The Gender Perspective of Academic Performance of Students Nexus Instructors' Performance in College of Business and Economics, Ambo University

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Abstract

This study is intended to analyze instructors' performance in teaching learning-process vis-a-vis academic performance of students from gender perspectives. To achieve these objectives, both primary and secondary data were collected. The primary data were obtained using questionnaire designed to assess instructors' performance in teaching learning process. Moreover, focus group discussion was conducted with students from all departments incorporating both male and female representatives. Stratified random sampling technique was used with 15% of students in the College of Business and Economics taken as respondents. Nearly 50% of instructors were randomly taken to be assessed by instructors. Moreover, secondary data were obtained from students' academic report of 2011/12 in the first semester. Qualitative and quantitative survey was used as a design of the research. Statistical tests have been made using chi-square and t- test employing SPSS as a tool. It was found that the academic performance of students is relatively poor in aggregate and male students performed better than their female counterparts. The performance difference between male and female students was tested to be statistically significant. The teaching learning performance of instructors is rated to be very high (88.6%) and the response of male and female students about instructors' performance is not significantly different.

Key words: Academic performance, Gender education, Teaching Learning process

Introduction

Education quality influences what students learn, how well they learn and what benefits they draw from their education. Whether a particular education system is of high or low quality can be judged in terms of input, output and process. However, much discussion of educational quality is focused on only system inputs in terms of the provision of teachers, teaching materials and other facilities, and on output in terms of students' achievement (Derebssa, 2006).

Improving the quality of education through improving the teaching-learning process is assumed to be cost-effective than through improving system input which is more difficult

for countries like Ethiopia. Realizing this fact, parallel with the rapid expansion of the education system the government called for improving quality of education by employing interactive teaching and learning process (Dejene & Schippers, 2007).

According to Barrow & Leu, (2006), process quality factors relate to teachers' and students' activities and interactions in the classroom. This shows that for the teaching learning process to be of higher quality, students and teachers should take part in the process actively.

A teaching strategy is not just about the activities of teachers, although that will be one component. It is actually a plan for someone else's learning, and it embodies the presentations which the teacher might make, the exercises and activities designed for students, materials which will be supplied or suggested for students to work with, and ways in which evidence of their understanding and ability will be collected. A teaching strategy means all of the activities and resources that a teacher plans in order to enable students to learn (Derebssa, 2006).

As found out by Heritage (2010) assessment, as the component of process dimension of education quality has two essential purposes: to provide information on students' current levels of achievement and to inform what teachers should do in classrooms to ensure that students make progress toward desired outcomes. The first purpose has been paid attention in recent years, especially in accountability contexts, where measuring student achievement in relation to standards has been of primary importance. Despite its centrality to effective practice in the classroom, the second purpose has attracted rather less attention.

The default assumption has apparently been that teachers will determine what needs to be done next, to move learning forward, using the assessment information about students' present achievement levels. Historically, there have been two main approaches to educational gender or sex differences in western cultures. The first is that social and cultural difference between men and women is seen as biological, natural and therefore unchanging. In many cultures and at many periods in history, this perspective went unchallenged, supported by a large literature focusing on women's inferiority. For example, in nineteenth-century Britain, males and females were expected to take up separate roles in society: men were associated with the public sphere and women with the private (Vicinus, 1972). So-called scientific studies were published that 'proved' that if women entered universities, their reproductive capabilities would be harmed (Delamont & Duffin, 1978). A twentieth century development of this perspective is that differences in behaviour between the sexes stem from innate biological differences between girls and boys.

Some literature survey on gender differences in academic performance at different levels indicate mixed results. However, one common finding is that females outperform their male counterparts in higher education. For instance, according various literatures viz. Leonard and Jiang (1999); Hyde and Kling, (2001); Bridgeman and Wendler, (1991); Wainer and Steinberg, (1992); Chen *et al.* (1999) and Conger and Long (2010), overall performance of female students is obviously better than that of males. This strengthens the general feeling that female students work harder and devote more time to studies than males.

Instructors are the key actors in enhancement of educational quality in any context. Consequently, in an effort to enhance the education quality, closely monitoring the instructors' performance is critical. However, it seems little/no study was made to assess the instructors' performance in teaching-learning process except for the purpose of promoting or granting scholarship for instructors. However, without conducting such study, it is hardly possible to understand what is going on, related to performance of instructors in teaching/learning process.

