

Gender Disparity in Academic Achievements in Ethiopian Colleges of Teacher Education

By

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Abstract

The main objective of this study was to investigate disparity in academic achievement of female and male students in colleges of teacher education in Oromia, and to identify variables attributing to this disparity. Three Colleges of teacher education, namely: Asella, Jimma and Nekemte were selected by purposive sampling. 184 female and 155 male students of third year were selected by quota and simple random sampling techniques. The study was carried out by employing closed-ended questionnaires addressing issues attributing to academic achievements like gender stereotype, admission procedure, institutional satisfaction, parental style, learning style, personality style and accommodation issues and Cumulative Grade Point (CGPA) of Ethiopian General Secondary Education certificate examination (EGSECE) and College academic achievements. These variables were analyzed with t-test, ANOVA, and simple regression analysis. The results of the study indicated that there are statistically significant differences between male and female students in academic achievement in both EGSECE and College CGPA, and further more at stream levels male students are significantly performing better than female students. From attributing variables, there are statistically significant differences between male and female students towards gender stereotype and institutional satisfaction while the same responses were obtained in other attributing variables. Moreover, the regression analysis shows that gender stereotype; institutional satisfaction and accommodation issues are significantly associated with female students' academic achievement.

Keywords: Gender, Gender Balance, Gender Disparity, Academic Achievement, Teacher Education

1. Introduction

The issues of equity in education between male and female groups have been a serious problem in Ethiopian education system at all levels in general, and of higher education in particular. The number of admission, retention, and graduates has not been proportional to the size of population when compared to male and female students throughout the county (Habtamu, 2004). The long-term vision of Ethiopian Growth and Transformation (GTP) emphasizes the importance of social justice, which is based on equality among various groups in Ethiopia and between men and women. The objectives of the GTP also pretty well stress the importance of achieving the Millennium Development Goals (MDGs), which gives significant place for gender equality and equity in various sectors of the economy and social services (MOE, 2010).

The nature of gender inequalities in education has changed profoundly over recent decades and with regard to attainment in particular, has become more complex. Apart from the injustice inherent in all gender stereotyping, gender differences in education can also negatively affect economic growth and social inclusion. The education for women is believed to have far-reaching benefit. It has positive contribution to health of family, family size, and education of children (Hill, 1993). In similar vein, World Bank (2006) stated that one way for developing countries to bring a better life standard of people is to invest in education of girls. In its view of the far-reaching advantage of girls' education, The article continued to state that "Not only well educated women are more productive, but they will also bring up better educated and healthier children (World Bank, 2006). When we turn to the Ethiopian case, the

proportion of females to male higher education academic achievement and participation has not yet reached the same (MOE, 2008). This shows that the higher education females are still a long way off, as compared to what is desired by the country.

As a result, their passivity can handicap the students in their relationships with their instructors, advisors, and classmates. Not being able to say no to friends, to inquire about an assignment with an instructor, or to stand up for themselves may also hinder the learning of survival skills in the new culture. Being assertive, initiating contact, and getting involved in social and academic interactions, however, may help students cope with their academic life in colleges.

Sex differences research shows us that it is difficult to separate innate from learned behaviors, or to understand to what extent stereotyping influences individuals' perceptions and behavioral or cognitive sex differences. Research shows that, in general, the range of differences is small compared to the similarities existing between the sexes. Gender-related results from cross-national surveys on performance are able to provide indicators of how a national education policy is working in terms of equity in comparison with others, but usually are not able to provide an analysis of particular causal factors, or what should or could be done to create a more equal gender system (Brusselmans, 2001).

The most frequent reason for the low performance of college student is joining particular fields of study or tracks without their career choice. The other is variation in entry behavior between female and male students' that affects their academic achievement at college level is because of low academic self-concept. While our country has implemented various policy instruments, the goal of providing equal opportunities for female and male, only a few of them reaching the equality of outcomes or have implemented successfully the gender mainstreaming strategy in the field of education. Although the list of potential policy measures that aim at changing traditional gender roles and stereotypes is long, the same is not true for developing adequate gender-specific teaching methods and guidelines.

