

GENDER INFLUENCE ON ACADEMIC PERFORMANCE OF NURSING STUDENTS IN NIGERIAN UNIVERSITIES.

Effioanwan Amanso Orji,¹ University of Nigeria, Enugu Campus, Nigeria
effioanso99@yahoo.com

Esther Patrick Archibong², University of Calabar, Calabar, Nigeria
espat@unical.edu.ng

Ngozi Phoebe Ogbonnaya³, University of Nigeria, Enugu Campus, Nigeria
ngozi.ogbonnaya@unn.edu.ng

Festus Nkpoyen⁴, University of Calabar, Calabar, Nigeria
sabenof@yahoo.com

Anthony Francis Edet⁵, University of Calabar, Calabar, Nigeria.
aeyikang@yahoo.com

Abstract: The purpose of the study aimed to examine the extent to which gender impact on academic performance of University Nursing Students in South-South and South-East Zone of Nigeria. The retrospective survey design was adopted for the study. Selection of subjects to be used for the study was done based on 275 Nursing students from University of Calabar and University of Nigeria, Enugu campus admitted in 2005/2006 and 2006/2007 academic session and who subsequently graduated in 2009/2010 and 2010/2011 academic session. Instrument used for data collection was pro-forma which went through a face and content validation by both research supervisor and other test experts. Questionnaire and FGD was used to collect students' records from the respective universities. The data collected were arranged, coded and analyzed using one-way analysis of variance (ANOVA). The hypothesis was tested at 0.05 level of significance. Findings of the study showed that demographic characteristic, in terms of gender, when considered individually does not significantly influence academic performance of university nursing students.

Keywords: Education, Gender, Academic performance, Nursing, Institution

Introduction

Academic performance and achievement grades are regarded the primary indicator of quality of education. Nevertheless, performance grades alone do not offer adequate explanation to the sources of student's positive or negative outcomes, nor cause one to suppose the way forward to make better accomplishment. It becomes imperative to assess and evaluate gender as one of the factors that can affect academic performance. The understanding of this factor is beneficial as it can suggest some standards against which quality of education is judged and improved if found otherwise. In educational institution, success is assessed by academic performance, or the ability of a student to measure up to set standards of the school and the institution. Researchers such as Ugoji (2008), and Egbule (2004) have shown that student's performance lately is fast declining, and this could be due to their confrontation with many demands of both academic and non-academic-related obligations. (Olanipekun, Shola, James, 2013). This challenge is considered an important one needing urgent and significant solution.

Since academic performances of students are determined by the quality of human resources within, various educators have tried to provide solutions to the puzzling circumstance.

Statement of the Problem

Recently, the issue of poor academic performances of students in universities and other institutions of higher learning has been of great concern to lecturers and all those who are interested in the education industry. One among the issues at stake is: Do the male and female possess equal potentials for acquiring the knowledge and skills for a variety of occupation? There is the assumption that all those admitted into the university regardless of their gender can cope with the academic demands and responsibilities, but in the contrary, some leave school prematurely without completing the University programme, some change their courses and others spend extra year(s) before completing their school years, others who manage to the finishing line of programme end up with pass and third class degrees. Why is it so? This scenario seems to suggest that performance may be an interacting factor. The problem above motivated the researcher in finding out if truly some of the demographic variables such as gender affect academic performance of Nigerian nursing students in University of Calabar and University of Nigeria, Enugu campus.

Review of Relevant Literature

Gender and academic performance:

Gender according to Anderson (2004) refers to the social attributes and opportunities associated with being male or female and the relationship between women and men and girls and boys as well as the relations between women and those between men. These attributes, opportunities and relationships are socially constructed and are learned through socialization processes. They are context/time specific and changeable. Gender determines what is expected, allowed and valued in a woman or a man in a given context. In most societies, there are differences and inequalities between women and men on responsibilities assigned, activities undertaken, access to and control over resources, as well as decision-making opportunities. Gender is part of a boarder socio-cultural context.