In most societies, men and women differ in activities they undertake, in access to and control of resources, and in participation in decision-making. And in most societies, women as a group have less access than men to resources, opportunities and decision-making (Desprez-Bouanchaud et al., 1987).

Assessment of the academic performance of male and female students is very important to selectively respond to mitigate the problem based on the result. If not, this poses difficulty to address the performance gap of male and female students, if any. Nonetheless, the study on the academic performance of male and female students was hardly conducted to determine if there is performance difference between male and female students.

Thus, this study was designed to investigate the performance of instructors' in teaching- learning and academic performance of male and female students. The result of the study is helpful because it may be used as baseline information to analyze the improvement or deterioration in the teaching learning process and academic performance of students. Hence, the study bridges the currently existing gaps.

Objectives
The general objective of this study is to examine the teaching learning performance of instructors and the academic performance difference of male and female regular undergraduate students of College of Business and Economics, Ambo University.

Specific objectives

Specific objectives of the study are:

- To determine the academic performance difference of male and female regular undergraduate students of college of Business and Economics, Ambo University.
- To analyse the teaching, learning and assessment performance of instructors from students perspective.
- To find out the response difference of male and female students about the performance of instructors regarding teaching and learning.
- To analyze the academic performance of students related to teaching learning performance of instructors.

Research hypotheses

H_1: Academic performances of male and female students do not vary significantly

H_2: There is no significant difference in mean response between male and female students about instructors' performance.

Materials and Methods

Research design

Qualitative and quantitative survey method has been used as the design of the research in order to address the research problem. The quantitative technique was used to analyze the Cumulative Grade Point Average (CGPA) and the data collected using the questionnaire filled by students to assess instructors' performance. Academic performance is measured using the CGPA. Other characteristics and educational outcomes such as, creativity and motivation and other factors are not considered in this study. Qualitative technique is used to account for the result of focus group discussion.

Sampling methods

The units of analysis were students and instructors of Ambo University, College of Business and Economics. The college was selected purposively. There were a total of 405(305 male and 100 female) second and third year regular undergraduate students as of the end of the first semester of 2011/12 academic year in the regular program at the college in five departments. This shows that the male to female ratio is 3:1. From each section of the entire departments and batches, 61 students or about 15% were selected based on stratified random sampling to assess the teaching learning performance of instructors. The sample respondents were stratified as male and female respondent and selected based on the fixed ratio stated above. Accordingly, 46 male and 15 female students were selected. First year students were not considered as subjects of study as they were lately admitted in the second semester in 2011/12 academic year. There were 44 instructors in the college out of which nearly 50% were selected using simple random sampling to be assessed by students and instructors were not stratified as male and female.

The students' and instructors' lists were obtained and sample respondents were taken from all sections and departments and both gender (male and female) to obtain a representative sample.

Data collection methods

Secondary and primary data were obtained for the study to be successfully carried out. Particularly, secondary data (the most recent students' cumulative grade points average (CGPA) of the entire students) were obtained from office of the registrar. The CGPA was used as a measure of academic performance of students while various books, articles, megazines and materials were referred to for secondary information. Primary data were collected using questionnaire in line with getting the opinion of students regarding teaching, learning and assessment performance of instructors. To quantify the response of students about the instructors performance, five points likert scale (*strongly agree, agree, neutral, disagree and strongly disagree*) taking value of 5 and 1 respectively. Moreover, focus group discussion was conducted with both male and female representative students of the entire departments and sections. This was used for triangulation purpose and particularly the students witnessed about their own academic performance and instructors' teaching learning performance.

The parameters for assessing instructors' performance mainly focused on teaching, learning and assessment dimensions with due regard to the new approach, i.e the constructivist approach. Precisely stating, the existing parameters were revised in line with the new approach of student centered and continuous assessment. Pilot test had been conducted in line with assessing whether the questions were clear, understandable and complete to the respondents.

Data analysis

In order to test the significance of the academic performance difference between male and female students, Chi-square was used by categorizing the academic performance proxy (CGPA) as High (as CGPA>=2.75), this is what is recognized as cut off point for graduates to compete for higher Education instructorship. Medium (as CGPA >=2.00 and less than 2.75) and Low (as CGPA<2.00), this is the cut off point for any graduate to satisfy a minimum performance level and the number (frequency) of students in each performance range is considered. The t-test was used to test whether there is significant difference in mean response of instructors' performance between male and female respondents (students).

