

IMPACT OF PARENTS' SOCIO-ECONOMIC STATUS ON ACADEMIC PERFORMANCE AMONG CHEMISTRY STUDENTS IN DALA LOCAL GOVERNMENT, KANO STATE

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Abstract

Many years ago, in the Nigerian education system, intelligence was thought to be the sole determinant of academic achievements of students, but nowadays, emphasis is on parents' socio-economic status which greatly affects student's educational achievements. Educational process takes place either formally or informally. Higher academic performance could be traced to active parental influence and participation in their children's education. This study employed ex-post facto research designs. The population for the research consists of all the SS2 chemistry students of Dala Local Government Senior Secondary Schools. Four (4) schools were purposely selected in Dala local government area of Kano State. Purposive sampling technique was adopted as sampling technique for the study where a sample of one hundred and thirty-eight (138) students were selected. Qualifying examination result was the major instrument used in collecting data for this research. The students were intimated with goals of the research and confidentiality of their responses, and with the support of the school managers, their parents' socio-economics status was determined. The results were analysed using SPSS statistics; descriptive level was used to answer research questions while t-test was used to analyse the hypotheses at inferential level. The study recommended that Government should consider the income of some people and regulate the prices of educational materials, means of transportations and school fees which are presently beyond the reach of the ordinary man. This will support the need for equal education of both boys and girls from both lower and higher socio-economic status.

Keywords: Educational system, Parents Socio-Economic Status, Students Performance and Educational Achievement.

Introduction

Education is what makes the world go round and an instrument for national development as well. Hence the political, economic and social progress in general depend on the education system (El-Yakub, 2015). Science education plays an important role in all human endeavours and the place of Chemistry as a basic science in the Nigerian education system cannot be over emphasized. Odunusi (2001) observed that the economic and political development of a nation is assessed in terms of her achievements in science and technology. Therefore, Nigeria as a nation is committed to producing future scientists and technologists for better citizens and a better nation as stated in the national policy on education that the nation should be geared towards: a free and democratic society, a just and egalitarian society, a united strong and self-reliant nation, a great and dynamic economy, and a land of bright and full opportunities for all citizens (Federal Republic

of Nigeria {FRN} , 2013). Based on this premise, parents are contributing their quota by sending and advising their children to go to school in order to achieve this national goal. In a related development, the socio-economic status of parents might be considered as one of the major contributing factors, which affect the academic performances of students. It is not out of place to imagine that parental socio-economic background can have possible effects on the academic achievement of children in school (Henrietta & Odozi, 2014). This is as a result of the fact that parents have different ways of raising their children according to many factors surrounding their economic, educational and social levels. Parents of different occupational classes often have different styles of child rearing, different ways of disciplining their children and different ways of reacting to their children (Rothestein, 2004). On the other hand, parents who do not involve in their children's educational process are also considered to be capable of repressing and destroying the motivation and ability of their children through neglect and indifference to their achievements (Al-Matalaka, 2014). In every society, there exists a sort of social grading of which is termed as social stratifications. Social stratification refers to a ranking of people or groups of people within a society (Kerbo, 2006). It means the division of people into different social classes. In reference to this system of social classes in Nigeria, Acoseh (1983) has emphasized that some groups belong to the upper, middle, and lower classes. Socioeconomic status, as explained by Saifi and Mehmood (2011), is a combined measure of an individual's or family's economic and social position relative to others, based on income, education and occupation. However, according to Chandra and Azimuddin (2013), socioeconomic status of parents is the most important variable in determining the academic achievements of students. Parents have important roles to play in making their children to be successful in educational achievement and other aspects of live generally.

However, Chemistry is a subject offered at science classes of senior secondary schools in Nigeria. In this regard, Kano state is a homogeneous cultural society with trading and farming as the major commercial activities. Dala Local Government is located within the metropolitan city where the trading activities is more pronounced. A local community based in Dala Hill is documented in Kano since the 7th century (Iiffe, 2007). Dala is the most populous local government in Nigeria (NPC, 2007), and therefore most parents are involved in either trading or farming as their source of income. Kano is the second largest city in Nigeria, after Lagos, and the most important city in northern Nigeria with more than 3 million people living in metropolitan (Kano NPC cited in Bello & Egresi, 2017). As a high-density society, a lot of secondary schools are located there with numerous students' population.

