

ASSESSING THE IMPACT OF PARENTAL EDUCATION LEVEL AS AND INVOLVEMENT ON SECONDARY SCHOOL STUDENTS' ACADEMIC ACHIEVEMENT IN DALA EDUCATION ZONE, KANO STATE, NIGERIA

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Abstract

The study investigated the influence of parental level of education and parental involvement on academic achievement among senior secondary school students in the Dala Education Zone, Kano State. Four research objectives, with two research questions and two hypotheses, were formulated to guide the study. An ex-post facto research design was adopted. The population consisted of all 5,822 students in the Dala Zonal Education Directorate, out of which 357 were selected as a sample through a multi-stage sampling technique. Data were collected using the Parental Involvement (PI) questionnaire by Chavez (2006). The students' academic achievement was measured using the qualifying examination results of the 2022/2023 academic session. The researcher validated the face and content validity of the instruments. A pilot test was conducted on 30 SSII students from the Dala Zonal Education Directorate (not part of the sample), and the instruments were found to have a reliability index of 0.72. Descriptive statistics of simple percentage were used to answer research questions 1 and 2, while the t-test for independent samples was used to test the hypotheses. The findings revealed that the majority of parents had a high level of education, and most respondents (71.1%) had involved parents. Significant differences existed in academic achievement between students with high and low levels of parental education ($p\text{-value} = 0.000 < 0.05$) and between students with involved and uninvolved parents ($p\text{-value} = 0.046 < 0.05$). Based on the findings, the study concludes that parental level of education and parental involvement influence students' academic achievement. The study recommends that teachers develop versatile teaching methods to support students' academic achievement and that school counselors introduce programs encouraging parental involvement, such as Parent-Teacher Associations.

Keywords: Academic Achievement, Parental education, and Parental Involvement

Introduction

Poor Academic achievement of students in senior secondary schools of Kano State has always been an issue of great concern to students, teachers, parents, and specialists in education as well. Home background factors may be the major cause of this failure recorded every. This is because both parents have roles to play in the training and development of the child, when such roles of training and developing the child are left to one parent, it might affect the cognitive development of the children as they grow. Perhaps the most obvious and direct justification of the link between parents' education and students' academic performance depends on the postulation that parents learn something during schooling that affects how they interact with their children around learning activities at home. Parents with higher education make sure their children are exposed to lots of educational opportunities in their communities. Similarly, Parents with higher levels of education have more opportunity to guide their children towards making decisions as regards the choice of subjects that are consistent with their abilities and passion, unlike their

counterparts.

Parental involvement can also significantly impact the academic achievement of secondary school students in mathematics. Parents that are actively involved in their children's education, students are more likely to perform better in mathematics. Parental involvement in mathematics education can provide crucial support and motivation for students. When parents show interest in their child's math education, they can help build a positive attitude towards the subject. Encouraging students to practice math skills outside of school, providing assistance with homework, and engaging in discussions about math concepts can all contribute to improved academic performance.

Academic achievement is the result of instruction, that is the level or extent to which a student, teachers, parents, institutions, or an organization has achieved their educational goals and objectives. Steinmayr, Meibner, Weidinger, and Wirthwein (2017) Academic achievement represents performance outcomes that indicate the extent to which a person has accomplished specific goals that were the focus of activities in instructional environments, specifically in school, college, and university. They added that School systems mostly define cognitive goals that either apply across multiple subject areas (e.g., critical thinking) or include the acquisition of knowledge and understanding in a specific intellectual domain (e.g., numeracy, literacy, science, history). To Yakubu (2017) Academic performance refers to what skills the student has learned and is usually measured through assessments like standardized tests, performance assessments, and portfolio assessments.

Parental education describes the educational attainment of parents, usually measured by their highest level of formal education, such as high school diploma, college degree, or vocational training. Singh, Horo, and Singh (2016) stressed that Parents are likely to create an environment that is intellectually stimulating for a child. This hidden curriculum at home depends on parental education. Joseph (2016) defined Parental educational level in his work titled ‘ ‘ Relationships Among Parents’ Educational Level, Income, Academic Adjustment and Performance Senior Secondary School Students in Kaduna Metropolis, Nigeria (P-10)’ ’ as the highest educational attainment of either father or mother or both. In other words, the education of the parents or Parents’ level of education refers to the scholastic attainment of mother and father in Schools/Colleges, which normally plays an important role in determining a child’s intellectual performance. Likewise, Qadri (2018) opined that Parents are the most immediate relation of a child so their educational status has an important influence on the child's personality. Well-qualified and educated parents can better understand the educational needs, their children’s aptitude, and tendencies in any subject for future settlement. Qadri (2018) further said that they can help their children in their early education in a better way which affects their proficiency in their relative area of knowledge.

