
INFLUENCE OF PARENTS' SOCIO-ECONOMIC STATUS ON THE ACADEMIC ACHIEVEMENT IN BIOLOGY OF PUBLIC SENIOR SECONDARY SCHOOL STUDENTS IN ORLU LGA IMO STATE

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ABSTRACT: *The study was carried out to investigate the effect of parents' socio-economic status on the academic achievement in biology of public senior secondary school students in Orlu LGA Imo state. Descriptive research design survey was used. The population of the study comprises of senior secondary school students of the selected school. The sample consisted of 200 students from 10 secondary schools randomly selected for the study. The instruments used for the study is a self-designed questionnaire and inventory to collect students' results. Validity of the instrument was ascertained through face and content validity. Reliability co-efficient of 0.70 was obtained. Three hypotheses were formulated and tested at 0.05 level of significance. The data were analyzed using chi-square statistical tools. Conclusions drawn from the analyses indicate that parents' socio-economic status influenced the academic achievement in biology of public senior secondary school students in Orlu LGA Imo state. It is therefore recommended that parents without proper educational background should endeavour to send their children to extra lessons after school hours/days, by weekends and during holidays to improve their academic performance. Also, parents with high socio-economic status should assist schools in area of educational developments, setting up of laboratories and libraries in schools. More so, government should embark on programmes or formulate policies that can bridge the gaps between children of the rich and the poor in their academic pursuit. Churches, government and non-government organizations should introduce scholarship scheme to assist less privilege students; basic and social amenities should also be provided in all public schools by the government to ensure that standards are maintained.*

KEYWORDS: Socio-Economic Status, Academic Achievement, Biology, Public Secondary School, Students, Parent.

INTRODUCTION

Education is a process by which the mind of human being develops through learning at homes, streets, religious institutions like churches and mosques, schools, colleges or universities. It is also a process whereby a person develops attitudes and abilities that are considered to have value and relevance in the society. It is the best legacy a nation can give to her citizens especially the youth. Every nation hoping to have bright future needs to emphasis education because it is the only way too much development. Yusuf and Al-Banawi (2013) noted that education must be considered as a key investment in modern economies because, as previously seen within the framework of a knowledge-based economy, there are strong and positive correlation between economic activity and education in explaining economic growth. Asiru (2014) stated that education is a catalyst to the development of individuals, society and the nation as a whole. Dagbo (2014) also opined that education in an important tool for social growth, development and interaction of all elements in the society for its economics, social and

political well-being. Olayanju (2014) posited that education plays a critical role in human capacity building and skills acquisition.

Education is the best legacy a nation can give to her citizens. This is because the development of any nation depends on the educational attainment of her citizenry and the quality of education of such a nation. Education does not only provide knowledge and skills but also inculcates values to students. It prepares individuals to be responsible citizen life. According to Mahmmud (2010), cultural heritage and values are transmitted from one generation to another through education. The responsibility of training a child always lies in the hand of the parents. This is congruent with the common assertion by sociologist that education can be an instrument of cultural change which is being taught from home. It is then generally believed that socio-economic background of the parent has direct impact on the academic performance of the students.

Socio-economic status (SES) is often measured as a combination of education, income and occupation. It is commonly conceptualized as the social status or class of an individual or group. Low socio-economic status and its correlates, such as lower education, poverty and poor health, ultimately affect our societies as a whole. Research indicates that children from low social economic status (SES) households and communities develop academic skills more slowly compare to children from higher socio-economic status group.

Alken and Barbarin (2008) noted that, the school system in low social economic status communities are often under resource and have negatively affected student's academic progress. Families from low social economic status communities are less likely to have the financial resource or time available to provide children with academic support. According to Agulana and Nwachuku (2001) in the quest of finding survival feet, the nation has evolved series of socio-economic and educational measures and policies such as structural adjustment program (SAP), austerity measure, universal primary educatio, (UPE), Universal Basic Education (UBE) and devaluation of the naira. These measures have not improved the socio-economic and educational status of families in the country. They have rather increase their suffering and widened the socio-economic gaps between families.

Many rural and sub-urban dwellers can no longer pay the school fees of their children. Children are made to engage in hawking, subsistence farming, become housemaids or engage in other menial jobs to support their academic pursuit. The health status of the children which could also be traceable to parental socio-economic background can be another factor that can affect the academic achievement of the student. Adewole (2005) had reported that in a rural community where nutritional status is relatively low and heath problem are prevalent, children academic performance is greatly hindered. This assertion is again hinged on nature of parental socio-economic background. Similarly, good parenting supported by strong economic home background could enhance strong academic achievement of the child. Learning environment that is not free of barrier or obstacle or distraction such as noise, gas/smoke pollutions and so on can constitute health hazards, which in turn affect or reduce student's concentration or perceptual focus to learning. Market and garages located near schools have always posed a threat to student. Noise and pollution from these sources have always endangered student life and concentration. Other factors according to Danis (2004), complementing environment and socio-economic factors to produce high academic achievement include good teaching, counseling, good administration, and good seating arrangement. It has also been proved that student that come from simulative environment with laboratory equipment or those that are

taught with rich instructional aides, picture and allowed to demonstrate using their functional nerves like eyes, hands and sense of touch perform better than those trained under theoretical and canopy of abstraction. Thus, teaching and learning should be done under organized, planned and fortified environment with instructional aides to stimulate student sense of conception, and concentration to facilitate systematic understanding and acquisition of knowledge.

