

# **GENDER PERSPECTIVE IN STUDENTS' PERFORMANCE IN REAL ESTATE EDUCATION: THE CASE OF COVENANT UNIVERSITY STUDENTS, OTA NIGERIA**

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## **Abstract**

The value of quality formal education to the development of any nation is incontrovertible. Educational institutions need the attendance of students (either males or females) to be able to perform its role both to the individuals and the nation at large. In general, the worth and efficiency of educational institutions can be measured by their students' performance. Students' academic performance is the most appropriate basis of assessing the quality and effectiveness of teaching and this has generated great attention over the years with regards to its measurement. Gender has been identified as one of the major factors affecting the students' educational attainment. Thus, this paper seeks to carry out a comprehensive analysis of gender differences in the educational attainment of Estate Management students of Covenant University, Ota Nigeria using data for one set of graduates (2011 - 2015 Session) with a view to establish the relationship between gender and performance in the Grade Point Average (GPA) of the students. The result showed that female students performed better than their male counterparts across the five years regardless that they are fewer than the males and studying a discipline that is perceived to be dominated by the male gender. The different factors that could be responsible for this outcome are discussed. The conclusion from the study is that the result is consistent with the literatures reviewed which is that females place higher value on education and tend to be more focused and determined to succeed than their male counterpart. This is also consistent with the trend in students' academic performance in the University. The study recommended for the establishment of measures that will enhance better performance for the male students in the University.

Keywords: Students, Gender, Performance, Real Estate Education, Grade Point Average (GPA).

## **1 INTRODUCTION**

Across the world, it is imperative that both male and female have equal access to higher education because of its substantive role in the economic development of any nation. Women's movements and affirmative action groups have been clamoring over the years for equal participation of both sexes to higher education and this is now a policy priority in many countries including Nigeria (Austin & Leland, 1991). There seems to be a huge progress in this regard with the continuous rise in the participation of girls and women in educational programs across many countries of the world. Regardless that there is higher inclination towards equality in participation, there still exist gender differences in academic performance. Historically, academic performance of students of Covenant University has been one of large differences between the results of men and women with more women attaining higher class of degrees, having better cumulative grade point average (CGPA) and outperforming the men in most of the courses offered. The norm has been that more women than men perform well academically in most of the university and departmental courses.

There are different reasons for which gender differences in academic performance exist. Gender differences in academic performance could arise from the types of subjects offered by male and female students (Okafor, 2001). Gender differences could arise from unique characteristics of different individuals that are connected with achievement, such as family background, age and marital status (Njoku, 2001). The type and quality of institutions attended could also engender gender differences in academic performance. Furthermore, gender differences in academic performance can be associated with biological factors as well as psychological factors (Nwajiuba, 2011) or may be attributed to the roles men and women are expected to play which results in manifestations of gender based power and prejudice in the male dominated profession which are evident in the way students are assessed. Bradley (1993) buttressed this in his report that "there exist traces of gender bias in the student assessment methods which are more detrimental to women".

A good knowledge of the form and the factors responsible for gender differences in academic performance is highly recommended and it is of huge importance to Universities since they are expected to be answerable in terms of the quality of the teaching they provide, the overall efficiency and effectiveness of the system and a commitment to equality of opportunity. Johnes (1992) pointed out the different indicators that can be used in assessing the performance of universities and in conducting inter-institutional comparison. These includes measures of educational achievement such as students' results in the different courses and their drop-out rates (Johnes, 1992). The challenge however is that there are more studies on gender differences in academic performance at the primary and secondary level (Willitts, Anderson, Tait and Williams, 2005 and Schoon, Ingrid, Ross and Martin, 2007) with limited studies on gender performance at the tertiary level (Hyde, Lindberg, Ellis; Williams, 2008; Makhubu, 1998). Moreover, these limited studies are concentrated in the developed nations leaving a dearth of literature on gender performance in higher education in the developing nations including Nigeria. This study contributes to the literature on gender performance in higher education from the context of developing nations although it focuses on a just one program, making it difficult to apply the findings to the larger student population and various programs, it however creates room for further study in that regards.

The study displays the gender differences in the academic performance of Estate Management students which is made possible from data garnered from student records deposited with the Universities' Centre for Systems and Information Services (CSIS). Therefore using the academic record precisely their Grade Point Average (GPA), this study examines the relationship between gender and educational attainment.

## **2 LITERATURE REVIEW**

Student academic performance is a vital decisive factor in the quality of graduates produced and in the quality of the leaders who will be accountable for the growth and development of the nation. It is therefore needful that great attention be given to ensuring that students attain high in their educational pursuit. Academic performance is usually measured by examination, continuous assessment and the Grade Point Average (GPA) Assessment but there is no consensus on the best method of assessment (Pascarella and Terenzini, 1991). Students' academic performance reveals the gender differences in learning style and learning outcomes. Katharin and Horn (2005) buttressed this by stating that the educational platform best reveals the gender differences in educational attainment.

