# Retrospective Analysis of Academic status of Female students in Jimma University Main Campus: from 1993 to 1997 E. C. 

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#### Abstract

Female students' participation in tertiary level education in Ethiopia is still very low even though rapidly increasing from time to time. This cross sectional study of Jimma University female students’ academic performance was conducted concentrating on the main campus, focused on the six faculties, namely faculty of medical sciences, public health, business and economics, technology, education and law.


Data were collected from the university registrar based on the records of the years 1993 through 1997 Ethiopian Calendar and ethical considerations were taken care.

According to the study, female students' success rate at fresh level was founded $68.1 \%$, including the status of pass, distinction and great distinction; followed by $15.3 \%$ warning, still lower than the males' performance at this level. That is, the attrition rate of male and female students at this level was founded to be $16.6 \%$ and $8.7 \%$ respectively, where the females' rate was almost twice that of the males' rate. At the final year of graduation the success rate of female students was $88.9 \%$, which was encouraging, but still lower than the males' success rate, $92.2 \%$. Though many of the females were founded rural originated, there was no significant difference in their academic performance compared with those from town. Besides, some female students disposed to academic dismissal and drop out at higher rates in some particular faculties like faculty of technology and medical sciences; which is recommended for further study followed by remedial action plan. Of course the recommendation to increase the rate of female enrolment at tertiary education followed by the continuation of the existing affirmative action is intact.

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## 1. INTRODUCTION

### 1.1 Background of the study

Jimma University was established in 1983 as health Institute and developed into University status in 1992. Beginning from its establishment, Jimma University has been engaged in providing innovative and community based practical education aiming at addressing societal needs and promoting holistic and sustainable development in the country (available at http://www.ju.edu.et/.).

Nowadays, one of the global issues that attract the world's attention is the widening of the gender gap in the arenas of education and development. Of course, it is worthwhile to mention that Ethiopian women are actively involved in all aspects of their society's life. They are both producers and procreators and they are also active participants in the social, political and cultural activities of their communities. They shoulder the overall reproductive works. However, the varied, important and backbreaking roles they play have not always been recognized. The discriminatory economic and social rules and regulations prevailing in the country have prevented them from enjoying the fruits of their labor. As a result, they remain still without equal opportunities. They have lagged behind men in occupying prestige jobs, status in all fields of selfadvancements. The 1999 national population office report indicated that
women in Ethiopia represent almost half (49.8\%) of the total population. This indicates that it is unthinkable to maintain economic development while females; half of the productive forces are excluded from participation.

The major factor for such problem can be attributed to lack of education. Education is the handmaiden of development. It can empower one to occupy prestigious job, status; know one's own interests, motives, abilities and potentialities in order to set and attain meaningful goals. Education enables not only individuals but also the society at large to clarify their beliefs and attitudes, which resulted in avoidance of baseless prejudice, stereotype thinking and discrimination against gender roles.

Nevertheless, gender disparity in education still remained severe in Ethiopia even though some progress is observed today. For instance, only 51\% of Ethiopia children attend schools up to the fifth grade (Women Empowering Women, n.d). And of all the children that do attend school in the country, only one third is girls. And what is much surprising is that the gap is more widened as grade level increases. Hence, the number of females at higher levels of education is very low and insignificant as compared to the males. The 1997 report of the Ministry of Education (cited in national office of population) witnesses this reality as shown in the table 1.

Table 1. Percentage of female students enrolled in regular undergraduate degree program by faculty and department (1995/96) academic year)

| Department/Faculty | Percentage of <br> female students |  |
| :--- | :--- | ---: |
| - | Business and Economics | $26 \%$ |
| - | Education | $14.8 \%$ |
| - | Library Science | $15.3 \%$ |
| - | Law | $9.6 \%$ |
| - | Language Studies | $25.2 \%$ |
| - | Medicines | $11.9 \%$ |
| - | Pharmacy | $2.8 \%$ |
| - | Science | $9.8 \%$ |
| - | Social Science | $28.3 \%$ |
| - | Technology | $3.2 \%$ |
| - | Veterinary Medicine | $3.8 \%$ |