Parental involvement takes many forms including good parenting in the home, provision of a secure and stable environment, intellectual stimulation and parent-child discussion (Desforges & Abouchaar, 2003). Based on this, student in the upper-class homes or family are assumed to have received proper and better parental care compared to children from the middle- and lower-class families, and that this has given them a lot of advantages in school over the latter (Fafunwa, 1974). In line with the above statement, Hill et al. (2004) had also argued that socio-economic status of parents does not only affect the academic performance, but also makes it possible for children from low background to compete with their counterparts from high socio-economic background under the same academic environment. In the same vein, other researchers had posited that parental SES could affect school children as to bring about flexibility to adjustment to the different school schedules (Guerin et al., 2001). The same view is shared by Machebe (2012), who concluded that, parental socio-economic status could influence academic performance of their children at school. In similar research conducted in Nigeria, Oni (2007) and Omoegun (2007) had found out that there is significant difference between the rates of deviant behaviour among students from high and low socio-economic statuses.

The most important concern of any teacher and all stakeholders in education should be the optimization of learning. They each want their work to have a positive impact on children, and their jobs are directly affected by the success of the school system (Roundy, 2021). It is very important that each child should be able to make the most of his abilities. In the past, intelligence was thought to be the sole determinant of academic achievement of students. Emphasis is now on parent's socio-economic status as it affects students' educational achievement. Machebe (2012) concluded that parental socio-economic status could influence academic performance of their children at school. This study sought to determine different socio-economic levels of parents and academic achievements of students.

The research is designed to find out the effect of parental socio-economic status and academic achievements of students in selected secondary schools in Dala Local Government Area of Kano State. Therefore, the researchers intend to investigate whether the academic performance of students from high socio-economic families are better than those from the low socio-economic families. Based on this, two research questions were formulated to guide the research.

Research Questions

This study provided answers to the research questions below:

- i. what is the mean difference in academic performance of students from higher socio-economic status families and those from low socio-economic status families?
- ii. What is the mean difference of academic performance of male students from low socio-economic status families and those of female from low socio-economic status families?

Research Hypotheses

To answer the question raised above, the following null hypotheses were raised for testing:

- i. there is no significant mean difference in academic performance of students from high socio-economic status families and those from low socio-economic status families.
- ii. There is no significant mean difference of academic performance of male students from low socio-economic status families and those of female students from low socio-economic status families.

Materials and Methods

The research adopted a mixed design of *expost -facto* and descriptive (survey) type because terminal examination results and socio-economic status of parents to students sampled were surveyed for analysis and how it affects students' academic achievement in terms of performance and parent-child intimacy. There are many secondary schools in Dala Local Government Area of Kano State, representing both junior and senior secondary, but the researchers used only the senior secondary schools as population for this study because Chemistry is only offered in senior secondary schools. Purposive sampling technique was adopted as sampling technique for the study. The sample for this study was selected from four (4) schools which were randomly selected. However, the study purposely considered the sample of one hundred and thirty-eight (138) students where fifty (50) were from high socio-economic status while eighty-eight (88) were from low socio-economic status families. The major instruments used in collecting data for this research was Senior Secondary School (SSCE) qualifying examination results of the sampled students. The SSCE qualifying examination results were used to analyse students' performance; 100 students to address research question and 88 students from low socio-economic status to addresses the second research question. The school managers and students' interviews were used to obtain data on parents' socio-economics status, because the former interact with parents while the later are

part of the parents. The interview was self-administered by the researchers at the sampled schools. The school managers and students were intimated with goals of the research and assured of the confidentiality of their responses. Statistical Package for Social Sciences (SPSS) statistical software was used for data analysis. At descriptive level, the research question was answered using mean and standard deviations while t-test statistics was used to analyse the hypotheses.

Results and Discussions

The data results were analyzed using the statistical package for social sciences (SPSS). The scores obtained at the end of the qualifying examinations were used to measure the academic performance of students from high and low socio-economic status families. The level of significance adopted for the analysis was 0.05. This level of significance formed the basis for accepting or rejecting the formulated null hypothesis as follows:

Research Question:

What is the mean difference in academic performance of students from higher socio-economic status families and those from low socio-economic status families?

Table 1: Mean and standard deviation on performance Low and High Socio-economics Status

Socio-Economic Status	N	Mean	Std. Deviation	Mean Difference
Low Status	50	52.4000	11.90610	11.02
High Status	50	63.4200	12.51789	

Table 1 shows that the mean academic achievement score (52.40) for students who were from the low socio-economic status families in the table above is lower than the score (63.42) for students from high socio-economic status. The significance of this variability in the academic performance between the two groups is tested using null hypothesis.

The statistical tool used for testing the hypothesis was the t-test statistics as follows:

Null Hypothesis one: There is no significant mean difference in academic performance of students from high socio-economic status families and those from low socio- economic status families.

