

EFFECTS OF THE TYPE OF SCHOOL ATTENDED ON UNDERGRADUATE STUDENTS' ACADEMIC PERFORMANCE OF BAMIDELE OLUMILUA UNIVERSITY OF EDUCATION, SCIENCE AND TECHNOLOGY, IKERE EKITI, NIGERIA.

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Abstract

This study aimed at finding out the effects of the type of school attended on Science Education students academic performance in University of Education, Science and Technology, Ikere Ekiti.. The study sought to explore the influence of the different students' school and societal socialization experiences on their academic performance. The study used descriptive research design and two questionnaires for data collection. Descriptive statistics was used in data analysis and t-test was used to test the hypothesis. The sample consisted of 100 Science Education 100 Level students from the University. The major findings of the study were that the type of school attended affected students' academic performance as majority of the students that performed were from single-sex schools. Based on the findings, it was recommended that co-educational schools should improve on those factors that hinder their teaching-learning processes.

Key words: Coeducational schools, Single sex schools, performance, gender

Introduction

Academic performance is the extent to which a student, teacher or institution has achieved their educational goals. Thus, performance is characterized by performance on tests associated with coursework and the performance of students on other types of examinations (Kyoshiba, 2009). Various studies have been carried out on the factors that affect students' academic performance or achievement in schools, colleges and universities. Some of the factors identified and reported to have affected the academic performance of students in these different settings are: students effort, previous or prior educational performance, self-motivation, the social-economic status of the students' parents, the students' age, number of hours of study per day, admission points, different

entry qualifications, tuition trends and the students' area of residence (rural or urban) (Farooq, Chaudry, Shafq & Berhanu, 2011; Ali,, 2013).

The type of school a child attended may affect the academic performance of the student. In this regard, Kyoshaba (2009) observed that students' educational outcome and academic success is greatly influenced by the type of school which they attended. The school we attend is the institutional environment that sets the parameters of a student's learning experience. In agreement with this, Considine and Zappala (2014) reported that the type of school a child attends influences the educational outcomes, furthermore, schools have an independent effect on the students' educational attainment, and this is likely to operate through the variation of quality and attitudes. In the same vein, Ali (2013), while studying the influence of the high school attended on university performance, observed that outcomes at the university level differ according to the type of high school attended. Thus, a student's school background is positively related to his or her academic performance at an undergraduate level. In addition, he also observed that the learning outcomes and educational performance of students are strongly affected by the type of educational institution where they received their education. However, this is a function of the number of facilities a school offers, which usually determines their quality, and which in turn affects the performance and accomplishments of its students.

In a related study, Mlambo (2011) observed that for a number of institutions, student admission is based on a number of different qualifications, to the extent that students receiving instruction in the same course differ greatly in terms of their prior knowledge. This being the case, one might wonder whether other researchers totally agree that prior educational performance, admission points and different entry qualifications truly affect future academic performance. Lot of studies have been conducted in the area of students achievement and these studies identify and analyze the number of factors that affect the academic performance of the student at school, college and even at university level. Their findings identify students' effort, previous schooling, parent's educational background, family income, self-motivation of students, age of student, learning preferences and entry qualification of students as important factors that have effect on student's academic performance in different setting. The utility of these studies lies in the need to undertake corrective measures that improve the academic performance of graduate students.

It is generally assumed that the students who showed better or higher performance in the starting classes of their studies also performed better in future academic years at degree level. Everyone can be surprised with this. It is also assumed that children learning outcome and educational performance are strongly affected by the standard and type of educational institution in which students get their education. The educational environment of the school one attends sets the parameters of students' learning outcomes. Considine and Zappala (2014) showed that schools environment and teachers expectations from their students also have strong influence on student performance. Most of the teachers working in poor schools or schools having run short of basic facilities often have low performance expectations from their students and when students know that their teachers have low performance expectations from them, hence it leads to poor performance. Performance of the students is also influenced by the school in which they studied but he also said that number of facilities a school offers usually determine the quality of the school, which in turn affect the performance and accomplishment of its students.

Students from elite schools are expected to perform good because they attend these elite schools and the main reason behind is that these schools are usually very rich in resources and

facilities. Some researchers have the view that school ownership and the funds available in schools do indeed influenced the performance of the student. Hence, school ownership, provision of facilities and availability of resources in school is an important structural component of the school. Private schools due to the better funding, small sizes, serious ownership, motivated faculty and access to resources such as computers perform better than public schools. From the last two decades it has been noticed significantly that there is great addition in research literature and review material relating to indicators of academic achievement with much emphasis on this dialogue, whether traditional achievement measures of academic performance are best determinants of future academic gain at university or higher level or innovative measures.