### **2.1 Gender and Performance**

The role that gender plays in the educational attainment of students has been established in different studies (Katharin and Horn, 2005; Reynolds and Stephanie, 2004). These gender differences can be associated with the aptitude and character of the individuals (Rothstein, 2004). There is the tendency for students with high intelligent quotient (IQ) test and those who are extremely meticulous to have high educational outcomes (Prince, 1993). Studies have shown that female students perform better academically than males in higher education (Hijazi & Naqvi, 2006; Reynolds and Stephanie, 2004). One reason attributed to this is that female students tend to be more focused and attend classes more frequently than the males. Similarly, several theories have tried to expatiate on the female's higher educational attainment over the males. Some of such theories include: Chodorow's (1978) psychoanalytic feminist theory, Gilligan's (1982) theory of women's development, and Coleman's (1988) concept of social capital. These theories concluded that females attain higher grades than their male counterpart because females tend to align faster and easily with expectations and norms of the society, associations and organizations. Coleman's (1988) concept of social capital theory also attested to the above by stating that female's social interactions in clubs or groups tends to impact on their academic achievement more than male students. Chee, Pino and Smith (2005) is of similar opinion that female students' higher GPAs results is the outcome of their social relationships. This helps to modify their attitudes and behaviors for learning and helps them conform to the academic ethic. Some other studies examined performance from the angle of the students emotional stability to handle stress and noted that female students tend to show more emotional distress that pushes them to devote more time and resources to their studies (Sax, Bryant, and Gilmartin, 2004; Sax and Harper, 2005). Carter and McClellan (2000) also supported the argument in favour of the women that stress help to ignite dedication and commitment in women to perform well academically, resulting in higher grades. The different style of learning is yet another factor affecting students' performance. Jacobs (1996) observed that female students tend to choose stereotypically "feminine" programs and places higher value on education.

## **2.2 Factors affecting Student Performance**

The factors affecting student performance are diverse and different from persons to places. According to Ilias, Abu Hasan, Rahman, and Yoso (2008) competence in English is a vital factor that impacts positively on students' performance. There is often appreciable increment in performance for students with good command of English. Some other factors highlighted in different studies that could impact on students' academic attainment are as follows: parental and teacher expectations and behaviors, childhood training and experience, class environment (such as class schedule, size, technology used in the class and exams systems, extra-curricular activities), student comprehension ability, motivation and the quality of secondary education obtained socio-economic factors and family education background, family and work activities and financial situation (Hijazi and Naqvi, 2006; Schreiner, 2009; Rothstein, 2004). The study carried out by Schreiner (2009) showed that ethnicity and social class of the student are factors with higher impact on students' academic outcome than gender when considered alone. Guidance and encouragement from parents, friends and teachers was highlighted by Ezeliora and Ezeokana (2010) as a factor that is able to impact on student performance through change in study habits and styles. The health of the student is also a key factor in academic success (Hijazi and Naqvi, 2006). Students' satisfaction with study facilities such as library, computer laboratory, classroom and other learning environment in the institution is a strong determinant of the educational outcome of students (Norhidayah, Kamaruzaman, Syukriah, Najah, and Syafena Andin, 2009).

## **2.3 Estate Management Program in Higher Institutions**

Estate Management program is also referred to as Surveying, Estate Surveying and Valuation, Studies in Real Property in different parts of the world. It is popularly called Estate Management in most Nigerian tertiary institutions including Covenant University, Ota. Estate Management is one of the fields in sciences and technology which is often categorized with low female enrolment across higher institutions in the world especially in developing nations particularly Nigeria. Extant literature (Salman, 2001; Oke, 2000) has shown that there is low enrolment of females in the study of Sciences, Technology, Engineering and Mathematics (STEM) programs and this has repercussion on national development. English, mathematics and science can be regarded as the essential courses for scientific and technological development of any country and these subjects are the major requirement for studies in any STEM fields including Estate Management. However, students especially females appear to have great fear for subjects and program that are science related. Little wonder, there is usually low enrolment especially on the part of the females for STEM program in which Estate Management is no exception (Salman, Yahaya and Adewara, 2011).

With regards to students' performance in STEM courses, research has also shown that although females generally performed at similar levels to males, they tend to have lower levels of interest, confidence and enjoyment in Mathematics, Physics, Chemistry and Earth sciences than the males in these subjects and these may have contributed to the reason for fewer women in STEM programs and professions (Ezeliora and Ezeokana, 2010; Martin, 2004). Several studies have also shown higher educational attainment in females above the men even in fields that are largely male-dominated (Salman, 2001; Oke, 2000). This higher performance in most cases does not culminate in female participation in the practice of such profession and this calls for concern. Similarly, the trend appears to be the same for Estate Management students as there are cases of female students diverting to other professions after graduation.

