similarly, (Charp, 1994; Burnt and Bugbee, 1994) asserted that greater students' autonomy particularly students' ability to work independently are reported to be crucial for success in distance education. With this background, Kirkup (1986) argued that the fact that women are said to learn better through group interpersonal exploration (Burge, 1983; Faith, 1988) can be put as a possible justification for their lower success rate in distance institutions which lack the group-based teaching intervention.

#### **2.3.3. Institutional Variables.**

Numerous research documents (Holmberg, 1989; Keegan, 1990; Verdiun & Clark, 1991) have tried to identify the variables within a distance teaching institution which influence the academic performance of its students. But similar research endeavours that have sought to identify the institutional variables that particularly affect the performance of women distant students are quite meager (Faith, 1988; Jenkins, 1990).

Thus, in this section, an attempt was made to draw additional available source related research literature from two apparently different sources. The first source is the previous studies on the institutional barriers on the performance of distant students (i.e. regardless of the sex of the distant students). The second source is the previous studies on the academic

objectives must involve more concrete and meaningful objectives for the life of most women such as: promoting their professional competence as well as their level of qualification, enhancing their employment prospects and opening up employment opportunities in the labour market if the program is meant to attract large number of women & for better academic results. In a similar vein, Oudshroun's (1986) findings revealed that the capacity of the program & course objectives to boost women's self-esteem and underdeveloped social skills is an important factor that influence women's performance in distance education courses.

The relationship between distance student's performance and the difficulty level as well as attainability of the training objectives have been consistently reported by researchers (Holmberg, 1989, Willis, 1993). According to such research documents both the difficulty level of the distance education program and course objectives and their attainability poses major academic predicament for students unless they are set based on a preliminary study of the needs, experiences and problems of the target students as well as the general circumstances under which the study is designed to take place (frame factors).

### 2.3.3.2. Instructional Materials

The quality of the instructional materials that are used by the distance teaching institutions is found to affect the students achievement and persistence (Moss and Brew, 1981; Keegan, 1986; Moore, 1987). In fact, Sewart (1982) reported how the British Open University successfully improved the completion rate of students by increasing the quality of the teaching materials.

The aspects of the instructional materials that have found to affect students performance are the successfulness of the materials in making most of their learning activities highly interactive (Garrison, 1990; Willis, 1992) and the materials' effectiveness in imposing a compelling demand of active learning on the learners for the mastery of each lessons (Saettler, 1990; Savery and Duffy, 1995;)

According to McNabb(1994) Millbank (1994) the crucial factor for promoting students' learning through increased interactivity are the use of self-instructional materials and interactive communication technologies in the instructional design and process.

Saettler (1990) quoting Solomon's study reports the two determinant factors for the learner's investment of his/her mental effort (active participation) in a learning task. These are the learners' perception of the

relevance of both the medium as well as the message which it contains and also the learners ability to make meaning out of the materials presented.

Willis(1992) asserted that the effectiveness in the design of the instructional materials in incorporating a system of successive feedback and reinforcement as the learner progressively responds to each learning tasks and self-assessment exercise is a very important variable for motivating distance students for better learning.

Sherry and Morses' (1995) findings indicated that the performance orientedness of most learning activities which basically involves presenting important job directed competencies as lessons resulted in increasing student's motivation & performance.

White (1987) found that the organization of lessons in successive self-contained units (modules) promoted students' satisfaction with the course largely for it allows them to study each unit according to their self-adjusted and best suited flexible time.

The students' difficulty with the language the material is prepared has caused major learning problem for most students whose mother tongue is different from the language of institution (Prasad, 1992; khoul, 1993) Besides, the attempts that have been made to make the difficulty level of the contents appropriate to the

target students' level of academic competence proved to have improved the completion rate of distance students (Willis, 1992)

Similarly the "abundant" use of case studies and collaborative student projects which are relevant to the life of the students is repeatedly confirmed to be a major factor that determine the persistence and achievement of distance students (Sherry and Morse, 1995)

#### 2.3.3.2.1. The Gender-Sensitivity of the Self-Instructional Materials

Like in the conventional education system, the instructional materials to be used in the distance education system reported to have a problem of gender-bias against women distant students (McIntosh, 1983; Kirkup, 1986; Faith, 1988). So as to alleviate the academic and other problem women distant students face in this regard the above scholars strongly urge for the self-instructional materials to be gender sensitive. The commonly suggested means of achieving this were: a careful use of language which is free from gender-bias and taking caution from making similar problem in drawing female-male imagery in the texts of distance education. According to Faith(1988:13) both of the above suggestions "...were invariably underscored by almost all authors who wrote on the topic."

However, the most central issue in trying to make the self-instructional materials gender-sensitive focuses on the content of the self-instructional materials. Since the contents of the instructional materials is believed to be related with the performance of the distant students, an attempt will be made in the next section to discuss it in a further detail.

#### 2.3.3.2.1. The Gender-sensitivity of The Contents of The Self-Instructional Materials

The significance of the move towards gender sensitive content in distance education was appreciated by the expression of Sturrock, (1988:27) which read.

one important way in which distance education is slowly developing into a more inclusive and equitable system is in program and course content.

But, Sturrock (1988) believes that the gender-related problem in the content of distance education courses can be considered as part of similar problem in the traditional education. Accordingly, Faith (1988) argued that if we want a more women-centered curriculum in distance education, we must develop strategies to change the male tradition in the same way as at traditional universities. Faith further noted that this should start with questioning the very nature of academic education.

The depth and direction of the question that is said to have challenged "the hitherto dominant male academic tradition" (Burg, 1983:18) is well portrayed by the following Woolf's query: "...where, in short, is it leading us the academic procession of sons of educated men" (1968:63)

The direct implication of Woolf's question is that women entering the academic world should bring with them the education of their female experience. This is because, as one pioneer women distance educator & researcher put

In traditional courses, women are invisible. We have a womanless history, economics (McIntosh: 1984:14)

In response to the above problem, the academic world went on adding a few famous women in the content of their courses (Kirkup, 1981). However, this also couldn't escape the critical scrutiny of feminist educators who reduced the entire attempt of such curricular revision to what Lorenz in Haegen (1985:4) called "...add-women-and-stire-approach".

In a similar vein, McIntosh (1983) noted that this approach was not only wrong but even worse the earlier womanless contents. The foregoing line of argument has the aim of developing what has come to be known as women

studies or women education. Such women studies course offered preferably as an emerging discipline in its own right or, at least, integrated in the mainstream courses (Faith, 1988; Kirkup, 1988).

As far as the distance education is concerned, the first course in women studies was introduced by the British OU (1983) with the title "The changing Experience of Women." (Kirkup, 1988) The content of this course is described by Kirkup(1988:103) as topics that deal with issues & Questions about women's position and sex differences, psychological and physical explanations of female sexuality historical analysis of women's employment and economic dependence, health and violence.

However, the adoption of such distance courses, in developing countries, has resulted in a resistance like the following"... it is necessary for Open Universities not to develop sex-stereotypes courses under the brand of Women's Education" (Manjulinka and Reddy, 1996:58)

On the contrary, Kanwar's (1990) research on the advantage of a course designed by the British Open University to encourage women into the field of management (i.e. "Women into Management") indicated that the course found to be useful for it gives due consideration to specific problems of women in management practice. The contents of this course include how to explore oneself and bring down the barriers (of women) in

the world of work; the experience of women in organization; preparing to manage, marketing oneself; managing oneself; managing the job (Smith, 1986:13)

Subsequent evaluation of the impact of the above course (i.e. "Women into Management") on the academic status of women distant students in the British Open University revealed that the course increased both the success and retention rates of its women distant students (Kirkup, 1988).

#### **2.3.3.3. The student Support system**

Several researchers, (Moore, 1987; Keegan, 1990; Manjulinka and Reddy, 1996) confirmed that the quality of the learners' support subsystem in a distance education program to be a critical factor that determines students' success in the program. In fact, Sewart (1982) reported that the British Open University used increasing the quality of its students support subsystem as one of the most effective methods for improving students' success.

A more recent research piece (Willis 1992) Summarizes what he called three major elements of student-support that have direct influence on determining retention and achievement of distance students. The first is giving adequate advice to enquiries and applicants before they embark on a course. According to Willis (1992) this ensures that students would not start a course which is

less appropriate and relevant to their needs and expectations.

Secondly, once students are in the system the provision of rapid, appropriate and effective advice and help to the students increases their performance on the courses. Willis (1992) contend that such support has dual benefits. One is that it has direct result in preventing the students with problems from academic failure due to lack of help. The other benefit is that the support has a parallel vicarious impact on fellow students in improving their academic confidence by ensuring that those experiencing study problems are helped to overcome their problems somehow.

Thirdly, the distance education learners' support subsystem that creates an atmosphere that is supportive and encourages continuing, membership of the learning group has found to reduce students' failure. What Willis (1992) is meant by the above aspect of the student-support is a facility and system in the distance teaching institution that encourages students to seek advice and help from tutors, counselors and each other.

Other scholars (Sewart, 1993, Egan, etal, 1994; Threlkeld & Brzoska, 1994) underscore the availability and the effectiveness of the basic elements of any student-support subsystem in a distance education system as major variables that affect students' performance.

These include: the adequate provision of the learning materials; the timeliness of the feedback for assignments, exams and projects; the efficiency of the postal and telephone services: the effective use of the technological media mainly computers and telephone for instructional purpose and ensuring students' access to the learning resources (i.e. the center, the library, the computers)

Meanwhile, Keegan and Rumble (1982:235) identified the capacity of the student-support sub-system to provide shared-experience and/or 'socialization' as essential intervention to improve students retention and academic performance. The authors argue that lack of 'shared-experience'; 'inter-subjectivity' in the teaching-learning process of distance education is one major limitation of this form of education which all distance teaching institution must introduce a mechanism of compensating such missing element in their student-support.

Accordingly, Keegan & Rumble (1982) listed such intervention that they found to increase students' achievement. These are adequate interaction of students with their tutors; residential work for some courses; student self-help groups telephone tutoring and even funds to students associations.

### 2.3.3.3.1. The Gender-Sensitivity of The Student Support System

Like in the self-instructional materials, the gender-bias in the student support of a distance education system has been reported to hinder the performance of women distant students. (McInthos, 1976; Asher and Oak, 1985; Arger, 1990) The above scholars and others (sturrock, 1986; Smith, 1986; Kirkup, 1986, Faith, 1988) stressed that the administration of the students support of a distance education system, thus, needs to take gender-sensitive measures so as to alleviate the academic and non-academic problems women distant students face in their course of study. The suggested gender-sensitive measures include:

- the location of the study centers should be made at a central place which is convenient for most women distant students. Besides, the study centers should be perceived by most women distant students as free from any physical & psychological threat.
- the availability of separate toilet for women should be insured in the premises of study centers.
- the transportation problem of most women distant students to come & go to the study centers should be given due consideration
- the academic programming should be made flexible to entertain the various gender-related problems of women distant students

- the study center should give timely appropriate & courteous response to the queries of its women distant students.

A closer look into some of the above stated gender sensitive measures reveals that there seems to be little or no obvious reason to justify them as solutions for the gender specific problems of women distant students. For instance, the timeliness and the appropriateness of response a study center should give to its distant students couldn't be expected to have different effect upon women and men distant students. Because, it seems obvious that both women & men distant students require timely and appropriate response from their study centers.

Rather more analytical and extensive works have been documented about the gender-sensitivity of the student support system with particular reference to the instructional methods and tutors in a distance education system. In the following two sections, the related research findings on both topics will be reviewed.

#### **2.3.3.3.1. The Gender -sensitivity of the Instructional Methods**

The design and use of any method for educating women needs to recognize women-centered approach to pedagogy (Kirkup, 1981; Faith, 1988). The essential characteristics of this approach are described by these

authors as more dialogic, more exploratory and less given to Pseudo-objectivity than the traditional mode. It is also said to rely heavily on cooperation, and consensus or to use Rich's (1979:6) expression "more personal and antihierarchical by nature." These scholars strongly argue that the conventional approach is characterized by hierarchical, elitist and competitive styles which are all not in line with 'women's ways of knowing.

Meanwhile, as Kirkup (1983:13) pointed out, the valuation of personal experience as a basis from which to build knowledge is one central feature of women-centered approach in distance instruction. From the details of Kirkup's exposition two methodological implications seem to evolve.

The first is about the need for a different way of treating academic knowledge more specifically, making it less abstract and obliging students to test it against their own individual and group experience. The second implication is concerned with the necessity for a changed relationship between teacher and students in which teachers function more as expert resources than infallible pedagogues.

Meanwhile, Faith (1988:12) argued that the adoption of the women-centered methods (described thus far) in the conventional education seems less challenging than in the distance education due to the structure of the latter.

This is mainly because the said women-centered instructional methods call for several face-to-face contact sessions so as to give adequate opportunity for interpersonal exploration among the distant students. However, Faith believed that the essential principles of the approach can be advanced in the distance education modality using certain workable solutions. The commonly suggested means by experienced women distance educators and researchers (Kirkup, 1981; McIntosh, 1988; Faith, 1988) include increasing tutorial hours, encouraging more active student participation and creating contexts for interpersonal explorations among women students.

Kirkup (1988) contends that the most researched and widely recognized women-centered methodological intervention in distance education is emphasizing the grouping method for facilitating the learning of women students. According to Kirkup, a good example for deliberately creating grouping context for women might be the inclusion of one-week summer school in the distance program especially for women's studies.

Moreover, early experiments with group entry schemes (Peacock et al, 1978) had demonstrated the importance of mutual support for women students with common characteristics or no paid work. When a group of such women were kept together as a tutorial group for the whole year they were much more likely to complete the course than were similar students assigned to a more

typically heterogeneous group. Swarbrick (1984, 1986) found that her students valued the preparatory residential weekend they attended at the beginning of their year of study as the most valuable in sparsely populated regions of the country. This was their only contact with other bursary students and almost their only contact with other women studying the same course. They met other women who shared their problems and their worries and this camaraderie fired their confidence and enthusiasm. Hence, any scheme for women in the business school would have this 'grouping' aspect as a priority.

#### 2.3.3.3.2. Gender Sensitivity of the Tutors

Scholars (Burg, 1983; McIntosh, 1986; Faith 1988) assert that introducing a gender-sensitive distance education program for successful equitable development in women education requires, at least, tutor-counselors who are free from obvious gender bias and resistance to the change in this direction. These authors further noted that tutor-counselors who accept the need for the desired change and committed for an equitable distance teaching practice are believed to be successful in teaching women at a distance.