Gender implies the different roles, rights and responsibilities of men and women and the relation between them. Gender does not simply refer to women or men, but the way their qualities, behaviours, and identities are determined through the process of socialization. Gender is generally associated with unequal power and access to choices and resources (Alimi, Ehinola & Alabi, 2012). The different positions of women and men are influenced by historical, social, religious, economic, cultural realities. These relations and responsibilities can and do change over time. The use of the term gender also recognises the intersection of women's experience of discrimination and violation of human right not only on the basis of their genders but also from other power relation that result from race, ethnicity, caste, class, age, ability, disability, religion and a multiplicity of other factors. Women and men are defined in different way in different societies, the relation they share constitute what is known as gender relation. However, there is no known society when men and women have equal power relations. Gender relations constitute and are constructed by a range of institution such as family, legal system, or the market. Gender relations are hierarchical relations of power between women and men and always tend to be disadvantage (Greiff & Neubert, 2014).

Most students show that, on average, girls do better in school than boys. Girls get higher grades and complete high school at a higher rate compared to boys (Finn 2008), Standardized achievement test also show that females are better at spelling and perform better on test of literacy, writing, and general knowledge (National Centre for Education, 2003). An international aptitude test administered to fourth grades in 35 countries, for example, showed

that females outscored males on reading, literacy in every country. Although there was no difference between boys and girls on science test on fourth grade (International Association for evaluation Achievement). Girls continue to exhibit higher verbal ability throughout high school, but they begin to lose ground to boys after fourth grade on tests of both mathematics and science ability. The gender differences in science and mathematics achievement have implication for girl's future careers and have been a source of concern for educators everywhere.

Gender disparities in education and most importantly, in academic achievement is never a new occurrence but has existed for a long time. Evidence of researches in the area are numerous showing that girls are not performing adequate as their male counterparts in universities (Becker 2005; Finn 2008, & Erickson,2009). Aiken (2007) noted that males are highly ranked compared to female in academic achievements. The existence of gender gap in some American schools was also confirmed by Glenn (2009) who attested that there exists a wide gap between the genders at school performances. They observed from an analysis of negligible diversity which indicates that there is only moderate variation in the gender gap across schools suggesting that almost all girls had the ability to reach high achievement levels. On the other hand, Fryer and Levitt (2009) reported that the gender gap in students' result is very consistent across demographic groups and hence their basic conclusion is that there is a variation in the gender gap across schools. Kelly (2007) stated that boys are ahead of girls in the sciences with the largest difference being in mathematics and practical test.

More so, gender bias occurs whenever someone's attitude, decision and action towards an individual are based on that individual's gender. Gordon (1995) discovered that teachers of both sexes accept that the potentials of boys and girls differ according to their gender-specific natures, intellect and dispositions. Boys are portrayed by teachers as being more serious-minded with academic work, quick cognitive capacity and ability to handle difficult and demanding school responsibilities. However, Finn (2008) in a study observed that educational performances of girls and boys in Britain followed a constant pattern showing evenness of achievement of success at all levels. In the school setting boys seem to dominate interactions and discussion or question and answer sessions, whereas girls meet the expectation for their gender when they are quiet or display harmonising characters. Besides Vock., Preckel, and Holling, (2011) noted that students' achievement relies majorly on their intellectual capacities. Aitken (2004) studied 404 adults (203 men and 201 women) who completed four scales of a regulated intelligence measurement administered in groups. The findings from this study suggested that achievement had small to moderate positive complementary relationship with an intelligence factor.

Furthermore, Deary et al (2007) found that girls' performance in all academic courses was better than boys' except physics. This result showed that gender difference and its effect was real. According to Kuhn & Holling (2009), a study on test of higher level biological attainment skills among male and female students and came out with the result that female students do not perform as well as males. Meanwhile Ezewu (2003) in a study conducted to discover any difference in academic performance between the male and female, in their findings showed that males out-performed females in art subjects. This result supports the earlier discussion that the difference in performance could be due to choice of subjects. However, reports from social trend observed that boys are particularly under-represented in certain arts such as language and history.