The SPSS statistical soft ware was used to analyze the data. The responses were summarized in a frequency distribution table. The secondary data, particularly, the data that were collected using focus group

discussion were descriptively analyzed.

Results and Discussion

The results of the academic performance of male and female students in comparative form are presented below;

Comparative Analysis of Academic Performance of male and Female Atudents

Students' academic record shows that about 45% of total male population scored CGPA greater or equal to 2.75 while only 22% of total female students scored the CGPA specified.

The proportion of male students who scored CGPA of more than 2.75, which is (45%) is more than the proportion of total students scoring the same which is (39%). The proportion of female students scoring CGPA morethan 2.75 , which is 22% is much less than the proportion of total students scoring the same. On the other hand, about 9% of male students were academically warned or dismissed compared to 23% of their female counterpart. This simple descriptive indicates that male students outperform their female counterparts. This is clearly displayed (see figure 1) below:
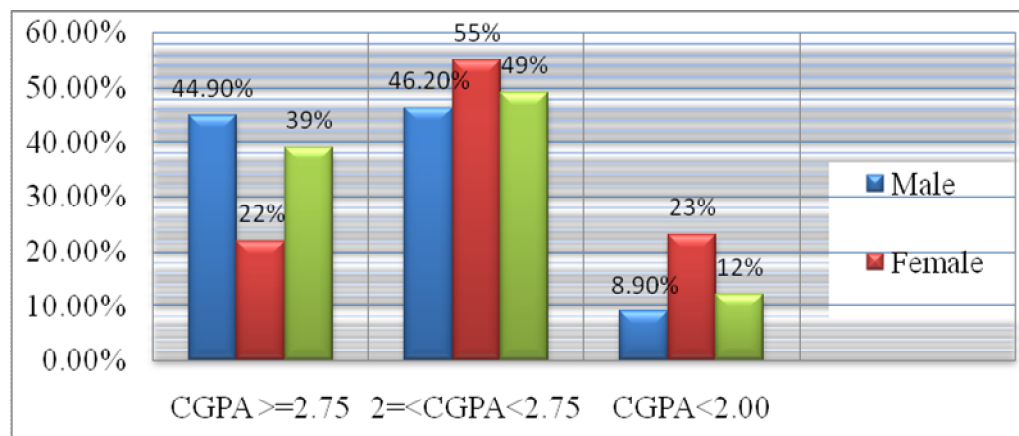

Figure 1 Percentage of male and female students achieving Academic Performance
Source: students' academic record 2011/12 academic year

The question of whether or not this difference is statistcally significant is tested using chi square statistical test.

The table above shows students' academic performance categorized in ranges between male and females, i.e academic performance is categorized

as high (CGPA=2.75), medium performance (CGPA between 2.00 and 2.75) and low CGPA less than 2.00.

The relative academic performance category and male and female students' count in each category is shown in the table below:

Table 1. Academic performance of Male and Female students count in range

Performance	Male	Female	Total
CGPA>=2.75	137	22	159
2=<CGPA<2.75	141	55	196
CGPA<2.00	27	23	50
Total	305	100	405

Source: students' academic record 2011/12 academic year
The observed frequency, expected frequency and computation of the chi square value related to academic performance of male and female students (table 2)

Table 2. Chi-square frequency table

Gender * Performances Cross tabulation

			Performances			
			High	Medium	Low	Total
Gender	Male	Count	137	141	27	305
		Expected Count	119.7	147.6	37.7	305.0
	Female	Count	22	55	23	100
		Expected Count	39.3	48.4	12.3	100.0
Total		Count	159	196	50	405
		Expected Count	159.0	196.0	50.0	405.0

The hypothesis were H_0: Academic performances of male and female students do not vary significantly, **H_a**: Academic performances of male and female students do vary significantly. The question of whether the academic performance difference is statistically significant is tested using a person Chi-square statistic (Table 3).

Table 3. Person Chi-Square test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.482[a]	2	.000
Likelihood Ratio	23.235	2	.000
N of Valid Cases	405		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 12.35.

The Pearson Chi-Square statistic is 23.482 with a *p*-value (Asymp. Sig. (2-sided) of .000. Therefore, the null hypothesis would be rejected at the α=.05 level of significance. This implies that the academic performance of male and female students vary significantly. This particularly means that male students outperform their female counterparts.