Accordingly, researchers have found the following to be the more appropriate qualities that characterize gender-

sensitive tutor-counselors in distance education.  
(Burge, 1983; Faith, 1988; Kirkup, 1988)

Those who have adequate orientation for and show commitment to gender -fair teaching-learning process.

Those who maintain supportive and encouraging approach towards their women students.

Those who appreciate the gender-related problems of their students and respond accordingly.

Those who usually adapt less hierarchical and more personal approach to their work while encouraging students to learn and form their own discussion groups.

Meanwhile there are documents that recommend women than men tutor-counselors for a better result in educating women at a distance. (McIntosh, 1983; Fatith, 1988)

Besides, a research report (Manjulinka and Reddy. 1996) also note that in some traditional societies women distance students reportedly feel inhibited to initiate dialogue with male tutor counselors.

#### **2.3.4. Situational variables**

There are a number of survey evidences which were reviewed by Holmberg (1989), Keegan (1990), Willis (1993) that have consistently confirmed the fact that the majority of distant students in most countries are working adults. Therefore, scholars in distance

education (Sewart, 1987; Moore, 1987; Hולםberg, 1989) have tried to improve the success and retention rate of distant students through developing a program that reasonably responds to the various situations that commonly affect the academic performance of distant students who are working adults. Generally, three sources of situational learning barriers for distant students who are working adults were repeatedly identified by the above authors.

The first source of situational barriers is the family of the adult distant students. In connection with this (Moore, 1987; Hולםberg, 1989; Keegan, 1990) found that the family responsibilities and other family-related problems of the distant students were some of the most common reasons for lower academic performance and eventual dropping out of several distant students.

The second source of situational barriers is the working life of the adult distant students. In this regard Phythian and Clements (1982) attested that adult distant students often complain that their studies are disrupted by their work. These authors also found that students' work-related reasons sometimes be major causal factors for poor academic performance in many distance education programs. According to them the two common such work-related situations that inhibit distance study are involvement in work duties are in out-of-work time and

being physically & mentally exhausted to study due to excessive work load.

The third sources of situational barriers for the learning of distant students who are working adults are the various personal situation that put adults in serious life difficulties Cross (1982), Holmberg (1989) and Keegan (1990) affirmed that financial constraints and health reasons were common personal situations that have been observed to affect the performance of adult distant students.

On the other hand, some researchers (Taylor and Kaye, 1986; Hermann, 1988; Kember, 1989) went further in examining the impact of the incidents that happen to occur in the course of interaction between the distant students and their distance teaching institution upon the performance of the students. The major incidental situations underpinned by the above researchers were: discouragement due to excessive study load and lower performance on assignments. Other incidents include disagreement with tutors and when the distance instruction fails to meet the students' previously held expectations.

Against the backdrop of the studies discussed thus far on the situational barriers that affect the academic performance of adult distant students, few previous research pieces have examined their relative impact on

women distant students. For instance, Faiths' (1988) and Sturrock's (1986) research results on the problem of distance students indicate that most women students report (more than their men counterparts) their various family responsibilities mainly home making and child rearing as additional obstacles to study at a distance. Similarly, Manjulinka and Reddy (1996) contend that in several distance education institutions found in India the complaints of women student about their family responsibilities are reported to be serious. On the other hand, Jenkins (1989) asserted that in most developing countries, the problem of women distance students due to their family responsibilities is largely coupled with their lack of encouragement from spouse or negative attitude (obstacle) from spouse to their education and social commitments.

Meanwhile, Boon and Joosten (1986:26) found that most women in developing countries have less money to spend on distance courses than men. Besides, Jenkins (1989), Manjulinka and Reddy (1996) argued that the traditional economic dependence of the majority of women in most developing countries have put adult women in such countries in obvious disadvantage to pay for their education.

## CHAPTER THREE

### 3. RESEARCH DESIGN AND METHODOLOGY

#### 3.1 The Population and Sampling

The target population of the study comprises all women distance students who had been enrolled to the certificate distance education programs of EMDP in regions 4 and 14 by the 1999/2000 academic year. Region 4 had been selected because it is the largest region in the country with its zones widely dispersed geographically, and thus, the only region that has two study centers of EMDP. Region 14 had been selected because it has the highest number of women students' (38)

In selecting the research subjects purposive sampling had been used i.e. all women certificate distance students of EMDP found in Region 4 and Region 14 were included in the study. This is because the number of women students in both regions are very few (38 women students from the total of 160 certificate distant students in Region 14 and 34 women students from the total students in Region 4)

However, so as to know the factors that particularly affect the performance of women distant students, male counterparts of the women subjects should also be

studied. Thus, equal number of male certificate distant students to the women subjects (i.e. 38 from Region 14 and 34 from Region 4) had been selected using simple random sampling method from among all male certificate distant students in the respective region. This makes the sample size of the study 152.

Moreover, a total of 12 tutors (6 tutors from each region) had been used as subjects of the study. These were taken from the total of 27 tutors who have been teaching in Region 4 (14 tutors) and in Region 14 (13 tutors). Besides, the coordinators of the study centers in Addis Ababa, Jimma and Nazareth were also included as subjects of the study for additional information.

### **3.2. Data Collection Methods and Instruments**

In the study questionnaire, structured interview and documentary analysis have been utilized as data collection methods and instruments.

#### **3.2.1. . Documentary Analysis**

Documentary analysis had been employed for two major purposes. The first was to know the status of women distant students' performance vis-à-vis that of men distant students. In this regard, the performance of the sampled distant students on tutor marked assignments was retrieved from the master mark list and the average

result was calculated for further statistical analysis using t-test. The second objective for using documentary analysis was to assess the impact of the background variables (sex, age, previous post secondary education level, relevance of the current work to the training and entrance exam result upon the calculated average result the students obtained in their previously completed tutor marked assignments. So as to carry out this the personal files of each and every sampled student was retrieved and the above stated background variables were recorded, tallied and coded in a manner that is suitable for further statistical analysis using multiple regression method.

### 3.2.2. **Questionnaire**

A questionnaire has, been prepared based on the reviewed literature of the study. This was to inquire the sampled distant students about the possible learning barriers in their personal characteristics, distance teaching institution, and in their life situations obstacles that are believed to hinder their performance in the distance training program.

Initially 70 items had been prepared and given to two expert judges (who have MA degree in curriculum and currently distance educators in the Ethiopian Civil Service College) to check the relevance and the clarity of the items on 5 -points rating scale.

To examine the extent of the agreement (reliability) between the two judges' ratings of the relevance and clarity of the items the Pearson correlation coefficient ( $r$ ) had been calculated between their ratings. The Pearson  $r$  for the item relevance ratings of the judges was found to be 0.93 while that of the item clarity ratings of the judges was calculated to be 0.96.

As to the selection of the items based on the input of the judges' ratings, 19 items which has been rated 2 in the 5 points scale by either of the judges had been eliminated from the questionnaire. Twelve items which had been rated 3 by either of the judges in the 5 points scale had been re-stated while the remaining 49 items which had been rated by the judges 4 and 5 in the 5 points scale were included in the questionnaire as they are.

### **3.2.3. Interviews.**

A structured interview had been prepared based on the reviewed literature of study. This was to inquire the tutors in the study centers about the major factors believed to affect the performance of their distant students. A total of 30 interview items had been prepared and distributed for comments to two graduate students in the Curriculum and Instruction Department and to three distant educators in the Ethiopian Civil Service

College. Based on the comments from the above graduate students and distance educators 14 items had been selected and made to be part of the interview.

In a similar manner a structured interview had been prepared for the coordinators of the study centers at Addis Ababa Commercial College, Jimma Agricultural College and Nazareth Technical College. This interview, which has twelve items, primarily focuses on the variables in the administration of the study centers that could have affected the performance of women distant students.

### **3.3. Try Out**

The try-out of instruments was carried out in one of the EMDP's study center in Awassa Town from December 15-30, 1999. The main purpose of the try out was to pilot the questionnaire and the interview as instruments. fifteen women and 15 men distant students in the study center were taken for the try out. 5 five tutors and the coordinator of the study center were included in the try out.

From the distant students' questionnaire items were cancelled out and three were reformulated too. Besides, one item was added. The interview schedules were also revised but only minor modifications were made. The above described corrections were made based on the

feedback obtained from the tryout in order to refine the items to serve their purposes.

Following the try out and the amendments made, attempt was also made to get feedback from colleagues who have MA degree in education to address face validity (that the instruments look good) and content validity (that the instruments involve relevant content geared to the problem of concern). In this regard the instruments were commented several times before they were finally used.

### **3.4. Data collection Procedure**

The data collection was carried out in the three study centers by the researcher and his assistants. Initially, the assistants were well oriented for five days on the objectives of the study and the instruments employed. All the necessary data were collected in three rounds. During the first round the researcher collected data from the study center found at Jimma Agricultural college from Jan. 1-20, 2000. In the second round (Jan 25-Feb. 15, 2000) data were collected from the study center at Nazareth Technical College and finally, from Addis Ababa Commercial College (Feb. 17-March 2, 2000).

Letters were written to the coordinating office of the study centers so that the concerned personnel would cooperate in the process of the study. Producing the letter whenever necessary the researcher held interview

with the tutors and the coordinators of study centers. Subsequently the necessary background data were collected from the files of the sampled distant students. This was carried out for seven days in each study center.

Then the sampled distant students were informed about the objectives of the study and were requested to cooperate in providing the inquired data. The researcher together with the assistants distributed the questionnaire for the distant students.

Since the researcher gave complete description of the objectives of the study for those who are concerned at all levels before conducting the interview, documentary analysis and administering the questionnaire, he got special cooperation and succeeded in obtaining the necessary data. All the questionnaires distributed to the distant students were filled in and returned.

### **3.5. Data Analysis**

Based on the level of measurement used to measure the dependent variable and the number of groups involved, the following statistical techniques were employed.

T-test was used to see the mean difference between the performance of women and men distant students and also between Region 4 and Region 14 women distant students as measured by their average result on the Tutor Marked

Assignments. Moreover, multiple regression was used to know the impact of seven background factors (sex, age, post sec-education, relevance of current work to the training and entrance exam result) on the students' performance as measured by the average result on Tutor Marked Assignments.

Chi-square was employed where nominal data were used to examine the homogeneity of the response of men and women respondents and also Region 4 and Region 14 respondents to the items in the questionnaire.

Furthermore the weighted mean was calculated for women and men group of respondents in each region based on their respective group's cumulative ratings of each item inquired about the situational variables that affect the performance of women distant students. Besides, for each item, the weighted mean difference of the ratings between women and men group of respondents were analyzed using one-way ANOVA.

In all of the above cases the existing differences were tested for statistical significance at alpha 0.05 level to tolerate errors that occur due to chance, as it is conventionally used in social science studies.

## CHAPTER FOUR

### 4. PRESENTATION OF THE FINDINGS AND DISCUSSION

This chapter examines the presentation and discussion of the data obtained through documentary analysis, questionnaire and interviews. The first part of the chapter deals with the documentary analysis; and the second part deals with the data of the questionnaire and the interviews.

#### 4.1. The Data from the Documentary Analysis

In this section the data obtained from the documentary analysis will be presented. This has two parts. In the first part the status of women's performance in the target distance training program will be discussed. This will be followed by the data on the background variables that affect the performance of the sampled distant students.

##### 4.1.1. The Status of Women's performance in the Distance Training Program.

To know the status of women's performance in the target distance training program vis-à-vis that of men students, the results the sampled distant students have obtained on the five already completed TMA's were examined Table 1 shows the obtained result.

**Table - 1**

The Status of Women's Performance As Measured by The Average Result on the Tutor Marked Assignments

	Sex	N	Mean	t	df	Sig. (2-tailed)
TMA Result	Female	32	45.18			
Region-4	Male	32	51.52	1.86	62	.048
TMA Result	Female	32	50.78			
Region-14	Male	32	60.94	3.45	62	.001

As it is shown in Table 1, the mean TMA result of Region 4 women distant students was 45 while that of Region 4 men distant students was found to be 51. In Region 14, whereas the mean TMA result of women distant students was 51, that of their men counterparts was observed to be 61.

Furthermore, the t-test results in Table 1 indicate that there is significant difference between the mean TMA results of men and women distant students of both regions at alpha 0.05 level. Thus, it can be deduced that women distant students of Region 4 and Region 14 perform significantly lower than their men counterparts on the TMA in the certificate distance training program of the EMDP.

In fact, the above finding of the study is in agreement with previous research results. (McIntosh, 1983; Kirkup, 1986; Faith, 1988) These researchers confirmed that women distant

students as a group show a significantly lower performance level than their men counterparts in both the continuous assessment result (TMA) and term end exams. This, among other things, implies that there seems to be gender-specific variables that may account for the wide gap that apparently exist between the performance of women and men distant students. The examination into what these gender specific variables are needs to start from the background variables which could have put women in lower performance level than men in distance training programs.

#### 4.1.2. Background Variables That Affect the Performance of Distant Students

In this section, the findings of the study on the impact of seven background variables (i.e. sex, age, marital status, post secondary education, the relevance of current work to the training, work experience, and entrance exam result on the performance of distant students (as measured by the students' average score on 5 TMA's) will be examined. As it was mentioned in the previous chapter the statistical tool used to carry out the analysis was multiple regression.

The result of the multiple regression analysis (see Appendix-B) identified those background variables which have been found to have significant impact on the performance of the distant students. Accordingly, the results obtained from Region 4 data revealed that the only background

variables which have been found to have significant impact on the performance were post secondary education, entrance exam result and sex. Besides, in Region 4, the obtained result makes clear that age, marital status, relevance of the students' current work to the training and work experience don't have any relation with the distant students' performance (average TMA results).

Similarly, the multiple regression result of Region 14 data shows that the entrance exam result and the sex of distant students are the only two background variables that have been significantly related with their average TMA result. This implies that post secondary education, age, marital status, relevance of the students' current work to the training and work experience don't have any impact on Region 14 distant students' TMA results.

Contrary to the above findings, there are several research results which have indicated the relation of distant students' age, marital status and relevance of current work to the distance training with their performance. For instance, Holmberg(1989)Verdiun&Clark(1991) reported that younger (below 40 years of age) distant students perform better than older distant students. Concerning the students' marital status, Kirk(1972)Leonard(1984) found that single women distant students obtained on the average higher assessment results on their distance training than married women distant students in the same group. McItosh's(1981)

correlational research results revealed that there is a strong correlation between the relevance of the distant students' work to their distance training with the results the distant students obtained in the training.

Meanwhile, the multiple regression result of Region 4 data also showed that under the third regression model, the prediction of the students' TMA results using each of the three determining variables i.e. sex, post secondary education, and entrance exam result were found to be significant at alpha 0.05 level. Similarly, the multiple regression result of Region 14 data indicated that under the second regression model, the prediction of the students' TMA results using each of the two determining variables i.e. sex and entrance exam result were found to be significant at alpha 0.05 level.

