

Effect of Gender on Academic Achievement of Low Achievers in Keyboarding In Secondary Schools in Anambra State

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Abstract: Gender disparity on the academic achievement of students necessitated the study to determine the effect of gender on the academic achievement of low achievers in keyboarding in secondary schools in Anambra State. Secondary schools in Anambra State were chosen for the study. One research questions guided the study and one null hypothesis was tested at 0.05 level of significance. Quasi-experimental design of non-equivalent control group was adopted for the study. Population was all the 61 low achievers from public secondary school in Awka Education Zone of Anambra State. A sample of 24 low achievers was purposively selected from secondary schools that have both male and female students. Instrument for data collection was Keyboarding Achievement Test (KAT) validated by three experts with a reliability coefficient of 0.88. Mean and standard deviation was used to analyse the research question while analysis of covariance (ANCOVA) was used to test the null hypothesis. The findings revealed that there was no significant difference in the mean scores of male and female low achievers in keyboarding. Based on the findings, it was concluded that the academic achievement of low achieving students in keyboarding is not influenced by gender. The researcher recommended that all learners should be given equal opportunity and the same level of encouragement irrespective of the gender.

Keywords: Gender, Academic Achievement, Low Achievers and Keyboarding.

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Introduction

Secondary education is a type of education received after primary education and it has its own goals and objectives as stated in the National Policy on Education. A student's primary objective is his academics especially at secondary school level, because it is the stage of career building. Unfortunately, many students are leaving this stage without essential business skill and knowledge. In fact, students' academic achievement plays an important role in identifying graduates who will become great leaders and productive manpower for nations' economic and social development.

According to Obidile (2017), academic achievement can be viewed as the outcome of student's effort in an examination. In Nigeria, academic achievement is measured by grades

or by scores at the secondary school level. These grades determine whether a student will have the opportunity to continue his or her education (to move to the next higher class). Therefore, academic achievement defines whether one can take part in higher education, and based on the educational degrees one attains, influences one's vocational career after schooling. Echefu (2018) opined that academic achievement refers to the degree of success attained at the end of an academic exercise which can be conceived to mean the extent one is able to accomplish after learning has taken place. Okeke (2018) opined that academic achievement concerns how students cope with or accomplish different task given to them by their teachers thus the determinants of this dimensions are students' intelligence, personality and the socio-economic status within the academic context. Besides the relevance for an individual, academic achievement is of utmost importance for the wealth of a nation and its prosperity, yet some students perform below average and these students are termed low achievers.

Sannakkanavar (2017), low achievers are people with deficits in executive functions, which are the mental processes that control and coordinate learning-related activities. Executive function is not the same as intelligence, and people with executive function deficits experience difficulties in processing information, retaining and recalling information, organizing materials, managing time and using effective learning. Low achiever might manifest by withdrawal and refusal to participate in classroom activities or by resorting, to the use of some of the protective mechanisms to an inordinate degree (Ogundola, 2017). Notwithstanding, certain strategies could be put in place to help low achieving students improve academically. The strategies may include the teaching of vocational subjects such as wood work, electrical repairs and installation, keyboarding and so on. The present study was on keyboarding.

Keyboarding is an invaluable skill among those in the workforce, as it is used to type business correspondences, e-mails, and memos, track expenses, and create websites.<https://www.wgu.edu/info/keyboarding-education-college-student>.

Benefits of Keyboarding and Advantages of Keyboard

Some of the benefits and advantages of keyboarding includes:

1. For students, their assignments will have to be handed in typed so being able to keyboard quick would be very beneficial.
2. For most jobs, keyboarding is a good skill to have. Jobs that use computers often require keyboarding as an important skill.
<https://justinj7460.wordpress.com/2015/04/10/the-importance-of-keyboarding-2/>.
3. Keyboarding skills are very important in that they can impact a person's ability to communicate with others in the future, both in social and professional realms.
<https://www.techwalla.com/articles/importance-keyboarding-skills>
4. Most reliable way of inputting data.
5. Reliable way of inputting text and numbers.
6. Available in variety of format.

But some scholars see keyboarding as a skill based subject specifically designed for women. It is not so because according to the requirements of the Millennium Development Goals [MDGs], countries are supposed to ensure that by 2015, gender disparity in education should be eliminated especially at the secondary school levels. Unfortunately, in some developing countries like Nigeria, this objective is yet to be achieved even as at 2017. Statistics show that

90 percent of women are secretaries in most schools and offices and 10 percent for men, this shows gender disparity in keyboarding at secondary schools. Gender according to Singh (2010) refers to a socio-cultural construct that connotes the differentiated roles and responsibilities of men and women in a particular society. This definition implies that gender determines the role, which one plays in relation to general political, cultural, social and economic system of the society. Women Major Group in Obidile (2017), gender refers to the biological and physiological reality of being males or females. According to Bolarinwa (2017), gender refers to sex status of the students which is either male or female. Okeke (2008) noted that there are many challenges posed by gender on academic achievement of students where certain subjects and activities are recognized as masculine and others, feminine. For instance, in a study conducted by Amoor and Umar (2015) on the influence of demographic variables such as gender on business education students' choice of secretarial option in colleges of education revealed that more female students opted for secretarial option than male students. This was found to be based on the notion that secretarial education where keyboarding is housed is meant for female gender. Such challenges call for instructional method that will enhance academic achievement of students irrespective of gender.