While, Parental involvement is the participation of parents in children’s educational process with the purpose of improving their academic and social well-being, which includes a diverse set of activities, such as assisting and monitoring learning at home, attending school activities and parent–teacher interactions, volunteering at school, communicating with teachers and collaborating with community (Zong, Zhang & Yao, 2017). While Bunijevac and Durisic (2017) opined that parental involvement in the education of students begins at home with the parents providing a safe and healthy environment, appropriate learning experiences, support, and a positive attitude about school.

Similar studies has been carried out by many scholars, to find out whether the parental education and parental involvement influences academic performance or rather the achievement of students. For instance, a study carried out by Idris, Hussain, and Nasir (2020) studied Relationship between Parents’ Education and their children’s Academic Achievement. Tenth-class students of government high schools in District Mardan constituted the population of the study (12788). The study employed systematic random sampling techniques was employed to choose five hundred and ten (510) students of thirty-four public sector schools as the sample group of the study. Through a self-developed questionnaire, the data were collected from the respondents of the study. The findings of the study revealed that the high education of fathers and mothers positively contributes to their children's academic achievement ($p\text{-value } 0.13 < 0.05$).

A large correlation was found between parents' education and students' academic achievement ($r=0.003 < 0.05$).

Similarly, Abu Bakar, Mamat, and Ibrahim (2017) also conducted a study that aimed to assess the Influence of Parental Education on the Academic Performance of Secondary School Students in Kuala Terengganu Malaysia. A descriptive Survey Research design was used in which data from 200 respondents was collected using a self-administered questionnaire from 4 selected secondary schools within Kuala Terengganu. A stratified random sampling technique was used to sample the respondents. The data were analyzed using regression analysis. The result of the analysis indicated that students from parents with high educational qualifications perform well than those from parents with lower educational qualifications ($p\text{-value } 0.003 < 0.05$).

So also, Alkali (2016) investigates the relationship among home background, social adjustment, and Academic Achievement in Biology of Senior Secondary School Students in Niger State, Nigeria. Three hundred and thirty-one (331) male and female students made up the sample of this study. The researcher employed a descriptive survey research design. Home background (parents' educational level), Social Adjustment Scale (SAS), and Biology Achievement Test (BAT) were the instruments used for data collation. The data collected were analyzed using t-test, ANOVA, and PPMC (r). The findings of his study revealed that a significant relationship exists between Home background (parents' educational level) and academic achievement of senior secondary school students. ($r=.878, p=0.000$),

In another study conducted by Paul and Ngirande (2014) on the impact of parental involvement on student performance: a case study of South African secondary school in South Africa. A quantitative research design was used for the study. A simple random sampling technique was used for the study. The total population of the study is 150 parents of grade 12 students, only 44 males and 70 females were drawn as the sample of the study. Results indicated that home and family involvement is the most significant factor that determines a learner's performance. In another allied study by Alonso Diaz, Woitoschach, and Alvarez (2017) on parental involvement and academic performance. A descriptive research design was used for the study. The population of the study consisted of students in the second year of obligatory education (ESO) in Spain. A simple random sample of 26,543 students was selected for the study. Using an instrument developed by experts in various fields of study who were contracted by the Spanish Ministry of Education, culture, and Sport in collaboration with the regional (autonomous community) education authorities. The study conclude that Parental involvement styles have an effect on achievement at an individual and school level.

All the studies reviewed are fails to single out a study on influence of parental level of education and parental involvement, on academic achievement among senior secondary school students in the Dala Education Zone, Kano State which is the major concern of the present study in order to fill the knowledge gap

Statement of the Problem

The downward trend in English academic achievement in Kano state continues to gain attention from researchers, government officials, parents, stakeholders, non-governmental organizations, and concerned individuals and groups. Statistical analysis of recent WAEC examinations in Kano State reveals a troubling trend: in 2016/17, 32,769 candidates registered for WASSCE in Kano State, with only 2 obtaining A1, 90 obtaining B2, 493 obtaining B3, 1,083 obtaining C4, 1,145 obtaining C5, 4,066 obtaining C6, 4,042 obtaining D7, 4,018 obtaining E8, and 16,423 failing with F9. In 2017/18, 30,664 candidates registered, with 15 obtaining A1, 109 obtaining B2, 478 obtaining B3, 1,020 obtaining C4, 1,333 obtaining C5, 2,455 obtaining C6, 3,988 obtaining D7, 4,882 obtaining E8, and 14,436 failing. Similarly, in qualifying examinations, only 25.68% of students passed with five credits, including English and Mathematics in 2017; 19.71% achieved the minimum requirement in 2018; 25.18% passed in 2019; and 27.91% passed in 2020. The persistence of this problem demands urgent research. Despite this, little research has been conducted to investigate why students continue to struggle with English Language. This