Furthermore, James (2005) attempted to find out whether gender difference existed in the representation of male and female in mathematics class. He made use of three hundred and sixty-four (364) students and found out that the females were consistently achieving higher

than males in all the mathematics class levels but difference was not significant. Also, they found that a population of intellectually gifted children (boys) frequently retained higher status as they advance in age. Hitherto Ezewu (2003) carried out a research to find out whether gender differences exist between the sexes in their academic achievement. He used six hundred (600) subjects, three hundred (300) to each gender selected from ten mixed secondary schools. He made use of end of year examination scores from the school's records. The subjects were aged between 14-16years and were at random from the third year of the ten schools. The results indicated that boys tended to be superior to girls in Mathematics while girls were superior in English Language.

Devi and Mayur (2003) carried out a study to examine factors influencing the academic accomplishments children resident in schools. A study sample of 120 children studying in senior classes of city schools was selected. They reported that girls were ranked higher than their counterparts in academic achievement. This was evaluated based on their examination scores in the high schools.

Methodology

In this study, the researcher used retrospective survey design to investigate what differences exists between students' demographic and non-demographic characteristics and academic performance. The design was considered appropriate for use as it allows for a statistical technique for establishing the differences between variables under study. Thus, data on nursing students' demographic and non-demographic profile in the two universities are obtained with Final Cumulative Grade Point Average (FCGPA) to determine inherent differences.

The subject of this study consist of 275 nursing students. One hundred and forty-eight (148) from University of Calabar and One hundred and twenty-seven (127) from University of Nigeria, Enugu Campus that gained admission in 2005/2006 and 2006/2007 academic sessions, and who subsequently completed in 2009/2010 and 2010/2011 academic sessions respectively. All the students whose results had passed through the university Senate for approval were included in the study. Convenience selection technique was used to select those students that gained admission in the two universities in 2005/2006 and 2006/2007 academic sessions. Same technique was used to select the students that graduated in 2009/2010 and 2010/2011 academic sessions. The students' demographic and non-demographic profile was sorted including their Final Cumulative Grade Point Average. Both UME and Direct Entry students were included in this study. In this study, pro-forma was designed by the researcher with categories of demographic and non-demographic profile inscribed, including the column for year of graduation and FCGPA which was used as a proxy for academic performance. Data from the pro-forma was sorted, coded and analysed using Independent T-test statistical analysis.

Results

A total of two hundred and seventy-five (275) students from the two universities, who were registered between 200/2006, and 2006/2007 academic session and graduated in 2009/2010 and 2010/2011 academic session had their final CGPA at the completion of their study. Their age range was 20-6years with mean and standard deviation of 32.7 ± 7.9 .

Table 1: Demographic distribution of the respondents

Demographic characteristics	No of Respondents	Percentage
Gender		
Male	50	18.2%
Female	225	81.8%
Age (yrs)		
20-29	120	34.6%
30-39	102	37.1%
40-49	33	12.0%
50 & above	20	7.3%
Mode of Entry		
DE	115	41.8%
UME	160	58.2%
Religion		
Christianity	275	100
Marital status		
Married	90	32.7%
Single	185	67.3%

Source: Field work, 2019

From Table 1 on the demographic distribution of the respondents, their gender showed that majority of students 225 (81.8%) were female, while only 50 (18.2%) of them were male. Their age group showed that 120 (46.6%) of them were 20-29 years, 102(37.1) % of them were 30-39yrs, 33 (12.0%) of them were 40-49yrs, while 20 (7.3%) of them were 50yrs & above. Their mode of entry showed that 115 (41.8%) of them were DE, while 160 (58.2%) of them were through UME. All of them (100%) were Christians, while 90 (32.7%) of them were married and 185 (67.3%) of them were single.

Hypothesis: There is no significant difference in the academic performance of male and female students. The hypothesis was tested using independent T-test. The result is presented in Table 2

Table 2: Showing Gender and Academic performance of Nursing Student.

