

Full Length Research Paper

Socio-Economic Variables Influences on Students Academic Performance in Agricultural Science in Secondary Schools in Emohua LGA of Rivers State, Nigeria

ThankGod Peter Ojimba*, Amarachi Emmanuel, Tamunodikipiri Obuchiebo, and Constance Wilson Eneyo

Department of Agriculture, Faculty of Vocational & Technical Education, Ignatius Ajuru University of Education, Port Harcourt, Rivers State, Nigeria.

*Corresponding author E-mail: thankgodojimba@yahoo.com, thankgodojimba@gmail.com

Received 2 September 2019; Accepted 23 October, 2019

The study focused on socio-economic variables influences on student academic performance in agricultural science in secondary schools in Emohua LGA of Rivers State Nigeria. Multi-stage sampling technique was used to sample 300 students' respondents through structured questionnaires and personal interviews. Data were analyzed using descriptive and inferential statistics such as likert scale and one-way ANOVA. The results showed that few students 71.7% walked about 2 km distances to school, the large number of children in the family (87%) made it difficult for parents to be able to pay the fees of students as at when due making the students to be sent back home and/or punished which leads to outright failure in the class including agricultural science as a subject. The study also accepted the alternative hypothesis that socio-economic variables influenced the academic performance of the students using four point likert scale analysis. The results also showed that family income with a mean of (3.03),

parent economic status (2.95), parents' poverty level (3.57) and lack of social amenities (2.65) were significant factors that influenced the students in agricultural science. The study further found out that parents' poverty level influenced the academic performance of students' in agricultural science at 5% level of significance using one-way ANOVA. Therefore, the academic performance of secondary school students in agricultural science is influenced by socio-economic variables such as family income, parents' poverty level, lack of social amenities, large number of children in the household, trekking long distances to school, etc. in Emohua LGA of Rivers State.

Keywords: Socio-economic status, influence, students' academic performance, agricultural science, secondary schools, Likert analysis, ANOVA, Emohua LGA, Rivers state, Nigeria

INTRODUCTION

Agricultural science is defined as the art and science of cultivating the soil, rearing of animal (livestock) preparing livestock feed, processing crops and livestock products for mans use or for the benefit of man. Agriculture provided the source of animal protein that fed over 70% of Nigerian population before independence in 1960. It was encouraged and used as part of Nigerian culture for

children to follow the parents to the farm from age 6. Although the missionaries have introduced formal education, but children still goes to their parents' farms after school to help them in farm work as a result, the children get an informal education in agriculture through a system of apprenticeship.

According to National Policy on Education NPE (2004),

it is the invaluable contribution of agriculture to our nation that bring forth our educationists and government to make provision in the national policy of the junior. Onu and Ikechi, (2013) stated that agricultural science as a subject has introduced into the secondary school levels before the tertiary institution, it was also taught in the form of rural science at the pre-secondary schools level of education, thus creating a vacuum at the secondary level. Since the secondary level of education during colonial era was fashioned along the line of grammar schools in Britain, the introduction of vocational subject such as agricultural science was not deemed necessary. The consequence therefore was the graduation of school leavers who at best saw agriculture as a part time hobby and not as a source of livelihood.

Modebelu and Duvie, (2012) in their study recommended four innovative teaching methods that can enhance quality and effective teaching and learning of subjects / courses. These they said could be adopted and applied by agricultural science teachers. These methods are as follows: information transformation and reception method, cognitive strategies development method, attitudes development, cognitive and motor skill s development method.

Modubelu and Nwakpadolu, (2013) stated six major challenges facing agricultural science subject. They are: inadequate technical knowledge, poor funding, absence of terms for practical, inadequate instructional materials, inadequate qualification of teachers. Effective teaching cannot lead to academic failure, the concept we hold on to as a result of interacting with other people has really influence our behavior collectively and this is called self-concept.

Despite the teaching of agricultural science subjects in basic and secondary school levels, the nation and the citizens have not been changed. A good number of agricultural science students still remain unemployed after their school they do not practice what they learnt in school to sustain themselves because the interest is not there. The teaching of agricultural science in Nigerian secondary schools needs to be properly handled. Agriculture contributes to the nation's economy development hence, the need to be taught thoroughly if it is to meet the educational and economic development. The goal of helping students to acquire scientific knowledge and the required skill may not have been achieved due to poor study and irregular habits and effective practical lesson among secondary school students in agricultural science (Emeya and Ojimba, 2012).