There is much commentary on the educational outcome related to the type of institutions students have access to; that is single sex schools and coeducational schools (Meyer,2008: Riordan,2008). They stressed that environment plays an important role in explaining why students choose not to compete. For instance, girls from single-sex schools behave more competitively than do girls in coeducational schools. A study by UNESCO(2010) found out that females frequently expressed having more confidence in the single-gender setting. This study also found out that girls found it easier to contribute to oral discussions and to ask questions without being ridiculed in a single gender setting. They found out that single sex classes improve the performance of female students in Science. They also found out that girls from single-sex physics classes reported a better physics self-concept of ability than girls from coeducational classes. Single sex schooling was found to help adolescents to gain a better self-concept of ability in school subjects that are considered inappropriate for their own sex. In addition, girls attending single sex schools produced higher tertiary entrance scores than those in coeducational schools.

Most studies have indicated that boys contribute more to classroom interaction (for example, by "calling out" answers) and dominate in "hands-on" activities, such as laboratory work and computer sessions). From this perspective, the presence of boys in the classroom is seen as having a negative effect on girls" academic engagement and achievement. Other commentators have pointed to the "distraction" inherent in mixed gender educational settings for adolescent in a study carried out in single-sex schools in Malaysia they found out that boys performance in English and foreign languages, and girls performance in Mathematics and science improved in a single gender settings. The study reports the experience of 30 secondary students enrolled in single gender schools. The study reveals that in gender separate classroom, students have higher motivation and higher confidence levels which offer them better educational opportunities. The advantages of single-gender education for girls is that it helps in expanding their educational opportunities, it custom-tailors their learning and instruction, and provides them with greater autonomy, especially in heterosexual relationships (UNESCO, 2010). Arguably, the single greatest benefit of girls-only education is the greater breadth of educational opportunities and the finding that many girls score higher on their final academic scores from an all-girls" school as compared to a girl who attended traditional high school.: The four factors driving the new crisis for girls argues that at every age, girls in girl-only classrooms are more likely to explore "non-traditional" subjects such as Computer Science, Physics (or the primary school precursors to the Physical Sciences), In general, they feel better about their bodies and their body image as well as about their academic abilities. By promoting self-esteem, single-sex schools may better equip girls to fight for their human rights in gender-biased male-dominated societies (Sullivan, Joshi & Leonard, 2010).

According to Smyth (2010) critics of single-sex education argue that girls-only schools are unnatural social settings which isolate girls from boys. In well-managed co-educational environments boys and girls learn to respect and value each other's ideas. They learn to listen and communicate with one another. Isolating girls and boys in single-sex schools is considered a barrier to them developing the effective interpersonal skills they will need to function as grown-ups in their society. He argued further that single sex schools automatically expand the leadership opportunities available to both boys and girls, and they increase the odds that each sex will enter non-traditional disciplines. Girls were also found to do better in certain subject areas such as Mathematics and Science when boys are not in the class. According to UNESCO (2010) many education ministries are debating the value of coeducational classes vis-à-vis single-sex education. In single sex education, all learners are either girls or boys. The heart of most debate is whether girls will be safer and get a better education if they learn only with other girls or in mixed classes with boys. Educators have three main choices of educating girls. There can be single-sex education in separate boys' or girls' schools, co-education of girls and boys in the same classes in the same school, or mixed models. Separate boys' schools and girls' schools may also bring their students together for some joint education for sport or extra-curricular activities.

Proponents of single-sex schools argue that these schools allow girls to flourish in a way that coeducational schools may not. Some studies indicate that girls in schools with single-sex programs achieve higher learning, display more self-confidence and leadership skills, and enter male-dominated fields at a higher rate (Smyth, 2010). Studies have also shown that girls in single-sex classes are actually more likely to act outside of traditional gender roles. Boys might also feel freer to engage in pursuits they may not have considered at a coeducational school. When girls are around, they are the ones expected to take part in such non-macho pursuits. But when the girls are not in the school, boys may perceive that it is acceptable to fill those feminine roles. Single-sex schools would therefore allow some boys to transcend the gender roles that are typically assigned to them. Single-sex schools have a higher percentage of graduates who attended four year colleges and a lower percentage of graduates who attended two-year junior colleges than coeducational schools. The positive effects of single-sex schools remain substantial, even after taking into account various school-level variables such as teacher quality, the student-teacher ratio, the proportion of students receiving lunch support, and whether the schools are public or private.

Statement of the problem

There have been diverse views on the academic performance of tertiary education students based on type of secondary school attended. Some are of the opinion that private schools perform better than public or coeducational perform better than single sex schools or vice-versa. Each of these views link its argument on several hindering factors to effective teaching-learning processes. It was against this background that this research work was carried out to determine the differences in the science Education Students' academic performance that attended co-educational and single sex secondary schools in the University of Education, Science and Technology, Ikere Ekiti, Nigeria.

Purpose of the study

The purpose of this study was to investigate the effects of the type of secondary Schools attended on the academic performance of Science Education students of University of Education, Science and Technology, Ikere Ekiti, Nigeria.