Factors which are present in the family contribute greatly to the achievement of the students. Among these are parental educational backgrounds, income, exposure, parental relationship with each other, strength of the family/population, religion, occupation etc. determine to a greater extent the readiness of the child to learn. However, the influence of other factors like mental and physical disabilities can account for poor academic achievement of students in biology.

It has been observed that many students do not pass well in biology external examinations such as West African School Certificate (WASC), National Examination Council (NECO) and University Tertiary Matriculation Examination (UTME). Obasi (1999); Ebeuwa-Okoh (2010); Atanda and Jaiyeoba (2011) and Abdu-Raheem (2015) noted that some of the factors responsible for the low achievement of students in schools are low socio-economic status of parents and lack of seriousness on the part of the students. This study therefore seeks to investigate parents' socio-economic status as a factor that leads to students' poor biology achievement in public senior secondary schools in Orlu LGA Imo state.

Research Hypothesis

1. There is no significant difference between parents' academic background and academic achievement in biology of students in public senior secondary schools in Orlu LGA Imo State.
2. There is no significant difference between parents' occupation and academic achievement in biology of students in public senior secondary schools in Orlu LGA Imo State.
3. There is no significant difference between parents' annual income and the academic achievement in biology of students in public senior secondary schools in Orlu LGA Imo State.

METHODOLOGY

Descriptive research design survey was used for the study. The population of the study comprised of senior secondary school students of the selected public school in Orlu LGA Imo state. The sample consisted of 200 students from 10 secondary schools randomly selected for the study. The instruments used for the study is a self-designed questionnaire titled Questionnaire on Parents' Socio-Economic Status and Students' Academic Performance (QPSESSAP) and an inventory was used to collect students' results through the help of schools' dean of studies and principal. Validity of the instrument was ascertained through face and content validity. Reliability co-efficient of 0.70 was obtained. Three hypotheses were formulated and tested at 0.05 level of significance. The data were analyzed using chi-square statistical tools.

RESULTS OF ANALYSIS

Hypothesis

Ho₁: There is no significant difference between parents' academic background and academic achievement in biology of students in public senior secondary schools in Orlu LGA Imo State.

Table 1: Chi-Square Analysis on the Parents' Academic Qualification and Academic Achievement of the Student in Biology.

Variable	F	Distinction	Credit	Pass	Fail	Total
No Education	O	0	0	2	2	4
	E	0.4	1.96	1.2	0.48	
Primary Education	O	0	28	28	12	68
	E	6.0	32.7	20.4	19.2	
Secondary Education	O	2	18	16	6	42
	E	4.2	20.2	12.6	5.1	
Tertiary Education	O	8	44	12	4	68
	E	6.8	32.6	10.4	8.1	
Postgraduate Education	O	10	6	2	0	18
	E	18.0	8.6	5.4	2.16	
Total		20	96	60	24	200

Degree of freedom (df) = 12; Significance level = 0.05

$$Df = (R-1) (C-1)$$

$$= (4-1) (5-1)$$

$$= 3 \times 4 = 12$$

Chi -square value = 80.59

Critical value = 25.87

From the table above, the calculated chi-square value is higher than the critical value at degree of freedom of 12 and 0.05 significance level. Therefore, the null hypothesis which stated that there is no significant difference between parents' academic background and biology achievement of students in public senior secondary schools in Orlu LGA Imo state is rejected.

Ho₂: There is no significant difference between parents' occupation and academic achievement in biology of students in students in public senior secondary schools in Orlu LGA Imo State.

Table 2: Chi-square Analysis on Parents' Occupation and Academic Achievement of the Students in Biology.

Variable	F	Distinction	Credit	Pass	Fail	Total
No Occupation	O	0	0	2	2	2
	E	0.2	0.96	0.6	0.24	
Artisan/Self employed	O	4	30	24	4	62
	E	6.2	29.8	18.6	7.4	
Farmer	O	0	4	8	8	20
	E	2.0	9.6	6.0	2.4	
Trader	O	4	34	12	4	68
	E	6.4	33.6	10.4	8.1	
Civil Servant	O	12	28	4	2	46
	E	4.6	22.1	13.8	5.52	
Total		20	96	60	24	200

Degree of freedom (df) =12; Significance level = 0.05

$$Df = (R-1) (E-1)$$

$$= (4-1) (5-1)$$

$$= 3 \times 4 = 12$$

Chi -square value = 60.80

Critical value = 28.87

From the table above, the calculated chi-square value is higher than the critical value at degree of freedom of 12 and 0.05 significance level. Therefore, the null hypothesis which stated that there is no significant difference between parents' occupation and students' biology achievement in public senior secondary schools in Orlu LGA Imo state is rejected.