Socio-economic position according to Ball and Crawford, (2010) refers to individuals social and economic ranking with society based on access to resources (such as materials and social assets, including income, wealth and educational credentials) and prestige (i.e. an individual's status in a social hierarchy, linked for instance to their occupation, income, or educational

level). American Psychological Association APA (2019) views socio-economic status as the social standing or class of an individual or ground, which is often measured as a combination of education, income and occupation. The variables that contribute effectively to quality academic performance are found within and outside the school, these variables may be termed as learner factors, socio economic factor, peer groups and school factors. Socio-economic factor may include parental level of education, parental income, financial and material support by parent, language, parental involvement including education and peer group in school environment (Michubu, 2013).

Olufemi, (2018) opined that education is one of the most important aspects of human resource development. Students' performance plays an important role in producing best quality graduates who will become great leaders and man power for the country thus responsible for the country's development. Adegoke and Oshokoya, (2015) views that families that fall within high socio-economic status often have more access to a wide range of resource to promote and support young children's development. Parents that are rich show more concern over their children's academic performance but students from families with high socio economic status tend to achieve success in their educational career much more than those of low socio-economic status (Olaniyi, 2004). Ojimba et al. (2018) view agricultural science as the art and science of cultivating the soil, providing livestock, preparing livestock feeds, processing crops and livestock products for the use of man.

Muhamed and Muhammed, (2010) opined that 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. It is not out of place to imagine that parental socio-economic background can have possible effects on the academic achievements of children in secondary schools. Whatever affects the developmental stage of children would possibly affect their education or disposition to it. Parent's status is one of such variable. According to Rothstein, (2004) parents of different occupational classes often have different styles of child bearing, different ways of disciplining their children and different ways of reacting to their children. These differences do not express themselves consistently as expected in the case of every family; rather they influence the average tendencies of families for different occupational classes. The socio-economic status of parents' also makes it possible for children from low background to compete with their counter parts from high socio economic background under the same academic environment.

Socialization is a term describing the way parent influence student academic achievement by shaping students skill, behaviors and attitude towards school. Parents influences students through the environment and discourse parents have with their children, showing that

academic socialization can be influenced by parents' social economic status (Magunson, 2007).

Ajila and Otutola, (2000) opined that the social upbringing of a child begins from the home (family). It is the home that makes the child identify him with the society, culture, religion and social class. Thus the home continues to exercise a strong influence over the child's life and academic performance in the school. They also opined that homes differ in their significances in the social order because some have more prestige and money while some have wider experience and knowledge of how to operate with the society or school environment.

The study on the socio-economic variable influence on academic performance in agricultural science in secondary schools can be found useful to both educational and policy makers giving guidance to the government on necessary cause of action to enhance academic performance. Literatures exist on socio-economic variables influences on academic performance in agricultural science in secondary school which includes Memon et al. (2010), Jones et al. (2010), Henrietta and Odozi, (2014), Egunsola, (2014), Abdu-raheem (2015), and Ovansa, (2017). The following authors have also worked on related topics: Onyekuru and Ibegbunam, (2013), Anyanwu et al. (2014), Okanezi and Adeagbo, (2018) and Ojimba et al. (2018a, b) to mention but a few. But none of these authors had worked on the present copy, therefore, there is the need for the study in details. Memon *et al.* (2010) discovered that education is the lifeline for efficient and stable working of human society. Education help develop individual personality making the person knowledgeable, competent, capable and skillful. Parents with high socio-economic status often have more success in preparing their young children for school because they typically have access to a wide range of resources to promote and support their children while the low status often lack the financial, social and educational supports that characterize families with high socioeconomic status. Poor resources could not promote and support children's development and school readiness. Parents may have inadequate skills for such activities as reading to and with their children and they may lack information about childhood immunizations and nutrition. Inadequate resources and limited access to available resources can negatively affect families' decisions regarding their young children's development and learning. As a result, children from families with low socio-economic status are less prepared than their peers from families with medium or high socio-economic status.