Gender	N	Mean	Std. Dev	t-test	df	P-value
Male	50	2.93	0.60	-0.276	273	0.783
Female	225	2.95	0.57			

The result on Table 2 shows gender and academic performance of Nursing students. The result revealed that there is no significant disparity in the academic performance of male and female students (P>0.05). The hypothesis was hereby accepted. This implies that even though the male had mean performance of 2.93±0.60 and the female had 2.95±0.57, their performance was not significantly different.

Discussion of the Findings

Influence of Gender on Academic Performance of Nursing Students

The findings from the study showed that gender does not significantly influence academic performance of nursing students. This study lends credence to National Centre for Education (2003) in the result of their study which revealed that an internal aptitude test administered to fourth grade in 35 countries, female scored more than male in reading literacy in every country. Although there was no significant difference between boys and girls in sciences while higher verbal ability was observed in girls throughout high school, they lose grounds to boys after fourth grade on test in both mathematics and science ability.

Although Lynn (2004) in his study, found out that males have larger brain size than female and therefore would be expected to have higher intellectual ability; Mackintosh (1998) in addition claimed that there is no sex difference in general intellect. Flynn (1998) also examined two tests administered by Israeli Defense Forces which qualify IQ test came up with a result that there is no sex difference. This further supports the result of the findings in this study. The result of this findings was further supported by young and Anderson (2004) as they examined SAT-M score and found male to score better than female but further noted that the differences in scores was not as a result of gender but as a result of economic status of both sexes. Also Hyde and Mertz (2009) in their studies reported that there is no significant gender disparity among students of Asian American in Minnesota. This view also added support to the findings of this study. Meanwhile, Ezewu (2003) in support of this study discovered that the difference in academic performance of male and female students could be due to choice of subjects not sex.

Alimi, Ehinola & Alabi (2012) further supported this study as he observed that there were no major or noticeable differences concerning parent-child relationship and academic performances. Boys and girls involved in the study showed apparently uniform relationship. Greiff & Neubert (2014) also supported the findings that significant difference was found in boys and girls as it relates to academic self confidence

Conclusion

The study assessed demographic and non-demographic characteristics and academic performance of nursing students in University of Calabar and University of Nigeria, Enugu campus. The influence of the demographic and non-demographic characteristics was investigated.

The following conclusions were drawn based on the finding of the study.

1. There was no significant difference between demographic characteristics of gender and academic performance of nursing students.
2. Availability of quite a number of factors such as conducive learning environment, quality and effective teachers etc. will enhance learning rather than looking at the concept of gender. Therefore, government and school managers should take this into consideration.
3. Every student should be considered and given equal opportunity and regards in a learning environment. This is because an individual who is determined to perform well in an examination can always do so, irrespective of gender status or otherwise.

REFERENCES

- Aiken, Lewis 2007. Intellectual variables of mathematics achievement. *Research Journal of School Psychology*, 9, 201-206. <https://doi.org/10.1016/02002>.
- Anderson, Mann 2004. Sex differences in general intelligence. In: R.L. Gregory (ed.), *The Oxford Companion to the Mind*. Oxford. Oxford University Press.
- Aitken, Harris 2004. Measured intelligence achievement, openness to experience and creativity. *Personality and Individual Differences*. 36(4) 913-929. <https://doi.org/10.1016/109905>.
- Alimi, Sabitu, Ehinola, Babatunde, Alabi, Oluwole 2012. International Education studies. *Academic Journal*. 5 (3) 44. <http://dx.doi.org/10.5539/ies.v5n3p44>
- Becker, John 2005. Differential treatment of females and males in mathematics classes. *Journal of Research in Mathematics Education*, 12 (3) 40-53
- Capon, Alison, Handley, Simon & Ian, Denis 2003. Working memory and reasoning; An individual differences Perspective 9(3) 203-244 <http://doi.org/10.1080/135467>

