

**PARENTAL VARIABLES AND ACADEMIC PERFORMANCE OF SECONDARY
SCHOOL STUDENT IN BIOLOGY of ENUGU SOUTH LOCAL GOVERNMENT
AREA OF ENUGU STATE**

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ABSTRACT

The study conducted to examine influence of parental variables on the academic performance of secondary school student in biology. The population of the study consisted of all the secondary schools students' Enugu South Local Government Area of Enugu State. The study adopted survey design, while random sampling technique was used in selecting two hundred and fifty (250) respondents. The structured questionnaire was used to elicit information from the respondents. Data collected were analyzed using percentage analysis. In conclusion, the study revealed Parental educational background, parental academic involvement, parents' occupation and parent's marital status influence students' performance in biology. It was also recommended that, since parents education influences students academic achievement in Biology, the government and all stakeholders in education sector should endeavour to implement its policy on basic education for all and thus create an enlighten society in which every parent would be educated enough to have a positive influence on their children especially in their attitude towards Biology which in turn would lead to better achievement in the subject

Keywords: Parental Variables; Occupation; Academic; Performance; Student; Biology Etc.

INTRODUCTION

Education is one of the most important factors that distinguish man from animals. It is one of the principal key of outcome of man's rationality. It is a process that starts from birth and ends whenever an individual finally dies. It involves a number of activities on the part of several people, including the teacher, the student, the parents, the government, and every citizen of the country. Each of these participates in the process in one way or the other. (IbiaandEtte, 2011). Education is essential for the development of society. The more educated the people of a society are, the more civilized and well-disciplined the society might be.

In Nigeria, the national policy on education (FGN, 2004) shows government's plan for action in providing Nigerian citizens with relevant education. Government sees education

as a means of building a free and democratic society, a just and egalitarian society, a great and dynamic economy, and a united, strong and self-reliant nation, a land of bright and full opportunities for all citizens. Section 1, sub-section 4(c) of the national policy on education (FGN,2004) provides that: “every Nigerian child have a right to equal educational opportunities irrespective of any real or imagined disabilities each according to his or her ability”. As a result of this, government has made several attempts to have a free and compulsory system of education in all the states of the federation in the basic schools. In the national educational goals derived from educational philosophy, education is to aid in the acquisition of appropriate skills and the development of the mental, physical and social abilities and competencies as equipment for the individual to live in and contribute to the development of the society. Philosophers believe that the aim of education is examined by man’s relationship to his society and also by preparing young people to enter adult society and participate in it. This cannot be realistic without the effort by parent through their system of teaching and upbringing.

Family is a primary cell of society where the child’s upbringing must begin since his birth, still in cradle. A person’s principles established since childhood are like letters engraved in the bark of a young tree, which grow and enlarge to become an integral part. Therefore, right beginning makes the most important part of a child’s upbringing or education. Nobody ever said training children was easy. They don’t come with guidelines and instructions, and they certainly don’t come with a pause button (I have looked!). What they do come with is a crucial set of physical and emotional needs that must be met. Failure of the parents to meet these specific needs can have wide-ranging and long-lasting negative effects especially on their academic performance (Epistein, 2001). This is because parents at home are children first teachers. As a child move from infant to toddler and then to a pre-schooler, he learns how to speak, listen, write and read which latter develop the child to achieve academically (Theisen, 2009).

The more the parents involve in the process of imparting education to their children, the more the children might excel in their academic career and to become the productive and responsible members of society. It has been assumed that academic achievement of students may not only depend on the quality of schools and the teachers, rather the extent of parental involvement has vital role to play in academic achievement of their kids. Parent involvement in a child’s early education is consistently found to be positively associated with a child’s

academic performance (Hill and Craft, 2003). Specifically, children whose parents are more involved in their education have higher level of academic performance than children whose parents are involved to a lesser degree. The influence of parent involvement on academic success has not only been noted among researchers, but also among policy makers who have integrated efforts aimed at increasing parent involvement into broader educational policy initiatives.

One variable seeing affecting students' performance in biology is educational background of their parents; the level of educational attainment of parents could influence the academic achievement of their children. According to European Union Monitoring Report (2013), those students whose parents have a tertiary level of education perform, on average, significantly better in tests of science, reading and mathematical ability than do those whose parents have only basic schooling. In a family where both the father and mother are educated, their children are always taken good care of in their academic activities. Such parents know the importance of getting educational materials for their children in school. They may go through their children's exercise books after school, or even employ a private teacher to teach them after school. By so doing, their academic performance will be improved; whereas in the case of illiterate family, the need to supervise the children's exercise books is not there, hence their children's low academic performance in school.