Henrietta and Odozi (2014) explored the issue of parental socio-economic status on students' academic achievement in secondary schools, the relationship between home-based environment factors and the academic performance of students in selected secondary schools within a local government area in Enugu State. The four factors that were examined and statistically

analyzed were: parental socio-economic background, parental educational background, parental educational qualification and students' health statuses. Diverse statistical tests were performed on the various data collected to establish statistical significance of the factors effects on students' academic performance. Parental socio-economic status and parental educational background did not have significant effect on the academic performance of the students.

Adegoke and Osokoya, (2015) investigated access to internet and socio-economic background as correlates of students' achievement in agricultural science among selected senior secondary schools 2, students in Ogbomoso South and North Local Government Areas. Descriptive statistics, Pearson moment correlation and multiple regressions were used to analyze the data gathered. The study observed that, 67.7% of the students have access to the internet (two-third of the sample). A positive but not significant relationship existed between access to internet and students' achievement in agricultural science ($r = 0.110$ and $p > 0.05$). There was a positive and significant relationship between socio-economic background and students' achievement in agricultural science ($r = 0.515$ and $p < 0.01$). Furthermore, relationship between socio-economic background and access to internet is not significant ($r = 0.040$ and $p > 0.05$). Access to internet and socio-economic background were jointly related to students' achievement in agricultural science.

Abdu-raheem, (2015) carried out a study on parents' socio-economic status on secondary school students' academic performance in Ekiti State. The data were analyzed using regression statistical tools. It was confirmed in the study that there was relationship between parents' socio-economic status and academic performance of secondary school students. It is therefore recommended that parents without or with low education should endeavour to send their children to home lessons after school hours, by weekends, and during holidays to improve their academic performance. Government should embark on programmes or formulate policies that can bridge the gaps between children of the rich and the poor academically.

Onwukwe *et al.* (2017) observed that continuous low academic achievements records of students from low socio-economic backgrounds in secondary schools particularly in science, social science and art subjects is a threat to national development. The study investigated the influence of parents' socio-economic status on academic performance of students in secondary schools in Owerri Education Zone, Imo State, Nigeria. The results of the study showed that students from low socio-economic backgrounds attend public schools more than those from high socio-economic backgrounds and they achieve less academically than those of high socio-economic backgrounds. The differences in achievements were significant. The socio-economic backgrounds of

students also influenced their enrollment in sciences, arts and social sciences.

Ovansa, (2017) investigated the effects of socio-economic background of senior secondary school students on their academic performance in Adavi LGA of Kogi State. Stratified random technique was used to select the secondary schools and the students for the study. Simple percentage was used to analyze the research hypothesis. Conclusion drawn from the analyses indicated that parent socio-economic status influenced the academic performance of the students. Okanezi and Adeagbo, (2018) investigated the effects of poverty on educational attainment of secondary school students in Emohua Local Government Area (LGA) of Rivers State, Nigeria. Data were collected through questionnaire on whether poverty of parents affect their ward's performance in examinations, the quality of schools they attend, and the level of education ultimately attained. Analysis was done using mean statistical tool for the research questions while chi-square was used to test the hypotheses at 0.05 alpha levels. The findings revealed that poverty of parents negatively affected their ward's academic performance, the quality of schools their wards attend and the level of education ultimately attained.

Olufemi et al. (2018) carried out a study to assess factors affecting students' academic performance in southwest, Nigeria and concluded that students' factors, parental background, school factors, and teachers' factors have serious influence on students' academic performance. It is hereby recommended that school facilities should be adequately provided.

Researchers have tried to identify the socio-economic variables that influence students' academic performance in Rivers State and other states in the Nigeria but none have been carried out in Emohua LGA. Therefore the study seeks to identify the socio-economic variables that influence the academic performance of secondary school students in agricultural science in Emohua LGA of Rivers State.

Objectives of the study

The general objective is to evaluate the socio-economic variables influences on students' academic performance in agricultural science in secondary schools in Emohua L.G.A of Rivers State.

The specific objectives are to:

- (i) Analyze influences of the social status on students' academic performance in agricultural science.
- (ii) Determine the socio-economic variables affecting students' academic performance in agricultural science.

Research questions

- (i) What are the social status variables influencing academic performance in agricultural science?
- (ii) To what extent do the socio-economic variables influence students' academic performance in agricultural science?

