

Influence of Gender on Students' Academic Achievement in Government Subject in Public Secondary Schools in Oredo Local Government Area of Edo State, Nigeria

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Abstract

The overall goal of this study was to provide an insight into the influence of gender on students' academic achievement in government subject in public secondary schools in Oredo Local Government Area of Edo State. Three research questions were raised to guide the study. The population of the study was made of 822 both male and female students. A total of 412 students made up the sample for the study. Multistage sampling technique was used to select the students. Ex-post-facto research design was adopted for the study. Examination proforma was the instrument used for collecting data in this study. Data was analyzed using frequency counts, percentages and proportion.

Keywords: Gender, academic achievement, government subject.

1. Introduction

Before the birth of the 6-3-3-4 system of education in Nigeria, Government subject has been part of the subjects that student offers from class III. With the introduction of the 6-3-3-4 system of education in Nigeria. Government subject is now been offered from senior secondary school one (SSS1) for both male and female in the art and social sciences in the secondary schools and also an examinable subject by West Africa Examination Council (WAEC) and National Examination Council (NECO).

Gender is the range of physical, biological, mental and behavioural characteristics pertaining to and differentiating between masculinity and femininity (Haig, 2004). Depending on the context, the term may refer to biological sex (i.e. the state of being male, female or intersex), sex based social structure (including gender roles and other social roles) or gender identity (Udry, 1994). Gender issues are currently the main focus of discussion and research all over the world, Nigeria inclusive. The question of gender is a matter of grave concern especially among academics and policy formulators. Intellectuals are worried about the role of male and female in the psychological, political, social, economic, religious, scientific and technological development of nations.

Meanwhile, concerns about academic achievement with respect to males and females have generated a considerable interest in the field of educational testing over the years. Differences in academic achievement of the two genders are likely to contribute disparities in the allocation of cognitive roles in the world of work.

Numerous studies on sex differences in cognitive performance can be found. Colom and Lynn (2004) asserted that males have larger average brain sizes than females and therefore, would be expected to have higher average IQs. Mackintosh (1998) on the other hand, claims that there is no sex difference in general intelligence. Mackintosh proposes that general intelligence should be defined as reasoning ability and that the best measure of this is the progressive matrices. Examining two tests administered by the Israel Defense Forces which qualify as IQ tests-one of them is an adaptation of progressive matrices. Flynn (1998) found no sex difference.

Investigating academic performance at pre-collegiate level, Lao (1980) found female students to obtain higher Cumulative Grade Point Average (CGPA) compared to males. Examining sex-related difference in classroom grades, Kimbell (1989) found that in contrast to standardized tests like SAT-M, female students outperform males in math classes. Willberg and Lynn (1999) arrived at a similar conclusion for history classes versus history tests. The authors explain this pattern by stating that females tend to work more conscientiously and have a stronger work ethic than males. They also tend to have better language abilities including essay writing skills, vocabulary and word fluency which contribute to better course work. Stage and Kloosterman (1995) noted that although gender differences in math achievement continue to exist on high cognitive level tasks at the high school level, such differences appear to be

declining. Young and Fidler (2000) examining SAT-M scores of high school seniors, found males to score better than females. However, they noted that males generally come from households where the parents' socioeconomic status as measured by examinee reported educational levels and income, is higher. In contrast, female test takers are more diverse and include more low-income students than the boys group. Others have argued that the content of the test or of its administration favors males (Bridgeman & Wendler, 1991). Yet other researchers have explained the gap by adhering to such factors as differences in course taking behaviour, classroom experiences and processing (Young & Fidler, 2000).

The studies conducted outside of the US present differing outcomes. Younger, Warrington and Williams (1999) focus on the gender gap in English secondary schools. Their analysis is based on the performance of boys and girls in GCSE examinations in the UK and girls are found to get better grades than boys. This phenomenon is explained by boys' disregard for authority, academic work and formal achievement, differences in students' attitudes to work and their goals and aspirations and girls' increased maturity and more effective learning strategies. Baker and Jones (1993) analyzed sex differences in the eighth grade math performance of over 77,000 students in 19 developed and developing countries. They find no evidence of a significant gender gap. Both cross-national variation in sex differences in mathematical performance and the trend toward less of a difference between males and females question any innate male superiority in intelligence. OECD (2001) analyzes gender differences in mathematics and science achievement in the eighth grade for fourteen OECD countries including Turkey. The study finds that gender differences in mathematics achievement are statistically insignificant in all countries but the Czech Republic. In science, gender differences favour males and are often statistically significant except for five countries including Turkey.