poor achievement can be attributed to various factors, including parental level of education and parental involvement. Therefore, this study aims to assess the Impact of Parental Education Levels and Involvement on Secondary School Students' Academic Achievement in Dala Education Zone, Kano State, Nigeria.

Objective of the Study

The present study achieved the following objectives:

1. To determine the levels of parental education among senior secondary school students in Dala Education Zone, Kano State
2. To determine the dimensions of parental involvement among senior secondary school students in Dala Education Zone, Kano State
3. To find out differences in academic achievement between students from parents with high and low educational levels among senior secondary school students in Dala Education Zone, Kano State
4. To examine whether there is difference in academic achievement between students with involved parents and uninvolved among senior secondary school students in Dala Education Zone

Research Questions

The research questions were raised to guide the study:

1. What are the levels of parental education among senior secondary school students in Dala Education Zone, Kano state?
2. What are the dimensions of parental involvement among senior secondary school students in Dala Education Zone, Kano state?

Hypotheses

H0₁: There is no significant difference in academic achievement between students from parents with high and low educational levels among senior secondary school students in Dala Education Zone, Kano state

H0₂: There is no significant difference in academic achievement between students with involved and uninvolved parents among senior secondary school students in Dala Education Zone, Kano state

Methodology

Ex-post-facto design was used for the study. The population of the present study comprises the entire SS II students in Dala Education Zone, Kano State. The total number of SS II is 5,822 students as given by department of planning, Research and statistics KSSSMB Kano (2023). The population is heterogeneous covering male and female students from different tribes, religious leanings and socio-economic backgrounds and is predominantly an adolescent within the age of 17-20. A sample of 357 SS 2 students was through Multi-stage sampling technique (stratified random sampling, stratified random sampling proportionate sampling technique). This sample was drawn based on the recommendation of Research Advisors (2006),

The parental involvement questionnaire was an instrument developed by Chavez in year 2006. The instrument was used by the developer to measure the involvement of parents in the educational activities of their children at school. The questionnaire typically includes items related to different aspects of parental involvement, such as parent-teacher communication, academic support at home, attendance at school events or meetings, and participation in educational decision-making. The instrument has two section 1. Background information which include the first item on parental level of education based on the option ranging from a=9, b=8 c=7, d=6, e=5, f=4, g=3, h=l2, and i=1. The highest mark is 9 and the lowest is 1 and from 5 to 9 is considered as high parental education while from 1-4 is considered as low parental education. Which section 2. is a 15 item questionnaire on a 4 point likert scale ranging from Strongly Agree (SA=4), Agree (A=3), Disagree (D=2), and Strongly Disagree (SD=1) respectively. Chavez revealed that the parental involvement questionnaire (PIQ) has high face and content validity with

a reliability index of 0.83. The current researcher reviewed the face and content validity of the instrument. The current researcher evaluated the internal reliability of the Parental Involvement Questionnaire using Cronbach's alpha with a sample of 20 students not part of the research sample, obtaining a coefficient alpha of 0.83. The instrument were scored with a minimum score of 15 and maximum score of 60 with the score range as follows: from 15-37 were considered as low while 38-60 were considered as high parental involvement. While academic achievement was measured using qualifying examination result of 2020/2021 academic session.

The data collected from the study were analyzed using both descriptive and inferential statistics. Descriptive statistics, including counts and simple percentages, were used to answer research questions one, and two, the inferential statistics used included t-tests for independent which was used to test hypotheses one and two all at a 0.05 level of significance.

Results

RQ1: What are the proportions in the parental levels of education among senior secondary school students in Dala Education Zone, Kano State?

Table 1: Parental level of Education among senior secondary school students in Dala Education Zone, Kano State

Variable	Level	N	Percent %
Parental Education	Low	53	14.8%
	High	304	85.2%
Total	Total	357	100.0%

Table 1 present the parental level of education among senior secondary school students in Dala Education Zone, Kano State, the table revealed that 304 (85.2%) of the parent have a high level of education and 53 (14.8%) of the parent have a low level of education. Thus, based on the descriptive results, the majority of students of Dala Education Zone, Kano State their parents found to have a high level of education.