To ensure the equality of females in access and participation; the Ministry of Education (MOE, 2008) had made a positive discrimination of women to higher education. The entry assessment or admission procedure for female students shows a positive discrimination, which has made the proportion of male and female students in higher education better than the former one. In fact, the number of female students entering higher education institutions in recent years by far exceeds the previous admission procedures. Previous studies mostly address gender disparity in academic achievements at subject levels; for instance disparity in Mathematics achievements of grade 5 and 6 (primary schools) students (Seleshi, 2000 & 2001). Moreover, gender disparity in other hard science courses in secondary schools were clearly described (Marshall, 1984; Sherman, 1980) while Tamire (2008) reported the causal attribution of female academic achievement in first year university students.

However, there were no detailed research studies of gender disparity in academic achievement made at stream level other than subject areas in colleges of teachers' education where the proportion of female students are well presented as compared to the rest of higher education institutions in Ethiopia. Even though girls' enrollment in education, at all levels, is increasing from time to time, the national and regional studies shows that female academic achievement is significantly lower than males' academic achievement (MOE, 2008).

The issues of varying proportions of male and female students in different fields of study, and gender patterns in achievement by subjects and streams were not well studied so far with statistical analysis, which reflects current situation. Critical issues with respect to gender gaps in terms of boys outperforming girls and girls outperforming boys in subjects referring to high school achievement as a predictive validity for college achievements did not get due attention so far. Besides, comprehensive studies of the extent and causes of gender disparity in academic achievement in colleges of teacher education do not thoroughly analyzed.

Therefore, the difficulty of narrowing the achievement gap between males and females and achieving minimum competence by female in college education is a hurdle for the participation of women. Exploring factors contributing to females' low academic achievement is a crucial point, part of which this study focuses on, in general and in selected colleges of teachers' education in Oromia region in particular.

However, the challenge is how-to retain and improve the academic achievement of female students in college education. For instance the cumulative academic achievement of male and female in Jimma College of Teachers Education in previous academic year was 2.94 and 2.28 respectively. Furthermore, the data of graduated student profile shows that only 7.73% of female students achieved CGPA of 3.25 and above. It can be argued that, though the current massive campaign of female students in colleges of teachers' education is commendable, it has failed to ensure the proportional academic achievement of gender. Hence, the study was aimed to identify the significance level of gender disparity in academic achievement and major factors attributing the disparity of gender in colleges of teachers' education and to project the existing problem at national level. Hence, the study was guided by the following basic research questions:

1. Is there statistically significant difference in academic achievements between male and female students in colleges of teachers' education?
2. What are the major factors attributing to differences in academic achievements between male and female students at college level?

2. Research Design and Methodology

Design of the Study

The research method employed is determined by nature of research topic (Creswell 2003). Therefore, descriptive survey method was employed for its appropriateness to get broad descriptions of quantitative information and to identify major factors attributing gender disparity in academic achievement.

Sampling Techniques

Three Colleges of teachers' education were selected from Roomier region. Purposive sampling was employed for selecting the research sites (colleges) while quota and simple random sampling techniques were employed for selecting the participants. The reason behind for selecting these colleges was that they could relatively be a good representative in offering training for a long period, and to get valuable information and for easy accessibility as compared to the rest of other colleges of teachers' education in Oromia region. From the three colleges only third year students were selected by the use of quota and simple random sampling as shown in the Table 1 below.

Table1: Sampling Techniques

College	Population			Samples		
	Female	Male	Total	Female	Male	Total
Asella	317	226	543	60	50	110
Jimma	346	326	672	75	65	140
Nekamte	260	239	499	50	45	95
Total	923	991	1914	185	160	345

Instruments

The research instruments employed for data collection were close -ended questionnaire and students Cumulative Grade Point Average (CGPA) of EGSECE and Cumulative academic achievement of students' up to fifth semester. The items of questionnaires were prepared in the form of Likert- scale Type and the level of agreement on five- point and four point scale ranging from strongly agree to strongly disagree, and institutional satisfaction level on three point satisfaction rating scale were employed to gather the required data.

Procedures

The questionnaires were partly developed and partly adopted by the researchers in consultation with other experienced instructors in English; and translated into Afan Oromo to avoid language barrier while responding the questionnaires. To ensure whether the questionnaire were free from vague and unclear items, a draft questionnaire translated into Afan Oromo were distributed to students of the same levels of the study sites.

The reliability coefficients were determined for the selected items using Cronbach alpha method of estimating reliability by the use of SPSS17.0. The Cronbach alpha reliability of the questionnaire items was 0.86, which shows that questionnaire were clear for every participant. After the validity and the reliability of instruments were checked, the revised questionnaires were distributed to samples of third year students of the three selected colleges of teachers' education.