The role of parental involvement in children's education has become a central issue in educational policy and research. Research findings support the existence of positive relationship between parental involvement and educational success, especially in the secondary school years.

Parental Educational Background and Student's Academic Performance

We cannot afford to ignore the educational background of the parents while assessing the performance of their children. They make an equal contribution to the inherited ability of children to learning. To properly educate a child is an expensive undertaking and cannot be effectively done by all in a given society. Debey, Edem and Thakur (1990) theoretically classified Nigerian society into three classes namely: upper, middle and lower classes. Social class membership is related to various pattern of behaviour. The upper and middle class parents are generally well educated hence better experienced. They therefore take it for granted that their children will do well academically. On the other hand, the lower class parents are generally with little or no formal education. They rely mainly on informal

education. They occupy poor positions in the society example messengers, cleaners, gardeners, driver, etc. They are used to taking orders from their bosses hence when they get home where they are bosses themselves, they dish out order which must be strictly followed. According to Sheepe (1997), it is more characteristic of family associated institutions that demand absolute obedience, such as military and the deeply religious. In addition, Peck (1998), noted that large-scale study of teenagers violence towards parents indicates that this behaviour is learned in families where parents used severe physical punishment against their children. The lower class parents are much less likely to make high assumptions for their children. They may instead hope that their children will become apprenticed to a trade.

Topping (1995), argued that lower class juveniles who become delinquent do so because of the lower class value system. This really explains the delinquent and criminal behaviour of most of the students which adversely affect their academic performance in school. It is generally observed that inequality is a prime breeding ground for the use of excessive force by the powerful and for resentment among the powerful and dependent members. Under this circumstance, it is difficult to imagine how failure and frustration experienced outside the family can be resented in the relative safety of the household for according to Ferguson (1999), Geues and Straus (1998), family violence is strongly associated with low educational and occupational status.

Parents play a major and a very important role in performance of their children in school (Neil, 1994). For most children, interior of the home and its immediate surroundings are the first environments they experience throughout their early years. Young children spend majority of their time with their parents at home and this has been shown to be a major factor that influence the overall academic performance of children. Within the home, children have early interactions with parents and the quality of interaction largely determine the state of a child's academic performance. The language development, which is the basis for educational attainment, differs between literate and illiterate family. Children from illiterate home are deprived from future learning processes and good academic performance because they lack basic academic foundation which children from literate home enjoy. Parent's involvement in scholastic activities of a child goes a long way in giving the child a head start among his peers that can only be guaranteed by literate parents.

Parental Occupation and Student's Academic Performance

Occupations are ranked into most prestigious occupation and lower ranking occupation. The most prestigious occupations are physicians, surgeons, lawyers, chemical & biomedical engineers, and communication analysts. While lower ranking occupation are food preparation workers, counter attendants, bartenders and helpers, dishwashers, janitors, maids and housekeepers, vehicle cleaners, and parking lot attendants. The job consider as high status in classification provides more challenging works, ability and greater control over working conditions. While those considered less valued in classification paid significantly less and more laborious, very hazardous and provided less autonomy. Gachathi, (2006) indicated that occupational prestige is a component of socioeconomic status encompasses both income and educational attainment. To him, occupational status reflects the educational attainment required to obtain a job and income levels. When parents have a better occupation, they make adequate provision for their children education. They provide economic, social, psychological and emotional support to their children, and this would make it possible for the children to perform well in their educational attainment.

Memo, (2010) in their research on the impact of socioeconomic status on students' educational achievement at secondary schools districts of Malir, Karachi, in Indian. They found that there was significance relationship between parents' occupation and students' academic performance in matriculation examination. Students whose fathers have better occupation performed well in matriculation examination than those students whose fathers have a less prestigious occupation. Fathers with the high occupation are in a better condition to assist and encourage their children toward educational attainment. They can provide whatever is needed to support and encourage their children morally, intellectually, spiritually and psychologically. But parents with less prestigious occupation due to instability and financial problems cannot provide adequate modern facilities to enhance their children education. Mother's occupation also influences students' academic performance. It was observed that students with a mother who have better occupation performed well in matriculation examination than their peers from mothers with less prestigious occupation. Also Saifullahi, (2011) pointed out that parents' occupation significantly influence students' achievement. He used the data from three different colleges in Gujarat district. The result indicated that children of government employees secured more marks (60.02%) than the private job holders, because of the certainty and reliability of the government jobs. Parents

with government jobs are more secured, and their family are at peace relatively compared to those who work in the private organization. They are always in frustration and lack of confidence at been permanent. Likewise, occupation of the mother has an influence on students' scores. The result of this study indicated that the maximum percentage of marks that is 64.5% is of students who mothers were government workers. So this seems that both fathers and mothers profession have a significant influence on students' academic achievement.