From the discussion that have been made thus far it seems evident that in both regions the distant students' result on TMA is determined by their sex and also by their result on the entrance exam. The finding on how the target distant students' TMA result was determined by their sex confirmed the result observed in the previous section i.e. women and men distant students have significantly different TMA results. Furthermore, the above finding concerning the relation of TMA results with entrance exam results reveals still another background variable which the target women distant students were disadvantaged with. That is the

entrance exam results of women distant students was found to be significantly lower than their men counterparts. Thus, it can be deduced that women distant students' significantly lower TMA results is partly explained by their lower entry behavior as measured by the entrance exam.

On the other hand, as it was shown above, different results were obtained in Region 4 and Region 14 as to the impact of the sampled distant students' previous post secondary educational level on their TMA result. This difference seems to indicate the target distant students' particular level of post secondary education which significantly determine their TMA results. This can be observed by comparing the post secondary education level of Region 4 and Region 14 men and women distant students vis-à-vis their respective TMA results.

In Region 4, most women distant students don't have post secondary education and hence, the students' post secondary education level was found to determine their TMA result. But, in Region 14 most women distant students have a diploma level post secondary education and as the result the students' post secondary education level found to be not related to their TMA result. Thus, it can be concluded that the minimum post secondary education level which could determine the students' TMA result is a diploma level education. But, as it was observed among Region 14 subjects the post secondary education above diploma level (BA degree)

failed to bring about significant difference on TMA results when compared to that of diploma level post secondary education.

## 4.2. The Data From of the Questionnaire and Interviews

### 4.2.1. Distance Learners' Characteristic Variables

Distance education is largely characterized by individual learning as opposed to the group learning that is common in the conventional education. Thus, the study on the relevant characteristic variable within the individual distant students that are believed to affect the academic performance becomes important. Accordingly, in this section, women distant students' characteristic variables that are believed to affect their performance in the target training program of the study will be discussed. For the sake of convenience, the variables are grouped under three categories. These are, the prior-learning variables, the study skills variables and the dispositional variables of the learners.

#### 4.2.1.1. The Prior-learning variables

To examine the adequacy of the respondents' prior-learning level for their present distance training, three performance-related aspects of learners' prior-learning were assessed. These include, the students' perceived prior-learning level in the medium of instruction (English), the students' perceived prior competence in the quantitative methods and the students' perceived background knowledge related to the contents of the training. The table below addresses this issue.

**Table -2**

**Prior Learning Variables That Affect the Performance of Women Distant Students.**

Items and Response categories Subpopulations		Prior English language proficiency level		Prior Competence in quantitative methods		Background knowledge and experience	
		Adequate	Inadqt	Adequate	Inadqt	Adequate	Inadqt
Region	Gender						
4	Female (F <sub>4</sub> )	6(19%)	26(81%)	15(47%)	17(53%)	8(25%)	24(75%)
	Male (M <sub>4</sub> )	10(31%)	22(69%)	16(50%)	16(50%)	13(41%)	19(59%)
	Subtotal (R <sub>4</sub> )	16(25%)	48(75%)	31(48%)	33(52%)	21(33%)	43(67%)
14	Female (F <sub>14</sub> )	15(47%)	17(53%)	20(63%)	12(37%)	17(53%)	15(47%)
	Male (M <sub>14</sub> )	27(84%)	5(16%)	25(78%)	7(32%)	17(53%)	15(47%)
	Subtotal (R <sub>14</sub> )T	38(59%)	26(41%)	45(70%)	19(30%)	29(45%)	35(55%)
Total	Female (F <sub>4</sub> +F <sub>14</sub> )	17(27%)	47(73%)	35(55%)	29(45%)	20(31%)	44(69%)
	Male (M <sub>4</sub> +F <sub>14</sub> )	37(58%)	27(42%)	41(64%)	23(36%)	30(47%)	34(53%)
	Grand Totals	54(42%)	74(58%)	76(59%)	52(41%)	50(39%)	78(61%)
Gender Difference X <sup>2</sup>	F <sub>4+14</sub> Vs M <sub>4+14</sub>	12.80*		1.17		3.28*	
	F <sub>4</sub> Vs M <sub>4</sub>	1.33		0.06		1.77	
	F <sub>14</sub> Vs M <sub>14</sub>	9.97*		1.87		1.58	
Regional Difference X <sup>2</sup>	R <sub>4</sub> Vs R <sub>14</sub>	15.5*		6.35*		2.10	
	F <sub>4</sub> Vs F <sub>14</sub>	5.74*		1.58		1.16	
	M <sub>4</sub> Vs M <sub>14</sub>	18.51*		1.09		1.00	

\* Significant at alpha 0.05 level

As can be seen from Table 2, 81 per cent of women respondents from Region 4 felt that their prior English language proficiency level is inadequate for their present training. Still from among Region 4 women respondents those who declared the inadequacy of their background knowledge and experience related to the contents of their training and their prior competence in quantitative methods were 75 per cent and 53 per cent, respectively.

Similarly, 47 per cent of women respondents from Region 14 acknowledged that their prior English language proficiency is inadequate for their present training. As to the background experience and prior competence in quantitative methods of Region 14 women respondents, those who reported inadequacy were 43 per cent and 37 per cent, respectively.

The above findings seem to indicate that English language proficiency was the most common problem of women distant students of both regions followed by the inadequacy in having the background knowledge & experience related to the training as far as prior learning is concerned.

Consistent with the above findings, eleven of the twelve interviewed tutors agreed that the inadequacy in the English language proficiency level and the lack of experience in industrial & business work environment are the major problems that affect the performance of their women distant students.

Table 2 also shows the significant chi-square test results between women & men as well as between Region 4 and Region 14 respondents. As can be seen from the table, significant gender and regional difference was observed at alpha 0.05 level concerning the respondents perceived English language proficiency level. The obtained significant chi square result on the gender difference indicates that the problem

of the target distant students due to their inadequate English language proficiency level is more common among women than among men. Similarly, the significant Chi-square regional difference result shows that the above stated English language problem of the target distant students is more common among Region 4 women respondents than among Region 14 women respondent.

Several research works Singh (1983) Khoul(1987) Jenkins (1989) have reported similar results with the above finding of the study. More specifically, Khoul (1987) and Prasad (1991) confirmed that women distant students on the average have disadvantaged prior proficiency level in the medium of instruction as compared to their men counterparts. However, the above researchers reported the apparently lower status of women's prior proficiency level in the medium of instruction as one aspect of women's lower (on the average) previous educational level. Similarly Kanwar(1990) attested the relatively disadvantaged status of the majority of rural women distant students (as compared to women from urban areas) in their mastery level of the language of instruction. Kanwar(1990) further indicated that the above reported difference between women distant students from rural & urban areas is the function of their difference in their previous educational attainment.

The discussion that has been made thus far implies that the obtained significant difference between women and men respondents in general and also between Region 4 women students and Region 14 women students might be due to the wide gap that existed between the groups in their previous educational level. As it was indicated in the preceding section, the majority of women distant students (when compared to the majority men distant students) and the majority of Region 4 women students (when compared to Region 14 women students) have a relatively lower prior educational level. Thus, it can be argued that the target training program of EMDP has required the English language proficiency level which is beyond the educational level of the majority of its women distant students as compared their men counterparts and most of its Region 4 women students as compared to their Region 14 counterparts.

#### **4.2.1.2 Study Skills Variables**

The subjects in this study were also inquired whether or not they face problem, in their course of study, due to lacking the five major aspects of study skills. These include locating the necessary learning resources such as books and journals; the skill of how to take note; the skill of reading effectively; the skill of writing a well organized report on assignments and the skill of using ones out-of-work time effectively for study. The results obtained pertaining to the above aspects of study skills are given in the table below.

**Table - 3**

Study Skills Variables That Affect Distant students' Performance

Items and Response categories		Problem of locating learning resources		Problem due to lacking note taking skill		Problem due to lacking effective reading skill		Problem due to lacking the skill of writing well-organized report		Problem of using your out-of-work time effectively	
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Subpopulations											
Region	Gender										
4	Female (F <sub>4</sub> )	12(38%)	20(62%)	17(53%)	15(47%)	25(78%)	7(22%)	24(75%)	8(25%)	19(59%)	13(41%)
	Male (M <sub>4</sub> )	11(34%)	21(66%)	14(44%)	18(56%)	10(31%)	22(69%)	13(41%)	19(59%)	14(44%)	18(56%)
	Subtotal (R <sub>4</sub> )	23(36%)	41(64%)	31(48%)	33(52%)	35(55%)	29(45%)	37(58%)	27(42%)	33(52%)	31(48%)
14	Female (F <sub>14</sub> )	10(31%)	22(69%)	13(41%)	19(59%)	15(47%)	17(53%)	14(44%)	18(56%)	11(34%)	21(66%)
	Male (M <sub>14</sub> )	8(25%)	24(75%)	6(19%)	26(81%)	6(19%)	26(81%)	9(28%)	23(72%)	8(25%)	24(75%)
	Subtotal (R <sub>14</sub> )T	18(28%)	46(72%)	19(30%)	45(70%)	21(33%)	43(67%)	26(41%)	38(59%)	24(38%)	40(62%)
Total	Female (F <sub>4</sub> +F <sub>14</sub> )	22(34%)	42(66%)	30(47%)	34(53%)	28(44%)	36(66%)	38(59%)	26(41%)	35(55%)	29(45%)
	Male (M <sub>4</sub> +F <sub>14</sub> )	19(30%)	45(70%)	20(64%)	44(69%)	16(25%)	48(75%)	22(34%)	42(66%)	22(34%)	42(66%)
	Grand Totals	41(32%)	87(69%)	50(59%)	78(61%)	44(34%)	84(66%)	60(47%)	68(53%)	57(45%)	71(55%)
Gender Difference X <sup>2</sup>	F <sub>4+14</sub> Vs M <sub>4+14</sub>	0.32		3.28		4.99*		8.03*		5.35*	
	F <sub>4</sub> Vs M <sub>4</sub>	0.11		0.56		2.33		4.02*		1.56	
	F <sub>14</sub> Vs M <sub>14</sub>	0.31		3.67		5.74*		4.15*		4.27*	
Regional Difference X <sup>2</sup>	R <sub>4</sub> Vs R <sub>14</sub>	0.90		4.73*		2.22		2.00		2.56	
	F <sub>4</sub> Vs F <sub>14</sub>	0.28		1.00		6.67*		6.48*		0.57	
	M <sub>4</sub> Vs M <sub>14</sub>	0.67		4.65*		1.33		1.11		2.49	

\* Significant at alpha 0.05 level

As it is shown in Table 3, of the five aspects of the study skills, the majority of women respondents (78 per cent of women respondents from Region 4 and 59 per cent of women respondents from Region 14) reported that they face a major problem during their distance training due to lack of effective reading skill. Yet high proportion of women respondents (75per cent from Region 4 and 50per cent from Region 14) admitted that they face problem during their distance training due to lack of the skill of writing a well organized report on their assignments.

Meanwhile, significant chi-square results were found on the difference between women and men respondents of Region 14 about three aspects of the five inquired study skills at alpha 0.05 level. These were concerning the problem due to lacking effective reading skill (5.74); the skill of writing a well organized report on assignments (4.02); and in using ones out-of-work time effectively for study (4.27). This means that within Region 14 the problem due to the above stated aspects of study skills is more common among women respondents than among men respondents.

On the other hand, in Region 4, although the greater majority of the respondents reported the problem due to all of the five aspects of study skills, significant gender difference was found in the chi-square test only on the problem in writing a well-organized report in assignments. The absence of significant gender difference among Region 4 respondents on most study skills variables shows that the inquired study skills problems were common both to women and men respondents.

As far as regional difference is concerned significant chi-square result were obtained at alpha 0.05 level between Region 4 women respondents and Region 14 women respondents on two of the five aspects of study skills. These were concerning the problem due to lacking the skill of writing a well organized report (6.48) and the skill of effective reading (6.67).

The results of the interview with the tutors also supports the above finding. Virtually all of the interviewed tutors (ten of the twelve interviewed tutors) confirmed that the most common study skill problem of women distant students is their inability to write a well organized report on the tutor marked assignments.

The research findings on the study skills of distance students Kanwar (1990) Mandie-Files (1985) Sturrock (1986) are not specific particularly concerning the difference between men and women students and also between urban and rural distance students Mandie-Files (1985), for instance, compared the complaints of women and men distance students in lacking which she called the 'necessary study skills to study at a distance.' And finally she found out that more women distant students have reported to face the skill of reading the self-instructional materials than their men counterparts. In the same vein, McIntosh's(1974) needs assessment research finding revealed that women distance

students from rural areas need special counselling and tutorial support which largely include developing their study skills.

In general, however the supporting evidence from these research works for the above findings of the study is clear. That is more women than men students and also more rural distance students than urban students tend to lack the required study skills for academic learning at a distance.

#### **4.2.1.3 Distance Learners' Dispositional Variables**

In this section, the impact of those dispositional variables, which are believed to be more common among women than men distant students, on the performance of the distant students will be examined. Table 4 summarizes the inquired items about women distant learners' dispositions and the obtained results.

