

**HOUSEHOLD EDUCATION EXPENDITURE AS CORRELATE OF ACADEMIC
PERFORMANCE OF SECONDARY SCHOOL STUDENTS IN
OSUN STATE, NIGERIA**

Akinmoladun, Olarewaju Olakunle

*Department of Educational Management
Faculty of Education, University of Ibadan, Ibadan
E-mail: akinmoladun4live@yahoo.com*

Abstract

This study investigated the influence of household education expenditure (learning materials, transportation, food items and extra lesson expenses) on the academic performance of Senior Secondary School (SSS) students in Osun State, Nigeria. Descriptive research design was adopted. The state was stratified in line with the existing three senatorial districts, with each having 10 local government areas. Four local government areas, representing 40%, were randomly selected from each senatorial district. There were 142 public senior secondary schools in the 12 sampled local government areas. Forty per cent of the schools were randomly selected per local government totaling 56. Random sampling technique was used to select 40% of SSS III students per school, totaling 3,304. Parents and students filled their respective components of the instruments. The instruments titled: "Household Education Expenditure Scale" ($r=0.97$); "Student English Language Performance Test" ($r=0.89$) and "Student Mathematics Performance Test" ($r=0.88$) were used. Five hypotheses were tested ($p = 0.05$). Data were analysed using Pearson product moment correlation and multiple regression at 0.05 level of significance. Household expenditure on learning materials ($r = 0.099$; $p < 0.05$), extra lesson ($r = 0.169$; $p < 0.05$) and transportation ($r = 0.16$; $p < 0.05$) had significant positive relationship with academic performance while expenditure on food items ($r = -0.26$; $p < 0.05$) was negatively related. Household education expenditure on feeding had significant negative contribution to academic performance ($\beta = -0.292$; $t = -10.050$; $p < 0.05$), while expenditure on learning materials had significant positive contribution ($\beta = 0.070$; $t = 2.909$; $p < 0.05$). Others had no significant contributions to academic performance. Household expenditure on learning materials

positively influenced academic performance while expenditure on food items had negative influence. The study recommended that household should spend more on learning materials and less on feeding at school to improve academic performance of public secondary school students.

Keywords: *Household education expenditure, secondary school students, expenditure on learning materials, expenditure on food items, expenditure on extra lesson, expenditure on transportation, Osun State*

Introduction

Secondary education should prepare students for useful living in a society and for higher education. Despite the roles secondary education is expected to play, some secondary school graduates are not able to further their education or secure jobs probably because of poor performance in the West African Examinations Council (WAEC) and the National Examinations Council (NECO) examinations.

The performance of senior secondary school students in English language and Mathematics in WAEC and NECO examinations in Nigeria, as shown on tables 1 and 2, seems to call for attention. While it should be noted that English language and Mathematics are compulsory subjects for admission into some courses in higher institutions of learning in Nigeria. The performance of students in the two subjects in the West African Senior School Certificate Examination (WASSCE) is presented on table 1.

Table 1: Percentage of Candidates with Credits in English language and Mathematics in WASSCE (2003-2012)

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
English	29.03	30.27	25.63	32.48	30.32	35.02	41.55	35.13	57.24	55.34
Maths	36.91	34.52	38.20	41.12	46.75	57.27	47.04	41.95	40.35	38.93

Source: Annual WAEC (May/June) 2002-2012 results

The country, in the last 10 years, recorded the lowest percentage of candidates with credit in English language in 2005 (25.63%) and the highest in 2011 (57.24%). The trend in the performance of candidates in English language over the period fluctuated. In Mathematics, the

lowest percentage was recorded in 2004 (34.52%) while the highest, 57.27%, was recorded in 2008. The trend in the performance of candidates in Mathematics also fluctuated.

According to Adepoju and Oluchukwu (2011), a credit level in either of the subjects is used as one of the criteria for measuring and establishing the brilliancy of a particular candidate in the Nigerian context. The poor performance of secondary school students in SSCE English language and Mathematics made it difficult for majority of the students to gain admission into higher institutions of learning.