What makes this situation worst is not only the scant enrollment size but also the insignificant number of female students who complete their study to graduate.
There are quite a number of factors that affect girls' education. Among these the main ones are customary attitudes, early marriages and unwanted pregnancies, inadequate and gender biased teaching and educational materials, lack of adequate facilities in the schools, location of the schools, and sexual harassment and others ( Burns, 2005 and Teshome, 2002). In addition, girls are also expected to share the heavy reproductive work of their mother. Consequently, if girls and young women get the chance go to school, they are expected to manage both educational and domestic responsibilities. This in turn results in to poor scholastic performance and early dropout from the educational system. Furthermore, the mentioned factors that affected girls' access to schooling are considered to be the major causes for the present low female students' representation in higher education institutes. By realizing this fact, Jimma University has been taking deliberate measures with the intention of raising the
proportion of female students. These includes, respecting their first choice during departmental placement, starting from their enrollment holding open discussion with them in order to clear the cloud, arranging and giving tutorial classes orientation \& study skills, head start sessions during enrollments, tutorial classes, up to 13 hours per course based on the choice of the majority female students, and awarding for high achieving female students. By considering these realities, this research paper aimed at assessing the academic status of female students at Jimma University main campus. Therefore, studying the enrollment rate, the academic performance, study completion, and the attrition rate of female students following the enrollment year and academic year levels from 1993 to 1997 E.C were the task of this study.

### 1.2 Statements of the Problem

As indicated in the introductory part, this research paper is focused on answering the following points.

- What does the academic status of female students look like across faculties, through the academic years
with special emphasis on first and final year?
- Does students academic performance influenced by variables like age, admission type, high school area and program attended.
- Which groups of female students are more vulnerable to attrition?
- What does the enrollment rate of students look like across the years and programs?


### 1.3 Objective of the Research

## General Objective

This research is intended to asses the academic status of female students in Jimma University main campus who had joined the university between 1993 and 1997 E.C and graduated within the same time range (see section 2).

Specific Objectives: This research is intended to:

- Describe the academic performance of female students across faculties,
- Assess academic performance of female students with reference to their admission type, high school area, and program type.
- Determine female student attrition rate?
- Determine enrollment rate of students across years and programs
- Rate their success level comparing enrollment and graduation
- Recommend possible means of minimizing attrition as well as raising proportion of female students


### 1.4 Significance of the Research

Gender gap in education participation is currently the critical concern of educators, researchers, and policy makers. The concern extends well beyond the very important equity issue and induced deliberate move to improve the situation of women with respect to participation to education and training. The low education level of most women leads them to less rewarding and lower status jobs-like the usual domestic activities performed at home. This in turn has a negative effect on how women perceive themselves by reinforcing and perpetuating gender stereotypes and biases. Again the negatively affected women's status and employment result in various social evils such as mortality, morbidity, poverty, and income inequality. As it has been usually rang in these days, "Educating a women is educating the family", enhancing female students' education and training at higher level institutions realizes the poverty reduction process and the attainment of other millennium development goals of the country. Therefore, this research is believed to have salient contributions in uncovering the deep-rooted academic problems of female students and identifying particular group of female students who are more exposed to drop out from higher education and /or performing poorly. This enables the university and other concerned bodies to take intervention measures to alleviate the problem and improve the situation of women's' participation in higher learning institutes. Moreover, the research can serve as a resource for other researchers who wish to promote further research development in the area.

### 1.5 Delimitation of the study

The scope of this study delimited to female students who had joined the university (only main campus) from 1993 to 1997
provided that they/their batch had graduated within the same time range. The study also analyzed the academic performance of female students with reference to their age, origin (degree of urbanization of the secondary education they had attended), and admission type (program they had attended).

### 1.6. Limitation of the study

The researchers premeditated to include records of all female students joined the university within the time range covered by the study so that the clear picture about their performance could be depicted. However, they could not succeed in doing so for the complete record of students joined the university in 1997 as well as records of regular female students in the Faculty of Low and Faculty of Business and Economics were not founded. This might have influenced the result obtained.

## 2. Methodology <br> The study population and site

The study population comprises all batches of female students of Jimma University (main campus) who enrolled in or after 1993 E.C provided that they graduated in or before 1997 E.C. It included female students who attended their education within the time indicated through evening extension and regular program. The research area was delimited to the main campus because of constraints of money and time. Accordingly, study included six faculties: Faculty of Business and Economics [FBE], Faculty of Low [FOL], Faculty of Education [FOE], Faculty of Medical Sciences [FMS] and Public Health Faculty [PHF] and Faculty of Technology [FOT]. And students who enrolled before 1993 were not included in the study since the researchers couldn't find well documented file of their academic record during the pilot study. The study was conducted on May, 2006.

## The study design and sample

In order to realize the objectives of the research, the study design needed to be longitudinal in order to follow and assess the total female students enrollment with in the given time range, their academic status, performance and attrition from their enrollment to graduation time. So as to depict clearly the performance of female students under investigation, the comparison was made between male and female performances. For that matter, the analysis began from the total students enrolled in the campus within the time frame of the study, then specifically focused on that of female students.