**Table - 4**

Distance Learners' Dispositional Variables that Affect their Academic Performance

Items and Response categories Subpopulations		Don't have problem to study in isolation		Able to commit oneself study as required		Confident in adequately understanding what has been required to learn in each lesson?		Willing to initiate calls to tutors when the need arise		Distance education is suitable to ones best desired way of learning		Willing to actively participate in face-to-face tutorial sessions	
		Agreed	Disagreed	Agreed	Disagreed	Agreed	Disagreed	Agreed	Disagreed	Agreed	Disagreed	Agreed	Disagreed
4	Female (F <sub>4</sub> )	24(75%)	8(25%)	20(63%)	12(37%)	11(34%)	21(66%)	10(31%)	22(69%)	26(31%)	6(19%)	25(78%)	7(22%)
	Male (M <sub>4</sub> )	25(78%)	7(22%)	23(72%)	9(28%)	21(66%)	11(34%)	25(78%)	7(22%)	24(75%)	8(25%)	23(72%)	9(28%)
	Subtotal (R <sub>4</sub> )	49(77%)	15(23%)	43(67%)	21(33%)	32(50%)	32(50%)	35(55%)	29(45%)	50(78%)	14(22%)	48(75%)	16(25%)
14	Female (F <sub>14</sub> )	21(56%)	11(44%)	19(59%)	13(41%)	19(59%)	13(41%)	15(47%)	17(53%)	24(75%)	8(25%)	22(59%)	10(31%)
	Male (M <sub>14</sub> )	26(81%)	6(19%)	24(75%)	8(25%)	23(72%)	9(22%)	20(63%)	12(37%)	26(81%)	6(19%)	23(72%)	9(28%)
	Subtotal (R <sub>14</sub> )T	47(73%)	17(27%)	43(67%)	21(33%)	42(66%)	22(34%)	35(55%)	29(45%)	50(78%)	14(22%)	45(70%)	19(30%)
Total	Female (F <sub>4</sub> +F <sub>14</sub> )	45(70%)	19(30%)	39(61%)	25(39%)	34(53%)	30(47%)	25(39%)	39(61%)	50(78%)	14(22%)	47(73%)	17(27%)
	Male (M <sub>4</sub> +F <sub>14</sub> )	51(80%)	13(20%)	47(73%)	17(27%)	44(69%)	20(31%)	45(70%)	19(30%)	50(78%)	14(22%)	46(72%)	18(28%)
	Grand Totals	96(75%)	32(25%)	86(67%)	42(33%)	78(61%)	50(39%)	70(55%)	58(45%)	100(78%)	28(22%)	93(73%)	35(27%)
Gender Difference X <sup>2</sup>	F <sub>4-14</sub> Vs M <sub>4-14</sub>	1.50		1.89		2.14		3.01		0.37		0.54	
	F <sub>4</sub> Vs M <sub>4</sub>	0.08		0.64		2.29		14.19*		0.37		0.33	
	F <sub>14</sub> Vs M <sub>14</sub>	2.00		1.77		1.16		1.58		0.37		0.07	
Regional Difference X <sup>2</sup>	R <sub>4</sub> Vs R <sub>14</sub>	1.44		1.51		2.92		3.27		0.52		0.61	
	F <sub>4</sub> Vs F <sub>14</sub>	0.67		0.07		4.02*		3.28		0.37		0.72	
	M <sub>4</sub> Vs M <sub>14</sub>	0.10		0.08		0.29		1.87		0.37		0.14	

\* Significant at alpha 0.05 level

Several other researchers McIntosh(1981), Asher & Oak(1985) confirmed that due to the more demanding life situations of the majority of adult women in developing countries, women distance students in such countries mostly don't have career goals related to their distance courses and particularly in traditionally 'male' professions.

In Table 4 the Chi-square test results show the two dispositions upon which significant difference was observed between women & men respondents in both regions. These are "willingness to initiate calls to their tutors" and "being confident in adequately understanding what has been required to learn in each lesson." Unlike men respondents, the majority of women respondents (69 per cent of Region 4 and 53 per cent of Region of 14 reported that they are not willing to initiate calls to their tutors. Still the greater majority of women respondents (66 per cent of Region 4 and 41 per cent Region 14) declared that they are not confident in adequately understanding what has been required to learn in each lesson of their training program. Thus, it appears that the target women distant students tend to lack two gender specific distant learners' dispositions which have found to affect their performance i.e. willingness to initiate calls to tutors and being confident in mastering what has been required to learn in every lesson of the training. In fact, this finding is in agreement with

earlier research results (Asher and Oak, 1984 Sturrock (1988) Faith (1988) which have confirmed the relatively higher report on the academic problem of women distant students due to lacking the above dispositions.

Once the gender specific dispositions are identified the next step would be examining the existence of regional difference pertaining the dispositions. As far as the regional difference among women respondents is concerned the only significant chi-square result at alpha 0.05 level was found concerning the disposition of "being confident in adequately understanding what has been required to learn in each lesson", which is 4.01. That means, women distant students' lack of confidence in comprehending what has been required to learn in each lesson of the training seems to be more prevalent among Region 4 respondents than their Region 14 counterparts. Given the fact that almost all of women subjects from Region 14 have previous experience of college education (as opposed to most women respondents of Region 4 who don't have) the greater report of the latter group about their lack of confidence is basically in line with Sturrock's (1988) finding on similar issue.

Sturock (1988) affirmed that women distance students are more likely to show lack of confidence to master the contents of their college level distance courses.

On the other hand, the absence of significant difference between women respondents of Region 4 and Region 14 concerning the disposition of "willingness to initiate calls to tutors" appears to contradict the finding of Manjulinka & Reddy (1996). These authors reported that significantly higher proportion of rural women distant students (When compared to their urban counterparts) refrain from initiating calls to their tutors even if they desperately need help. But in this study, it seems evident that the failure of most women distant students to initiate calls to their tutors is the common problem of both Region 4 women respondents and Region 14 women respondents.

#### 4.2.2. Institutional Variables

In this section, the variables that affect the performance of women distant students primarily due to the distance teaching institution (here means the Ethiopian Management Development Project-EMDP), will be examined. As it was indicated in the previous chapters, the institutional variables will be discussed under the three major parts of a distance education system. These are the program and course objectives, the self-Instructional Material (SIM) and the student support system (SSS).

##### 4.2.2.1. The Program and Course Objectives

An attempt was made to find out whether or not the program and course objectives of the target distance training program meets the needs of its women distant students. Thus, the subjects were inquired if their present distance training program is worthwhile in promoting their career advancement (e.g. promotion, better job etc) and their personal development (e.g. personal fulfillment, satisfaction etc). Although the distance training program's role in enhancing the employment opportunity of its women students has been reported to affect their performance, it wasn't considered in this study since all of the subjects were already government employees. The table below summarizes the results obtained about the two inquired items on the program objectives.

**Table - 5**

The Worthwhileness Of The Program And Course Objectives To Women  
Distant Students

Items and Response categories		Is the training program worthwhile for your career advancement?		Is the training program worthwhile for your personal development?	
		Yes	No	Yes	No
<b>Subpopulations</b>					
<b>Region</b>	<b>Gender</b>				
<b>4</b>	Female (F <sub>4</sub> )	26 (81%)	6(19%)	24 (75%)	80 (25%)
	Male (M <sub>4</sub> )	25 (78%)	7 (22%)	26 (81%)	6 (19%)
	Subtotal (R <sub>4</sub> )	51(80%)	13(20%)	50(78%)	14(22%)
<b>14</b>	Female (F <sub>14</sub> )	25 (78%)	7 (32%)	26 (81%)	6 (19%)
	Male (M <sub>14</sub> )	24 (75%)	8 (25%)	23 (72%)	9 (28%)
	Subtotal (R <sub>14</sub> )T	49(77%)	15(23%)	49(77%)	15(23%)
<b>Total</b>	Female (F <sub>4</sub> +F <sub>14</sub> )	51(80%)	13(20%)	50(78%)	14(22%)
	Male (M <sub>4</sub> +F <sub>14</sub> )	49(77%)	15(23%)	49(77%)	15(23%)
	Grand Totals	100(78%)	28(22%)	100(78%)	28(22%)
<b>Gender Difference X<sup>2</sup></b>	F <sub>4</sub> + F <sub>14</sub> Vs M <sub>4</sub> +M <sub>14</sub>	0.62		0.91	
	F <sub>4</sub> Vs M <sub>4</sub>	0.1		0.37	
	F <sub>14</sub> Vs M <sub>14</sub>	0.09		0.78	
<b>Regional Difference X<sup>2</sup></b>	R <sub>4</sub> T Vs R <sub>14</sub> T	0.14		0.38	
	F <sub>4</sub> Vs F <sub>14</sub>	0.1		0.37	
	M <sub>4</sub> Vs M <sub>14</sub>	0.09		0.08	

Table 5 shows that from among Region 4 respondents 81 per cent women & 78 per cent men respondents indicated that the training program is worthwhile for their career advancement. Similarly, 78per cent of women and 75per cent of men respondents of Region 14 agreed with the worthwhileness of their distance training program for their career advancement.

Meanwhile, 75 per cent of women and 81 per cent of men respondents of Region 4 reported that their training program is worthwhile for their personal development. In Region 14, those who believed in the usefulness of the training for their personal development comprise 81 per cent of women and 72 per cent of men respondents, respectively.

The above findings show that most of women respondents of Region 4 and Region 14 believe in the worthwhileness of their distance training program both for their career advancement and personal development. Yet additional evidence about the perceived usefulness of the training program for women distant students can be drawn from their very decision to join the EMDP certificate training program. As it was indicated in the previous chapter several women students of EMDP joined the target certificate level management training in spite of having higher level qualification in business and management or related fields.

Table 5 also makes clear that since almost all of the respondents agreed with the worthwhilness of their distance training program neither significant gender difference nor significant regional difference was found in all chi-square test results at alpha 0.05 level. This means that no evidence was observed about the usefulness of the training program or lack of it to be biased in favour of women of men and also in favour of Region 4 or Region 14 women distant students.

#### 4.2.2.2. The Self Instructional Material (SIM)

The self instructional material is the crucial vehicle of distance instruction. Thus, the aspects of the self instructional material which are believed to have a relatively greater influence upon the performance of women distant students need to be examined. These are the difficulty level and the relevance of the self-instructional material. Accordingly in this section the difficulty level of the self instructional material and also the relevance of the self instructional material for the target women distant students will be discussed. Although there are a number of other performance determining variables in the SIM such as its interactivity, stimulating lesson presentation etc. they were not considered in this study due to the absence of any empirical or theoretical ground as to their differential impact on women & men distant students.

##### 4.2.2.2.1 The Difficulty level of the self Instructional Material

As far as the difficulty level of the SIM is concerned, the target women distant students difficulty on the contents of the SIM and on the language with which the material is presented were separately examined. Table 6 summarizes the obtained results.

**Table 6**The Difficulty Level of the SIM for Women Distant Students

Items and Response categories		How difficult is the language with which the SIM is Presented?		How difficult is the contents of the SIM	
Subpopulations		Difficult	Not Difficult	Difficult	Not Difficult
Region	Gender				
4	Female (F <sub>4</sub> )	25 (78%)	7 (22%)	22 (69%)	10 (31%)
	Male (M <sub>4</sub> )	20 (63%)	12 (37%)	19 (59 %)	13 (41%)
	Subtotal (R <sub>4</sub> )	45(70%)	19(30%)	41(64%)	23(36%)
14	Female (F <sub>14</sub> )	21 (66%)	11 (34%)	16 (50%)	16 (50%)
	Male (M <sub>14</sub> )	18 (56%)	14 (44%)	15 (47%)	17 (53%)
	Subtotal (R <sub>14</sub> )T	39(61%)	25(39%)	31(48%)	33(52%)
Total	Female (F <sub>4</sub> +F <sub>14</sub> )	46(72%)	18(28%)	42(66%)	22(34%)
	Male (M <sub>4</sub> +F <sub>14</sub> )	38(59%)	26(41%)	34(53%)	30(47%)
	Grand Totals	84(66%)	44(34%)	76(59%)	52(41%)
Gender Difference X <sup>2</sup>	F <sub>4</sub> + F <sub>14</sub> Vs M <sub>4</sub> +M <sub>14</sub>	1.34		1.81	
	F <sub>4</sub> Vs M <sub>4</sub>	1.87		0.61	
	F <sub>14</sub> Vs M <sub>14</sub>	0.59		0.01	
Regional Difference X <sup>2</sup>	R <sub>4</sub> T Vs R <sub>14</sub> T	4.02*		4.01*	
	F <sub>4</sub> Vs F <sub>14</sub>	4.24*		4.33*	
	M <sub>4</sub> Vs M <sub>14</sub>	4.01*		3.94*	

\* Significant at alpha 0.05 level

As it is shown in Table 6, the majority of the respondents 78per centwomen, 63per cent of men respondents of Region 4 and 66per cent of women; 34per cent men respondents of Region 14) reported their difficulty on the language with which the material is presented. It appears that the very high agreement among the respondents of both sexes on the difficulty of the language of the SIM is the reason for the lack of significant gender difference in the chi-square test results at alpha 0.05 level (see Table 6). Thus, it can be

concluded that the difficulty of the language with which the SIM is presented is somewhat equally common problem among women distant students and men distant students included in the study.

On the contrary, the chi-square test results indicate that there is a significant regional difference between women respondents of Region 4 & Region 14 and also between men respondents of Region 4 & Region 14 at alpha 0.05 level. This means that significantly greater proportion of Region 4 respondents of both sex found difficult the language with which the material is presented when compared to their Region 14 counterparts.

This finding is in agreement with the result obtained on language competence of the respondents in the previous section. That was the finding in which the greater percentage of Region 4 respondents reported the inadequacy of their prior English language proficiency level for the present training when compared to their Region 14 counterparts.

As it was indicated in the previous section the relatively higher report of women distant students' difficulty with the language of instruction have been stated in many studies conducted in India as one aspect of their lower previous educational attainment when compared to their men counterparts Singh, (1982) Khouli, (1987) Prasad (1991).

This implies that the greater report of Region 4 women respondents about their difficulty with the language of instruction seems to result from their lower educational level when compared to Region 14 women distant students.

With regard to the difficulty level of the contents of the self instructional materials, 69 per cent women & 51 per cent men respondents of Region 4 admitted their difficulty with the contents. But, from among Region 14 respondents only 50 per cent women & 37 per cent men respondents complained about the difficulty of the contents of the material. As indicated above there is wide gap between women and men respondents of both regions concerning the difficulty of the contents. In fact, this was evidenced by the chi-square test results in which significant difference as observed between women & men respondents of both Regions.

Similar result were reported by Kirkup, (1986) which compared the appropriateness of the SIM of four distance teaching institutions for its women and men participants. She found that the studied SIM presume the academic competence level which was hardly possessed by greater proportion of its women distant students than their men counterparts.

On the other hand, Manjulinka and Reddy (1996) indicated that several rural women distant students can not follow through the SIM due to its difficulty level unless an induction courses (a gradual introduction to the main course) given to them. According to the above researchers this academic problem is less common among women distant students from rural areas.

#### 4.2.2.2.2.The Relevance of The Self Instructional Material

In order to make adult learners successful in their academic learning in distance education programs, the self instructional material to be used in the program has to be relevant to the needs & experiences of the target adult learners. Thus, the subjects were asked if the self instructional material being used in their present training is relevant to the needs & experiences of women distant students. Table 7 shows the inquired items and the obtained results.