Several factors have been identified by researchers and stakeholders in the education sector as the causes of poor performance of students in public examinations. Among such factors were: poor location of schools, incessant changes in government policies, teachers' strikes, home-school proximity, high student-teacher ratio, lack of supervision, monitoring and evaluation machinery, lack of good textbooks, poor content and context of instruction, poor and non-conductive learning environment (Oladokun, Adebajo and Charles-Owaba, 2008; Asikhia, 2010 and Owoeye and Yara, 2011).

Table 2: Percentage of Candidates with 5 Credits (including English language and Mathematics) in WASSCE and NECO (2010 - 2019)

Exam	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
WASSCE	3.71	30.9	39	38.30	31.28	38.68	52.3	56.53	48.15	64.18
NECO	24.9	8.06	31.58	69.57	52.29	68.56	88.51	49.33	71.48	71.59

Source: WAEC May/June and NECO June/July results (2010-2019) and National Bureau of Statistics (NBS), 2019.

The country, in the last ten years, recorded the lowest percentage of candidates with credits in at least five subjects (including English language and Mathematics) in WASSCE in 2010 (3.71%) and the highest in 2019 (64.18%). The trend in the performance of candidates in the examination over the period fluctuated. In NECO, the lowest percentage was recorded in 2011 (8.06%), while the highest, (88.51%), was recorded in 2016. The trend in the performance of candidates in the examination also fluctuated. The average performance in WASSCE over the period was 40% while that of NECO was 53.59%

The poor performance of public secondary school students in external examinations, especially WASSCE, as revealed on table 2, appears to be a national one as candidates from the South-West states (Ekiti, Lagos, Oyo, Osun, Ogun and Ondo) also recorded poor results in WASSCE. The South-West zone of the country is often regarded as educationally advantaged because of its educational history (Okobiah, 2002; Ajayi, 2008 and Oni, 2008). The performance of candidates from the zone in WASSCE from 2014 to 2018 is presented on table 3.

Table 3: Percentage of Candidates from South-West States with 5 Credits and above (including English language and Mathematics) in WASSCE (2014 – 2018)

State	2014	2015	2016	2017	2018
Ekiti	33.80	43.95	54.3	71.83	56.81
Lagos	45.86	50.61	63.09	65.50	60.72
Ogun	28.92	35.22	52.8	54.14	51.69
Ondo	32.40	41.99	64.8	44.27	52.21
Osun	19.54	18.87	45.5	43.5	40.85
Oyo	19.00	21.63	36.0	53.58	37.87

Source: NBS 2019

The results of candidates in WASSCE, from table 3, revealed that Osun State recorded the lowest percentage of candidates with five credits and above in 2015 (18.87%) while the highest was recorded by Ekiti State in 2017 (71.83%). The geo-political zone's average performance in the examination was less than 50%. The performance of candidates from each state over the period also fluctuated.

The performance of candidates from Osun State was relatively low compared to other South-West States. For example, in 2015, while Osun State recorded 18.87%, Ekiti, Lagos, Ogun, Ondo and Oyo states recorded 43.95%, 50.61%, 35.22%, 41.99% and 21.63%, respectively. The poor performance of candidates from the state demands the attention of stakeholders.

Most of the secondary school graduates would not be able to transit to the next level of education because of their poor performance. They may also find it difficult to get jobs, especially where credits in English language and Mathematics are required. These set of

secondary school graduates may eventually find their ways into the streets doing odd jobs and constituting social nuisance to the society.

Per capita private expenditure on secondary schooling in South-West states are: ₦27,503:28, Ekiti; ₦52,436:16, Lagos; ₦13,824:16, Ogun; ₦15,695:12, Ondo; ₦21,184:80, Osun; and, ₦21,517:44, Oyo while the net enrolments in secondary schools in the states are 71.6%, 69.8%, 53.8%, 64.7%, 62.5% and 64.7%, respectively (Alabi, 2010b). The per capita private expenditure in Osun State (₦21,184:80) was higher when compared with that of Ondo (₦15,695:12) and Ogun (₦13,824:16) states. Since public schools in Osun State do not pay school fees, household education expenditure for this study will be limited to expenditures on educational materials, transportation, food items and extra lessons.