The influence of parental occupation continues to attract the attention of many researchers. In line with this assertion Qaiser, Hassan, Ishtiaq, Muhammad, Farid & Zaibun (2012) conducted a study on effect of parental socioeconomic status on the academic achievement of secondary school students in Karak district, Pakistan. One thousand five hundred students were selected from 60 government boy's high school in Karak district as a sample of the study. They classified parents into four classes based on their occupation; class 1, class 2, class 3, and class 4. The result indicated that those students who their parents belong to class 1 scores high grade than the other classes in comparison. Likewise, the students belong to class 2, are better than those from Class 3, and then followed by class 3, to class 4 respectively. Therefore, it is important to note that parents' occupation plays a significant role on students' academic performance. The study indicated that parents with prestigious occupation provide necessary facilities needed for the enhancement of their children education. They also give them support and encouragement toward the attainment of educational achievement. On the other hand, students from less prestigious occupations lack so many advantages as compared to those from the parents with high prestigious occupation. Challenges both at home and school which hinder them from participating fully in classroom activities, and result in poor academic performance. Parents with lower or less prestigious occupation are always battling with how to satisfy their basic needs in the life as such they pay little attention to their children education. Therefore, the influence of parents' occupation cannot be overemphasized, even though; other socioeconomic status variables such as income, education do affect students' academic performance.

According to Charles (2013) occupational status measures social position by describing job characteristics, decision making, ability & control and psychological demand on the job. Ahmad (2013) suggested that a series of questions were asked to parents and guardians about the financial circumstances surrounding children school enrolment in

Tanzania. Their answer was no more than economic problem militating against their children to school. Wang (2010) also mentioned poverty as a contributing factor of children drop out in rural areas of China. Parents with less prestigious occupation fail to make adequate provisions to support their children in their educational attainment, and result in poor academic performance or even dropout. Farkhada (2013) in his analysis of gender and socioeconomic status on the academic achievement of secondary high school students of Luck now a city in India, found out that male and female students perform academically well than their peers from low socioeconomic status. High socioeconomic status parents provide necessary facilities regarding their children education, health and understand their problems related to the adolescent period that affects their academic achievement. Ibrahim, (2014) in his research conducts to find out the influence of parental socioeconomic status on their involvement in their children's education in Jordan. He revealed that the relationship between parental occupation and parental involvement at home was moderate in some strategies. It shows that parent with the prestigious occupations is more likely to identify their children's problem to give a possible solution. They also help them to do their homework by providing facilities necessary for learning development. It is possible as a prestigious occupation is connected with income level. Prestigious occupation parents have better income stability that would make it easier for them to make adequate provisions to their children's learning development.

METHODOLOGY

Area of the Study

The area of the study was Enugu South Local Government Area of Enugu State, Nigeria.

Research Design

The research design for this study was a survey design. This study was descriptive in nature with a systematic description of the parental variables and students performance in Biology by employing the use of questionnaire to obtain information on the independent variable.

Population of the Study

The population of this study consisted of all Senior Secondary II students (SSII) in all the public secondary schools in Enugu Zone. The population of the students at the level was seven thousand, three hundred and two students (7,302) in the 2015/2016 school year.

Sample and sampling Technique

The Sample size of 250 SS II biology students offering Biology in Enugu South Local Government Area of Enugu State, Nigeria. . The sample size was statistically determined using the sample fraction

Research Instrument

The research instrument used for the study was the questionnaire adopted from the works of Teseema and Socters, (2006) to obtain data on the independent and dependent variables presented in both sections A and B of the questionnaire.

Validation of the Research Instrument

In order to establish the validity of the instrument, three test and measurement experts in the Department of Educational Foundations, University of Uyo were given the instrument for vetting. The items in which at least two experts agreed upon were regarded as suitable and used in the instrument. The items in the questionnaire were properly worded to meet the respondents' level of understanding.