- Devi, Saritha & Mayuri, K. 2003. The Effects of family and school on the academic achievement of residential school children. *Journal of Community Guidance and Research* 20 (2): 139-148: <http://dx.doi.org/10.21013/jems.v7.n3.p3>
- Deary, Ian, Strand, Steve, Smith, Pauline. & Fernandis, Cres 2007. Intelligence and educational Achievement, *Intelligence* 35 (1), 13-21. <https://doi.org/10.1016/j.intell.2006.02.001>
- Egbule, Joseph 2004. *Developmental psychology*. Benin City: Justice Jeco Publishers Ltd.
- Erickson, Gaalen 2009. Females and science achievement. *Journal of Science Education*, 6B (2), 63-89.
- Ezewu, Edward 2003. A study of sex differences in Academic achievement of secondary schools. *The Counsellor*. 3(2). 102.
- Finn, Jeremy 2008. Sex difference in educational attainment. *Harvard Education Review* 49(4), 477-503.
- Flynn, James 1998. Israeli military IQ tests: Gender differences small; IQ gains large. *Journal of Biosocial Science*, 30(4), 541-553. <https://doi.org/10.1017/S0021932098005410>
- Fryer, Roland & Levitte, Steven 2009. An empirical Analysis of the gender gap in mathematics. *American Economic Journal*. 2 (2) 210-240,
- Glenn, Ellison 2009. The gender gap in secondary school mathematics at high achievement levels. Evidence from American mathematics competition. *Journal of Economic Perspective*. American Economic Association 24(2), 109-128.
- Greiff, Samuel & Neubert, Jonas 2014. On the relation of complex problem solving, personality, fluid intelligence and academic achievement. *Learning and Individual Differences* 36(1), 37-48 <http://doi.org/10.1016/j.lindif.2014.08.003>
- Gordon, Dickson (1995). Causes and consequences of Girls under Achievement: The influence of teacher attitude and expectations on the performance of secondary school girls. UNICEF, Harare.
- Hyde, Janet & Mertz, Janet (2009). Gender, culture, and mathematics performance. *Proceedings of the National Academy of science*, 106 (22), 8801-8807. *International Journal of Academic Research in Progressive Education and Development* 2012, 1 (3), 226-348. DOI: 10.6007/IJARPED
- James, Allen (2005). Grades as valid measures of academic achievement of classroom learning. *Clearing House Journal of Educational Strategies Issues and Ideas* 78 (5) 218-223, doi: 10.3200/TCHS.78.5.218-223
- Kelly, Joan 2007. Children's adjustment in conflicted marriage and divorce. *A decade review of research journal of the American Academy of child and Adolescent psychiatry*, 39, 963-973. <http://dx.doi.org/10.1097/00004583-200008000-00007>.
- Kuhn, Jorg-Tobias., and Holling, Heinz. (2009). Gender, reasoning ability, and scholastic achievement: a multilevel mediation analysis. *Learning Individual Differences*. 19, 229-233. doi: 10.1016/j.lindif.2008.11.007
- Kumari, Ashwini., Devi, Saritha., & Mayuri, K. 2017. Family Factors and Academic Achievement: A Comparative Study of Residential School Children and Rural Government School Children. *IRA International Journal of Education and Multidisciplinary Studies* 7(3), 245-256, 190199. doi:<http://dx.doi.org/10.21013/jems.v7.n3.p3>
- Lynn, Richard (2004). Sex Differences on the Progressive matrices. Some data from Hong Kong, *Journal of Biosocial Sciences*, 35 pp. 145-150. DOI:10.1017/s0021932003001457
- Mackintosh, Nicholas 1998. Reply to Lynn. *Journal of Biosocial Sciences* 30 (4), 533-539 DOI: <https://doi.org/10.1017/S0021932098005331>

- Olanipekun, Shola Sunday, James Andokari Zaku, 2013. Gender Analysis of Students' Entry Qualification in English Language in Colleges of Education in Kwara State, *International Journal of Secondary Education*. 1 (5), 23-25. doi: 10.11648/j.ijsedu.20130105.12
- Ugoji, Florence 2008. The impact of counseling on the academic performance of secondary school students. *African Journal for Interdisciplinary Studies* 8(2) 67-73.
- Vock, Miriam., Preckel, Franzis., and Holling, Heinz. (2011). Mental abilities and school achievement: a test of a mediation hypothesis. *Intelligence* 39, 357–369. doi: 10.1016/j.intell.2011.06.006