Households may need to complement government efforts in the areas of funding and getting students ready for school, to improve academic performance of public secondary school students in the state. Oyegoke (2012) had noted that the era has gone when parents want everything related to education to be provided free by the government. Munda and Odebero (2014) corroborated this when they submitted that providing free education was beyond the scope of Kenya's ordinary education budget. Adepoju and Oluchukwu (2011) also opined that parents should be well-educated to take up the challenges and responsibility of financing the education of their children.

Though, the component of household education expenditure includes: expenses on school fees, uniform, transportation, extra lesson, feeding, textbooks, Parent-Teacher Association (PTA), writing materials, ceremonies and notebooks. Households in Osun State do not pay school fees nor purchase school uniforms because the state government's free education programme has taken care of these expenditures. The school meal programme of the state government is limited to students at the junior primary school.

Household in the state spend money on textbooks: storybooks, graph books, mathematical and statistical tables and formulae, past questions as well as exercise book; transportation of students to and from school; food items and pay extra lesson fees. A household's financial status, to a large extent, determines the proportion of financial support given to a student. Households with high financial status may provide necessary resources and financial support for

students. This was the position of Memon, Joubish and Khurram (2010) and Oyegoke (2012). Ayeni (2003) had earlier noted that some parents face difficulties in meeting the education needs of their children in Osun State.

Households spend money on students' transportation to attend classes in the school, outside school lessons and excursion. Students, whose parents cannot afford the fares, have to trek to school regardless of the distance. This may cause stress and tiredness, which Satapathy (2008), noted could lead to low academic performance. Okoza, Aluede and Akpaida (2012) also noted that trekking to school affect academic performance while Duze (2010) submitted that when distance to school is too far, besides fatigue, students may lose interest in schooling.

Households spend money on students' feeding at school, during outside school lessons and excursions. Students that are adequately fed, especially with breakfast, may do well in their studies. This was the submission of Averett and Stifel (2007) when they found malnourished children to have lower cognitive abilities when compared with well nourished children, but Bellisle (2004) found no effect of breakfast in the cognitive performance of children who are generally well nourished.

Households incur expenditure on extra lessons which comes in various forms. Some are provided one-to-one in the house of either the teacher or the student. Others could be in group. Ryu and Kangy (2008) found extra lessons to have effect on academic performance of students.

There are some research efforts on determinants of academic performance. Most of these works, though with conflicting results, focused more on teachers' competence, resources provision and utilisation, textbooks, teaching methods, teacher-student ratio, peer influence and school climate (Adeogun and Osifila, 2005; Yinusa and Basil, 2008; Akiri and Ugborugbo, 2009; Akinsolu, 2010; Ajayi and Ekundayo, 2011).

Oni (2005) found positive correlation between expenditure per child and academic performance. Ewumi (2012) found no significant relationship between socioeconomic status and academic performance while McEwan and Trowbridge (2007) found a link between socioeconomic status and academic performance.

Similar studies were carried out by Olubor (2009), on private cost of pre-school education in Nigerian private schools; Isuku (2012), on size factors and recurrent unit cost of public secondary schools in Edo State, Nigeria and Oyegoke (2012) on private cost and academic performance in secondary schools in Ekiti State, Nigeria;. While studies carried out by Olubor (2009), Isuku (2012) and Oyegoke (2012) in other states were limited to the unit cost of education and academic performance, this study correlated household education expenditure with academic performance in Osun State.

Statement of the Problem

Secondary school students' academic performance in Osun State is below expectation. Less than 50% of candidates from the state obtained five credits (including English language and Mathematics) in WASSCE between 2014 and 2018. Most of the secondary school graduates in the state could not transit to the next level of education nor get jobs because of their poor results.. The different measures introduced by the state government to address the problem have not also yielded good result as poor academic performance of students persists. One of the implications of this is that Osun State may need to spend more on security in a few years to come as these set of students may constitute security risk. The state may also be categorised among the educationally disadvantaged in the country. It is against this background that this study investigated household education expenditure and academic performance in the state.

Hypotheses

Five hypotheses were formulated and tested in the study at 0.05 level of significance.

- H₀1. There is no significant relationship between household expenditure on learning materials and academic performance of public secondary school students in Osun State.
- H₀2. There is no significant relationship between household expenditure on transportation and academic performance of public secondary school students in Osun State.
- H₀3. There is no significant relationship between household expenditure on food items and academic performance of public secondary school students in Osun State.