Methods of Data Analysis

The data collected and secured from participants were structured, organized and framed to suit analysis and inferences. The data were presented using descriptive and inferential statistics. Only summarized data for inference described under result and discussion session. Based on the nature of the basic research questions the data were analyzed as follows:

1. Descriptive statistics was employed in all variables of the study
2. One-Way Analysis of Variance (ANOVA): was employed to analyze the significant differences between the respondents within the selected College and streams particularly for Likert - scale questionnaires
3. t-test: was employed to analyze the significance differences between female and male CGPA of college academic achievement and EGSECE.
4. Simple regression analysis was employed to predict major factors attributing female students academic achievement

3. Result and Discussions

From 345 samples of the study 339 questionnaires were properly responded which is 98.2% of the total sample of the study. The results of the study variables are presented in both descriptive and inferential statistics and followed with discussion. Moreover, the detailed data analysis of each items of the questionnaires are shown in the appendences.

Table 2: Analysis of Gender Difference in EGSECE and College CGPA

Variables	Gender	N	Mean	Std. Dev	t	Sig.
EGSECE CGPA	Female	184	2.1326	0.14426	-8.588	0.031*
	Male	155	2.2617	0.13005		
College CGPA	Female	184	2.4179	0.28293	-9.756	0.001*
	Male	155	2.8041	0.43988		

**shows significant level at 0.05*

As depicted in Table 2, the descriptive statistics of the study shows that CGPA of EGSECE of male students (Mean= 2.2617, St.Dev. = .13005) are better than that of female students (Mean=2.1326, St.Dev. =.14426) and CGPA of college achievements of male and female students (mean= 2.8041, St.Dev. = 0.43988) and (mean= 2.4179, St.Dev. = .28293) respectively shows that male students are performing in both at EGSECE and colleges levels than female students.

Furthermore, the inferential statistics shows that there is statistically significant difference between CGPA of EGSECE and college CGPA of male and female students ($t = -8,588$, $p = 0.031$) and ($t = -9,756$, $p = 0.001$), respectively. Moreover, the data reveals that the achievement of female students in college academic achievement is the worst as compared to EGSECE achievement. This shows that the achievement gap or disparity between female and male student is widen at college academic achievement than at high school achievements. The implication is that, even though more female students are entering into college of teachers' education with less CGPA of EGSECE, they did not show any progress in their academic performance. Some scholars agreed that the more representation of female student in college education promote their self-concept that leads to good academic achievement. However, the result of this study is in contrary that even though more female students joined the college they are performing less than male students.

Table 3: Analysis of Gender Disparity in CGPA by Stream

Streams	Gender	N	Mean	Std. Dev	T	Sig.
Language. CGPA	Female	58	2.463	.286	-6.548*	0.000
	male	31	2.934	.471		
Natural .Science. CGPA	Female	70	2.386	.292	-5.483*	0.000
	male	91	2.757	.460		
Social Science .CGPA	Female	56	2.461	.300	-4.915*	0.000
	male	33	2.880	.431		

**shows significant level at 0.05*

As shown in Table 3, male students are performing better than female students in all the three steams (language, Natural science and social science streams). This finding is in contrary to literature cited in Smith (1994) which states that academic achievement disparity is minimal between female and male students in language and social sciences as compared to natural sciences and mathematics courses. More specifically, the difference observed in natural science stream other than language and social science stream is argued with the literature review cited in (Silesia, 2000 & Tamire, 2006).

Besides Table 3 depicted, despite the fact that disparity within the stream slightly varies, the overall result shows that male students are better academic achievers than female students. More over the disparity goes beyond the expectations in some streams.

Recent researchers reported that female students academic performance in language and social science courses is better than that of male students, while male students academic performance in natural science and mathematics is better than female student (Hallan,2003 & Smith, 1994). However, this finding shows that male students' academic performance is better than that of female students in all streams.

International assessments of student achievement in reading, mathematics and science report some consistent gender patterns. The most visible and clear gender difference is the advantage of girls in language and humanity studies that encompasses social science fields or streams. This advantage is consistent across countries, different age groups, survey periods and study programs (Lafontaine & Monsieur, 2009). In mathematics, boys and girls have similar results in the fourth and eighth year of schooling in most countries. Boys' advantage emerges in the later school years and is especially noticeable among students in the same study programs or streams and year groups(Shiel, 2009).