Hypothesis

H_{01} : There is no significant difference in the socio-economic variables influences on academic performance in agricultural science.

METHODOLOGY

Study of area

The study was carried out in Emohua local government Area, Rivers State, Nigeria. The area is located between latitude 5° 10 North and longitude 6° 54' East, in the tropical rainforest characterized by two different seasons. Emohua Local Government Area consists of (14) fourteen political wards and the major occupation of the people is farming. According to the National Population Commission (2006), Emohua has a population of 201,901, with an area of 831 km² (321 sq miles). It is found in south-south geopolitical zone of Nigeria. Emohua is currently made up of eight sub-villages which includes. Oduaoha, Elibrada, Isiodu, Rumuakunde, Rumuche, Mbueto, Rumuochia, and Mbuitanwo. There are (27) twenty seven registered secondary schools in Emohua. The most popular are the 16 secondary schools listed below.

- (a) Community Secondary School Elibrada
- (b) Community Girls Secondary School Okporowo Ogbakiri
- (c) Odegu Community Secondary Schools (Rumuerhor)
- (d) Community Secondary School Rumuji
- (e) Community Secondary School Omudioga
- (f) Runde High School, Runde
- (g) Community Secondary School Rumuekpe
- (i) Community Secondary School Oduaoha Emohua
- (j) Ibaa Girls Secondary School
- (k) Government Secondary of School Rumuakunde
- (l) Community Secondary school Ahai
- (m) Runde Community Girl's School Omofu/Egaminu
- (n) Community Secondary School Ndele
- (o) Demonstration Secondary School Ndele
- (p) Government Secondary School Okporowo Ogbakiri
- (q) Uvahu comprehensive High School Ibaa

Population of the study

The population of the study comprised of the students in all the secondary Schools in Emohua Local Government

Area offering agricultural science.

Method of data collection

Data were obtained through two main sources which are primary and secondary sources. The primary method involved the use of structured questionnaires, personal contact, and discussion with the respondents on socio-economic variables. The secondary method involved the use of internet facilities, bulletins, journals, published article and test books etc.

Sampling technique/sample size

The multi-stage sampling technique was used to collect data. The first stage involved obtaining list of all secondary schools in Emohua Education Authority. Second stage was selecting 10 secondary schools offering agricultural science in their curriculum and those that have JSS I – SS III. The third stage involved the random sampling of 30 students from each school chosen, giving a total of 300 students randomly sample.

Analytical tools

Descriptive statistic such as frequency, percentages and inferential statistics such as Likert scale and one-way ANOVA were used to analyze the data according to the objectives of the study.

RESULTS AND DISCUSSION

Influences of social status on students' academic performance

The social influences considered in this study are analyzed in (Tables 1-5). The analysis of students responses to the distance of schools from home as shown in (Table 1) shows that 27.67% of the students walk less than 1 km to school, 44% walk about 2 km to school, 10% walk 3 km, 9.7% walk up to 4km while 8.6% walk up to 5 km. This shows that only few students live close to the school, majority of them live far from the school. This is because schools in Emohua Local Government Area are located far from residential areas. Table 2 shows students' responses to the number of children in their father's household. About 13% of the students came from homes with less than 4 children, 47% came from homes with a maximum of 5 children and 19.3% of the students came from homes with 8 children and above. This shows that majority of the students (60%) are not more than 5 persons in their homes and few of them are above 8 persons in the homes. The parents because of the large number of children could

not afford to send their children to good school; they could not provide them with the basic material needed in studying and learning process. Table 3 shows students response to how long it takes to pay school fees per term in secondary schools. About 34% of the students revealed that they pay their school fees one week after reopening, 35.67% pay fees one month after resumption, and 23.3% also revealed that they pay their fees two months after reopening while 7% pay their fees at the end of the term. Table 3 indicated that schools in Emohua LGA restricts students from learning when fees are not paid making majority (70%) of the pupil to pay their fees before the end of one month after resumption. Table 3 also indicated that parents that have large household pay part of the fees for some of their children at the beginning of the term while they struggle to pay the rest at the end of the term. Table 4 shows the response of principal's reactions when school fees were not paid on time in secondary schools in Emohua L.G.A. The table indicates that 10% of the students were punished when their fees are not paid on time, 70% were sent back home, 9.0% where seriously harassed and 11% where treated indifferently. The table showed that majority of students in Emohua LGA were sent back home to their parents by the principal when their school fees are not paid on time. Some students were punished because their parents' relationship with the principal who decides not to send them home, some parents were seriously harassed by the principal for not paying up their children's school fees because they came to plead with the principal while the principal was indifferent and undecided on what to do with few of the students.