**Table -7**

The Relevance of the SIM for Women Distant Students

Items and Response categories		The contents in the SIM are performance oriented/job directed		The SIM discusses fairly equally the experiences of both women & men workers		Examples & cases in the SIM are relevant to the local managerial work practices		The SIM reflects fairly equally the experiences of both women & men managers?	
		Yes	No	Yes	No	Yes	No	Yes	No
Subpopulations									
Region	Gender	Yes	No	Yes	No	Yes	No	Yes	No
4	Female (F <sub>4</sub> )	20(63%)	12(37%)	18(56%)	14(44%)	10(31%)	22(69%)	21(66%)	11(34%)
	Male (M <sub>4</sub> )	22(69%)	10(31%)	21(66%)	11(34%)	14(44%)	18(56%)	20(63%)	12(37%)
	Subtotal (R <sub>4</sub> )	42(66%)	22(34%)	39(61%)	23(39%)	24(38%)	40(62%)	41(64%)	23(36%)
14	Female (F <sub>14</sub> )	24(75%)	8(25%)	25(78%)	7(22%)	19(59%)	13(41%)	19(59%)	13(41%)
	Male (M <sub>14</sub> )	26(81%)	6(19%)	24(75%)	8(25%)	24(75%)	8(25%)	23(72%)	9(28%)
	Subtotal (R <sub>14</sub> )T	50(78%)	14(22%)	49(77%)	15(23%)	43(67%)	21(33%)	42(68%)	22(34%)
Total	Female (F <sub>4</sub> +F <sub>14</sub> )	44(69%)	20(31%)	43(67%)	21(33%)	29(45%)	35(55%)	40(62%)	24(68%)
	Male (M <sub>4</sub> +F <sub>14</sub> )	48(75%)	16(35%)	45(70%)	19(30%)	38(59%)	26(41%)	43(76%)	21(33%)
	Grand Totals	92(72%)	36(28%)	88(69%)	40(31%)	67(52%)	31(48%)	83(65%)	45(35%)
Gender Difference X <sup>2</sup>	F <sub>4+14</sub> Vs M <sub>4+14</sub>	1.04		1.86		1.72		0.95	
	F <sub>4</sub> Vs M <sub>4</sub>	0.28		0.59		1.07		0.07	
	F <sub>14</sub> Vs M <sub>14</sub>	0.37		0.09		1.77		1.11	
Regional Difference X <sup>2</sup>	R <sub>4</sub> Vs R <sub>14</sub>	0.48		2.42		3.87		1.12	
	F <sub>4</sub> Vs F <sub>14</sub>	1.16		3.01		5.11*		0.27	
	M <sub>4</sub> Vs M <sub>14</sub>	0.93		2.04		3.02		0.09	

\* Significant at alpha 0.05 level

As can be seen from Table 7, the majority of Region 4 women respondents acknowledged that their SIM is performance oriented (63 per cent); discusses fairly equally the experiences of both women & men workers in organization (56 per cent); and its examples & cases reflect fairly equally the experiences of both men and women manager (66 per cent). The percentages of Region 14 women respondents who agreed to the first, second and third items mentioned above were found to be 75 per cent, 78 per cent and 59 per cent, respectively.

When the difference between women and men respondents was considered, no significant, chi-square result was observed on the gender difference in both regions at alpha 0.05 level pertaining to all of the inquired items. Thus, it appears that as far as the relevance of the SIM is concerned, no evidence was found for the existence of gender bias (i.e. favouring women or men) in the SIM.

As to the relevance of the examples and cases in the SIM to local managerial work practices, significant difference was observed (5.11) between women respondents of Region 4 and Region 14 in the chi-square test at alpha 0.05 level. This means, whereas significantly greater proportion of Region 14 women respondents (59 per cent) agreed with the relevance of the examples and cases of the SIM to their local managerial work practices, the majority of Region 4 women respondents

(69 per cent) disagreed with the said relevance of the examples & cases to their local managerial work practices.

In fact, this lack of the relevance of instructional materials to local work practices have been reported by research works that focused on the distance course materials of Open University of the UK in India (Khouli, 1987) (Kanwar, 1990) and Eastern Europe (Ilyin, 1993; McIsaac, Murphy & Demirey 1994).

More importantly, Kanwar (1990) underscored the problems of distance students due to the failure to localize not only the instructional materials prepared by the British Open University but also those prepared by the Indra Gandhi National Open University for the consumption of distance students in the various distant regions of India. Thus, the above finding about the perceived irrelevance of the examples and cases of the SIM to Region 4 women's expected managerial work environment seems to indicate the major additional problem women students from this region apparently face when compared to their Region 14 women counterparts. This problem expected to have contributed to the relatively poorer performance of Region 4 women distant students on their average TMA results when compared to their Region 14 counterparts.

#### **4.2.2.3. The Student Support System (SSS)**

The student support system (SSS) is the most vital component of distance education system. Thus, in this section, the aspects of the student support system in the target study centers of the study which are believed to affect more the performance of women than men distant student will be examined. These include the convenience of the study center, the responsiveness of the study center, the appropriateness of the academic schedule of the training for the distant students and the tutor related variables.

##### **4.2.2.3.1. The Convenience of The Study Center**

For all practical purposes the distance education study centers should be convenient for most of its students regardless of the gender of the students. However, the academic performance of more women distant students than their men counterparts were found to be affected by the inconvenience of the study center. Accordingly, so as to know the convenience of the study centers to its women distant students, the subjects in this study were inquired if their respective study center is convenient for them in terms of location, safety and transportation. Table 11 summarizes the obtained results.

**Table - 8**

The Convenience of the Study Centers To Women Distant Students.

Items and Response categories		The location of the study center is convenient		The study center is safe from any physical and psychological threat.		Transportation problem to go and come from the study center	
		Yes	No	Yes	No	Yes	No
Subpopulations							
Region	Gender						
4	Female (F <sub>4</sub> )	13(41%)	19(59%)	27(84%)	5(16%)	15(47%)	17(53%)
	Male (M <sub>4</sub> )	15(47%)	17(53%)	30(94%)	2(6%)	14(44%)	18(56%)
	Subtotal (R <sub>4</sub> )	28(44%)	36(56%)	57(89%)	7(11%)	29(45%)	35(55%)
14	Female (F <sub>14</sub> )	26(81%)	6(19%)	29(91%)	3(9%)	2(6%)	30(94%)
	Male (M <sub>14</sub> )	24(75%)	8(25%)	31(97%)	1(3%)	4(13%)	28(87%)
	Subtotal (R <sub>14</sub> )	50(78%)	14(12%)	60(94%)	4(6%)	6(9%)	58(91%)

As Table 8 shows almost all of the respondents of both regions reported that their study center is convenient as far as safety is concerned. As to the location of the study center, unlike the majority of Region 14 respondents who reported their study center to be in a convenient location, the majority of Region 4 respondents found the location of their study center to be inconvenient.

In addition to the inconvenience of the location, transportation problem also was found to be the factor upon which the respondents of Region 4 and Region 14 differed significantly. Unlike Region 14 respondents, the majority of Region 4 respondents complained about the transportation problem to go and come from their study centers.

Previous research results (Dodds & Inquai, 1988; Jenkins, 1989; Kanwar, 1990; Guy, 1992) indicated that the inconvenience of the location and the safety of the study center and the related problem of transportation to go and come from the study center pose greater problem on women students than men students. But, in this study, no gender difference was found among the respondents concerning the problem due to the inconvenience of the location of the study center and the problem in transportation. Yet the obtained regional difference which showed the relatively higher complaints of Region 4 respondents about the inconvenience of the location of the study center and the transportation problem to come & go to the study center seem to indicate the possible related barriers women distant students from this region might have faced to a greater extent in their course of study.

#### 4.2.2.3.2. The Responsiveness of the Study Center

In an attempt to know the responsiveness of the study centers to women distant students the subjects were asked whether or not the response they get from their respective study center is timely and appropriate to their queries. In addition, the subjects were also asked if they get proper treatment from the concerned support staff whenever they communicate with the study center Table 9 portrays the obtained result.

**Table - 9**The Responsiveness of The Study Center to Women Distant Students

Items and Response categories Subpopulations		The timeliness of the response. Timely response from the study center		Appropriate response from the study center		Proper treatment from the support staff of the study center?	
		Yes	No	Yes	No	Yes	No
Region	Gender						
4	Female (F <sub>4</sub> )	27(84%)	5(16%)	25(78%)	7(22%)	30(94%)	2(6%)
	Male (M <sub>4</sub> )	26(81%)	6(19%)	24(75%)	8(25%)	29(91%)	3(7%)
	Subtotal (R <sub>4</sub> )	53(83%)	11(17%)	49(77%)	15(23%)	59(92%)	5(8%)
14	Female (F <sub>14</sub> )	30(94%)	2(6%)	29(91%)	3(7%)	30(94%)	2(6%)
	Male (M <sub>14</sub> )	27(84%)	5(16%)	23(72%)	9(28%)	26(81%)	6(19%)
	Subtotal (R <sub>14</sub> )	57(89%)	7(11%)	52(81%)	12(19%)	56(88%)	8(12%)

Table 9 indicates that 84per cent women respondents and 81per cent men respondents from Region 4 affirmed the responsiveness of their study center to their queries by declaring its timeliness. From the same region, those who acknowledged the appropriateness of the response they obtained from their study center for their queries constitute 78per cent women 75per cent men respondents. Similarly, from among Region 14 respondents women subject who declared the timeliness of the response they have got from their center were found to be 94per cent. As to the appropriateness of the response they obtained from their

study center 91per cent women respondents reported that they receive appropriate response. From the same region, the percentage of men respondents who said the response they have got from their study center to their queries as timely and appropriate found to be 84per cent and 72per cent, respectively.

With regard to the treatment the sampled distant students receive from the support staff whenever they interact with these workers for instructional and administrative matters most respondents of Region 4 (94per cent women & 91per cent men) and Region 14 (94per cent women and 81per cent men) reported as getting proper treatment from the staff. Thus, the above findings appear to rule out the existence of gender related variable that affect the performance of the target women distant students due to the problems related to the responsiveness of the study center.

#### 4.2.2.3.3. The Appropriateness of the Academic Program of the Distance Training Project

This part of the study deals with the appropriateness of the academic program of the target distance training project for its women distant students. Table 10 portrays the inquired items and the obtained results.

Table – 10

The Appropriateness of The Academic Program For Women Distant Students

Items and Response categories		The academic schedule is flexible		The academic schedule allow pacing		The face-to-face tutorial sessions are adequate	
		Yes	No	Yes	No	Yes	No
Region	Gender						
4	Female (F <sub>4</sub> )	10(31%)	22(69%)	9(28%)	23(72%)	21(66%)	11(34%)
	Male (M <sub>4</sub> )	12(38%)	20(62%)	8(25%)	24(75%)	19(59%)	13(41%)
	Subtotal (R <sub>4</sub> )	22(34%)	42(66%)	17(27%)	47(73%)	40(63%)	24(37%)
14	Female (F <sub>14</sub> )	8(25%)	24(75%)	14(44%)	18(66%)	26(81%)	6(19%)
	Male (M <sub>14</sub> )	11(34%)	21(66%)	10(31%)	22(69%)	23(72%)	9(28%)
	Subtotal (R <sub>14</sub> )T	19(30%)	45(70%)	24(38%)	40(72%)	49(72%)	16 39%)

As it is indicated in Table 10 most women respondents (more than 80 per cent) in both regions affirmed that the academic program of their distance training doesn't allow them to learn in their own learning pace and also is not flexible so as to address their needs and problems. But the greater majority (above 85 per cent) of Region 4 and Region 14 women respondents declared that their contact sessions are adequate to enable them meet their learning objective in their target distance training.

The almost unanimous agreement of women respondents about adequacy of the contact sessions is an indication of what Kirkup(1986) called a women-centered scheduling intervention in distance education. What Kirkup (1986) meant by this intervention was that the academic schedule of the distance education should make possible the adequate interpersonal exploration among its women students. The most effective means of achieving this was reported to be increasing the number of contact (face-to-face) sessions.

On the other hand the very high agreement of women respondents about the academic program's lack of flexibility and its failure to allow the students to learn in their own learning pace was reinforced by the results of the interview with the center coordinators. The interview with the coordinators of the three study centers revealed that the scheduling of the training program doesn't have a system that allow its students learn in their own learning pace.

Besides, the center-coordinators also agreed that the academic program of the training cannot be adjusted to entertain the possible problems the students might have faced in their course of study. Several researchers (Jenkins, 1989; Arger, 1993; Evans and Terry, 1993) reported the particular advantages of introducing an

academic program that lends itself for flexibility and pacing for women distant students. The common justification provided by the above authors is that more women distant students than their men counterparts face numerous situational problems which couldn't be taken care of unless the scheduling of their distance training allows flexibility and pacing.

In fact, the flexibility of the academic program and the provision of the opportunity to the distant students to learn in their own pace had been the major advantages of distance education over the conventional education system. Furthermore, with particular reference to women distant students Kirkup (1986) McIntosh (1986) Faith (1988) consistently confirmed that the academic schedule that is flexible and that makes possible the differential learning pace of the students increases both the retention and performance of women distant students. Thus, it can well be concluded that the target distance training's academic program lack of flexibility & the opportunity for learning at ones own pace could have hindered the performance of its women distant students.

#### 4.2.2.3.4. Tutor-Related variables

Tutors play the key role in influencing the performance of their distant students. This is largely because they determine the nature of instructional interaction that should be established between themselves and their students. Accordingly, in this section, the findings of the study concerning the tutor-related variables that affect the performance of women distant students will be examined.

The first attempt that was made in this section was to know the background of the sampled tutors in terms of their sex composition, qualification and work experience.

With regard to the sex composition of the tutors, from among the twelve sampled tutors, there were only two female tutors (one from Region 4 and the other from Region 14). Meanwhile, there are evidences that affirmed the relative advantage of using female than male tutors for promoting the performance of women distant students (Asher & Oak, 1985; Sturrock, 1986; Faith, 1988). The first justification given for the above assertion was that female tutors can better be taken as role models for women students than male tutors. The other justification that rather seems more important was that female tutors understand and respond better to the needs and problems of women distant students than male tutors. This is mainly because most

female tutors are believed to have themselves gone through the gender-related problems their respective women students are perhaps currently experiencing in their distance training. Therefore, it is not difficult to appreciate the apparent problem of the sampled women distant students due to lacking female tutors who could have served them as role models and as who share their gender-related academic problems and thus, help them better to find solution.

As to the qualification of the tutors, except three tutors who have BA degree, the remaining nine interviewed tutors have MA(MSc.) degree. However, only five tutors have their degrees on management or related fields (the field of study which is being given to the target distant students of the study). The remaining seven tutors' area of specialization were found to be (physics, English(2), educational psychology, civil engineering, mechanical engineering plant science and agricultural economics. But, all of the seven latter tutors reported to have completed a diploma level management training. This means, they are tutoring the certificate level management distance training having only a diploma level qualification in management.