The issue on gender differences in performance especially in science-related subjects and STEM fields speaks volume on why women are not seeking careers in STEM professions including Estate Management related occupations in spite of their excellent performance in math and science subjects. Although this research seeks to establish whether there is a gender difference in academic achievement, there are many findings from literature that have established differences in performance as well as general interest in areas of discipline related to mathematics and science. It then means that educational attainment alone cannot be the main reason women consider in making their career decisions. A similar situation is mirrored among Estate Management students as many graduates especially female do not seem to further pursue a career in the profession. This research suggests that women should be well represented as the men in STEM fields and proposes this as a further research in identifying reasons why high-achieving women in science-related subjects may not be entering these professions.

### 3 RESEARCH METHODOLOGY

Covenant University is one of well established private universities in Nigeria. Its student population has been increasing from time to time. Currently, there are over 10,000 students at undergraduate and post graduate level in various modes of delivery. This student number is among the first in the class of private universities in Nigeria. The study presents an analysis of gender differences in academic performance which is made possible because of the availability of data taken from student records deposited with the Universities' Centre for Systems and Information Services (CSIS). The data used for the study is the students' Grade Point Average (GPA) for the graduates set of 2011 - 2015 session of the department of Estate Management. Crosstab and Correlation is used in the analysis to establish the relationship between gender and the students GPA. The class of degree used in Covenant University include: First Class (4.5 and Above), Second Class Upper (3.50 - 4.49), Second Class Lower (2.50 - 3.49), Third Class (1.50 - 2.49) and Pass / Probation Class (Below 1.50). The Results are shown below:

Table 1: Analysis of Students' GPA by Gender

	FIRST SEMESTER		SECOND SEMESTER	
Students' CGPA	Male N (%)	Female N (%)	Male N (%)	Female N (%)
4.50- 5.00	-	-	-	-
3.50-4.49	4 (6.3)	12 (32.4)	5 (7.4)	8 (21.6)
2.50- 3.49	15 (24.0)	17 (46.0)	24 (35.3)	23 (62.1)
1.50-2.49	26 (41.3)	4 (11.0)	31 (45.6)	4 (10.8)
Less than 1.50	17 (27.0)	-	8 (11.8)	2 (5.4)
Total	63	37	68	37
<b>SECOND YEAR</b>				
4.50- 5.00	-	1 (2.6)	-	-
3.50-4.49	7 (14.0)	16 (41.0)	5 (10.4)	15 (39.0)
2.50- 3.49	16 (31.4)	16 (4.0)	10 (21.0)	15 (39.0)
1.50-2.49	18 (35.3)	5 (13.0)	17 (35.4)	9 (23.1)
Less than 1.50	9 (18.0)	1 (2.6)	16 (33.3)	-
Total	51	39	48	39
<b>THIRD YEAR</b>				
4.50- 5.00	-	-	1 (2.4)	2 (5.4)
3.50-4.49	5 (11.9)	12 (30.0)	4 (10.0)	20 (54.1)
2.50- 3.49	15 (35.7)	15 (37.5)	14 (34.1)	9 (24.3)
1.50-2.49	13 (31.0)	5 (12.5)	13 (32.0)	6 (16.2)
Less than 1.50	9 (21.4)	2 (5.0)	9 (22.0)	-
Total	42	40	41	37
<b>FOURTH YEAR</b>				
4.50- 5.00	1 (6.0)	1 (4.3)		
3.50-4.49	3 (18.0)	10 (43.5)		
2.50- 3.49	7 (41.2)	9 (39.1)		
1.50-2.49	5 (29.4)	3 (13.0)		
Less than 1.50	-	-		
Total	17	23		
<b>FIFTH YEAR</b>				
4.50- 5.00	-	4 (17.0)	-	4 (17.0)
3.50-4.49	4 (16.0)	9 (37.5)	4 (21.0)	9 (37.5)
2.50- 3.49	9 (36.0)	9 (37.5)	9 (47.4)	9 (37.5)
1.50-2.49	4 (16.0)	2 (8.3)	3 (16.0)	2 (8.3)
Less than 1.50	4 (16.0)	-	3 (16.0)	-
Total	25	24	19	24

Table 1 above shows the results obtained from the performance differences among the male and female students using their Grade Point Average (GPA). The result shows that none of the students attained 1<sup>st</sup> class grade (4.50 - 5.00) in their first year of study. This may be traced to their freshness in the university system as they are still trying to stabilize and conform to the university education. More female students however show high performance as they attained 2<sup>nd</sup> class upper grades (3.50 - 4.49) more than their male counterparts (32.4% to 6.3% in their first semester and 21.6% to 7.4% in second semester). The female students also perform better than their male counterpart in the next grade of 2<sup>nd</sup> class lower (2.50 - 3.49) in the first semester of the first year while the male students perform slightly better than the females in the second semester (46% to 24% and 62.1% to 35.3% respectively in the first and second semester). The better performance of the female students was further reflected at the 3<sup>rd</sup> class and probation grades (1.50 - 2.49 and less than 1.50) as it shows that the female students had only 11% and 10.8% in the first and second semester while the male counterpart had 41.3% and 45.6% in the first semester and second semester respectively.