Male advantage in science achievement is significant only for those attending the same classes and schools in most countries. Daily observations of the higher performance of boys in mathematics and science lessons might provide information on why girls have lower self-confidence in these areas and are

less inclined to choose mathematics, science and technology fields of study at tertiary level (Close & Shiel, 2009). However, the achievement disparity observed in all the three streams in Table 2 above, male students are better achievers than female students, which is in contrary to all the cited literatures (Close & Shiel, 2009, Lafontaine & Monsieur, 2009).

The above Table 3, also summaries that male students are better academic achievers than female students. The difference is statistically significant and in some cases it is beyond the expected result. One can conclude that affirmative action taken during the admission process does not have as such a meaning full intension in female academic achievements. This requires another policy that urges to mitigate disparity between male and female students in their academic achievements at college level. Furthermore the disparity of male and female student is analyzed at stream levels of each college are shown in Figures 1, 2& 3 below, respectively .

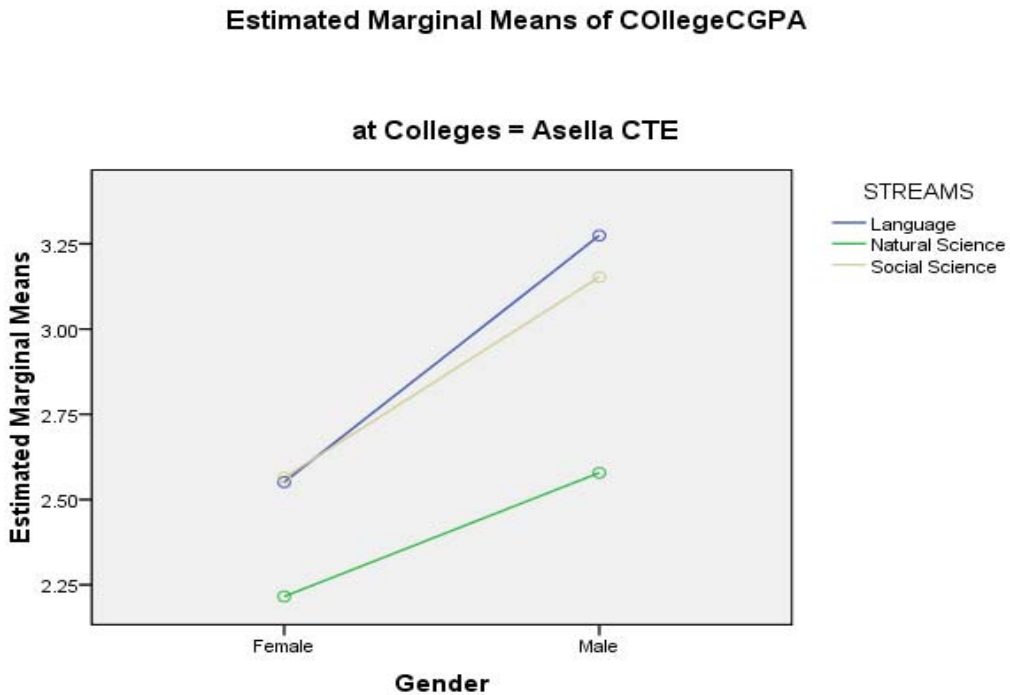


Fig1. Gender disparity in academic achievement in their respective streams in Asella CTE

It is clearly observed from Figure 1 that, male students are performing better than female students in all the three steams (language, Natural science and social science streams). In the case of Asella College of Teachers Education specifically, significant difference is observed in language and social science streams than natural science streams. This finding is in contrary to literature cited in Smith (1994) which states that academic achievement disparity is minimal between female and male students in language and social sciences as compared to natural sciences and mathematics courses.