## Data collection procedures

Data was collected using the recorded documents found in the respective faculties or registrar office. Computer records of students' background and academic grade results were filtered by using DBASE (Computer Software) working currently in the university and printed, coded and transferred to SPSS-11 for analysis purposes. Twelve (two from each faculty, one for the regular and one for the extension) data collectors were recruited, trained, and worked under the close supervision of the researchers. Moreover, the data collected from the database and crosschecked with hard copy.

## Variables

The variables of this research were age, admission type (regular/Extension), program studied, origin/area of high school, and grades at first and final years with respect to their cumulative grade point averages.

## Analysis

After the data was tabulated and entered to the SPSS-11 (statistical package for social science) version, descriptive statistics such
as percentages and frequencies were computed. A one-way analysis of variance (ANOVA) was carried out for the grade point average against the various variables if more than 3 to check for equality of variances. A pair-wise comparison of means for the grade point averages was also carried out using t-test. All tests of statistical significance are performed at alpha $=.01$ level.

## Ethical Consideration

The official consensus of the university authority was approached to use the document. Only the identification numbers were used for confidentiality purpose of protecting the student personal documents.

1997 E.C. and records of 4313 students were founded. Among this, 4265 (98.9\%) students' year of entry was clearly recorded and identified. As shown in table 2, enrollments of students kept on increasing from year to year. The increment was not indicated in year 1997 merely because of damage in the records of students' document that had joined the university in that year. Besides, sex of 4303 students were recorded and 787 (18.3\%) were found to be female.

From the total students whose record founded in this study $79.2 \%$ (3417) were degree students, the rest were attended diploma program. Likewise, 76.4\% were regular while the rest were followed extension program.

## 3. RESULTS

The study focused on female students who had enrolled in the university from 1993 to

Table 3: Female students across different faculties

|  |  | Frequency | Percent | Valid Percent |
| :--- | ---: | ---: | ---: | ---: |
| Valid | Cumulative <br> Percent |  |  |  |
| FOE | 371 | 47.1 | 47.1 | 47.1 |
| FBE+LAW | 21 | 2.7 | 2.7 | 49.8 |
| MED | 177 | 22.5 | 22.5 | 72.3 |
| PHF | 167 | 21.2 | 21.2 | 93.5 |
| TECH | 51 | 6.5 | 6.5 | 100.0 |
| Total | 787 | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0 0}$ |  |

Note for the sake of simplicity FBE and Law faculties data are merged
as the data obtained is incomplete and are from extension program only

Regarding age of students, the range is (47.7\%) depicted the degree of from 15 to 28 year. Majority of them $86.3 \%$, were between $18-21$ ages.

Out of the total students attended the education in Jimma University in the selected program, only records of 2058
urbanization of the high school they had come from. Among this, as shown by figure 1, 667 ( $32 \%$ ) of them originated from rural high schools, followed by urban and semi-urban where each of them accounted for $25 \%$.

Figure 1: Degree of urbanization of the secondary school the participants had attended


Concerning academic status of students at freshman completion, majority of them promoted with the academic status of Pass 3183 (73.8\%), followed by distinction 458 (10.6\%), then Warning 267 (6.2 \%). Insignificant number of students had
marked as drop Out 156 (3.6\%), Great Distinction 153 (3.5\%), Academic Dismissal for good 41 (1\%), Academic Dismissal/Readmission 36 (0.8\%), and Withdrawal and Incomplete 11 (0.3\%).

Table 4: Crude Academic Status at Freshman Completion

|  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :---: | ---: | ---: | ---: | ---: |
| Valid |  | 8 | .2 | .2 |
| A.D | 41 | 1.0 | 1.0 | .2 |
| AD/R | 36 | .8 | .8 | 1.1 |
| Pass | 3183 | 73.8 | 73.8 | 2.0 |
| Dist | 458 | 10.6 | 10.6 | 75.8 |
| G.Dist | 153 | 3.5 | 3.5 | 86.4 |
| DO | 156 | 3.6 | 3.6 | 89.9 |
| WARN | 267 | 6.2 | 6.2 | 93.6 |
| W.D+INC. | 11 | .3 | .3 | 99.7 |
| Total | 4313 | 100.0 | 100.0 | 100.0 |

As shown in table 5, in the attempt to identify academic status of students at the final year, records of 2070 (47.8\%) students were founded clearly stating the required variable. Of these students, including those with academic status of pass, distinction and great distinction, 1913 ( 92.8\%) had graduated successfully. On
the contrary side, 130 (6.2\%) students were failed to graduate at the final years. They went out with the status of academic dismissal, academic dismissal/readmission, drop out, or delayed to clear grade F or to upgrade the cumulative grade points to 2.00.