Meanwhile, several authorities in distance education (Holmberg, 1989; Keagan, 1990; Sewart, 1993; Willis, 1993 etc) strongly established as essential requirement

the adequate qualification of tutors in the subject matter they are supposed to give tutorial service. But, the above finding about the qualification of the seven tutors seems to indicate that their qualifications can hardly be considered as adequate to serve as tutors in the target management distance training program. This is because of two reasons. The first is that since the professional degrees of the above seven tutors have little or nothing to do with the subject matter of management training, there is hardly any way of using their professional expertise for the purpose of their current tutorial practice. The second reason is that a diploma level training in any field of specialization can not be expected to equip any person with the essential knowledge and skills required to serve as a tutor for a certificate level training in the same field of specialization.

In addition to the tutors' qualification in the subject matter of the target training, their qualification in distance teaching (tutoring) were also examined. In this regard, it was found that all of the interviewed tutors acknowledged that they have taken the special training for tutors offered by the British Open University. Besides, almost all of the sampled tutors reported to have a minimum of two years of experience as tutors in distance education program.

On the contrary, all of the interviewed tutors reported that they haven't taken any training in gender-

sensitive teaching practice in general let alone with specific reference to tutorial service in distance education. In relation to this issue previous studies (McIntosh, 1981; Kirkup, 1986) attested that tutors awareness of the gender-sensitive tutorial practice and their orientation on the learning needs and problems of most adult women have a marked impact in enhancing their facilitating role as distance educators for their women distant students.

From the above discussion it appears that the sampled tutors' lack of training in gender-sensitive tutorial practice could possibly have hindered their tutorial support for the target women distant students. However, there need to be additional evidences to conclude on the direct impact of the tutors' lack of training in gender sensitivity on the performance of the sampled women distant students.

Once the background of the sampled tutors was examined further attempt was made to know whether or not the predominant instructional method used by the tutors in the face-to-face session is in line with adult women's suitable way of learning (i.e. interpersonal exploration). Accordingly, the subjects were inquired to indicate the average amount of time the tutor commonly spend in the face-to-face session for lecture versus other methods that involve student-tutor or student-student interaction.

**Table -11**

Tutor's use of Lecture Versus Other Methods in The face-to-face sessions

Subpopulations		Items and Response category	Proportion of lecture time in a period			Lecture time in a period taken by ones tutor versus ones familiar school-based teacher		
			Blew $\frac{1}{4}$ of the period	Between $\frac{1}{4}$ - $\frac{3}{4}$ of the period	Above $\frac{3}{4}$ of the period	Greater in the tutor	No Difference between the two	Greater in the teacher
Region	Gender							
4	Female (F <sub>4</sub> )	3(9%)	5(16%)	24(75%)	6(19%)	21(66%)	5(16%)	
	Male (M <sub>4</sub> )	2(6%)	4(13%)	26(81%)	3(9%)	23(72%)	6(19%)	
	Subtotal (R <sub>4</sub> )	5(8%)	9(14%)	50(78%)	9(14%)	44(69%)	11(17%)	
14	Female (F <sub>14</sub> )	2(6%)	6(19%)	24(75%)	4(13%)	22(69%)	6(19%)	
	Male (M <sub>14</sub> )	1(3%)	5(16%)	26(81%)	6(19%)	21(66%)	5(16%)	
	Subtotal (R <sub>14</sub> )T	3(5%)	11(17%)	50(78%)	10(16%)	43(67%)	11(57%)	

As it is indicated in Table 14 more than 75 per cent of women respondents of both regions agreed that the average amount of time the tutor commonly spends in the contact session in using lecture method is above  $\frac{3}{4}$  of the period.

In addition when the subjects were asked if there is a difference between their tutor and the average campus based instructor they have been familiar with in the proportion of time spent on lecture versus discussion method the majority of the respondents (86 per cent women & 82 per cent men respondents of Region 4 and 92 per cent women & 87 per cent men respondents of Region 14) agreed that there is no difference between the two in that respect. This finding is consistent with Sturrock's (1986) research result conducted on the

instructional methods commonly used by tutors in the face-to-face session in The Netherlands Open University. She found that in spite of the pedagogical requirement from the part of the tutors to use varieties of non-directive methods in their contact session most tutors relapse into largely using the traditional lecture method as in their campus-based educational system.

The same document further reported that no difference was observed between the distance education tutors and campus-based instructors included in the study as far as their commonly used method is concerned. Other researchers also confirmed the above finding (Arger, 1990; Bolton, 1991; Manjulinka and Reddy, 1996)

Meanwhile, the subjects in this study were also asked if their respective tutor has the qualities which are found to facilitate women's learning in the face-to-face sessions. Table 12 depicts the obtained results.

Table - 12

Tutor's Classroom Behaviors in the Face-to-face sessions

Items and Response categories		The tutor is friendly in his/her teaching approach		The tutor is supportive & tolerant to the students problems		The tutor encourages more student participation		The tutor attempts to take the students personal experiences as a basis for discussion		The tutor has positive (at least neutral) attitude towards women students in the tutorial group	
		Agreed	Disagreed	Agreed	Disagreed	Agreed	Disagreed	Agreed	Disagreed	Agreed	Disagreed
Region	Gender										
4	Female (F <sub>4</sub> )	24(75%)	8(25%)	7(22%)	25(78%)	21(66%)	11(34%)	8(25%)	24(75%)	3(9%)	29(91%)
	Male (M <sub>4</sub> )	22(69%)	10(31%)	8(25%)	24(75%)	24(75%)	8(25%)	11(34%)	21(64%)	4(13%)	28(87%)
	Subtotal (R <sub>4</sub> )	46(72%)	18(28%)	15(23%)	49(77%)	45(70%)	19(30%)	19(30%)	45(70%)	7(11%)	57(89%)
14	Female (F <sub>14</sub> )	21(66%)	11(34%)	6(19%)	26(81%)	23(72%)	9(28%)	5(16%)	27(84%)	7(22%)	25(78%)
	Male (M <sub>14</sub> )	27(84%)	5(16%)	9(28%)	23(72%)	27(84%)	5(16%)	4(13%)	28(87%)	6(19%)	26(81%)
	Subtotal (R <sub>14</sub> )T	48(78%)	16(25%)	15(23%)	49(77%)	50(78%)	14(22%)	9(14%)	45(86%)	13(20%)	51(80%)

As it is shown in Table 12, from among five variables of tutor's behaviors, three of them were reported by less than 25 per cent of women respondents in both regions. These were trying to help less-achieving students; attempting to take students' personal experience as the basis for discussion and being supportive and tolerant to the students' problems. In other words, these were reported to be the least common tutors' classroom behaviors that were observed among the tutors of EMDP certificate distance training program. On the contrary, more than 80 per cent of women respondent's in both regions acknowledged that their tutors are friendly in their teaching approach; encourage more student participation and have positive or neutral attitude towards women distant students in their tutorial group.

However, research findings (Tremaine & Owen, 1984; Zindi & Aucoin, 1995) asserted that all of the three reportedly least common tutors' classroom behaviors in the target training found to promote women distant students' retention and success. More specifically, tutors' attempts to take students' experiences as the basis for discussion has been considered as one of the basic elements of feminist pedagogical approach which proved to have increased adult women's performance in distance education programs. (Faith, 1988, Kirkup, 1988; Kanwar, 1990)

of adult distant learners have become obstacle for them not to work on their distance training. The scale the subjects were made to use was defined as follows:

Give 5	=	if the situation affects your study	<u>always</u>
" 4	=	" " " " "	" " <u>often</u>
3	=	" " " " "	" " <u>sometimes</u>
2	=	" " " " "	" " <u>rarely</u>
1	=	" " " " "	" " <u>not at all</u>

For each group of respondents the weighted mean of their ratings of each item was calculated as indicated in Table - 13.

Table - 13

Situational Factors that Affect the Performance of Women Distant Students

Item No.	Factors	Region - 4							Region 14						
		Female		Male		Total		F-Ratio	Female		Male		Total		F-Ratio
		Mean	SD	Mean	SD	Mean	SD		Mean	SD	Mean	SD	Mean	SD	
1.	Involvement in household chores	3.51	0.69	2.23	0.60	1.89	0.31	13.4299*	2.88	0.26	1.77	0.31	2.34	0.29	17.1831*
2.	Involvement in child care	3.77	0.67	3.42	0.70	3.61	0.71	8.8389*	3.82	0.63	2.76	0.72	3.32	0.86	27.9969*
3.	Obstacle from Spouse	2.49	0.91	2.09	0.67	2.30	0.83	8.38*	1.19	0.26	1.18	0.32	1.19	0.25	0.029
4.	Obstacle from other family member(s)	1.85	0.75	2.69	0.59	1.74	0.71	0.2813	1.86	0.33	1.71	0.42	1.69	0.37	0.8467
5.	Disagreement with ones tutor	1.34	0.83	1.32	0.78	1.33	0.74	0.1911	1.04	0.02	1.13	0.33	1.12	0.12	0.2191
6.	Discouragement due to <del>exclusive</del> <del>excessive</del> study load	3.78	0.60	3.52	0.75	3.66	0.69	5.5122*	2.81	0.66	2.64	0.87	2.56	0.83	1.7313
7.	Discouragement due to low performance in previous assignments	3.76	0.86	3.42	0.88	3.60	0.88	5.1309*	3.02	0.81	2.74	0.99	2.87	0.92	3.0922
8.	Involvement in work-duties in out-of-work time	2.80	0.89	3.05	0.76	2.93	0.83	3.2196	1.55	0.56	1.53	0.53	1.54	0.29	0.0401
9.	Being physically exhausted due to excessive workload	1.78	0.45	1.65	0.43	1.72	0.42	1.1152	2.34	0.61	2.32	0.73	2.33	0.66	0.1812
10.	Involvement in social and community participation	3.85	0.75	3.61	0.59	3.72	0.68	4.4780*	3.78	0.66	2.44	0.82	3.04	1.06	45.7564*

\* Significant at an alpha level &lt; 0.05

A closer look into Table 13 shows the overall differences among the mean scores of women & men distant students (in both Region 4 and Region 14) which are statistically significant at alpha 0.05 level. In Region 4 the results of the analysis of variance show that significant mean difference was observed on item No. 1,2,3,6,7 and 10 between women and men respondents. This implies that involvement in household chores, involvement in child care, obstacle from spouse discouragement due to excessive study load, discouragement due to low performance in previous assignments and involvement in social & community participation are the situational factors which more commonly affect the study of Region 4 women distant students than their men counterparts. But, in Region 14, the one way ANOVA results for items 1,2,and 10 indicate that there is significant difference at alpha 0.05 level on the items between the mean ratings of men and women respondents. This revealed that the situational variables which were found to be significantly more common among women distant students than men distant students were involvement in household chore, in child care and in social & community participation.

The above findings seem to indicate that the target women distant students in both regions have barriers to their study due to their family responsibilities as a mother and home maker. Although all of women distant students are government employees they still face obstacles that make

them not to work on their study due to their family responsibility as a wife and mother when they stay at home.

Consistent with the above findings (Kirk, 1972; McIntosh, 1981; Kirkup, 1986; Faith, 1988) affirmed that the family responsibilities of most women distant students determines their participation, performance and persistence in distance training programs. These authors strongly argue that the traditional role of women who as a wife and a mother put a compelling cultural pressure upon women spend much of their out-of-work time in household chores and child caring. Since the only free time the target women distant students have for study is their out-of-work time at home using this time for the highly demanding family responsibilities, indeed, expected to hamper the performance of these women in their distance training.

On the other hand the significantly higher rating of Region 4 women respondents of the obstacles: "discouragement due to excessive study load" & discouragement due to low performance in previous assignments" more likely to be ascribed to their lower prior educational level than gender-related cause. This is mainly because no parallel significant difference was found between Region 14 men & women respondents (see Table 16) pertaining to the obstacles mentioned above. However, both women and men respondents of Region 14 have rated the variable very high as obstacles that hinder them from working on their study material.

Finally, the significant difference observed between women and men respondents of both regions in facing the barrier to study on their training material due to their involvement in social & community participation indicated another gender-related situational variable that affect the performance of women distant students.

With particular reference to developing countries Jenkins(1989) Kanwar (1990), Manjulinka and Reddy (1996) extensively analyzed the barriers to women distant students' study due to their social commitment. According to the above researchers, the problem of women distant students on their study due to their social commitment has two aspects. The first is concerned with the competing demand of their social engagement upon their study time. The second is the inhibiting societal influence against women's attempt to use their out-of-work time for study as opposed social engagements.

The point the above authors have tried to make is that although the competing demand of the distant students' social participation on study time is common to both men and women the inhibiting aspect of the problem is unique to women distant students only. Thus, it follows that the higher report of the target women distant students as to the situational barrier of their study due to their social commitment might have resulted from the inhibiting societal

influence against women's attempt to share their time  
between social engagement and study.

## CHAPTER - FIVE

### 5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1. Summary

A growing number of recent literature appear to indicate the importance of distance education and the considerable role it plays in promoting women education. Findings, in general have evidenced that distance education servers as a viable alternative solution for educating working adult women who otherwise couldn't get the opportunity to enhance their qualification through the conventional education system. Most scholars in the area strongly underscore the particular advantage of distance education for women in developing countries who are believed to have more severe constraints of time, space, resources, and socio-cultural & socio-economic limitations to pursue their education in the conventional education. Thus, distance education can help them with its outreach to their home and mainly with its flexibility, adjustability to their learning needs and problems.

Taking this into account several countries and international organizations like UNESCO and World Bank have responded to a widespread demand for women education through distance education.

Nevertheless distance education in Ethiopia seems to be disregarded. Except for the secondary school level correspondence education currently being run by the Educational Media Agency and a single private vocational correspondence education initiative distance education doesn't seem to exist in Ethiopia. In addition it seems unlikely to find a major research attempt on 'distance' education in Ethiopia, in general and on the role of 'distance' education for Ethiopian women, in particular.

Within this deplorable state of distance education in Ethiopia, quite recently, a management training program through distance education has been launched by the Ethiopian Federal Government in cooperation with the British Open University. However, like any other distance education programs, the benefit of distance education for its most need consumers-those who have been disadvantaged in getting formal educational opportunities-can only be ensured whenever the performance of these groups in the distance training program found to be satisfactory. Yet, the performance of women (one of the primary targets of EMDP) in EMDP doesn't seem to compare fairly with that of men distant students. Subsequently, it becomes obvious that unless the barriers that affect the performance of women distant students in EMDP are identified and well taken care of, the objective of EMDP and similar other distance education programs in the country, to serve as a viable

alternative solution for educating women couldn't be attained.

The main objective of this study was, therefore, to find out the major variables that affect the performance of women distant students in EMDP. To this effect, the study centers of EMDP that are found only in Region -4 and Region -14 were purposively made the focus of the study. These were the study centers at Jimma College of Agriculture & Nazareth Technical College (Region -4) and the study center at Addis Ababa Commercial College (Region-14).