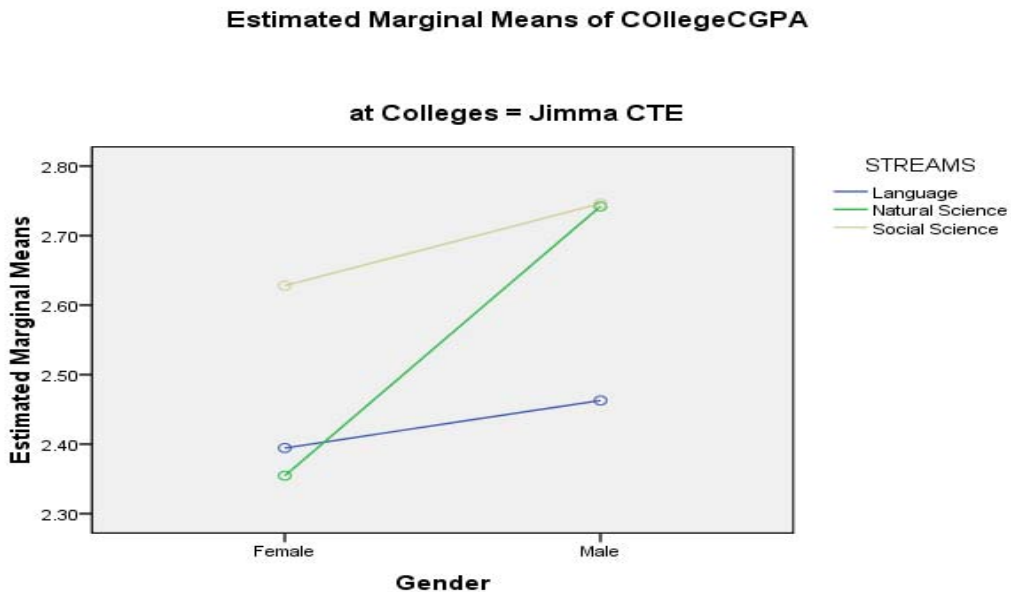


Fig. 2 Gender disparity in academic achievement in their respective streams in Jimma CTE

One can argue from figure 2, male students are performing better than female students in all the three streams (language, Natural science and social science streams) as observed in the case of Avella College of Teachers Education. More specifically, the difference observed in natural science stream when compared to language and social science stream is the worst of all which is argued with the literature review cited in Sileshi (2000) and Tamire(2006).

From figure 1 and 2 described above, despite the fact that disparity within the stream varies from college to college the overall result shows male are better academic achievers than female students.

Moreover, the disparity goes beyond the expectations in some streams. Recent researchers reported that female students' academic performance in language and social science courses is better than that of male students, while male students' academic performance in natural science and mathematics is better than female students (Hallan,2003 & Smith,1994). However this finding shows that male students' academic performance is better than that of female students in all streams.

From Figure 3 above, the same trend is observed that male students are better college academic achievers than female students in all the three streams /Language, Natural and social Science Streams/. To sum up this finding, it is in contrary to other research finding that state female students' academic achievement is better in soft sciences/ social and language areas. Even though it is difficult to conclude at this stage, surprisingly, the reverse of previous research is observed here in selected colleges of teachers' education in Oromia region. As a researcher, even though it is difficult to generalize findings with single and one case study, the differences observed in the three streams might be because of some extraneous finding like teachers quality, and educational resources available in each college must be better addressed ahead of conclusions.

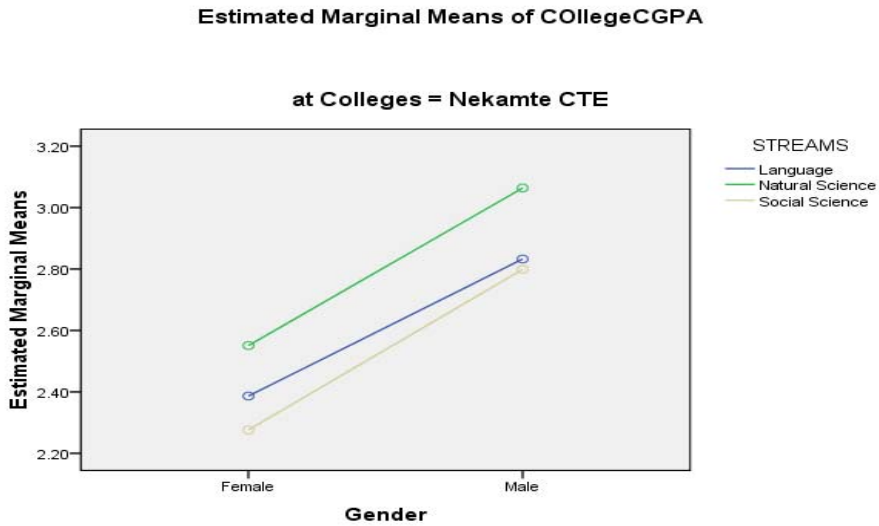


Fig.3 Gender disparity in academic achievement in their respective streams in Nekamte CTE

Figure 1, 2 & 3 summaries without any exception that male students are better academic achievers than female students. The difference is statistically significant and in some cases it is beyond the expected result. One can conclude that affirmative action taken during the admission process does not have as such a meaning full intension in female academic achievements. This requires another strategy that urges to mitigate disparity between male and female students in their academic achievements at college level. Moreover, the performance of female students were analyzed alone from the selected colleges is shown in Tables 3&4 below.