The study specifically intends to investigate whether students from co-educational schools perform better than those from single sex schools.

Research Question

Is there any significant difference between the academic performance of Science Education students that attended co-educational secondary and single sex schools.

Hypothesis

Ho: There is no significant difference between the academic performance of Science Education students that attended co-educational secondary and single sex schools.

Population And Sample

The study population was made up of one hundred (100) first year Science Education students at the University of Education, Science and Technology, Ikere Ekiti, Nigeria during the 2020/2021 academic year. Of these students, forty (40) students entered the programme from single-sex secondary Schools and sixty (60) students gained admission from co-educational secondary schools (representing 40% and 60% of the population respectively) were used as the study sample. The selection of the sample was done alphabetically for both groups for reasons of convenience. This means that the first forty (40) and sixty (60) names on the list of each group were selected respectively.

Choice Of Course

Five (5) courses taught in the first year of Science Education Programme were considered for the study. These courses were: SED 101 (Foundation of Science Education), ITS 111 (General Biology for ISC), ITS 113 (General Chemistry for ISC), ITS 115 (General Physics for ISC) and EED 115 (Global Ecology). The courses were chosen because they are the core/compulsory courses taken by all first year Science Education students. The researcher used only five (5) core courses for reasons of convenience and with the assumption that similar results were likely to be obtained in other courses.

Data Collection and Analysis

The researcher obtained the students' raw scores from the department at the end of each semester. These scores constituted the data used for the study. Data were analyzed using the arithmetic means and a t-test of two independent group means. t-test was used to ascertain the homogeneity of group variance. Mean scores of Single-sex secondary schools and coeducational Schools were calculated for each course. They were used to determine the level of academic performance of each group in each course. The minimum passing mark of 40% and a maximum passing mark of 100 % for each course were used for the purposes of this study. This was in accordance with the passing mark for every course taught at the University. This means that group Mean-scores of 40% or above constitute a passing score for the group in each course.

In testing the hypothesis, the standard deviation of both groups was calculated for each course. A t-test was used to test for the significance of differences in academic performance between the two groups. All t-tests were two-tailed and conducted at a 5% level of significance.

Testing of Hypothesis

Ho: there is no significant difference between academic performance of Science Education students that attended single sex secondary schools and co-educational schools.

In testing the hypothesis, the mean total score and standard errors obtained on the academic performance of students that attended single sex secondary schools and those from co-educational schools were subjected to t-test analysis at 0.05 level of significance.

Table 1: the t-test showing academic performance of students that attended single sex secondary schools and co educational schools among University students in Ikere Ekiti.

Group	N	Mean	Variances	Standard error	df	t-cal	t-tab	Results
Single-sex schools	40	65	06	0.6082	98	14.79	1.98	Significant at P<0.05
Co-educational schools	60	56	16					

Results And Discussion Of Findings

Table 1 shows that the mean score of respondents from single sex schools is 65 with variance of 6, while the mean score of respondents from co-educational is 56 with variance of 16. The t-calculated is 14.79 while the table value is 1.98 thus the t-cal is greater than t-tab value, therefore the null hypothesis is rejected. This implies that there is a significant difference between the academic performance of students that attended single sex secondary schools and co-educational schools among University students in Ikere Ekiti.

This is in accordance to the submission of Sullivan, Joshi and Leo (2010) who stated that students that attend single sex schools tend to perform better than other counterparts who attended mixed gender schools. This was supported by Smyth (2010) who shared same opinion. The significant difference in the level of academic performance between the two groups could be attributed to the difference in academic background of the type of schools they attended. While one group attended single sex secondary schools, the other attended Co-educational school. This finding is consistent with results reported by Kyoshiba (2009); Considine and Zappala who collectively and separately agreed that educational outcomes and academic performance was greatly influenced by the type of school a student attended, and that schools have an independent effect on a student's educational attainment.

Another factor that could contribute to the difference in the level of performance between the two groups is that the secondary school students, apart from taking many subjects at the Junior Senior Secondary School, are also exposed to curricula offerings which begin to focus their attention and interest toward future career goals. Furthermore, secondary school education broadens the students' interest, knowledge and outlook and makes them appreciate the relevance of education in their lives.

Conclusion

It was concluded from the findings that the effects of type of school attended on academic performance of science Education students were unequal, with the single secondary schools group having a noticeable edge in academic performance over the co-education school group. There was also a statistically significant difference in the performance of both groups in the five courses at the 5% level of significance. Based on the fact that the single sex secondary school group performed academically better than the co-educational group, the researcher recommends that:

- Lecturers should ensure that the co-educational group improve their academic performance by improving on the their area they are lacking behind.
- The University should provide both lecturers and students with tools, equipment and other instructional aides to improve academic performance.
- Students (especially co-educational group) should be advised to work harder to improve their academic performance.

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