In both Regions all women distant students who had been registered for the certificate level management training program were included in the study. These were (38 women distant students from Region 14 and 34 women distant students from Region 4). Similarly, from each region the same number of men distant students (38 from Region 14 and 34 from Region 4) were also made the subjects of the study. Besides, the tutors (twelve in number) teaching in the above stated study centers and the coordinators of the study were also used as subjects of the study .

A multiple system of data collection was employed: documentary analysis, questionnaire & interviews. In light of the nature of the data collected through the above methods, the analysis of the data was made as follows: T-test and multiple regression were employed

for the documentary multiple regression were employed for the documentary analysis; percentages, chi-square, weighted Mean and one-way ANOVA were used for the data collected through the questionnaire. Finally, the data obtained through the interview were analyzed qualitatively together with the results of the questionnaire.

In brief the following findings have been documented:

**1. The status of Women's Performance**

The T-test between the means of women and men distant students' average TMA results of both regions revealed that women distant students on the average perform significantly lower than men distant students at alpha 0.05 level.

**2. The Background Variables**

Among Region-4 subjects, Sex, entrance exam result and prior post secondary education level were found to determine the average TMA results of the distant students. While among Region 14 subjects, only sex and entrance exam result were found to determine the distant students' average TMA results. Besides, the prior post secondary education below a diploma level were found to be related with significantly lower TMA results of the distant students. At the same time, the prior post secondary education of a diploma level or above were observed to be related with

significantly higher average TMA results of the distant students. But, there is no significant difference between the TMA results of those distant students who have a diploma level post secondary education and those who have above diploma level (BA degree) post secondary education. The above results imply that since women distant students have lower post secondary education level than their men counterparts women's lower performance on TMA's can partly be explained by their lower post secondary education level.

On the other hand, it was also found that among the subjects of both regions, age, marital status, work experience and the relevance of current work to the training were observed to have no impact on the students average TMA results.

### **3. The Learners' Characteristic Variables**

As far as the distant students' prior learning is concerned, the students' lower prior English language proficiency level was observed to be the most common problem of women distant students. The second most common problem of women distant students was found to be their inadequate background knowledge and experience related to the training. Besides, it was observed that significantly higher proportion of women students Region-4 than Region-14 women students

reported to have inadequate prior proficiency in the English language for their distance training.

As to the study skills variables the majority of women respondents (78 per cent from Region 4 & 59 per cent from Region 14) reported that they face a major problem in their distance training due to lack of effective reading skill. Yet high proportion of women respondents (75 per cent from Region 4 & 50 per cent from Region 14) admitted that they face major in their distance training due to lack of the skill of writing a well organized report on their assignments. Both of the above findings were also confirmed by the results of the interview with the tutors.

Moreover, the chi-square results between Region-4 & Region 14 women respondents concerning the students' problem due to lacking the skill of writing a well organized report, and the skill of effective reading were found to be 6.46 and 6.67, respectively. Both are significant at alpha 0.05 level. This implies that the reported study skills problems were more common among Region-4 women respondents than their Region-14 counterparts.

Finally, significantly higher proportion women respondents of both regions reported to lack willingness to initiate calls to their tutors. But, unlike Region 14 women respondents, significantly

higher proportion of Region-4 women respondents indicated their lack of confidence, to understand adequately what has been required to learn in each lesson of their training.

#### **4. Institutional Variables**

Concerning the self-instructional materials significantly higher proportion of women respondents from Region-4 reported that both the content and the language with which the material is presented were difficult for them. But, the greater majority of Region-14 women respondents found difficult only the language with which their instructional material is presented.

As to the relevance of the self-instructional materials significantly higher proportion of Region-4 women respondents declared that the examples and the cases in the self instructional materials are not relevant for their local managerial work practices. However, no parallel significant result was observed on the above point among Region 14 women respondents.

Most women respondents in both regions affirmed that the academic program of their distance training doesn't allow them to learn in their own learning pace. Still the greater majority of women respondents in the two regions reported that the academic schedule is not flexible so as to address their need and problems.

With regard to the instructional methods used by tutors in the face-to-face sessions, virtually all women respondents in both regions confirmed that their respective tutors use more than three-fourth of their tutorial session in giving lecture. Yet the same proportion of women respondents believed that there is no difference between their respective tutor & their familiar school/campus-based teacher in the amount of time spent in a given period for lecture versus other methods.

Moreover, women respondents of both regions almost unanimously agreed that their tutors don't try to help less-achieving students; are not tolerant and supportive to the students' problems; and don't use students' personal experience as the basis for discussion in the face-to-face tutorial sessions.

##### **5. Situational Variables**

Pertaining to the situational variables, three factors were rated significantly higher by women respondents of both regions as obstacles that make them not to study their training materials. These were: involvement in household chores, involvement in child care and involvement in social and community participation. Furthermore, unlike Region-14 women respondents, Region-4 women respondents rated two additional situational variables significantly higher

as obstacles that make them not to study their course material. These were: discouragement due to low excessive study load and performance in the previously marked assignments of the training.

## **5.2. Conclusion**

There is an increasing recognition among scholars in distance education and those who are concerned in the promotion of women education in the world that distance education is vital for enhancing the qualification of working adult women.

On the contrary, let alone the attempt to use distance education to promote women education in Ethiopia, the status of distance education itself is in deplorable condition. Besides, local research in the field is almost nonexistent. Owing to these facts the researcher feels that it would be helpful to examine the factors that affect the performance of women distant students in one of the largest distance training projects in the country (EMDP) to have a clear picture of the major variables involved hoping that it

- (a) provides concerned parties as well as those who are interested with the necessary information that can be used in the planning and further development of women education through distance education both at the regional and federal level.

- (b) helps to know the nature and the extent of the various barriers that affect the academic performance of women distant students in the distance training program being launched in the country.
- (c) suggests realistic ways in which the major barriers to the performance of women distant students in the country could be solved.

Accordingly, despite the limitation of the study it would be possible to draw the following conclusions based on the findings of the study.

The findings have evidenced that the significantly lower performance of women distant students on their TMA's appear to result from partly their lower prior post secondary education a related problem of study skills, and gender-related dispositions such as lack of willingness to initiate calls to their tutors who are mostly men.

The findings also revealed that the significantly lower performance of the studied women subjects seems to result from their major difficulty with the language of instruction-English. That is, the certificate distance training program has required the English language proficiency level which is hardly possessed by the majority of its women participants, more truly by most of

its women distant students who don't have a diploma level previous educational background.

According to the results of the study the lack of relevant examples and cases for local managerial work practices appear to influence negatively the performance of women distant students, especially those from Region-4.

Moreover, the lack of flexibility in the EMDP's academic program to address the needs and problems of its students as well as its failure to give the students the opportunity to learn at ones pace seem to have a stronger negative impact on the performance of women than men participant. This is mainly because women participants the project observed to have faced greater problems, than men that nake necessary flexibility and the opportunity to learn at ones pace in the academic program.

Furthermore, the predominant use of lecture methods by the tutors in the tutorial face-to-face sessions and the tutors apparent unawareness about how to facilitate adult women's learning such as of using students' personal experience as a basis for discussion appears to contradict women's desired way of learning-interpersonal exploration.

Finally, the findings also affirmed that most women participants of EMDP have faced gender-specific situational problems which have become additional

barriers for their performance in the training. These were involvement in household chores, child care and social commitment.

To sum up, it has to be noted that the findings of the study are not perfect and final for the already limitations would have some impact and leave us with uncertainty. To arrive at a satisfactory conclusion, thus, further investigation has to be made. If similar findings would appear, it will be of a great assistance to the concerned bodies to search for ways and means of improving the situation.

### **5.3. Recommendations**

The findings of the study, in general, indicate that women distant students in the certificate distance-training program of EMDP face several barriers that can affect their academic performance. These facts imply that a tremendous effort has to be made by the concerned bodies to ameliorate the situation.

Therefore, on the basis of the findings the following recommendations are forwarded.

1. Although there is a need to have certain basic educational requirement to pursue ones education at academic level, any distance training program should have started from where the distant students actually are. Thus, the distance training program

that is meant to benefit women should be designed based on the knowledge, experience and needs of the target women participants. The standard procedure for this would be carrying out a preliminary needs assessment of the target women group. Accordingly, the target distance training program that has identified women as its target groups should be developed based on the needs assessment of the target women group.

2. Since most women subjects face serious difficulty with the language of instruction (English), it would be essential to change the instructional language of the training of program to local languages i.e. Amahric and Oromifa . Although it seems challenging to use local languages to advanced academic training, for a certificate level training which is needed for practical career advancement than academic excellence, the official language of any of the two target regional states could be used to deliver the training program.
3. So as to alleviate the problem of women distant students due to lack of the necessary study skills to study at a distance, a self-contained induction course should be given the target women group before launching the main training program. For the distance training in the traditionally 'male' professions (e.g. technology and management) such induction courses not only be made to serve as a gradual introduction to the main training but also

provide basic information that enhance women's participation & performance in the target 'male' dominated professional training. A typical examples for this would be the special support packages prepared for women distant students by the British Open University (i.e. Women into Management and 'women into Technology').

4. Since women distant students believed to have been disadvantaged in their pre-entry educational status and the occurrence of gender-related situational problems in their course of study, there is a need to introduce special student support services for women. This might include increasing the tutorial hours for women, establishing strong student-student networking system and experience-sharing forums for women distant students; creating a system for using the locally available qualified women in the area of the target training as site facilitators and mentors for the women distant students.
5. Tutors play the crucial role in promoting the performance of their women distant students. Therefore, it is necessary to make the tutorial service gender-sensitive to improve the performance of women distant students. This might include offering special training for tutors on gender-sensitive tutorial practice and also on the desired way of adult women's learning-learning through interpersonal exploration. Encouraging more

qualified women for tutoring women distant students is also another measure that has to be taken to make the tutorial service gender-sensitive.

## BIBLIOGRAPHY

### Books

- Belanky, M. et al (1986) Women's Way; of Knowing: The Development of self, Voice and Mind. New York: Basic Books
- Bowbes, G. and Duelli-Kein (Eds) (1983) Theories of Women's Studies. London Routledge and Kegan Paul.
- Chacon-Dangue, F, J(1987) A Multivariate Model For Evaluating Distance Higher Education College. Park Pennsylvania State University Press.
- Cross, K. (1981) Adults as learners: Increasing Participation and Facilitating Learning. San Francisco: Jossey-Bass.
- DAE<sub>a</sub> (1995) Association for the Development of African Education. Education Policy Formation, Formulating Education Policy: Lessons and Experiences from Sub Saharan Africa. Tours, France.
- Evans T. (1991) Understanding Learners in Open Learning. Open University. Open University Press
- \_\_\_\_\_ and King, B. (Eds) (1991) Beyond the Text: Contemporary Writing on Distance Education, Greelong: Deakin University Press.
- \_\_\_\_\_ and Nation, D.E. (Eds)(1993) Reforming Open & Distance Education: Critical Reflections from Practices New York: St. Martins Press.
- Faith, K. (Ed) (1988) Toward New Horizons for Women in Distance Education: International Perspectives. London and New Your: Routledge.
- Fennema, E. and J. Ayer (Eds.) (1984) Women & Education: Equity & Equality Berkley; McButcheon.
- Hanson, Ee tal (1997) Distance Education: Review of Literature (2<sup>nd</sup> ed) Washington, DC AECRISE.
- Holmberg, B. (1986) Growth and Structure of Distance Education. London: Croom Helm
- \_\_\_\_\_ (1989) Theories in Distance Education London: Croom Helm.
- Keegan, D. (1990) Foundation of Distance Education. New York: Routlage.
- Kelly, and Elliott, M(Eds) (1982) Women's Education in the Third World: Comparative Perspectives. Albany, New York State University of New York Press.
- King, Eand Hill, M (Eds) (1993) Women's Education in Developing Countries: Barriers Benefits and Policies. Baltimore: John's Hopkins University Press.
- Manjulika, S & Reddy, V. (1996) Distance Education In India: A Model for Developing Countries. New Delhi: Vikas Publishing House Pvt. LTD.
- Oudshroon, N (1986) Towards a More Women-Centered Approach For Distance Education Curriculum. London: Routeledge.

- Rich, A. (1979) "Toward a women-centered university" In on Lies, Secrets and Silence: Selected Prose (1966-1978). New York W.W Northon.
- Smith, R, (1986) "Course Guide for Women into Management". Open University.
- Smock, C (1981) Women's Education in Developing Countries: Opportunities and Outcomes. New York: Praeger Publishers.
- Tsehai B. Selassie (ed) (1991) Gender Issues in Ethiopia: Addis Ababa: IES: AAU.
- Verduin, J.R., Thomas J. and Clark (1991) Distance Education: The Foundations of Effective practice. San Francisco: Jossey-Bass.
- Whitelegg, E (1984) "Course Guide to The Changing Experience of Women" Open University.
- Willis, B. (Ed) (1992) Distance Education: Strategies and Tools, Englwood Cliffs, NJ. Educational Technology Publications, In Co.
- \_\_\_\_\_ (1993) Distance Education: A Practical Guide Englewoods Cliffs NJ: Educational Technology publication.
- Woolf, V. (1963) Three Guineas. New York: Harcourt, Brace & World.

### Articles

- Arger, G. (1990) Distance Education in the Third World; Critical Analysis on the Promise and Reality, Open Learning 5(2), June p. 9-18.
- Bartels, S. (1982) Student Learning Differences and the Role of Regional Support Services. Institutional Research Review. 13(1) 81-100.
- Bernt, F. L. & Bugbee, AC (1993) Study Practices and Attitude Related to Academic Success in a Distance Learning Program. Distance Education, 14(1), 97-112
- Burge, E. J (1983) " Professional Networking: An ICDE Example "ICDE Bulletin, 3,15-18.
- Daniel, John S. (1991) The Open University in the Changing World. Open Learning February, 6(1) 1 P. 3-8.
- Elsiddig, M.O. (1991) Planning Higher Education: Towards an Open University for Sudan. Distance Education. 4(14) PP.138-145.
- Garrison, D.R & Shale, D. (1987) Mapping Boundaries of Distance Education: Problems in Defining the Field. The American Journal of Distance education 1(1), 7-13.
- Hill, M & King, E. (1996) "Women's Education and Economic Well-being", Feminist Economics. 6(10) PP. 18-23.
- Jenkins, J. (1989a) Some Trends in Distance Education in Africa: An Examination of the Past and Future Role of distance Education as a Tool for National Development. Distance Education, 10(1) PP.14-27.
- Johnson, D.W. & Johnson, R.J (1984) Instructional Goal Structures: Co-operative, Competitive or Individualistic, Review of Educational Research. 44, 213-240.