Ho₃: There is no significant difference between parents' annual income and the academic achievement in biology of students in public senior secondary schools in Orlu LGA Imo State.

Table 3: Chi-square Analysis on the Parents' Annual Income and Students Academic Achievement in Biology.

Variable	F	Distinction	Credit	Pass	Fail	Total
No Annual Income	O	0	0	2	2	2
	E	0.2	0.96	0.6	0.2	
1.6million and above	O	10	2	0	0	12
	E	1.2	5.8	3.6	1.4	
960,000-1.500,000	O	8	8	0	0	16
	E	1.6	7.7	4.8	2.0	
960,000-950,000	O	2	12	14	3	30
	E	3.0	14.4	9.0	3.6	
360,000-650,000	O	0	48	8	6	62
	E	0.2	29.8	18.6	7.4	
120,000-350,000	O	0	26	38	14	78
	E	7.8	37.4	23.4	9.4	
Total		20	96	60	24	200

Degree of freedom (df) =15; Significance level = 0.05

$$\begin{aligned} Df &= (R-1) (E-1) \\ &= (4-1) (6-1) \\ &= 3 \times 5 = 15 \end{aligned}$$

Chi -square value = 104.2

Critical value = 25.0

From the table above, the calculated chi-square value is higher than the critical value at degree of freedom of 15 and 0.05 significance level. Therefore, the null hypothesis which stated that there is no significant difference between parents' annual income and students' biology achievement in public senior secondary schools in Orlu LGA Imo state is rejected.

DISCUSSION

The academic achievement of the students can as well be affected negatively by parent's academic background. Parent who do not go beyond elementary or secondary schools and who do not have any form of exposure to the subject biology are not able to give proper help to their children in their academic problems in biology and otherwise. The study also confirmed that parent's background has strong relationship with students' academic achievement in biology. The study is in connection with Asikhia (2010) and Rothstein (2004) who asserted that children raised by parents with reasonable academic background are more inquisitive towards learning compared to the children from low educational home. Ogunsola and Adewale (2012) also agreed that educational qualification of parents is a significant factor that affects the academic achievement of students. The findings are contrary to the works of Adeyemo and Babajide (2012) who discovered that there is no significant relationship between socio economic disadvantage of students and their achievement in physics.

The study also revealed that parental annual income is highly correlated with students' academic achievement in biology. This is because biology as a subject is practical oriented and biology practical materials, specimens, even text books and even excursions are cost demanding. The findings of the study are supported by the works of Okeke (2009); Lacour and Tissington (2011); Abdu-Raheem (2015) who discovered that low academic achievement is closely connected with lack of resources. It is contrary to that of Ebenuwa-Okon (2007) and (2010) who discovered that financial status does not significantly influence academic achievement. He believed that enhanced academic achievement is a matter of personal determination than financial determination.

This study also revealed that the occupation of parents has a great influence on the academic achievement of the students in biology. Most parents tend to be ignorant of the need for their children to get that exposure in biology in order to gain the knowledge of even handling some domestic issues which are been taught in biology lessons. Most parents allow their occupations to encroach into the child's study time thereby bringing distractions and lack of focus to the student. Ige (2007) confirmed that students who took the Senior School Certificate Examinations in Ekiti State performed poorly between 2005 and 2007. Ugoji (2008) lamented that students' academic performance is declining because they are confronted with so many schools and non-school related demands and responsibilities. This is in support of a study by

Wolfie (2006) who in his research work observed that the choice of occupation is the main focus of man's wealth and status and this influences the academic achievements of the children.

CONCLUSION AND RECOMMENDATION

Based on the findings of this study, it is concluded that socio-economic factors such as parent's academic background, parent's occupation and parent's annual of income are significantly related to students' academic achievement in public senior secondary schools in Orlu LGA Imo state.

It is therefore recommended that parents without proper educational background should endeavour to send their children to extra lessons after school hours/days, by weekends and during holidays to improve their academic achievement. Also, parents with high socio-economic status should assist schools in area of educational developments, setting up of laboratories and libraries in schools. More so, government should embark on programmes or formulate policies that can bridge the gaps between children of the rich and the poor in their academic pursuit. Churches, government and non-government organizations should introduce scholarship scheme to assist less privilege students. Guidance and counseling services should be emphasized especially in government and public schools to assist students with problem which usually emanate from emotional distress and depression. The emergence and wide spread of private schools across the nation has made it impossible for government/public schools to function properly. This is because most of our teachers and the rich people in the country prefer the private schools to public schools for their children while the less privilege has no option but to continue with the public schools. In order to balance the wide gap, government should restructure all public schools across the country by ensuring that qualified teachers are recruited and well paid. Also, basic amenities should be provided for the public schools to ensure that standard is maintained. School fees, tuition fees, and all other academic levy should be made affordable to the parents.

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