

RELATIONSHIP BETWEEN PARENTAL BACKGROUND AND STUDENTS' PERFORMANCE IN CHEMISTRY IN GOMBE LOCAL AREA OF GOMBE STATE

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Abstract

This study aims to investigate the relationship between parental background and academic performance of students in Chemistry in Gombe LGA of Gombe State. The study adopted *expo facto* design. The population for the study comprised all Senior Secondary School II students in Gombe LGA. Purposive sampling was used to select 48 students from each of the schools. The instruments used for the study is a self-designed questionnaire and inventory to collect students' results. The instrument was subjected to face and content validity. Test-re-test and estimation of internal consistency methods of reliability were adopted to determine the reliability of the instruments. Reliability co-efficient of 0.69 and 0.71 was obtained. Two hypotheses were formulated and tested at 0.05 level of significance. The data collected was analyzed using Regression statistical tools. The study revealed that parental level of income is highly correlated with students' academic performance in Chemistry in Gombe LGA.

Keywords: Chemistry, academic performance, Relationship, Parental Background.

Background of the Study

Despite the fact that the development of any nation depends largely on the quality of education of her citizen, the academic performance of most Nigerian students in secondary schools is decreasing in Chemistry. Imogie (2002) drew attention to the public outcries concerning the low quality of education in Nigeria. Ige (2007) confirmed that students who took the Senior School Certificate Examinations performed poorly in all science subjects Chemistry not being an exceptional between 2005 and 2007. Ugoji (2008) lamented that students' academic performance is declining because they are confronted with so many school and non-school related demands and responsibilities. Adeyemi in Abdu-Raheem (2010) agreed that the problem of students' underachievement has been an educational issue since the early 1980s. Abdu-Raheem (2010) also confirmed through the data

collected from Ekiti State Ministry of Education that only 26.9% of students that sat for Junior Secondary School Examinations for five academic sessions in Social Studies passed at credit level. Hassan (1983) examined and listed the causes of poor academic performance among secondary school students. Some of the causes are low intellectual ability, poor study habits, low achievement motivation, lack of vocational goals, low self-confidence, low socio-economic status of the family, poor family structure and anxiety. Different factors such as the child's intelligence, state of health, motivation, anxiety, availability of suitable learning environment, adequacy of educational infrastructure, may influence students' academic performance positively or negatively (Eweniyi 2005). They identified low motivational orientation, low self-esteem/self-efficacy, emotional problems, poor study habits, poor teacher consultation and poor interpersonal relationships as some of the causes. Fayemi

(2011) also highlighted inadequate funding, poor teaching methodology, infrastructural decay, low morale among the teachers, indiscipline among teachers and students as factors responsible for the students' failure in national examinations. Adegbite (2014) noted that most Nigerian students at every level of education sponsor their education by engaging in various kinds of works like prostitution, kike driver, daily pay labourer, security guard, recharge card selling, fuel attendant and casual worker.

The family is the first, the smallest and the most important unit of a child's social organization. It is responsible for the development of the child's physical, mental and moral dispositions. Asikhia (2010) also agreed that the family educational background and socio-economic status play pivotal roles in the learning process of the child. Askikhia stressed further that the child's performance whether in the positive or negative could be attributed to the type of family such a child comes from. Ushie, Owolabi and Emeka (2012) confirmed that family type, size, socio-economic status and educational background play important role in children's educational attainment and social integration.

Caro (2009) found that the relationship between family socio-economic status and academic achievement is cordial. Chen (2009) also posited that parental education is the key determinant of student's achievement. These researchers have noted that there is gap in academic achievement between students of high and low socio-economic families. They stressed further that because children from low socio-economic status have relatively poor skills, they are prone to leave school early and less likely to gain admission to college. Udida, Ukway and Ogodo (2012) also agreed that family characteristics are major source of

disparity in student's educational outcomes. Udida et al stressed further that student's academic performance is influenced by the socio-economic background of their parents; as parents that earn high income can take absolute responsibilities of their children's education compared with parents that earn meager salaries. Huang (2007) confirmed that there is a correlation between parents' education level and children's motivation and achievement at upper secondary schools. Hansen and Masterkaasa (2006) discovered that students who originated in a farm household show the lowest educational attainment while those who originated in academic household perform best. Unity, Osagioba and Edith (2013) emphasized that a child is affected negatively if he/she comes from an economically disadvantaged family. Unity et al stressed further that such children are faced with overwhelming challenges that leads to poor school performance.

In their study, Farooq, Chaudhry, Shafiq and Berhanu (2011) asserted that students whose parents are educated score higher on standardised tests than those whose parents were not educated at secondary school level in a metropolitan city of Pakistan. Farooq et al affirmed that educated parents can better communicate with their children regarding school works and activities. Hill, Castelino, Lansford, Nowlin, Dodge, Bates and Pettit (2004) attested that the status of parents does not only affect the academic performance of students, but also make it impossible for children from low socio-economic background to compete well with their counterparts from high socio-economic background under the same environment.