In higher education women are often found to outperform men. Hyde and Kling (2000) stated this to be the case irrespective of the measure of success used. Betts and Morell (1999) reported that sex remains a significant predictor of CGPA after controlling for various individual attributes such as ethnic background, SAT scores and the high school attended. Similarly, investigating about 60,000 students from 22 public research universities, Kim, Rhoades and Woodard (2003) find that SAT scores have a significant impact on student graduation, although at the individual level gender is a more powerful correlate of graduation than the SAT score. Women are also found to obtain better grades than would be predicted from their SAT scores (Leonard and Jiang, 1999; Hyde and Kline, 2001; Bridgeman and Wendler, 1991; Wainer and Steinberg, 1992). Many researchers claim that a large part of the under-prediction derives from the difference in course taking patterns of male and female college students. Ruling out differential course selection as an explanation for the under-prediction of female grades, Leonard and Jiang (1999) suggested that females have better study skills than the male students. Other researchers have argued that women receive higher grades than men because they work harder and attend class more frequently (Wainer & Steinberg, 1992).

Investigating success in terms of course grades, Bridgeman and Wendler (1991) found out that women typically had equal or higher grades in math classes. Wainer and Steinberg (1992) on a sample of 62,000 students concluded that although women had lower SAT-M scores, they received similar grades from first-year math courses. Cohn, Cohn, Hult, Balch and Bradley (1998) on the other hand, find gender to an insignificant determinant of success in courses on macroeconomics.

Academic achievement is the outcome of education, that is, the extent which a student, teacher or institution has achieved their educational goals. Academic achievement is commonly measured by examination or continuous assessment but there is no general agreement on how it is best tested or which aspect is most important knowledge such as facts (Annie Ward & Stoker, 1996). Individual differences have been linked to differences in intelligence and personality. Students with higher mental ability as demonstrated by IQ test and those who are higher in conscientiousness tend to achieve highly in academic setting (Annie Ward & Stoker, 1996).

There is no doubt that Government as a subject is a means of developing the learners the skills of citizenship education and acquaintance of the workings of government machinery in the larger society. Government as a subject is aimed at bringing about change in the behavior of the learners. The extent of the achievement of this aim will depend on the teacher's ability as the facilitator of knowledge, the materials he uses and the method he adopts to put across the teaching. Over the years, attempt has not been made to examine the influence of gender on students' achievement on this subject (Government). Despite the usefulness of this subject in the secondary schools, effort has been directed to mathematics, english and other science subjects to the neglect of this broad base subject, which is a core subject for those that will study law, business administration and all other courses in the humanities. To the best knowledge of the researcher, there have been know much of research efforts and knowledge base on the influence of gender on students academic achievement in "Government" as a subject in secondary schools in Oredo local Government Area of Edo State, hence the need for this study. It is hoped that, this study will provide the needed information that will assist government, school administrators, teachers, examination bodies, students and stakeholders in education to know the

performance of both male and female on the subject 'government'.

2. Purpose of the Study

The purpose of this study was to find out the influence of gender on students' academic achievement in government subject in public secondary schools in Oredo Local Government Area of Edo State.

3. Research Questions

To guide this study, the following research questions were raised.

1. What is the proportion of male and female students that obtained grade 'A' in Government subject?
2. What is the proportion of male and female students that obtained grade 'B' in Government subject?
3. What is the proportion of male and female students that obtained grade 'C' in Government subject?

4. Method and Materials

This study was made up of 412 students, male (204) and female (208). The male had a mean age of 16.79 ± 96 with the age range of 14-19 years. The female had a mean age of 15.69 ± 89 with the age range of 14-19 years.