Table 4: Descriptive statistics of academic achievement of female student by college

Variables	College	N	Mean	St.Dev
College CGPA	Asella CTE	61	2.486	0.30018
	Jimma CTE	74	2.4082	0.28611
	Nekamte CTE	49	2.3966	0.24754
	Total	184	2.4306	0.28237

As observed in descriptive statistics of Table 4 above, academic achievements of female students are in the same range. All are below CGPA 2.50 (Asella CTE , Mean=2.4860, St.Dev.=.30018) , Jimma CTE(Mean= 2.4082, St.Dev.=.28611), and that of Nekamte CTE ,(mean =2.3966, St. Dev.= .28237), respectively. This result shows that similar achievement is observed among female students in each of sampled colleges of teachers' education.

Table 5 : Analysis of Variances /ANOVA/ of female students CGPA within the College

Variables		Sum of Squares	Df	Mean Square	F	Sig.
College CGPA	Between Groups	.278	2	.139	1.759	.175
	Within Groups	14.233	181	.079		
	Total	14.511	183			

From Table 5 above there is no statistically significant difference ($F=1.759$, $p>0.05$) observed between the achievements of female students in all the selected colleges. Based on Tables 4 and 5 above one can conclude that similar problems are observed in all college regarding female students' academic achievement. Furthermore, the disparity in academic achievement of female student analyzed at steam level is shown in Table 6 & 7 below.

Table 6: Descriptive Statistics of Female Students CGPA by stream

Variables	Streams	N	Mean	Standard. Dev
College CGPA	Language	87	2.4631	.28626
	Natural Science	63	2.3696	.26054
	Social Science	34	2.4614	.30094
	Total	184	2.4306	.28237

As depicted in Table 6 above, the academic achievement of female students in their respective stream are similar. For instance language stream (mean=2.4631, St.Dev. = .28626), Natural Science (mean= 2.3696, St.Dev. = 0.26054,) and Social science (mean=2.4614, St. Dev = 0.30094). Referring to Tables 2, 4 & 6 above, in all steams the CGPA of female student is below 2.50, whereas their counter parts, male students' college CGPA is above 2.75. This shows that in all streams female students academic achievements is far below that of male students.

Table 7: Analysis of Variance /ANOVA/ of female CGPA within Stream

Variables		Sum of Squares	df	Mean Square	F	Sig.
College CGPA	Between Groups	.358	2	.179	2.274	.106
	Within Groups	14.154	181	.079		
	Total	14.511	183			

As shown in Table 7, there is no statistically significant difference ($F= 2.274$, $p>0.05$) observed between academic achievements of female students in all the steams. From both Table 6 and 7, it can be argued that female students are not in favor of any stream courses. More over their performance is similar in all their tracts or streams as well as in all their respective college. Factors such as socio-economic differences, ethnic origin and language intersect with gender to influence educational performance and indeed, such social factors are more influential as students grow older to affect their academic career endeavors (Sammons, 1995). Thus, disparities in absolute attainment related to gender and socio-economic factors increased as students grew older (Sammons, 1995). Interestingly, as the achievement of female students in each college is similar, either the students might have the same social and economic

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factors or the same academic problem from the ground. The overall analysis show that male students are significantly performing than female students, in over all performances, in their college academic career in all streams.

Table 8: Analysis of variables attributing to female students academic achievement