Table 2: t-test on the academic performance of students from high socio-economic status families and those from low socio- economic status families.

Socio economics Status	N	M	SD	T	P	Remark
Low status	50	52.4000	11.90610	-4.511	.000	Rejected
High status	50	63.4200	12.51789			

The result of the t-test from Table 2, reveals that the mean score of students from parents of high economic status (M=63.42, SD=12.52) was higher than mean score of low socio-economic status (M=52.40, SD=11.91), $t = -4.51$, $p < 0.005$. The observed level of significance for the test lower than the significant level of 0.05. Therefore, the null hypothesis which states that there is no significant mean difference in academic performance of students from high socio-economic status families

and those from low socio-economic status families is thus rejected. This means that parents' socio-economic status influence students' academic performance in chemistry.

Table 3: Mean and standard deviation on performance of male and female low socio-economic status families.

Socio-economics Status	N	Mean	SD	Mean difference
male	54	40.17	10.33	6.06
Female	34	46.27	7.63	

Table 3 shows that female students from low socio-economics status have a mean score of 46.27 and a standard deviation of 7.63, which is greater than that of the male students of low socio-economics status who have mean score of 40.17 at a standard deviation of 10.33. The mean difference is 6.06. The mean scores are far better than the standard deviation scores which reveals the existence of difference in the performance of the two groups. The result indicates that female students from low socio-economics status have a better mean score than male students from the same class. The significance of this variability in the academic performance between the two groups is tested in the corresponding hypothesis.

Table 4: t-test analysis between male students from low socio-economic status families and those of female students from low socio-economic status families.

Background	N	M	SD	Df	T	p	Remark
Male	54	40.17	10.33	86	-2.96	0.004	Rejected
Female	34	46.27	7.63				

The result of the t-test analysis from the Table 4 reveals that the mean scores of the female students with low socio-economics status ($M=46.27$, $SD=7.63$) is higher than the mean score of the male students of the same socio-economics status ($M=40.17$, $SD=10.33$), $t_{(86)}=-2.96$, $p < 0.05$. Since the p-value is less than the level of significance set for this hypothesis, therefore, the null hypothesis which says that there is no significant difference between the performance of female students and male students of low socio-economics status in chemistry in secondary schools of the study area is rejected.

Discussions of Findings

The study investigated the parents' socio-economic status and academic performance among chemistry students in Dala local government, Kano state. The major findings from the research analysis and the hypothesis indicate that there is significant difference in academic performance of students from high socio-economic status families and those from low socio-economic status families. This finding does not agree with Henrietta and Odozi (2014) who stressed that Parental socio-economic status and parental educational background did not have a significant effect on the academic performance of the students. However, this finding agrees with results obtained by other researchers. Eze (2002), Craig Ronald (2003), Hill et al (2004), and Rothstein (2004) asserted that the status of parents not only affect the academic performance of students but also makes it impossible for children from low socio-economic background to compete well with their counterpart from high socio-economic background under the same academic environment. In a related development, Eshetu (2015) revealed that the socioeconomic status of parents

(particularly educational level and occupational status of parents) has a strong association with the academic performance of students.

Generally, there is significance of the effect of the two factors being considered in the ongoing discussion. It is apparent that the variable plays an important role in the students' academic performances. This is because the mean scores of students of high socio-economic status and low status are still relatively different.

Conclusion

Knowledge possession through education by people has been strongly associated with social status in all societies (Krikorian, 1994). Consequently, education is an instrument for social mobility, social wellbeing, economic development, good behaviour and attitude of any society. The implications of social status to knowledge distribution are to create conditions for injustice in the distribution. There is the tendency by which those who enjoy higher social status in society will enjoy more opportunities in education of the right type and quality, while those at the lower status will unjustifiably lack educational access or where it exists will not be of the right type and quality. So, parents should leverage with their children's, teachers and school environments in order to have better academic performance and achievements of their children which lead to the positive socio-economic development of their society

Recommendations

Sequel to the data analyzed above the results of the findings shows that all the factors mentioned have a little inspiration on the students' academic performance and achievements in relation to their parents socio-economic status. Also, based on the basis of the findings of this research, the following recommendations were drawn:

- i. Educational policy makers and school-based organizations should map out detailed plan for parents' enlightenments on supporting their children education.
- ii. Government should consider the income of some people and regulate the prices of educational materials, means of transportations and school fees which are presently beyond the reach of the ordinary parent. This will support the need for equal education of both boys and girls from both lower and higher socio-economic status.

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