Table 5: Crude Academic status at time of graduation

|  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :---: | ---: | ---: | ---: | ---: |
| Valid | A.D | 69 | 1.6 | 3.3 |
| AD/R | 17 | .4 | .8 | 3.3 |
| Pass | 1577 | 36.6 | 76.6 | 80.7 |
| Dist | 288 | 6.6 | 13.9 | 94.6 |
| G.Dist | 48 | 1.1 | 2.3 | 96.9 |
| DO | 23 | .5 | 1.1 | 98.1 |
| WARN | 19 | .4 | .9 | 99.0 |
| W.D+INC. | 13 | .3 | .6 | 99.6 |
| DELAY | 8 | .2 | .4 | 100.0 |
| Total | 2060 | 47.8 | 100.0 |  |
| Missing System | 2253 | 52.2 |  |  |
| Total | 4313 | 100.0 |  |  |

Since the major target of this study was on analyzing academic performance of female students, records of female students from
each faculty were identified and analyzed (figure 2). Consequently, majority of female students, like that of the total
population of students, were from FOE 371 (47.1 \%) and then health faculties 344 (43.7\%). Again, 75.3\% (593) of the female students were attended degree programs
while the rest were attendants of diploma program. Besides, 72.7 \% (572) of them were regulars students while the rest 27.3\% were joined extension program.

Figure 2 Bar graph showing female students across different faculties


FACULTY OF THE STUDENT
Figure 3 Age of female students on their entrance to the university


Regarding the age at which female students joined university, as shown in figure 3, majority of them (84\%) included in the range of 18 to 20 years old. In general, the
minimum age is 17 and the maximum is 23 year old and the mean age is 19 years with standard deviation 1.19 years.

Table 6: degree of urbanization of the origin of female students.

|  | Frequency | Valid percent | Cumulative <br> percent |  |
| :--- | :--- | ---: | ---: | ---: |
| Valid | urban | 165 | 43.2 | 43.2 |
| Semi-urban | 114 | 29.8 | 73.0 |  |
| Rural | 103 | 27.0 | 100.0 |  |
|  | Total | 382 | 100.0 |  |

As shown in table 6, among the 787 students, only 382 students' area of origin was documented. Among this, majority of them 165 (43.5\%) came from urban,
followed by semi-urban 114 (29.8) and the least figure 103 (27.0 \%) originated from rural areas.

Figure 4 Number of female students based on year of entry


Note: The figure for year 1997 was small for the completed data was not obtained.

Figure 4 showed that the number of female students joining the university increasing from time to time. For instance, the number of female students in 1993 was below fifty
but alarmingly increased and reached beyond 300 in 1996. The decline in 1997 was due to the incomplete data obtained.

Table 7: Academic status of female students after freshman completion

|  | Frequency | Percent | Valid percent |  | Cumulative <br> percent |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: |
| Valid |  |  | 12.0 | 12.0 |  |  |
| AD/R | 94 | 11.9 | 58.9 | 70.9 |  |  |
| Pass | 461 | 58.6 | 7.7 | 78.5 |  |  |
| Dist. | 60 | 7.6 | 1.5 | 80.1 |  |  |
| G. Dist | 12 | 1.5 | 4.6 | 84.7 |  |  |
| D. out | 36 | 4.6 | 15.3 | 100 |  |  |
| Warn | 120 | 15.2 | 100 |  |  |  |
| Total | 783 | 99.5 |  |  |  |  |
| Missing system | 4 | .5 |  |  |  |  |
| Total | 787 | 100 |  |  |  |  |

Table 8: academic status across male and female students at freshman level

|  |  | Academic status cross tabulation |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | A.D/R | PASS | DIST. | G.DIST | D.OUT | WARN | TOTAL |
| Sex of the | Female <br> Student <br> Count <br> \%Within sex of <br> the student | 94 | $12.0 \%$ | 561 | 60 | 12 | 36 | 120 |
|  | $7.9 \%$ | $7.7 \%$ | $1.5 \%$ | $4.6 \%$ | $15.3 \%$ | $100 \%$ |  |  |
| Male <br> Count | 118 | 2449 | 380 | 80 | 122 | 295 | 3444 |  |
| \% within sex of <br> the student | $3.4 \%$ | $71.1 \%$ | $11.0 \%$ | $2.3 \%$ | $3.5 \%$ | $8.6 \%$ | $100 \%$ |  |
| Total <br> Count | 212 | 2910 | 440 | 92 | 158 | 415 | 4227 |  |
| \% within sex of <br> the student | $5.0 \%$ | $68.8 \%$ | $10.4 \%$ | $2.2 \%$ | $3.7 \%$ | $9.8 \%$ | $100 \%$ |  |