- H₀4. There is no significant relationship between household expenditure on extra lessons and academic performance of public secondary school students in Osun State.
- H₀5. What is the relative contribution of household expenditure on educational materials, food items, extra lessons and transportation to academic performance of public secondary school students in Osun State.

Methodology

Research Design

The descriptive research design carried out *ex-post facto* was adopted for the study. Gathering information *ex-post facto* was considered appropriate for the study because the phenomena studied were already in existence and the researcher had no direct control over them.

Population of the Study

The population for this study comprised all the 43,440 SS3 students in the 573 public secondary schools in Osun State as at the time of this study. The parents of the participating students were also included in the study. The researcher had contact with the parents through the students (their children). Parents and students filled their respective components of the instruments used for the study.

Sample and Sampling Techniques

The stratified sampling technique was used. Osun State was stratified in line with the existing three senatorial districts: Osun West, Osun Central and Osun East with each of them having 10 local government areas (LGAs). From each of the senatorial districts, 40% of the local governments were randomly selected. Four LGAs were selected from each senatorial district: Osun West (Ayedaade, Ede North, Iwo and Ede South); Osun Central (Odo Otin, Osogbo, Ifedayo and Isokan) and Osun East (Ife Central, Ilesa East, Ife East and Oriade). Twelve LGAs were selected altogether.

Forty percent of the senior secondary schools were randomly selected in each of the LGAs. Fifty-six secondary schools were selected from the LGAs. Forty per cent of the SS3 students in the schools were

randomly selected. A total of 3,304 students were selected for the study. The parents of the participating students were purposefully used for the study.

Research Instruments

Three research instruments were used for the study with the reliability and validity tests carried out on them. The instruments are: Household Education Expenditure Scale (HEES), Student English Language Performance Test (SELPT) and Student Mathematics Performance Test (SMPT) with reliability coefficients of 0.97, 0.86 and 0.88 respectively.

Procedure for Data Collection

SELPT and SMPT were administered the same time. The instruments were administered simultaneously in all the schools. HEES got to the parents through their children. Out of 3,304 questionnaires distributed, a total of 2,862, representing 86.62% were returned. Out of the 2,862 returned questionnaires, 2,627, representing 79.51%, were considered valid after data collection which lasted four weeks. The researcher and the research assistants marked the answer sheets and scored the students.

Data Analysis

Data collected were analysed using Pearson product moment correlation and multiple Regression analysis at 0.05 level of significance.

Findings and Discussion

Hypotheses Testing

H₀1: There is no significant relationship between household expenditure on learning materials and academic performance of public secondary school students in Osun State.

Table 4: Expenditure on Learning Materials and Academic Performance

Variables	N	Mean	SD	r	p	Remark
Exp. on learning materials	2627	28.3882	9.63578	.099		Sig.
Academic performance	2627	18.1775	7.04616		.000	

Table 4 reveals a significant positive relationship between expenditure on learning materials and the academic performance of public secondary school students in Osun State ($r = 0.099$; $p < 0.05$). Therefore, H_{01} is not accepted. The positive relationship implies that the higher the expenditure on educational materials, the better the academic performance of the students.

H₀₂: There is no significant relationship between household expenditure on transportation and academic performance of public secondary school students in Osun State.

Table 5: Relationship between Expenditure on Transportation and Academic Performance

Variables	N	Mean	SD	r	P	Remark
Expenditure on transportation	2627	12.0815	8.11523	.162		Sig
Academic performance	2627	18.1775	7.04616		.000	

Table 5 reveals a significant positive relationship between expenditure on transportation and the academic performance of public secondary school students in Osun State ($r = 0.16$; $p < 0.05$). Therefore, H_{02} is not accepted. The positive relationship implies that the higher the expenditure on transportation, the better the academic performance of the students.

H₀₃: There is no significant relationship between household expenditure on food items and academic performance of public secondary school students in Osun State.

Table 6: Relationship between Expenditure on Food Items and Academic Performance

Variables	N	Mean	SD	r	p	Remark
Expenditure on food items	2627	14.4134	10.57709	-	.000	Sig
	2627	18.1775	7.04616	0.261		
Academic performance						

Table 6 reveals a significant negative relationship between expenditure on food items and the academic performance of public secondary school students in Osun State ($r = -0.26$; $p < 0.05$). Therefore, H_03 is not accepted. The negative relationship implies that the higher the expenditure on food items, the lower the academic performance of the students.