In the second year of study, only female students had 1<sup>st</sup> class grade (2.6%). The female students further showed better performance at 2<sup>nd</sup> class upper grade both in the first and the second semester (41% and 39% as compared to male with 14% and 10.4% in both semesters. The performance at 2<sup>nd</sup> class lower of the second year shows that male students perform better than their female counterpart in the first semester (31.4% to 40%) while the status quo returned in second semester with female students recording 39% while the male students recorded 21%. At the third class level, the female students also performed better than their male counterpart in both the first and the second semester (13% to 35.3% and 23% to 35%). The female students perform poorly only at the probation class with 18% to 2.6% and 33% to 0% for male and female respectively in both first and second semester.

None of the students had 1<sup>st</sup> class in the 1<sup>st</sup> semester of their third year of studies. However, both male and female students recorded 1<sup>st</sup> class in second semester with the females surpassing the male in population (5.4% to 2.4%). The female students continue to perform better than the male students at 2<sup>nd</sup> class upper grade with 30.5% and 11% and 54.1% and 10% in the first and second semester respectively. The trend continued at 2<sup>nd</sup> class lower grade in the first semester with female students performing better than the male students in their number (37.5% to 35.7%). The male students performed better in second semester with 34% to 24.3%. As a reoccurring trend, male students recorded the highest number at 3<sup>rd</sup> class grade. This shows 35.3% to 13% and 35.4% to 23.1% for male to female students in both first and second semester respectively. The same trend was also recorded at the probation grade level with 18% to 2.6% and 33% to 0% in the first and second semester respectively.

The semi-final class shows the result for the first semester alone. This is because the second semester at this level is basically used for the students industrial work experience (SIWES). The first semester at this level shows that the males performed better than female students at 1<sup>st</sup> class grade level with 6.0% to 4.3%. The male students performed better than the male at 2<sup>nd</sup> class upper grade with 43.5% to 18%. The trend changed at 2<sup>nd</sup> class lower grade with male performing better than female with 41.2% to 39.1%. Also, as a common occurrence, majority of the male students were in the 3<sup>rd</sup> class (29.4%) compared to female (13%). None of the students were in the probation class at this level.

The final year result shows that only female students were able to attain the 1<sup>st</sup> class grade level both 17% each in first and second semester. The female students maintained a leading and constant performance ahead of their male counterpart with 37.5% to 16.0% and 37.5% in both 1<sup>st</sup> and second semester at the 2<sup>nd</sup> class upper grade level. The female students continue this lead performance at 2<sup>nd</sup> class lower grade with 37.5% to 36.0% but male students performed better in second semester with 47.4% to 37.5%. The 3<sup>rd</sup> class shows a reoccurring trend of male students having majority in both first and second semester with 16.0% to 8.3% in each of the semester. Lastly, only the male students have a GPA less than 1.50 both in the first and second semester (16% in each of the semester).

Conclusively, the results show that female students perform better than their male counterpart across all levels. The poor performance of the male students which is reflected at the 3<sup>rd</sup> class grade point (1.50 - 2.49) across all the level of studies and this call for attention which is the need to be able to motivate the male students to perform well. The reason for this may not be far from the assumption that Estate Management is a field related course which does not require much of academic brilliancy and high performance to excel. The female students therefore make it a point of duty to graduate with good grades so that they can be employed in non-field related aspect of Estate Surveying and Valuation.

Table 2: Pearson Ranked Correlation

		Gender	C G P A
Gender	Pearson Correlation	1	.594(**)
	Sig. (2-tailed)		.000
	N	121	34
Mean C G P A	Pearson Correlation	.594(**)	1
	Sig. (2-tailed)	.000	
	N	34	34

\*\* Correlation is significant at the 0.01 level (2-tailed).

In order to investigate whether there is a relationship between students' gender and academic performance, Pearson' Correlation analysis was conducted using Gender and CGPA (academic performance) as the variables and the result is as presented in Table 2. The result in Table 2 reveals  $r = 0.594$  and  $p = 0.000$ . This shows that there is a positive relationship between gender and academic performance. This implies as the gender of the student changes from Male (coded 1) to Female (coded 2), there is a tendency for a better academic performance. This seems to provide support to the result in Table I indicating that female students performs better than their male counterparts in Estate Management program in Covenant University, Nigeria.

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