Assessment result of Instructors' performance from questionnaire

The mean response of male and female students on teaching learning performance is summarized (table 4). The grand mean performance of instructors (each sampled instructor's performance on aggregate) is 88.6%. This shows that the teaching learning performance of instructors from the students' rating perspective is very high compared to 75%, set as cut off point as minimum performance. Whether the mean response difference of male and female is statistically significant is tested. For this purpose, independent sample t-test was used.

Table 4. Mean score of male and female students' response on instructors' performance

Parameter	Mean Male students' rating out of five	Mean Male students' rating out of five
1	4.55	4.70
2	4.58	4.68
3	4.55	4.54
4	4.08	4.55
5	4.46	4.38
6	4.61	4.31
7	4.49	4.33
8	4.36	4.44
9	4.33	4.55
10	4.48	4.53
11	4.43	4.53
12	4.39	4.43
13	4.34	4.33
14	4.36	4.48
15	4.22	4.26
16	4.28	4.20
17	4.85	4.38
18	4.30	4.28
19	4.25	4.10
20	4.31	4.39
Average	4.44	4.42
Grand mean		
	4.43 =	88.6%

Source: Survey, 2011/12, College of Business and Economics, Ambo University

Mean response distribution of male and female students mentioned on y-axis for parameters mentioned from 1 to 20, on x-axis which are proxies of instructors' performance in teaching learning process whose maximum value is 5 and minimum value is 1(See figure 2 below).
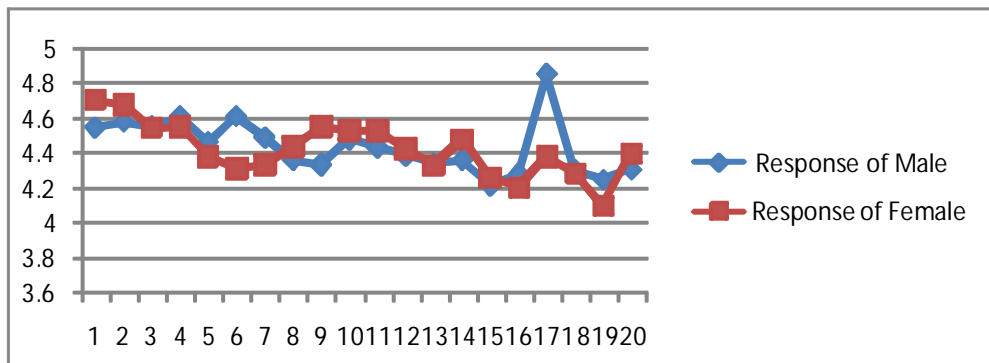
Figure 2. Distribution of mean response of male and female students on instructors' performance

Hypothesis 2.
H_0: There is no significant difference in mean response between male and female students about instructors' performance
H_a: There is significant difference in mean response between male and female student about instructors' performance

The hypothesis was tested using the t-test and the output shown in the following table (table 5)

Table 5. Group Statistics using t-test

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Response	Male	20	4.437338E0	.1558213	.0348427
	Female	20	4.417533E0	.1534541	.0343134

The Levene's test for equal variances yields a p-value of 0.947. This means that the difference between the variances is statistically insignificant and the statistics in the first row should be used because the responses are assumed to have equal variances. The p-value (**sig 2-tailed is 0.688)** is greater than 0.05, indicates that there is insignificant different between average assessment result of female and male students about instructors performance (table 6). This implies that the null hypothesis is accepted implying that the response is independent of gender. This mean there is no statistically significant difference between mean responses of male and female students about the instructors' performance.

Table 6. Independent samples test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Response	Equal variances assumed	0.005	0.947	0.405	38	0.688	0.019805	0.048902	-0.07919	0.118802
	Equal variances not assumed			0.405	37.991	0.688	0.019805	0.048902	-0.07919	0.118803

The focus group discussion has been made with students' representative of all sections comprising both male and female students to triangulate the data. Accordingly, the students freely responded to the questions particularly related to performance of students themselves, teaching learning process of instructors and female's academic performance as a separate issue.

Students' performance in teaching learning

The students agreed during discussion that some of them have weakness of internalizing the continuous assessment and student cantered approach because of attitudinal problem, i.e not believing in its purpose. As a result they failed to achieve up to expected performance.