Variables	College	N	Mean	St.Dev	F	Sig.
Gender stereotypes	Asella CTE	61	27.6167	7.11192	.663	.517
	Jimma CTE	74	29.2297	10.66623		
	Nekamte CTE	49	29.3061	8.56398		
	Total	184	28.7213	9.05380		
College admission	Asella CTE	61	18.6167	3.39037	.205	.815
	Jimma CTE	74	19.0946	4.95506		
	Nekamte CTE	49	18.9184	4.26144		
	Total	184	18.8907	4.29017		
Institutional Satisfaction	Asella CTE	61	25.3000	6.33607	.119	.888
	Jimma CTE	74	25.6757	5.56188		
	Nekamte CTE	49	25.1633	6.67504		
	Total	184	25.4153	6.10100		
Learning style	Asella CTE	61	25.8333	5.41863	.680	.508
	Jimma CTE	74	26.8243	5.25867		
	Nekamte CTE	49	26.7347	4.88951		
	Total	184	26.4754	5.20758		
Personality style	Asella CTE	61	26.5333	5.55242	3.025	.051
	Jimma CTE	74	28.9459	6.43171		
	Nekamte CTE	49	28.2041	4.61420		
	Total	184	27.9563	5.76921		
Parental style	Asella CTE	61	50.1667	11.19650	1.5200	0.221
	Jimma CTE	74	52.8649	8.43074		
	Nekamte CTE	49	50.0408	12.28305		
	Total	184	51.2240	10.52517		
Accommodations	Asella CTE	60	14.5500	5.21869	.5440	0.582
	Jimma CTE	74	13.7066	5.97746		
	Nekamte CTE	49	14.7784	7.28551		
	Total	184	14.2701	6.11419		

Table 8 above shows that there is no statistically significant difference observed among female students in the three selected colleges. The implication is that all variable attributing to gender academic achievement are equally threatening female students. Furthermore, analysis of attributing variables of female and male students' academic achievement is described in Table 9 below.

Table 9: Analysis of Variables Attributing to Gender Academic Achievement Disparity

Variable	Gender	N	Mean	Std.Dev.	t	Sig.
Gender stereotype	Female	184	28.7391	9.03227	-3.814	.000*
	Male	155	35.6516	9.83803		
Satisfaction level	Female	184	25.4076	6.08520	-2.444	.0068*
	Male	155	31.3290	5.55972		
Admission procedure	Female	184	18.8696	4.28804	1.047	.296
	Male	155	18.3355	5.10828		
Learning style	Female	184	26.4728	5.19345	-.228	.820
	Male	155	26.5935	4.41617		
Personality style	Female	184	28.6457	5.75523	-1.769	.076
	Male	155	29.7677	6.35203		
Family style	Female	184	51.2609	10.50825	-.457	.648
	Male	155	51.7548	9.15902		
Accommodation	Female	184	14.7523	6.10223	-1.155	.249
	Male	155	15.0800	6.49269		

**shows significant level at 0.05*

From Table 9 above, there is statistically significant t difference between male and female students towards gender stereotypes ($t = -3, 814, p < 0.01$) and institutional satisfaction ($t = -2, 44 \&, p < 0.05$). This shows that gender stereotype still exists among educated society, even female students are not confident enough about their future endeavors. This is still a difficult task to act on it. Whereas, in the rest of attributing variables; admission procedure ($t=1.047, p > 0.05$), learning style ($t = -0.228, p > 0.05$), personality style ($t=-1.769, p > 0.05$), family style ($t= -.457, p > .05$), accommodation ($t= -1.155, p > .05$), there is no statistically significant difference between female and male students.

Table 9 depicts that both male and female students are agreed that admission policy and affirmative action is acceptable. Moreover, learning style, personality and family style did not have significant effects on students' academic achievements of male and female students at college level for this particular study. This is in fact true, as the backgrounds of the students are from similar social and cultural groups. Even though similar responses observed between female and male students towards accommodation issues ($t= -1.155, p > .05$), the descriptive statistics of both male and female students do not agree towards the accommodation issues. This implies that the problem is similar for both male and female students. Therefore, it is easy to argue that accommodation issue equally threatening male and female students in affecting their academic achievement.

Table 10: Regression Analysis of Attributing Variables

Variables	Regression coefficient	Level of significance
Gender stereotypes	-0.950	0.0031*
Admission procedure	0.361	0.2741
Institutional satisfaction	-0.741	0.0072*
Learning style	-0.001	0.8430
Personality style	-0.263	0.0641
Parental style	-0.036	0.0742
Accommodation	-0.871	0.0016*

**shows significant level at 0.05*

The regression analysis shows the relation of gender stereotypes, admission procedure, institutional satisfaction, learning style, personality style, parental style and accommodation related to academic achievement of female students. From the result of regression analysis gender stereotypes, institutional satisfaction, and accommodation, factors are playing a dominant role in affecting female students' academic achievement. Whereas the rest of variables like admission procedures, learning and personality styles do not significantly affect female students' academic achievements. According to Wood (1987), education as the main instrument in producing equal life chances is unwise because, it would require the precondition. In a society where girls and women are viewed as unequal to boys and men, there should be a possibility for schools to compensate and so equalize girls' life chances. Interestingly, this study is also argued with the findings of Wood (1987), that institutions have responsibility to compensate matters pertaining female students academic performance by mitigating gender stereotypes and improving institutional satisfaction.