- Kanwar, A. (1990) Distance Education for Women's Equality: An Indian Perspective, Distance Education 5(2). PP.49-59.
- Kirkup (1977) 'The Tip of the Iceberg: Some Effects of Open University Study on Married students' Teaching at a Distance, 10, 19-77
- \_\_\_\_\_ (1981) "Career-wise: A New Technology-Women Tell their Stories", United Kingdom open university, Walton Hall, Milton Keynes.
- \_\_\_\_\_ (1983) "Women's Studies At a Distance: The New Open University Course." Women's studies International Forum, 6(3), 273-82.
- \_\_\_\_\_ (1989) "Women in Technology: a Feminist Model of Learner Support on the Open University: International council For distance Education, 12, 62-66
- Leonard, D. (1984) "The Changing Experience of Women at the Open University. In Hughes, M and Kennedy, M(Eds) Breaking the Mould. London; Routledge and Kegan Paul.
- Mandie-Files, A.(1985) "Institutional and Ideological Control of Gender in a Transitional Society" in King, P. ; Lee, W; and Warakae, V. (Eds) (1985) From Rhetoric to Reality? Papua New Guinea's Eight Point Plan and National Goals After a Decade (pp. 166-71 port Moresby: University of Papua New Guinea Press.
- Mathewson, C. (1994) Whose Development, whose Needs: Distance Education Practice and Politics South Pacific Distance Education, 9(9) P. 35-47.
- McIntosh, N.E. (1972) The Response to the Open University – Continuity and Discontinuity Higher Education 2, 186-95.
- \_\_\_\_\_ and Woodley, a (1974) "The Open University, and Second Chance Education Paedagogica Europaea, 10, 85-100.
- \_\_\_\_\_ Calder J and Swift, B. (1976) a Degree of Difference – A Study of the First year's Intake to the Open University of the United Kingdom. London: society for Research into Higher Education.
- \_\_\_\_\_ (1983) " Research for a New Institution: The Open University" Innovation in Higher Education. London: Society for Research into Higher Education.
- McNabb, J (1994, Oct.) Telecourse Effectiveness: Findings in the current literature. Tech. Trends 39-40.
- Prasad, V. (1993) An Decennial Perspective. Indian Journal of Open Learning . 1(2) P.13: New Delhi, IGWOU
- Ramirez, H. (1994) Programs and Drop-out in Universidad Estatal a Distancia (UNED) of Costa Rica. The American Journal of Distance Education 8(3) PP. 64-73.
- Ross, L.R. & Powell, R (1990) Relationships between Gender and Success in Distance Education Courses: A Preliminary investigation Research in distance Education, 2(2) 10-11.

- Rumble, G. (1989) The Role of Distance Education in National and International Development: An Overview Distance Education 10(1) PP. 83-84.
- Savery, J.R. & Duffy, T.M. (1995) Problem Based Learning Instructional Model and Its Constructivist Framework. Educational Technology, 35(5), 31-38.
- Sewart, D. and Daniel, J (1993) Student Support systems in Distance Education Open Learning 8(3) PP. 3-16
- Sherry, L. & Morse, R.A. (1995) An Assessment of Training Needs in the use of Distance Education For Instruction. International Journal of Telecommunications 1(1), 5-22.
- \_\_\_\_\_ (1996) Issues in Distance Learning. International Journal of Educational Telecommunications, 1(4), 337-365.
- Siaciwena, R. (1989) Staff Attitudes Towards Distance Education at the University of Zambia . Journal of distance Education. 2(1) PP. 83-84.
- Swarbrick, A. (1980) "To Encourage the Others: Women Studying Technology " Teaching at a Distance 17, 2-14.
- Taylor, J.C. and Others (1986) Students Performance in Distance Education: A Cross Cultural Multi-institutional Perspective. Distance Education 7(1), 68-91.
- TGE<sub>a</sub> 1994, Education and Training Policy. Addis Ababa EMDA.
- TGE<sub>b</sub> 1994 Education sector strategy. Addis Ababa EMPDA.
- Threlkeld, R. & Brozoska, K. (1992) Research in Distance Education. In B. Willis (Ed) Distance Education: Strategies and Tools. Englewood Cliffs, NJ: Educational Technology Publications, Inc.
- Tremaine, M & Owen, J (1984) "The Female Majority: Women Who Study Extramurally" Teaching at a Distance, 25, 45-50
- Zindi, F and Aucoin, R. (1995) Distance Education in Tanzania and Zimbabwe. Open Learning . 10(1), PP. 31-36.

### Unpublished Materials

- Alem Tsehay Zeleke, (1985) A Critical Analysis of the Problems of Women's Education in Ethiopia. The Hague institute of social studies.
- Almaz Eshete, 1991 "Women in Ethiopia: Problems and Prospects". A Paper Presented at the Seminar on Gender Issues in Ethiopia, Addis Ababa IDR.
- Asher, R. and Oak, A(1985) An Investigation into the study-Habits of Adult-Learners of Open University Program of SNTD Women's University and the study of Impact of Guidance of their study-Habits. Bombay, India: SNTD Women's University.
- Assefa Beyene, 1991, Female Participation & Performance in Rural Schools in Ethiopia. Addis Ababa ICDR, MOE.

## Appendix - B

### The Multiple Regression Results of Region – 4 data

ANOVA<sup>d</sup>

	<b>Model</b>	<b>Sum of Squares</b>	<b>df</b>	<b>mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	8288.302	1	8288.301	131.841	.000 <sup>a</sup>
	Residual	3897.697	62	62.866		
	Total	12185.999	63			
2	Regression	8718.551	2	4359.275	76.689	.000 <sup>b</sup>
	Residual	3476.449	61	56.843		
	Total	12185.999	63			
3	Regression	8958.502	3	2986.167	55.514	.000 <sup>c</sup>
	Residual	3227.497	60	53.792		
	Total	12185.999	63			

- a. Predictors: (Constant), Post secondary education  
 b. Predictors: (Constant), Post secondary education, Entrance exam result  
 c. Predictors: (Constant), Post Secondary education, Entrance exam result, Sex  
 d. Dependent Variable: Tutor Marked Assignment

### The Multiple Regression Results of Region – 14 Data

ANOVA<sup>c</sup>

	<b>Model</b>	<b>Sum of Squares</b>	<b>df</b>	<b>mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	1690.044	1	1690.044	12.215	.001 <sup>a</sup>
	Residual	8578.103	62	138.357		
	Total	10268.147	63			
2	Regression	2775.203	2	1387.601	11.296	.000 <sup>b</sup>
	Residual	7492.945	61	122.835		
	Total	10268.147	63			

- a. Predictors: (Constant), Entrance exam result  
 b. Predictors: (Constant), Entrance exam result, Sex  
 c. Dependent Variable: Tutor Marked Assignment

**Cont. App.B**

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	24.790	2.278		10.881	.000
	Post secondary education	9.727	.847	.825	11.482	.000
2	(Constant)	-19.445	16.224		-1.199	.235
	Post secondary education	6.096	1.546	.517	3.943	.000
	Entrance exam result	.355	.129	.361	2.751	.008
3	(Constant)	-16.838	15.831		-1.064	.292
	Post secondary education	7.566	1.657	.642	4.566	.000
	Entrance exam result	.299	.128	.303	2.328	.023
	Sex	4.478	2.120	.162	2.112	.039

a. Dependent Variable: Tutor Marked Assignment

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.501	15.054		.233	.817
	Entrance exam result	.331	.095	.406	3.495	.001
2	(Constant)	16.453	14.839		1.109	.272
	Entrance exam result	.275	.091	.338	3.025	.004
	Sex	-8.412	2.830	-.332	-2.972	.004

a. Dependent Variable

## Appendix – C

### **Addis Ababa University** School of Graduate Studies Faculty of Education

Questionnaire to be Filled out by Distance Students in the Ethiopian Management Development Project

**Dear Respondent,**

The purpose of this questionnaire is to describe the factors that affect your academic performance in your distance training in the Ethiopian Management Development Project.

It is important that you answer each question as thoughtfully and frankly as possible Hence,

- i. Please answer all questions
- ii. Most questions can be completed by filling out a tick (✓) mark in one of the boxes provided
- iii. You do not have to write your name
- iv. All of the information you may provide will be held confidential

**Thank you for your cooperation.**

## INSTRUCTION – 1

Please complete the following items by filling out a tick (✓) Mark in one of the boxes provided under each item:

1. How do you evaluate your prior learning (academic) level in meeting the academic requirement of your present training?

1.1 Your English language proficiency level

Adequate     Somewhat Adequate     Not at all adequate (Inadequate)

1.2 Your ability in quantitative methods

Adequate     Somewhat Adequate     Not at all adequate (Inadequate)

1.3 Your background knowledge and experience for understanding the basic concepts and theories of the training

Adequate     Somewhat Adequate     Not adequate

2. Please indicate if you have a major problem in lacking the following study skills for your present training. (Major problem here means an academic difficult which you believe to have affected your performance in the current training program) ability to locate learning resources (books, journals etc) for your training.

Yes  No 2.1 ability to locate learning resources (books, journals etc) for your training

Yes  No 2.2 ability to take note

Yes  No 2.3 effective reading skill.

Yes  No 2.4 skill in writing well organized report for your assignment

Yes  No 2.5 ability to use your out-of-work time to study your course materials

Yes  No 2.6 other (please specify)

3. Please indicate if you have the following enduring behavioral qualities or aspirations by making a tick (✓) mark in the appropriate box (i.e. tick in “Agree” if you have the quality and “Disagree” if you don’t have)

Agreed  Disagreed 3.1. Don’t have problem to study in isolation (without having fellow students or others around myself)

Agreed  Disagreed 3.2: Able to commit myself to my study as required

Agreed  Disagreed 3.3. Confident in understanding clearly the subject matter in each lesson of the training

Agreed  Disagreed 3.4. Willing to initiate calls to my tutor when the need arise

Agreed  Disagreed 3.5. Have career goal in advancing further studies in management

Agreed  Disagreed 3.6. Distance education is suitable to my desired way of learning

Agreed  Disagreed 3.7. Willing to actively participate in classroom discussion during the face-to-face tutorial session.

4. Is the present training program useful for your personal development (i.e. in increasing your knowledge and experience on your most desired area)?  Yes  No

5. Is the present training program useful for your career development (i.e. for being promoted in your job, entering a profession with a professional diploma etc.

Yes  No

6. How do you evaluate the difficulty level of the contents of your course materials

Difficult  Reasonably difficult  Not difficult

7. How do you evaluate the difficulty level of the language with which the material is presented?

Difficult  Reasonably difficult  Not difficult

8. Please indicate the relevance of the course material for you along the following points by making a tick (✓) mark in the appropriate box (i.e. tick in yes if you agree with the statement and No if you disagree)

Yes  No 8.1 Are most of the contents of the course material performance oriented/job directed?

Yes  No 8.2 Do the lessons in the course material discuss fairly equally the experiences of both women & men workers in organizations?

Yes  No 8.3 Are the examples & cases in the course material relevant to the local managerial work practices?

Yes  No 8.4 Do the examples & cases in the course material reflect fairly equally the experiences of both women and men managers?

9. Is the location of your training Center Convenient for you

Yes  No

10. Do you have a problem for your safety while you are at the center?

Yes  No

11. Do you face a problem of transportation to go and come from the study center?

Always  Sometimes

Rarely  No at all

12. At what time do you receive the necessary self-instructional materials?

Before you start the course  Immediately after you started the course

In the middle of the course  Other (Please specify \_\_\_\_\_)

13. Please indicate the responsiveness of the study center for your queries along the following points by making a tick (✓) mark in the appropriate box (i.e. tick in yes if you agree with the statement & No if you disagree)

Yes  No 13.1 Is the response you get for your queries from your study center timely? (i.e. not delayed?)

Yes  No 13.2 Is the response you get for your study center appropriate? (i.e. effectively directed towards solving you raised problem?)

Yes  No 13.3 Do you get proper treatment from the support staff whenever you interact with you study center?

14. Please indicate the proportion of your tutorial period which is commonly used by your tutor for lecture.

Below ¼ of the period  Between ¼ - ¾ of the period  Above ¾ of he Period

15. How do you compare your tutor and your familiar school or campus based teacher in the amount of TIME SPENT IN LECTURE within a period?

Greater in the tutor  No difference between the two  Greater in the teacher

16. Please indicate if your tutor has the following qualities by making a tick (✓) mark under 'Yes' and if she/he hasn't under 'No'

Yes  No 16.1 Is more friendly in his teaching approach?

Yes  No 16.2 Tries to help less-achieving students

Yes  No 16.3 Encourages more student participation

15. Do you think that your Women students might have gender-related problems to pursue their education? If yes, what are the major gender related problems you have observed to affect the performance of your Women?
16. What should have been done in your study center to provide more effective tutoring/counselling service to Women students?

## Appendix - E

### ADDIS ABABA UNIVERSITY SCHOOL OF GRADUATE STUDIES FACULTY OF EDUCATION

Interview schedule for The Coordinators of the study centers in The Ethiopian Management Development Project.

1. Do you think that there is a difference, on the average, between the performance of women and men distant students in the certificate distance training program? If yes, what major factors account for the difference? (e.g. Disadvantaged learners background factors; gender-specific learners characteristics, gender-bias in the student support system of the training etc.)
2. Is the academic program of the training flexible to address the situational problems of women distant students (such as childcare, maternity etc.)
3. Does the academic program of the training allow distant students with disadvantaged academic background to learn in their own learning pace?
4. Was there any measure taken by the administration to make the tutorial service gender-sensitive? Like giving training for tutors on gender sensitive tutorial practice; attempting to employ adequate women tutors etc.
5. Are there special student support services which are meant to help disadvantaged women groups in the program? e.g. increasing tutorial hours for women students special face-to-face arrangements for "women-only" discussion groups etc.
6. What should have been done to improve the performance of women distant students in the certificate distance training program?
7. If you have any other comments or suggestions on the matter?

## DECLARATION

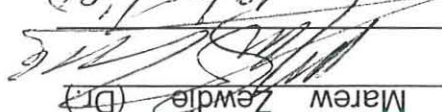
I, the undersigned declare that this thesis is my original work done under the guidance of Dr. Marew Zewdie. All sources of materials used for the thesis have been dully acknowledged.

Name Yared Getachew

Signature 

Date 22<sup>nd</sup> Jan 2005

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

Name: Marew Zewdie (Dr)  
Signature:   
Date of Submission: 19/05/00