Even if they are trying to adapt to this method, still there is the time utilization problem, particularly, they claimed devoting less than 4 hours per day for study. The students also claimed that most of them depend on short notes rather than reading books, and some other useful and relevant subject materials. This again confirms that students have still relatively poor academic performance and failure to play their own role in the teaching learning process.

Instructors' performance in teaching learning process

Students strongly argued that most instructors genuinely strive to create effective teaching learning atmosphere. Moreover, most instructors use their time effectively; most of them make the necessary preparation before coming to class; mostly they use appropriate method of teaching: inviting students to participate in class work, arrange group discussions and interactive

sessions; and adopt relevant assessment methods.

At same time the students claimed that instructors are willing to help students; willing to consult students at any outside of the class room. While instructors conduct continuous assessment as required, the active learning is a little bit not up to expectation. Nonetheless, they also claimed that there is unplanned assessment; unnecessary pace of teaching (too fast or too slow sometimes); and misuse of the continuous assessment as some failures of the instructors. From this finding, it was understood that instructors achieved the expected teaching learning performance level to bring about the desired outcome. This supports the result of the administered questionnaire and confirms that instructors have good performance.

Previous studies on gender differences in academic performance at different levels indicate mixed results. However, one common finding is that females perform better than their male counterparts in higher education. According to Leonard and Jiang (1999); Hyde and Kling, (2001); Bridgeman and Wendler, (1991); Wainer and Steinberg, (1992); Chen *et al.* (1999) and Conger and Long (2010), the overall performance of female students is definitely better than that of males. These studies also concluded that the reason for outperformance of female students is due to the fact that

female students work harder and devote more time to their studies than males.

These reports are quite contrary to the findings in this study which indicates that male students outperformed their female conterparts. According to the focus group discussion held with student representatives, female students are less self confident and have relatively lower self efficacy compared to the male counterpart Therefore, the reason for the relative poor performance of female students in this study could be due to adverse impacts of socio-cultural factors facing the female students.

Barrow & Leu (2006) in his study, had reported that teachers explained quality education in terms of student participation and how often questions are asked to build their self-confidence. He emphasized the importance of employing various teaching strategies and materials to motivate students as well as continuously assessing student performance.

The findings of this study is consistent with Barrow & Leu (2006) because the academic performance of students, based on the level of class interaction of students ultimately concluded that students have poor performance because students more or less failed to actively participate in the class.

Moreover, as found out by Heritage (2010) assessment, reports that

education quality has two essential purposes: that is to provide information on students' current levels of achievement and to inform what teachers should do in classrooms to ensure that students make progress towards desired outcome. This corroborates the present findings where the performance of instructors is assessed against assessment dimension.

Conclusion and Recommendation

Conclusions

- The academic performance of male and female students show that male students have performed better than female students and this difference is tested to be statistically significant.
- The teaching-learning performance of instructors in the college was found to be very high. The mean response difference of male and female students is statistically not significant and hence we can say that the academic performance of instructors is rated to be consistently high by male and female students.
- The overall academic performance of students was relatively poor; particularly out of 100 students about 12 students are academically warned or dismissed. Only 39% of students scored the high category academic performance (CGPA greater or equal to 2.75) and majority of students, i.e nearly 50% of them scored moderate academic performance. When we see the teaching learning performance of instructors, it seems to be mismatch as instructors performance rated to be

very high compared to relatively poor academic performance.

- The relatively poor performance of students is not attributable to performance of instructors in teaching learning process. This is supported by various literatures in that instructors may have played their role in teaching learning process while still students may perform poorly, particularly if they students are not playing their own role.

Recommendations

- The fact that academic performance of female students is relatively poor necessitates that there should be special support program for female students to capacitate and enable them to improve their academic performance. This could be in the form of critically evaluating and identifying courses for special tutorial program; providing academic and non academic counselling and mentorship as needed; arranging workshop and panel discussion to create awareness as to how to properly use time, study methods and establishing the system of cooperative learning and peer support
- To improve the relatively poor overall academic performance of students, there should be institutional determination to implement the student centred and continuous assessment methods of learning-teaching and assessment. Moreover providing timely feedback to assist them learn more. Besides, the basic facilities and services of education required should be fulfilled.
- The teaching learning and assessment performance of instructors is very encouraging. Relatively poor academic performance of students

may not be attributable to teaching learning performance of instructors. Hence the need for instructors to do more in encouraging students attitudinal changes towards learning for better performance.

Acknowledgement

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