Table 5 shows the repercussion faced by students for not paying their fees on time in Emohua LGA. About 50% of the students were liable to fail their exams for the term because they will not be allowed to return back to school when sent back home for lack of fees payment. About 39.3% of the students indicated they were frustrated because their parents couldn't afford to pay their fees and they have to go into menial jobs like farming, hawking, fishing, etc. to assist their parents to pay their fees. Another 10% of the students indicated that they were unable to cope with the requirements of fees paying for the term while less that 1% indicated they did not face any challenge as regards fees payments.

Influence of socio-economic variables on students' academic performance

The influences of socio-economic variables on students' academic performance in agricultural science in secondary schools in Emohua LGA are presented in (Tables 6 and 7). Table 6 shows the socio- economic variables on students' academic performance in agricultural science in secondary schools in Emohua LGA using a four point Likert scale analysis.

Table 1. Student's responses to the distance of school from home in Emohua LGA

Expected principal's reaction	Respondents	Percentages
Less than 1km	83	27.67
1.1km-2km	132	44.00
2.1km-3km	30	10.00
3.1km-4km	29	9.67
4.1km-5km	26	8.66
Total	300	100

Source: Field Survey 2015

Table 2. Students responses to the number of children in their father's household in Emohua LGA.

Number of children	Respondents	Percentages
Less than 4 children	39	13.00
4-5 children	141	47.00
6-7 children	62	20.67
8 children and above	58	19.33
Total	300	100

Source: Field Survey 2015

Table 3. Student responses to how long it takes to pay school fees per term in secondary schools in Emohua LGA

Frequency of fees payment	Respondents	Percentages
One week interval after reopening	102	34.00
One month interval	107	35.67
Two months	70	23.33
At the end of term	21	7.00
At the end of term	21	7.00
Total	300	100

Source: Field Survey 2015

Table 4. Student's responses to principal's reactions when school fees were not paid on time in secondary school in Emohua LGA.

Expected principal's reaction	Respondents	Percentages
Punishment	30	10.00
Sent home	210	70.00
Serious harassment	27	9.00
Indifference	33	11.00
Total	300	100

Source: Field Survey 2015

Table 5. Student responses to the repercussions of not paying fees in time in secondary schools in Emohua LGA.

Repercussions for not paying fees on time	Respondents	Percentages
Students relaxed	2	0.7%
Students are frustrated	118	39.3%
Maladjustment occurs	30	10.0%
Outright failure for the term	150	50.0%
Total	300	100

Source: field survey 2019

Table 6. Likert scale analysis for socio-economic variables on students' academic performance in agricultural science in secondary schools Emohua LGA.

Influence of socio- economic variables	Excellent	Good	Average	Low	Mean score	Decision
How does the family income affect your academic performance?	123	94	53	30	3.03	Reject
How does your parents' poverty level affect your academic performance?	201	69	30	—	3.57	Reject
How does the economic status of your parents affect your academic performance?	110	116	24	50	2.95	Reject
How does the social status of your parents affect your academic performance?	29	31	121	119	1.90	Accept
How does lack of social amenities in your school affect your academic performance?	94	32	150	24	2.65	Reject

Source: Field survey 2015

Table 7. Result of one-way ANOVA on the influence of parents poverty level on student academic performance in agricultural science in secondary schools in Emohua LGA.

Source of variation	Sum of square	Degree Freedom	Mean square	FC	F0.05
Among variable means	20,808.7	2	10,404.35	4.07	4.26
Within samples (errors)	23,031.3	9	2,559.03		
Total	43,840	11			

Source: Estimated from Field Survey data, 2015. V1=2; V2=9; F_C= estimated F-value; F_{0.05}- tabulated value of F-test at 5%.