When academic status of female students at freshman level seen separately, as depicted in table 7, majority of them 461 (58.1\%) were promoted with pass status followed by warning 120 (15.3). Academic dismissal and drop out added to 130 (16.5\%) while Distinction and Great Distinction status accounted only for 72 (9.2\%). When these figures for different academic status compared with that of their male counterpart, the proportion of female students on academic status such as Drop out, warning, and Academic Dismissal/

Readmission surpassed that of male. On opposite side, on good academic statuses such as great Distinction, Distinction and Pass status, the proportions of female students on each of these academic statuses were low. Moreover, freshman attrition rate for male and female students for the year 1993 E.C-1997 E.C was calculated and that of female students was $16.6 \%$ while that of male students were $8.7 \%$. This showed that female students' attrition rate was almost two times that of male.

Table 9: Female students' academic status across faculties at the freshman level


As one can see from table 9, female students joining FOT were not only small in number but also suffered from high rate of academic dismissal (17.6\%). On the other hand, drop out case was high for FMS female students (9.7\%) as compared to the other faculties. Moreover, female students from FOE observed to be low
achiever since $21.8 \%$ were survived with warning.

In general, many of the PHF female students were successful (89.7\%) while the rest were more or less at the same level of success, which was about $60 \%$.

Table 10: The average mark of female students across different faculties on the completion of freshman program.

| Faculty of <br> the student | Mean | $\mathbf{N}$ | Std. Deviation | Minimum | Maximum | Median |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| FOE | 2.1540 | 352 | .62957 | .00 | 4.00 | 2.1200 |
| MED | 2.3099 | .78657 | .00 | 3.89 | 2.3500 |  |
| PHF | 2.6723 | .76408 | .00 | 4.00 | 2.7600 |  |
| TECH | 2.3445 | .59048 | 1.70 | 3.90 | 2.1500 |  |
| Total | 2.3175 | .72388 | .00 | 4.00 | 2.2700 |  |

Table 11
ANOVA Table

|  | ANOVA Table |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: |
|  | Sum of squares | Df | Mean square | F |  |  |  |  |  |
| CGPA2* <br> Faculty <br> student | Between Groups (combined) | 3 | 9.949 | 20.534 |  |  |  |  |  |
|  | Within group | 716 | .485 |  |  |  |  |  |  |
|  | Total | 719 |  |  |  |  |  |  |  |

As one can deduce from table 10 and 11, the average mark of female students vary across faculties and this was significant at $p=0.01$ level of significance performance (measured as CGPA). Accordingly, the mean of the female students academic performance (CGPA2) was 2.3 (St.dev
0.72 ) while it varies faculty wise where the highest mean was 2.7 (St.dev. 0.76) for public health faculty, the lowest 2.2 (St.dev 0.63) education faculty; where by the maximum CGPA 4.0 is found in both faculties.

Table 12. The average mark of female students in regular and extension program together with other statistics

| Regular/extension | Mean | $\mathbf{N}$ | Std. <br> Deviation | Minimum | Maximum | Median |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Regular | 2.2383 | 527 | .74882 | .00 | 3.95 | 2.2400 |
| Extension | 2.5086 | 213 | .59481 | 1.43 | 4.00 | 2.3300 |
| Total | 2.3161 | 740 | .71807 | .00 | 4.00 | 2.2700 |

Similarly, the mean CGPA of regular 0.59) were the difference was significant at female students was 2.2 (St.dev. 0.75 ) $\quad \mathrm{P}=0.01$ using the $t$-test for equality of the while that of the extension was 2.5 (St.dev means.

Table 13: Independent $t$-test for the difference in CGPA at first year for regular and extension female students

|  |  |  |  | Levene’s Test <br> forEquality <br> of Variances |  |  |  |  |  | t-test for Equality of Means |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

As it is shown from table 12 there was deviation on the average mark of female students attending regular and extension
program. The average mark for extension female students on first year completion was 2.51 where as that of the regular
students was only 2.24 this difference is significant at $\mathrm{p}=0.01$ level of significance. also supported by t-test which was