Reliability of the Instrument

The "Student Home Variables Questionnaire", was administered on a sample of 20 students who were not part of the sample used for the main study. The internal consistency reliability of the instrument was determined by split- half method whose correlation coefficient was converted to that of the full length of the instrument using the Spearman Brown formula. The coefficient obtained was 0.55 and was deemed acceptable for the use of the instrument in the study.

Administration of the Instrument

The researcher visited each of the selected schools personally with a letter of introduction to the school principals. With permission duly granted by each of the principals, the sampled students in each of the schools were issued with questionnaire and each of the student was required to complete the items. The teachers of the classes involved assisted the investigator in distributing and retrieving of completed questionnaires on the spot. This was accepted by the researcher to ensure that time was utilized judiciously, and to avoid missing copies of the questionnaire.

Statistical treatment of the Data

The data obtained were analysed using Chi-Square statistics analysis.

DATA ANALYSES AND RESULTS

Hypothesis One: Parental educational background has no significant influence on students' performance in biology.

TABLE 1: Independent t-test analysis of scores on the influence of parental educational background and students' performance in Biology

Variable	N	X	SD	T _{cal}	T _{crit}	Decision
Educated	196	43.86	21.26	3.73	1.96	S
Non- educated	54	31.30	24.12			

*Significant at 0.05 level; df= 248; N= 250

Table 1 presents the obtained t-value as 3.73. This value was greater than critical t-value (1.96) at 0.05 level with 248 degree of freedom. This observation indicates that the influence of Parental educational background on students' performance in biology was statistically significant. Hence, null hypothesis one which assumed no significant difference was rejected.

TABLE 2: Independent t-test analysis of scores on the influence of parents' occupation on students' performance in biology

Variable	n	X	SD	T _{cal}	T _{crit}	Decision
Professional jobs	135	29.95	19.27	9.88*	1.96	S
Non-professional jobs	112	53.94	18.62			

*Significant at 0.05 level; df= 248; N= 250

Table 2 presents the obtained t-value as 9.88. This value was greater than critical t-value (1.96) at 0.05 level with 248 degree of freedom. This observation indicates that the influence of Parents' occupation on students' performance in biology was statistically significant. Hence, the null hypothesis three which assumed no significant difference was rejected.

Discussions

The first hypothesis which stated that parental educational background has no significant influence on students' performance in biology was rejected. The obtained t-value 3.73 was greater than critical t-value 1.96 at 0.05 level with 248 degree of freedom. This result implies that Parental educational background has significant influence on students' performance in Biology. The significance of the result is in agreement with the opinion of Topping, (1995) who argued that lower class juveniles who become delinquent do so because of the lower class value system. This really explains the delinquent and criminal behaviour of most of the students which adversely affect their academic performance in school. It is generally observed that inequality is a prime breeding ground for the use of excessive force by the powerful and for resentment among the powerful and dependent members. The significance of the result caused the null hypothesis to be rejected while the alternative one was accepted.

The third hypothesis which stated that parents' occupation has no significant influence on students' performance in biology was rejected. The obtained t-value 9.88 was greater than the critical t-value 1.96 at 0.05 level with 248 degree of freedom. This result implies that Parents' occupation has significant influence on students' performance in biology. The significance of

the result is in agreement with the opinion of Gachathi, (2006) who opine that occupational prestige is a component of socioeconomic status encompasses both income and educational attainment. To him, occupational status reflects the educational attainment required to obtain a job and income levels. When parents have a better occupation, they make adequate provision for their children's education. The significance of the result caused the null hypothesis to be rejected while the alternative one was accepted.

Conclusions and Recommendations

The influence of parental variables on the academic performance of secondary school students in biology has been investigated in this research work. Due to the alarming poor academic performance of secondary school students especially in biology, government has made several attempts to boost the academic performance of students. This can be realistic by the effort parents make through the system of teaching and upbringing. The more the parents involve in the process of imparting education to their children, the more the children might excel in their academic career and to become the productive and responsible members of society. Based on these, parental variables such as parental educational background, parental academic involvement, parents' occupation, and parents' marital status have significant impact on their children academic performance in school.

The study recommended that, school administrators and policymakers should continue to investigate ways to increase parents' involvement in their children's education both at school and at home to improve their academic performance. Furthermore parents who are not educated should be given opportunity to attend adult school in order to influence their children's academic at home. Finally, the ministry of education should create an awareness of how parents can be of help to their children's education irrespective of their occupation and marital status.

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