Statement of the Problem

There is general outcry about the dwindling standard of education in Nigeria and

observation has shown that many students fail to obtain credit pass in Chemistry at external examinations such as West African School Certificate (WASC), National Examination Council (NECO). This study therefore intended to investigate the relationship between parents' socio-economic status and students' academic performance in Chemistry in Gombe Local Government Area (LGA) of Gombe State.

Purpose of Study

This study attempts to investigate relationship between socio-economic status of parents and students' performance in Chemistry in Gombe LGA. Specifically, the study intends to determine the effect of parents':

1. qualification on academic performance of students in Chemistry in Gombe LGA
2. level of income on academic performance of students in Chemistry in Gombe LGA

Research Hypotheses

This study is guided by the following hypotheses:

H₀₁: Parent's qualification does not have significant effect on the academic performance of secondary school students in Chemistry in Gombe LGA.

H₀₂: Parents' level of income does not have significant effect on the academic performance of second-

ary school students in Chemistry in Gombe LGA.

Research Methods

This study adopted *expo facto* design. The population for the study comprised all Senior Secondary School II Students in Gombe LGA. The sample consisted of 960 students randomly selected from 20 schools in Gombe LGA. Purposive sampling was used to select 48 students that were not performing well from each school. The instrument for the study was a self-designed questionnaire titled Parents' Socio-Economic Status and Students' Academic Performance Questionnaire. (PSESSAPQ) Inventory was used to collect students' results through the assistance of school Principals, Counselors and Chemistry Masters. The instrument was subjected to face and content validation where three lecturers who were all Senior Lecturers. Two of them were in Chemistry Department while one was in Education Department of Gombe State University. Test-re-test method of reliability and estimation of internal consistency methods were adopted and reliability coefficient of 0.69 and 0.71 were obtained respectively. The data collected were analyzed using regression statistical tools.

Result

Hypothesis 1: Parent's qualification does not have significant effect on the academic performance of secondary school students in Chemistry in Gombe LGA.

Table 1: Parents' Qualification

Model	B	Std. Error	T	Sig. T	R	R ²	F
Constant	9.341	0.938	9.955	0.000			
Parents' qualification	0.776	0.1034	22.637	0.000	0.590	0.348	512.426

P= 0.05

Table 1 shows that the effect of parent's qualification on students' academic performance is statistically significant at 0.05 level. ($t = 22.637$, $p < 0.05$). Parent's qualification explained about 35% ($R^2 = 0.348$) of total variation in student's academic performance. The remaining 65.2% unexplained variation can be attributed to varia-

tion in other variables outside the model. The null hypothesis is rejected.

Hypothesis 2: Parents' level of income does not have significant effect on the academic performance of secondary school students in Chemistry in Gombe LGA.

Table 2: Parents' Level of Income

Model	B	Std. Error	T	Sig. T	R	R ²	F
Constant	16.233	0.835	19.429	0.000			
Parents' level of Income	0.542	0.032	17.188	0.000	0.485	0.236	295.420

P= 0.05

Table 2 shows that parent's level of income has significant effect on students' academic performance ($t= 17.188$, $p<0.05$). 23.6% ($R^2 = 0.236$) of the total variation in students' academic performance is explained by parents' level of income while the remaining 76.4% is largely due to variation in other variables outside the regression model. The regression model is statistically significant at 0.05 level. ($F= 295.420$, $p< 0.05$). The null hypothesis is thereby rejected.

Discussion

The study discovered that parent's qualification is closely related with students' academic performance. The study is in connection with Asikhia (2010) and Rothstein (2004) who asserted that children raised by parents with high qualifications are more inquisitive towards learning compared with those children from low educational qualification. Ogunsola and Adewale (2012) also agreed that educational qualification of parents is a significant factor that affects the academic performance of students.

The study also revealed that parental level of income is highly correlated with students' academic performance. The findings of the study is supported by the work of Lacour and Tissington (2011) who discovered that low achievement is closely connected with lack of resources. It is contrary to that of Ebinuwa-Okon (2010) who discovered that financial status do not significantly influence academic perfor-

mance. He believed that enhanced academic performance is a matter of personal determination than financial determination.

Conclusion

Based on the findings of this study, it is concluded that parental educational qualification and income have significant relationship on students' academic performance in Chemistry in Gombe LGA.

Recommendations

The author recommends that:

- Parents should give maximum financial support to their children to enhance their academic performance.
- Parents without education and those with low educational qualifications should endeavour to send their children to home lessons after school hours, by weekends and during holidays to improve their academic performance.
- Government should provide books, laptops and other educational facilities for schools to enable all students to have equal access to academic facilities. This will bridge the gaps between the rich and the poor students academically.
- Government should formulate policies such as scholarship for students from low socio-economic status and soft loans for the parents to enable such students to have

equal opportunity to education as children from high socio-economic status.

- v. Among the recommendations should be in financing and provision of well equipped laboratories and equipment ie reagents and modern apparatus.
- vi. Workshops and Seminars for Chemistry teachers to familiarize them with modern facilities and Information and Communication Technology.

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