Table 14: Cross tabulation of academic status vs. origin of town

|  |  |  | A.D/R | Pass | Dist \& G. Dist | D. Out | WARN | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Urban/semiurban/rural | Urban | Count | 25 | 95 | 17 | 6 | 21 | 164 |
|  |  | \%Within Urban/semiurban/rural | 15.2\% | .57.9\% | 10.4\% | 3.7\% | 12.85 | 100\% |
|  |  | \% of total | 6.6\% | 25.0\% | 4.5\% | 1.6\% | 5.5\% | 43.2\% |
|  | Semiurban | Count | 22 | 62 | 10 | 4 | 15 | 1133 |
|  |  | $\begin{aligned} & \hline \text { \% Within } \\ & \text { urban/sem9- } \\ & \text { urban/rural } \\ & \hline \end{aligned}$ | 19.5\% | 54.9\% | 8.8\% | 3.5\% | 13.3\% | 100\% |
|  |  | \% of Total | 5.8\% | 16.3\% | 2.6\% | 1.1\% | 3.9\% | 29.7\% |
| Total | Rural | Count | 69 | 216 | 33 | 14 | 48 | 380 |
|  |  | \% Within urban/semiurban/rural | 18.2\% | 56.8\% | 8.7\% | 3.7\% | 12.6\% | 100\% |
|  |  | \% Total | 118.2\% | 56.8\% | 8.7\% | 3.7\% | 12.6\% | 100\% |

Even though the highest Academic there was no significance difference as Dismissal/ readmission (21.4\%) seen in shown by the chi-square test at $\mathrm{P}=0.01$ female students who came from rural areas, where ( $\mathrm{P}=0.92$ ) in this test.

Table 15: Chi-Square Tests

|  | Value | df | Asymp. Sig. (2-sided) |
| :--- | :--- | :--- | :--- |
| Pearson <br> Square | $3.214^{\mathrm{a}}$ | 8 | .920 |
| Likelihood Ratio | 3.324 | 8 | .912 |
| Linear-by-Linear <br> Association | .548 | 1 | .459 |
| N of Valid Cases | 380 |  |  |

a. 2 cells ( $13.3 \%$ ) have expected count less than 5 . The minimum expected count is 3.79.

Table 16: Academic status of female students during final year (at the time of graduation)

|  |  |  | STATUS AT TIME OF GRADUATION |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | A.D | Pass | Dost | G. <br> Dist | D. Out | DELAY | Total |  |
| Sex <br> the <br> student | Female | Count | 17 | 129 | 32 | 6 | 3 | 1 | 188 |
|  | \% Within <br> Sex of the <br> student | $9.0 \%$ | $68.6 \%$ | $17.0 \%$ | $3.2 \%$ | $1.6 \%$ | $.5 \%$ | $100 \%$ |  |
| Count | 48 | 654 | 114 | 26 | 18 | 1 | 861 |  |  |
| \% Within <br> sex of the <br> student | $5.6 \%$ | $76.0 \%$ | $13.2 \%$ | $3.0 \%$ | $2.1 \%$ | $.1 \%$ | $100 \%$ |  |  |

The success rate of male and female students also showed difference that is males' success rate was $92.2 \%$ where as that of female students' success was $88.9 \%$. The rest $7.8 \%$ and $11.1 \%$ from male and female students respectively did not graduate with their batch for academic or non academic reasons.

## 4. DISCUSSION

In order to study the academic performance of female students Jimma University who are enrolled in or after 1993 and have graduated in or before 1997 E.C, cross sectional study based on document analysis method of data collection technique was employed and the result was displayed in the forerunning section (result Part) Similarly, this section devoted itself to the detailed discussion of the result obtained

Attending different program at different levels 4313 students were founded in the main campus of Jimma University. However, the entry year was clearly indicated for 4265 students. The data showed that the enrollment of students alarmingly increase from year to year. This is because of the general current trends of
education in Ethiopia for the new Education and Training policy focuses on expansion of education at all levels (Ministry of Education [MOE], 1994).
Out of 4,303 students whose sex was clearly recorded, 787 (18.9\%) were female which is insignificant compared to the total population of female in Ethiopia, which is almost half of their counter part male (MOE, 2005; Prime Minister Office, 2004). This is inline with the finding of Burns (2005) that presented the enrollment ratio of Ethiopian students' at all levels as one of the lowest in sub-Saharan Africa and the disproportional representation of female students at higher levels. However, as shown in figure 4, the number of female students joining the university, like that of male students, kept increasing from time to time. This could be due to the policy held at the country as well as at university level. The intake capacity of the Jimma University is increasing since its inception as a university. This resulted in the observed escalation of students’ number from time to time.
Regarding the age of students joined the different faculties, majority of them were at a fire age (15-18 year) with a range of 1528 age. Regarding the age at which female
students joined university, as shown in figure 3 , the range is $17-28$ with the mean of 19 year and St. dev. 1.19 where the majority (84\%) lied between 18 to 20 years.