4. Conclusions

The main objective of this study was to reveal gender disparity in academic achievement at college level. Accordingly, a number of attributing variables associated with academic achievement of female students at college level have been thoroughly analyzed.

The result of the study revealed that female students are well represented in colleges of teachers' education. They account 52 % of the total population of college students. The implication is that female student's participation rate at colleges of teachers education is due to the affirmative action taken during admission procedures. This result is encouraged achievements that reduce hesitation of higher education participation of female students in recent study (Tesfaye, 2004). Researchers (Marsh, Koller & Baumert, 2001) repeatedly reported that under presentation causes low self concept which in turn causes low academic achievement. Furthermore female with low self concept have had low academic achievement in mathematics, physics and chemistry courses (Demewoz, 2005).

In contrary to the study (Marsh, Koller, Baumert, 2001), the current study clearly demonstrated that the well presentation of female students in colleges of teachers education doesn't show any progress in their academic performances as compared to that of male student. Moreover, the disparity in academic achievement between male and female students not bounded only in hard sciences like mathematics, physics and chemistry, but in soft courses like social sciences and even like language courses. The findings of the study have proven that there is statistically significant difference between male and female students in college academic achievements. The difference is statistically significant in respective of their specialization. From the t-test analysis, statistically significant difference in EGSECE GPA of male and female students during admission was observed. This is in fact because of positive discrimination made during admission procedures. However, while remedial action in each college is not well structured, disparity in academic achievement between male and female student in college performance became the worst as compared to EGSECE GPA.

The regression analysis indicated that gender stereotype, institutional satisfaction, and accommodation issues significantly affect female students' academic achievement. All other variables under this study are equally threatening both male and female students in their life span of college duration. Hence, from the result of the study, it can be argued that female students are well represented in college of teachers' education. However, they are performing less than male students. The difference is statistically significant in all courses of streams. Thus, the underlying causes of female students lower academic achievement are among others, attributing variable like appropriate support at institutional level, low self-concept as a result of perceived gender stereotype considered to play a dominant role for low achievements' of female students at college level. Unless and otherwise these issues mitigated, the marked difference in academic achievement between male and female students continuous. Therefore,

it needs policy intervention to minimize the marked difference in academic achievements of male and female students.

Other research findings show that academic achievement is associated with academic self-concept, which will be developed by female students' representation in college (Baumert, 2001). In this study the more representation of female students in college does not reveal their academic competence and female students academic achievement significantly lower than that of male students both in EGSECE CGPA and college performance CGPA. The implication is that female students admitted in to colleges of teachers education with low CGPA of EGSECE continued with the same trend even lower than that CGPA of EGSECE as compared to their College.

In conclusion, the findings of this study shows that female students are less academic achievers than male students in colleges of teachers education in all the three stream (Language, social Science and Natural Science) which is in some cases in contrary to the recent research output. Some attributing variables in this particular study have been identified quantitatively. However, it is commendable to re-analyze the variables qualitatively in another research for the general conclusions.

Implications

On the bases of this study, the following implications have been made.

1. In order to eliminate gender stereotype, raising female students' self-confidence or self-esteem ahead of college admission at high school level should be a policy mandatory through revision school texts and reading display materials.
2. Affirmative action taken during admission of students into colleges of teachers' education should be re-visited by regional education bureau and colleges of teachers education, i.e. the interest and academic performance of female students are better predictors of their college academic achievements.
3. Affirmative action taken during admission of students into colleges of teachers' education should be followed with remedial action in each department of colleges of teachers' education.
4. Gender office, guidance and counseling at college level shall be involved as criteria for evaluation in colleges of teachers education to ensure female students academic achievement
5. Gender equity should be one priority area in academic achievement than mere simple representation of female student in colleges of teacher education.
6. It is very clear to observe that colleges of teacher education should employ gender sensitive by induction program about college education.
7. It is necessary that regional education bureau and colleges should work towards realizing a fifty-fifty gender balance in the teaching force/personnel/ at college level to develop self-concepts of female student.
8. In order to improve institutional satisfaction level, female trainees should also get a continuous support throughout the training time in departmentalized system within colleges of teachers' education.

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