H₀₄: There is no significant relationship between household expenditure on extra lesson and academic performance of public secondary school students in Osun State.

Table 7: Relationship between Expenditure on Lessons and Academic Performance

Variables	N	Mean	SD	r	P	Remark
Expenditure on extra lessons	2627	10.4857	7.48357	.169	.000	Sig.
	2627	18.1775	7.04616			
Academic performance						

Table 7 reveals a significant positive relationship between expenditure on extra lessons and the academic performance of public secondary school students in Osun State ($r = 0.169$; $p < 0.05$). Therefore, H_04 is not accepted. The positive relationship implies that the higher the expenditure on extra lessons, the better the academic performance of the students.

H₀₅: What is the relative contribution of household expenditure on educational materials, food items, extra lessons and transportation to academic performance of public secondary school student in Osun State.

Table 8: Relative contributions of independent variables to academic performance

Variable	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	19.659	.416		47.300	.000
Expenditure on books	.051	.018	.070	2.909	.004
Expenditure on transportation	-.011	.022	-.013	-.499	.618
expenditure on feeding	-.194	.019	-.292	-10.050	.000
expenditure on extra lesson	.000	.025	.000	.013	.989

Dependent Variable: academic performance

From table 8, only expenditure on feeding had significant negative beta value of -0.292. This implies that as it increases, the dependent variable (academic performance) decreases. The table also showed that expenditure on books (Beta= 0.070; t= 2.909; p<0.05) had significant contribution to academic performance while expenditure on transportation (Beta= -0.013; t= -0.499; p>0.05) and expenditure on extra lesson (Beta= 0.000; t=0.013; p>0.05) had no significant contributions to academic performance.

Discussion of Findings

A significant positive relationship between household expenditure on educational materials and academic performance was found from the results of this study. This result corroborated Aturupane, Glewwe and Wisniewski (2007) and Owoeye and Yara (2011) finding of a significant relationship between having books and academic performance of students. The positive contribution implied that the higher the expenditure on educational materials, the better the academic performance of the students.

The study also revealed a significant positive relationship between household expenditure on students' transportation and academic performance. The positive relationship implied that the higher the expenditure on transportation, the better the academic performance of students. If a student trekked to school, especially when the distance is long, he/she may be tired in getting to school. This will affect his/her participation in the class. This finding supported Satapathy (2008), Duze (2010), Garikai (2010) and Okoza, Aluede and Akpaida (2012) that trekking to school leads to low academic performance.

The results also revealed a significant negative relationship between household expenditure on food items and academic performance. This result implied that the higher the household expenditure on food items, the lower the academic performance of students. The significant negative relationship may be as a result of the negative effects of over-pampering children. The findings contradicted Acham, Kikafunda, Malde, Oldewage-Theron and Ega (2012) findings that feeding positively affects academic performance. It contradicted Aturupane et al's (2007) and Garikai's (2010) position of positive influence of nutrition on academic performance. It also contradicted Molinas and Mothe (2010) position that alleviating short-term hunger among children at school, contributes to improved academic performance.

A significant positive relationship existed between household expenditure on extra lessons and academic performance. The significant positive relationship indicated that the higher the household expenditure on extra lessons, the better the academic performance of students. This result supported Aturupane et al (2007), Dang (2006), Ryu and Kangy (2008) that private tutoring significantly impact on academic performance.

The results revealed further that household expenditure on food had negative significant contribution to academic performance while expenditure on learning materials had positive significant contribution. Expenditure on transportation and extra lesson had no significant contributions to academic performance.

Conclusion

From the results, the study concluded that a significant relationship exists between household expenditure on: learning materials, food items, transportation, extra lesson and academic performance of public secondary school students in Osun State.

The study also concluded that household education expenditure on feeding negatively affects academic performance.

Recommendations

Based on the findings that are significant, the following recommendations are made:

1. Households should spend less on food consumption by students during the school hours.
2. Households should spend more on provision of learning materials to improve students' academic performance in the state.