Jimma University has been running different programs through regular and continuing and extension program. Accordingly, the aggregated data of both sexes showed that (3417) 79.2\% were attended degree program, while 20.8 \% were attendants of diploma program. Taking data of female students independently, majority of them 593 (75.3\%) were enrolled in degree program while the rest went for diploma program. The observed difference in aggregated data as well as that of female was because of the fact that many faculties were not providing diploma program from the beginning or provided it only through extension program unlike degree. Moreover, since 1996 diploma program was phased out for the ministry of education gave the responsibility for regional colleges.

Regarding the proportion of students attended regular and continuing/extension programs, majority (76.4\%) were registered in regular program while the rest were followed extension program. Similar evidence observed regarding that of female students since $72.7 \%$ (572) of them were registered in regular program while the rest $27.3 \%$ were joined extension program, showing that the extension program contributed to the increase of female education at tertiary level.
Pertaining to the academic performance of female students at different program, students who had attended extension program showed good performance though they were small in number. The comparison was made based on their CGPA where the mean value for that of regular students was 2.2 ( St.dev. 0.75)
whereas that of extension was 2.5 with St.dev. 0.59, which is significant at $\mathrm{p}=0.01$ using t -test for equality of the means. This indicated that female students attends extension program are becoming strong in their academic performance.

Like for other variables, records regarding the degree of urbanization of the town of the school they had attended their secondary education was not founded for all students. It was clearly recorded for relatively half, which was 2058 (47.7\%) of the students. In general, the aggregated data of male and female students as indicated in figure 1, showed that majority of students joined the university came from country sides than urban or semi-urban. This is also logical since 80 \% of Ethiopian people are dwelling in the country side. However, the situation became the reverse when origin of female students treated independently. The data showed that majority of them 165 (43.5\%) came from urban areas while least number 103 (27.0\%) joined the university from rural areas.
This implies that still females from rural areas did not yet succeed in joining higher learning education compared to the same sex students who are from urban and semiurban and male students of the same areas. Tassew Dejene (2001) confirmed this idea stating that females in towns have better access to education than those in rural area. Therefore, Jimma University should design strategies by which female students from rural areas are encouraged to join the university. This is the responsibilities of the universities in the country since the one of the variable by which the quality of the service and education they provided are to be measured by the proportion of disadvantaged groups, like female and minorities (Higher Education Relevance and Quality Agency [HERQA], 2006).
Comparing the academic performance of female students from different origins,
there was no significance difference being tested by chi-square test at $\mathrm{p}=0.001$ though it seemed that the highest Academic dismissal/Readmission went for Female students from rural areas.

Although the study focused on six faculties: FBE, FOE, FOL, FMS, FPH and FOT, complete data of students from FBE and FOL were not accessed. In general, the available data showed that one third of students, 1898 (44\%), went for FOE and followed by the two health faculties (FPH \& FMS), which were accounted for 1570 (36.4\%). As the student population in FOE is one third of the total population of JU , females in this faculty found high in number 371 (47.1\%) than any other faculty. This might be due to the fact that FOE has incorporated many departments with different programs unlike other faculties for instance, FOL which is running with only one department.

Regarding academic status of students at freshman completion, majority of them promoted with the academic status of Pass 3183 (73.8\%), followed by distinction 458 (10.6\%), then Warning 267 (6.2 \%). Although the number/ percentage of students who had marked as drop out, academic dismissal for good, academic dismissal/ readmission and withdrawal and incomplete were seemed insignificant when viewed independently, the fact is far beyond that for they added up to 244 (9.2\%) and these much number considered as wastage.

Like that of freshman completion, academic status of students (both males and females) at the final year was also investigated. In view of that, majority of them 1913 (92.8\%) had graduated successfully while the remaining 130 (6.2\%) were not get graduated for various reasons. Though the attrition during the
final year was less in number compared to that of the first year, the wastage should not be considered as insignificant when the resources and time invested were taken into consideration. Moreover, if attrition continues like first and final years also during the middle levels, large amount of students would be victimize, which is in great wastage of resource. The attrition rate during first year significant compared to final years that might be due to the fact that students experience adjustment difficulty with the new physical, academic and social milieu. Study conducted in developed country also confirmed the same result (Ohio University, 2005).