In view of the above, there is indeed a need to have a re-examination of the mode of teaching and learning of keyboarding so that students especially the low achievers might apply the knowledge they acquired to real life situations. It is against this background that the researcher seeks to find out the effect of gender on the academic achievement of low achievers in keyboarding in secondary schools in Anambra State.

Statement of Problem

Many studies have been conducted to ascertain the effect of gender on academic performance of students in many subject areas. However, not much has been done in the area of keyboarding in secondary schools. It therefore becomes imperative to ascertain the effect of gender on students' academic achievement in keyboarding in secondary schools.

Purpose of the Study

The major purpose of this study was to determine the effect of gender on the academic achievement of low achievers in keyboarding in secondary schools in Anambra State. Specifically, the study sought to determine the:

1. Differences in the pretest and posttest mean achievement scores of male and female low achievers in keyboarding.

Research Question

A research question guided the study:

1. What are the differences in the pretest and posttest mean achievement scores of male and female low achievers in keyboarding?

Hypotheses

A null hypotheses was tested at 0.05 level of significance:

1. There is no significant difference in the pretest and posttest mean achievement scores of male and female low achievers in keyboarding.

Method

Quasi-experimental research design of non-equivalent control group was adopted in this study. The study was carried out in Anambra State. The population of the study was low

achievers from 61 public secondary schools in Awka Education Zone of Anambra State. The sample used for this study comprised 24 low achievers in junior secondary two (JSS2) from two community secondary schools in Awka Education Zone. Purposive sampling technique was employed to sample the zone and to sample two community secondary schools in Awka South Local Government Area of Awka Education Zone. From each school chosen, all streams in JSS2 were used. The selection of the schools was based on the following criteria: schools that have ICT teachers, schools with ICT laboratory and school with high number of low achievers. The rationale for purposively sampling of the two schools with these criteria was to ensure that, both schools were identical in terms of their characteristics and free of any variation in structure and methods of teaching. The instrument titled Keyboarding Achievement Test (KAT) was used for data collection. The KAT was selected from the JSS2 past questions between 2010 to 2016. The instrument comprised of 50 multiple choice objective test items with five answer options A-E. The instrument was validated by three experts and the reliability of the instrument was determined through test-retest reliability method. Data collected were analyzed using mean scores to answer the research questions and Analysis of Covariance [ANCOVA] to test the null hypotheses at 0.05 level of significance.

Result

Research Question 1: What are the differences in the pretest and posttest mean achievement scores of male and female low achievers in keyboarding? Result of analysis to the research question is presented in Table 1.

Table 1. Pre-test and Posttest Mean Achievement Scores of male and female low achievers in keyboarding

Gender	N	Pre-test Mean	Post-test Mean	Mean gain Decision	Gain
Male	6	32.32	55.28	22.96	No difference in effectiveness
Female	7	28.15	54.67	26.52	

Data in Table 2 show that the pre-test and post-test mean scores of male low achievers in keyboarding are 32.32 and 55.28, while the pre-test and post-test mean scores of female low achieving students are 28.15 and 54.67 respectively. The mean gain of male low achievers is 22.96 higher than that of their female counterpart which is 26.52. This implies that the mean achievement scores of male low achieving students are 3.56 higher than that of males' low achievers. Thus, gender has a significant effect on the academic achievement of males more than the female low achievers.

Hypothesis 1

There is no significant difference in the pretest and posttest mean achievement scores of male and female low achievers in keyboarding. The statistical test of the hypothesis is presented in Tables 2.

Table 2. ANCOVA on the Pretest and Posttest Mean Achievement Scores of Male and Female Low Achievers in Keyboarding

Source	Type III Sum of Squares	Df	Mean Square	F	P-value	
Corrected	104.045 ^a	2	52.022	3.356	.077	

Model						
Intercept	377.270	1	377.270	24.335	.001	
Pretest	95.325	1	95.325	6.149	.033	
Gender	7.339	1	7.339	.473	.507	Not Significant
Error	155.032	10	15.503			
Total	5784.000	13				
Corrected Total	259.077	12				

The result in the Table 2 show that there is no statistically significant difference on the pretest and posttest mean achievement scores of male and female low achievers in keyboarding using peer tutoring technique. This is because the p-value (.507) is greater than the level of significant (0.05). Based on the above, the null hypothesis is rejected, implying that there is no statistically significant difference on the pretest and posttest mean achievement scores of male and female low achievers in keyboarding.

Discussion

The findings of the study showed that the posttest mean scores of male and female low achieving students in keyboarding were close in value. Ezenwosu and Nworgu (2013) study revealed that male students slightly performed better than female students in biology. This implies that gender can evenly influence the academic achievement of both male and female low achieving students in keyboarding. In support Dania (2014) findings revealed that gender had no significant effect on academic achievement of social studies students. Similarly, the findings are in line with Ifeakor (2010) which stated that gender had no statistically significant effect on the students' achievement in government. Thus, such differences in academic achievement with respect to gender are a chance occurrence.

Conclusion

As a result of the findings of this study, it could be concluded that the academic achievement of low achieving students in keyboarding is not influenced by gender.

Recommendation

However, all learners should be given equal opportunity and the same level of encouragement irrespective of the gender.

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