References

- Acham, H., Kikafunda, J. K., Malde, M. K., Oldewage-Theron, W. H. & Ega, A. A. (2012). Breakfast, midday meals and academic achievement in rural primary schools in Uganda: implications for education and school health policy. *Food & Nutrition Research*, 56. Retrieved September 26, 2012, <http://www.foodandnutritionresearch.net/index.php/fnr/article/view/11217/19733>
- Adeogun, A. A. & Osifila, G. I. (2005). *Relationship between educational resources and students' academic performance in Lagos State, Nigeria*. Retrieved from: <http://www.unilorin.edu.ng/ejournals/index.php/ijem/article/viewFile/-136/54> on September 26, 2012.
- Adepoju, T. L. & Oluchukwu, E. E. (2011). Secondary school students' academic performance at the senior school certificate examinations and implications for educational planning and policy in Nigeria. *An International Multidisciplinary Journal, Ethiopia*, 5 (6), 314-333.

- Ajayi, I. A. & Ekundayo, H. T. (2011). Factors determining the effectiveness of secondary schools in Nigeria. *Anthropologist, 1* (13), 33-38.
- Ajayi, S. A. (2008). The development of free primary education scheme in Western Nigeria, 1952-1966: An analysis. Retrieved from: <http://www.ajol.info/index.php/og/article/viewFile/52320/40944> on March 15, 2012.
- Akinsolu, A. O. (2010). Teachers and students' academic performance in Nigerian secondary schools: implications for planning. *Florida Journal of Educational Administration & Policy Summer, 3*(2), 86-103.
- Akiri, A. A. & Ugborugbo, N. M. (2009). Teachers' effectiveness and students' academic performance in public secondary schools in Delta State, Nigeria. *Study Home Comm Sci, 3*(2), 107-113.
- Alabi, R. A. (2010a). *Report on research activities accomplished and planned for extension of funding*. Retrieved from: <http://www.iwim.uni-bremen.de/aktuelles/Alabi-Report%20on%20Research%20activities%20Humb-oldt-2-11-2008.pdf> on July 12, 2011
- Alabi, R. A. (2010b). Progressivity of education spending in Nigeria. *Institute for World Economics and International Management*. Retrieved from: <http://www.iwim.uni-bremen.de/Dorow/Alabi%202010%20-%20Progressivity-1.pdf> on May 13, 2011.
- Asikhia, O. A. (2010). Students and teachers' perception of the causes of poor academic performance in Ogun State secondary schools (Nigeria): implications for counseling for national development. *European Journal of Social Sciences, 13*(2), 229-242.
- Aturupane, H., Glewwe, P. & Wisniewski, S. (2007). *The impact of school quality, socio-economic factors and child health on students' academic performance: evidence from Sri Lankan primary schools*. Retrieved from: worldbank.org/.../ImpactOfSchoolQuality on December 13, 2013.
- Averett, S. L. & Stifel, D. C. (2007). Food for thought: The cognitive effects of childhood malnutrition in the United States. *Mimeo: Lafayette College*.

- Ayeni, A. O. (2003). Educational cost, In Babalola J. B. (Ed.), *Basic text in educational planning*, Department of Educational Management, University of Ibadan, 301–335.
- Bellisle, F. (2004). Effects of diet on behaviour and cognition in children. *British Journal of Nutrition*, 92(2), 227–232.
- Dang, H. (2006). *The determinants and impacts of private tutoring classes in Vietnam*. Department of Applied Economics, University of Minnesota. Retrieved from: <http://colloque-iredu.ubourgogne.fr/posterscom/communications-/Pa120-HaiAnhDang.pdf> on May 4, 2011.
- Duze, C. O. (2010). Average distance travelled to school by primary and secondary school students in Nigeria and its effects on attendance. *African Research Review*, 1(4), 378–388.
- Ewumi, A. M. (2012). Gender and socio-economic status as correlates of students' academic achievement in senior secondary schools. *European Scientific Journal*, 8(4), 23-36.
- Garikai, B. W. (2010). *Determinants of poor academic performance*. Retrieved from: <http://www.articlesbase.com/education-articles/determinants-of-poor-academic-performance-3659333.html> on December 15, 2013.
- Isuku, E. J. (2012). *Analysis of size factors and recurrent unit cost of public secondary schools in Edo State, Nigeria*. An Unpublished Ph.D Thesis, Department of Educational Management, University of Ibadan.
- McEwan, P. J. & Trowbridge, M. (2007). The achievement of indigenous students in Guatemalan primary schools. *International Journal of Educational Development*, 27(1), 61-76.
- Memon, G. R., Joubish, M. F. & Khurram, M. A. (2010). Impact of parental socio-economic status on students' educational achievements at secondary schools of District malir, Karachi. *Middle-East Journal of Scientific Research*, 6(6), 678–687.
- Munda, S. W & Odebero, S. (2014). The influence of education costs on students' academic performance in Kenya: an empirical study of Bungoma county secondary schools. *Asian Journal of Educational Research*, 2(1), 1-11.
- National Bureau of Statistics (NBS) (2011). *Social statistics in Nigeria*. Retrieved from: http://www.nigerianstat.gov.ng/ext/latest_release/ssd09.pdf on December 20, 2011.