The academic status/ performance of female students were presented in comparison with that of males both during freshman program and final year. With respect to the former one, as depicted in table 7, majority of female students 461 (68.1\%) were promoted with pure pass status followed by warning 120 (15.3). Academic dismissal and drop out added to 130 (16.5\%) while Distinction and Great Distinction status accounted only for 72 (9.1\%). When these figures for different academic status compared with that of their male counterpart, their performance could be marked as poor. This was evident since proportion of female students on academic status such as Drop out, warning, and Academic Dismissal/ Readmission surpassed that of male. On opposite side, on good academic status such as great Distinction, Distinction and Pass status, the proportions of female students on each of these academic statuses were low. Moreover, freshman attrition rate for male and female students for the year 1993 E.C1997E.C was calculated and that of female students was $16.6 \%$ while that of male students was $8.7 \%$. This showed that female students' attrition rate was almost two times that of male. This confirmed the
perpetuated gender gap in literate adults since less students joined Higher learning Institution but more of them drop out their education compared to male students. Pertinent to the later (academic performance during final year), male students kept on showing good performance than females. For instance, the male students' success rate was $92.2 \%$ where as that of female students' success was $88.9 \%$.

Significant difference in performance among female students themselves was also observed when assessed across different faculties and tested at $\mathrm{p}=0.01$ level using ANOVA. In general, the mean of the female students' academic performance (CGPA2) was 2.3 (St.dev 0.72 ) with the range of 2.2 (St.dev. 0.63), which belonged to FOE, to 2.7 (St.dev. 0.76 ), which is observed in PHF. In addition the general success rate was calculated and female students PHF came in first with rate of $89.7 \%$ while the other faculties were revolving around $60 \%$. In general, PHF was observed to be best for female students to achieve a high score as well as maintaining low number of drop out case. On the contrary side, female students joining FOT were not only small in number but also suffered from high rate of academic dismissal (17.6\%). On the other hand, drop out case was high for MSF female students (9.7\%) as compared to the other faculties. Moreover, female students from FOE observed to be low achiever. The reason for high rate of academic dismissal for FOT and high drop out case for FMS was not exactly known and recommended for further research, the categorization of female students from FOE as low achiever could be justified less prepared students are joining the faculty (Adula, 2006). Firdissa (2006) confirmed similar conclusion in the context of Faculty of Education in Addis Ababa University.

## 5. CONCLUSION AND RECOMMENDATION

This part of the paper devoted it self to presenting the conclusions and recommendations drawn from the aforementioned discussion.

### 5.1. Conclusion

- Although the proportion of female students in Jimma University was low compared to their male counterpart, their number kept on increasing from time to time within the time range of the study.
- The study showed that students joining Jimma University (both male and female) were youngsters for which consistent and effective guidance and counseling services demanded if they were needed to follow the right track in their stay in university as well as for their future life.
- Majority of female students were attended degree program than diploma. This might be due to the fact that diploma program was used to be offered by selected departments, and currently phased out at university level.
- The aggregated data of male and female students showed that majority of them were originated from rural high schools. However, records of female students depicted the opposite way that the majority of them were not from rural high schools. This implies that still females from rural areas are not succeeded in joining higher education unlike those from towns. Nonetheless, there was no significance difference in academic performance among female students from urban, semi-urban and rural areas. This might be due to the attempts made by the university in general and gender office in particular in supporting female students so that they
succeeded in their education through affirmative action.
- Majority of female students attended regular program than extension. This might be because of financial problem to cover the tuition fee as well as their living expenses, the perpetuating gender stereotypes, and family influence. The absences of extension program at selected department also contribute for the wide gap between those who followed regular and extension program.
- Although the number of female students attended extension program was relatively small in number, they showed better performance than those who attended regular program.
- Freshman attrition rate for male and female students was calculated and that of female students became twice that of males. Likewise, attrition rate for both sex during first year is more that the final years.
- There was also significant difference in enrollment and performance of female students joined different faculties. High numbers of students were joining FOE while least numbers were attending FOT. PHF was best suited female students for high rate of success and low dropout cases were registered there. On other hand, female students in the FOE registered low performance; FMS high in dropout and FOT were high in dismissal. Though giving justification for the performance of female students in other faculties seemed infant based on the data at hand, it is possible to give explanation for low performance of female students at the FOE as they were less prepared for higher education.


### 5.2 Recommendations

- The university should work toward increasing at least gradually the ratio of female students' enrolment to that of
males. It should design strategies by which enrollment of female students from country sides will increase.
- Although the academic performance of female students is becoming strong from time to time, the attrition rate for female students surpassed that of males. Therefore, the support that has been provided for female students in the form of affirmative action shall be strengthened.
- The cause for high academic dismissal and drop out in some faculties like in FOT and FMS respectively needs further investigation.
- The university should also think of strategies by which the proportion of female students in Extension program be increased. This could be done through providing scholarship opportunities.


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