The research design that was adopted for this study was the Ex-Post-Facto research design. This design is chosen because, the researcher has no control over certain factors or variables, or why differences exist. An attempt can only be made to find the cause or reason. The factors or variables cannot be manipulated because they already exist (Egbochukwu,1999). The population of this study comprised of all public secondary schools male and female students who enrolled and sat for government subject between 2009, 2010 and 2011 and had grade 'A', 'B' and 'C', the total population was 824 (West African Examination Council, 2009, 2010 & 2011). A total of 412 students formed the sample for the study. A multistage sampling technique was used. First, it involved stratifying the students into male and female and also into grade 'A', 'B' and 'C'. Secondly, a systematic random sampling technique was used in selecting the students into various grades, that is picking all the even numbers on the list. The research instrument that was used for this study was the examination sheet proforma. Data was collected from the Benin zonal office of the West African Examination Council. A letter was written by the researcher to the head of records and statistics who made the data available. Data was analysed using frequency counts, percentages and proportion.

5. Results and Discussion

The result of the present study are presented in table 1-3.

Research Question 1: What is the proportion of male and female students that had grade 'A' in Government subject?

Table 1: Proportion of male and female students that obtained grade 'A'

Sex	Frequency	Percentage %	Proportion
Male	70	49%	0.49
Female	73	51%	0.51
Total	143	100%	1

Data in table 1 shows that 70 male students had grade 'A' in government subject representing 49% (0.49) proportion while 73 female students had grade 'B' in government subject representing 51% (0.51) proportion.

Research Question 2: What is the proportion of male and female students that obtained grade 'B' in Government subject?

Table 2: Proportion of male and female students that obtained grade 'B'

Sex	Frequency	Percentage %	Proportion
Male	74	51%	0.51
Female	71	49%	0.49
Total	145	100%	1

Data in table 2, shows that 74 male students had grade 'B' in government subject representing 51% (0.51) proportion while 71 female students had grade 'B' in government subject representing 49% (0.49) proportion.

Research Question 3: What is the proportion of male and female students that obtained grade 'C'?

Table 3: Proportion of male and female students that obtained grade 'C'

Sex	Frequency	Percentage %	Proportion
Male	60	48%	0.48
Female	64	52%	0.52
Total	124	100%	1

Data in table 3, shows that 60 male students had grade 'C' in government subject representing 48% (0.48) proportion while 64 female students had grade 'C' in government subject representing 52% (0.52) proportion.

6. Discussion of Findings

The findings of this study provided information on the influence of gender in students' academic achievement in government subject in secondary schools in Oredo Local Government Area of Edo State. This study has helped to define the performance of male and female students who took government subject in the West African Examination Council between 2009, 2010 and 2011.

Data in table 1 revealed that 49% of male had 'A' in government subject while 51% of female had 51%. It therefore shows that female performed better than boys in this subject grade 'A'. This study agrees with the view of Lao (1980) found female students to obtain higher CGPA compared to males. Kimball (1989) found that in contrast to standardized measure of mathematics achievement tests like SAT-M, female students outperform males in math classes.

Data in table 2, shows that 51% of males had 'B' grade in government subject compared to their female counterpart with 49%. This study corroborated with the view of Young and Fisler (2000) examining SAT-M scores of high school senior, found males to score better than females.

Data in table 3, indicated that 48% of males had grade 'C' in government subject while 52% of female had grade 'C'. This shows that the female students outclassed their male counterpart in grade 'C' in government subject. This study is in agreement with Wilberg and Lynn (1999) arrived at a similar conclusion for history classes versus history tests. The authors explained this pattern by stating that females tend to work more conscientiously and have a stronger work ethic than males. They also tend to have better language abilities including essay writing skills, vocabulary and word fluency which contribute to better course work.

7. Conclusion

There is no doubt that, there is gender difference in academic achievement, this study further proved that, there exist a difference. Although in some cases the differences are insignificant.

8. Recommendations

Based on the submission above, the following recommendations were made:

1. Government should provide more man power (teachers) to handle or teach this subject in secondary schools.
2. School authorities should encouraged male and female students to enroll this subject in secondary schools.
3. Male students should brace up and take this subject seriously.

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