This study formulated and tested the hypothesis that "there is no significant relationship between the socio-economic variables of parents and students' academic performance in agricultural science in secondary schools in Emohua LGA of Rivers State, Nigeria. The results in the (Table 6) showed that there were significant differences between the socio-economic variables and students academics performance in agricultural science in secondary schools in Emohua LGA of Rivers State, according to the results of the variables used in the likert scale analysis. There was significance differences in relationship with all variables used with minimum mean score of 2.50 with the exception of the effect of parents social status on students' academic performance in agricultural science that had a mean value of 1.90. Meaning there was no significant relationship which means that the variable had low influence in student academic performance in agricultural science in secondary schools in Emohua L.G.A. Highly significant variables that effectively affected the performance of students in agricultural science in secondary schools in Emohua LGA using likert analysis were family income effect on academic performance (3.03), parents poverty level in academic performance (3.57), effect of parents status on students' academic performance (2.95) and lack of social amenities in the area(2.65). Results from (Table 6) further showed that there was significant relationship between students' academic performance in

agricultural science. These findings are in the line with Adegoke and Osokoya, (2015) which earlier results affirmed these results that there is a significant relationship between socio-economic background of parents and students achievement in agricultural science. Anyanwu et al. (2014) also have earlier confirmed these results that occupation of the parents, environmental influence and level of class attendance were significant determinants of academic success in agricultural science. It is also in line with Henrietta and Odozi, (2014) results confirmed the results of these study that parental status does not have significant relationship with the performance of the students in schools. Memon et al. (2010) highlighted that parents with socio-economic status often have more access to wide range of resources to promote and support the academic performance of their children but student who lack financial, social, and economic support from their parents find it difficult to cope with the teaching and learning process.

Table 7 gives the results on analysis of variance (ANOVA). The H₀ hypothesis stated that there is no significant relationship between parents' poverty level and students' academic performance. The F_C = 4.07, and F_{0.05} = 4.26, therefore the p>0.05, hence we accept the null hypothesis that the poverty level of parents does not really affect students' academic performance in agricultural science in secondary schools in Emohua

LGA. Henrietta and Odozi, (2014) obtained similar results of none significant relationship between parents socio-economic background and students' academic performance.

Conclusion

From the results of the study, the following conclusions were made. (1) Majority of the students live far from the school making them to walk very long distance to get to school while far students walk more than 1km to get to school. (2) The study also found out that majority of the students 47% came from families with five children which cause a delay in payment of fees for one to two month interval after resumption. Delay in fees payment led to about 70% of them being sent home which leads to outright failure in the term. (3) The study also formulated the hypothesis which states that there is no significant difference between the socio-economic variable of parents and the academic performance of students in agricultural science in secondary schools in Emohua LGA using likert scale analysis. The result showed that there is significant relationship between the socio-economic status and the academic performance of the students. It also showed that the following are influencing socio-economic variable that influence students' academic performance: family income (3.03) parent's poverty level (3.57), parent's economic status (2.95), parent's social status (1.90) and lack of social amenities (2.65). (4) The one-way ANOVA result proved that parent's poverty level did not influence the academic performance of students in agricultural science in secondary schools at 5% significance level which means that parent social economic status determines how well students will perform in their class subjects.

Recommendations

Based on the results of the study, the following recommendations were made:

- (i) Since some parents cannot afford to pay the fees of their children, the government should provide free education for the students.
- (ii) Fees should be subsidized for parents with large number of children.
- (iii) Social and economic policies should be provided to support children from low socio-economic background to have the same opportunity as those of high socio-economic status to provide quality education for their children.

Authors' declaration

We declared that this study is an original research by our research team and we agree to publish it in the journal.