- National Bureau of Statistics (NBS) (2019). *WAEC results statistics (2016–2018)*. Retrieved from: https://education.gov.ng/wp-content/uploads/2019/10/WAEC_RESULTS_STATISTICS_2016-2018.pdf on November 2, 2020.
- Okobiah, O.S. (2002). The educational imbalance between the Northern and Southern states of Nigeria: a re-direction of educational policies. Retrieved from: <http://www.nuc.edu.ng/nucsite/File/ILS%202002/ILS-60.pdf> on March 8, 2015.
- Okoza, J., Aluede, O. & Akpaida, J. E. (2012). Secondary school students' perception of environmental variables influencing academic performance in Edo State, Nigeria. *Bangladesh e-Journal of Sociology*, 9(2), 84-94. Retrieved from: <http://www.bangladeshsociology.org/Secondary%20School%20Students%20Perception-%20of%20EnvironmentalBEJS%209.2%20Final%20new.pdf> on January 7, 2013.
- Oladokun, V. O., Adebajo, A. T. & Charles-Owaba, O. E. (2008). Predicting students' academic performance using artificial neural network: A case study of an engineering course. *The Pacific Journal of Science and Technology*, 9(1), 72-79.
- Olubor, R. O. (2009). Private cost analysis of pre-school education in Nigeria private schools. *Journal of Social Sciences*. 19(2), 141-148.
- Oni, J. (2005). *Educational resources: An introduction*. Abeokuta: Gbemi Sodipo Press Limited.
- Oni, J.O. (2008). Universality of primary education in Nigeria: trends and issues. *International Journal of African and African American Study*, 7(1), 23-31.
- Osun State Government official website. (2011). *Osun people*. Retrieved from: <http://www.osunstate.gov.ng> on September 20, 2011.
- Osun State Ministry of Education. (2012). *Enrolment in day and boarding public secondary schools*. Osun State government.
- Osun News Portal. (2012). *Osun people*. Retrieved from: <http://www.onewsportal.com/osun-overview/local-government-areas/> on October 26, 2012.
- Owoeye, J. S. & Yara, P. O. (2011). School facilities and academic achievement of secondary school students in Agricultural Science in Ekiti State, Nigeria. *Asian Social Science Journal*, 7(7), 64-74.

- Oyegoke, S. A. (2012). The relationship between private cost and students academic performance in secondary schools in Ekiti State, Nigeria. *Journal of Educational and Social Research*, 2(8), 121-127.
- Ryu, D. & Kangy, C. (2008). *Do Private Tutoring Expenditures Raise Academic Performance? Evidence from middle school students in South Korea*. Retrieved from: http://yeri.yonsei.ac.kr/new/bbs/data/workshop/101202_01.pdf on November 15, 2011.
- Satapathy, S. (2008). Psychosocial and demographic correlates of academic performance of hearing-impaired adolescents. *Asia Pacific Disability Rehabilitation Journal*, 19(2), 63.
- Yinusa, M. A. & Basil, A. O. (2008). Socioeconomic factors influencing student academic performance in Nigeria: some explanations from a local survey. *Pakistan Journal of Social Sciences*, 5(4), 319-323.