REFERENCES

- Abdu-raheem BO (2015). Parent's socio economic status as predictor of secondary student's academic performance in Ekiti State. *Journal of Education and Practices*, 6 (1): 123 – 128.
- Adegoke SP, Osokoya MM (2015). Socio-economic background and access to internet as correlates of students achievement in agricultural science. *International Journal of Evaluation and Research in Education*, 4 (1):16 - 21.
- Ajila C, Olutola A (2000). Impact of parent socio economic status on university students' academic performance. *Ife Journal of Educational Studies*, 7 (1):31-39.
- American Psychological Association (APA) (2019). Socio Economic Status.
- Anyanwu SO, Anyanwu O, Ansa JEO (2014). Determinants of academic success in agricultural science subject among senior secondary school students. *Journal of Education Policy and Entrepreneurial Research*, 1 (2): 211 – 218.
- Ball K, Crawford D (2010). Socio economic inequalities in fruit and vegetable intake
- Egunsola AO (2014). Influence of income environment on academic performance of secondary school students in agricultural science in Adamawa State, Nigeria. *Journal of Research and method in Education*, 4(4): 46 – 53.
- Emeya S, Ojimba TP (2012). Social benefit of secondary school farms in Rivers state, Nigeria. *An International Journal of Arts and Humanities*, 1(14):274-290.
- Henrietta MC, Odozi IC (2014). Influence of parental socio-economic status on academic achievements of students in selected schools in Nigeria: A case study of Enugu State. *Journal of Education and Practice*, 5(2): 105 – 110.
- Jones P, Selby D, Sterling SR (2010). *Sustainability Education, Perspectives and Practices Across Higher Education*. London, Washington, D.C. Earthscan.
- Magunson K (2007). Material education and children's academic achievement during middle childhood development. *Psychology* 43.1497-1512.
- Memon GR, Joubish MF, Khurrari MA (2010). Impact of parental socio economic status on student's educational achievement at secondary school, of district Malir, Karachi. *Journal of Scientific Research*, 6 (6): 688 – 697.
- Michubu MJ (2013). Socio-economic factors influencing students' academic performance in public secondary schools in Igembu South District, Kenya. Students. A Masters' Degree Project, University of Nairobi, Kenya.
- Modebelu MN, Duvie AN (2012). Innovative methods and Strategies for effective teaching and learning. *Mediterranean Journal of Special Sciences*, 3 (13): 145-154.
- Modebelu MN, Nwakpadolu GM (2013). Effective Teaching and Learning of Agricultural Science for Food Security and National Sustainability. *Journal of Educational and Social Research* Vol. 3 (4):161-170.
- Muhamed FJ, Muhamed AK (2010). The Impact of parental social economic status on students educational achievement at secondary schools. *Journal of Scientific Research* 6 (6): 678 – 687.
- National Policy on Education (2004). National policy of Education in Nigeria 4th Edition NERDU, Press, Lagos.
- National Population Commission, 2006. Abuja Nigeria.
- Ojimba TP, Nwafor S, Aleru CN Onyekwere A (2018a). Role of students' academic performance in agricultural science in secondary school in Emohua Local Government Area of Rivers State, Nigeria. *Direct Research Journal of Social Science and Educational Studies*, 5 (5):75-84.
- Ojimba TP, Kalio AE, Nwaoburu O, Alali NJE (2018b). Teachers roles in students' academic performance in agricultural science in secondary schools in Emohua Local Government Area of Rivers State, Nigeria. *Direct Research Journal of agricultural and Food Science*, 6 (12):344-354.
- Okanezi B, Adeagbo BC (2018). Effect of poverty on educational attainment of secondary school students. *International Journal of Academic Research in Business and Social Sciences*, 8(7):727-736.
- Olaniyi OA (2004). Introduction to research in operational in education

- Social Science. Journal of Education Finance*, 12.12.
- Olufemi OT, Adediran AA, Oyediran WO (2018). Factors affecting students' academic performance in college of education in southwest, Nigeria. *British Journal of Education* 6(10): 43- 56.
- Onu FM, Ikechi ME (2013). Factors influencing student choice to study agriculture. *Agriculture and Biodiversity Research*, 2(4):80-86.
- Onwukwe E, Anyanwu E, Agommuoh P (2017). Influence of parents socio-economic status on academic achievements of secondary school students in Owerri Imo State, Nigeria. *Journal of Research and Method in Education*, 7(2):42-47.
- Onyekuru BU, Ibegbunam JO (2013). Teaching effectiveness of secondary School Teachers in Emohua L.G.A. of Rivers State, Nigeria. *European Scientific Journal*, 9 (28). 212 – 226.
- Ovansa JU (2017). Effect of socio economic status on the academic performance of senior secondary schools students: A case study of public senior secondary schools in Adarri L.G.A of Kogi State. *International Journal of Education and Evaluation*, 3(8): 7 – 17.
- Rothstein R (2004). Class and schools using social economic and educational reforms to close the white and black achievement gap. *Economic Policy Institute*. USA.