RQ2: What are the dimensions of parental involvement among senior secondary school students in Dala Education Zone, Kano State?

Table 2: Levels of Parental Involvement among senior secondary school students in Dala Education Zone, Kano State

Variables	Response	N	Percentage %
Parental involvement	Uninvolved	103	28.9%
	Involved	254	71.1%
	Total	357	100.0%

Table 2 presents the levels of parental involvement among senior secondary school students in Dala Education Zone, Kano State. The table reveals that 254 (71.1%) of the respondents have involved parents, while 103 (28.9%) have uninvolved parents. Thus, based on the descriptive results, the majority of the respondents were found to have involved parents.

H₀₁: There is no significant difference in academic achievement between students from parents with high and low educational levels senior secondary school students in Dala Education Zone, Kano state.

Table 3: t-test for Differences in academic Achievement Due to Level of Parental Education

Parental Education	N	Mean	SD	t-value	df	P-value (2-tailed)
Low	53	36.96	20.683	-7.786	355	.000
High	304	62.00	21.756			

Table 3 indicates that the mean score of academic achievement of students whose parents have a low level of education is ($M = 36.96$, $SD = 20.683$) and high ($M = 62.00$, $SD = 21.756$) levels of parental level of education is significantly different ($t = -7.786$, $df = 355$, $p = .000$). Hence, based on the obtained result, the null hypothesis is rejected and concluded that there is significant difference in academic achievement of respondents about their parental level of education (p -value, 0.000 , < 0.05). That is to say, students from high parental levels of education were academically brighter than their counterparts.

H₀₂: There is no significant difference in academic achievement between students with involved and uninvolved parents among senior secondary school students in Dala Education Zone.

Table 4: t-test for Differences in academic Achievement Due to variation of parental involvement

Parental Involvement	N	$\bar{x}$	SD	t-value	df	P-value (2-tailed)
Uninvolved	103	54.41	24.238	-2.006	355	.046
Involved	254	59.85	22.829			

Table 4 shows that the mean mathematics achievement scores of students with involved ($M = 59.85$, $SD = 22.829$) and uninvolved ($M = 54.41$, $SD = 24.238$) parents are moderately different ($t = -2.006$, $df = 355$, $p = .046$). Therefore, a significant difference exists in academic achievement between students with involved and uninvolved parents in Dala Education Zone (p -value, 0.046 , < 0.05).

Discussion

The finding of this study is discussed and compared with empirical studies done previously by other researchers. These discussions are carried out based on the issues relevant to the research question and the null hypotheses that guided the study. According to the finding from research question one of this study majority of the parents of senior secondary school students in Dala education zone in Kano State were found to have high levels of education. This is because 304 (85.2%) of the parent have high level of education and 53 (14.8%) of the parent have a low level of education. This may be most of the parents of students in Dala were located within the main city of Kano so that people living in the area have direct access to education and they know the value of education.

Finding from research question two revealed that majority of the respondents were found to have involved parents. This is because 254 (71.1%) of the respondents have a high level of parental involvement, while 103 (28.9%) have a low level of parental involvement.

The finding of the study from hypothesis one indicates that significant difference exists in the academic achievement of senior secondary school students in Dala education zone concerning their parental level of education. The finding of this study is in agreement with the findings of Idris, Hussain, and Nasir (2020) who conducted a study on the Relationship between Parents' Education and their children's Academic Achievement, found that the high education of fathers and mother positively contributes to their children's academic achievement. Moreover, the finding of this study is also in line with the finding of Abu Bakar, Mamat, and Ibrahim (2017) in their study on the Influence of Parental Education on the Academic Performance of Secondary School Students in Kuala Terengganu Malaysia, and concluded that parents with high educational qualification perform well than those from parents with lower educational qualification. This study also is in support of the study of Asad Khan Iqbal and Tasneem (2015) which find out a significant positive relationship between parent's education level and the academic

achievements of students. The agreement between the current study and the reviewed study may be due to the similarities in culture and location as well as the nature of schools involved in this study.

Finally the study revealed that difference exists in academic achievement between students with involved and uninvolved parents in Dala Education Zone (p-value, 0.046, < 0.05). This is in support with finding of Alonso Diaz, Woitoschach, and Alvarez (2017) studied parental involvement and academic performance and found that Parental involvement styles have an effect on achievement at an individual and school level. It's also in line the finding of Paul and Ngirande (2014) on the impact of parental involvement on student performance: a case study of South African secondary school in South Africa. A quantitative research design was used for the study. A simple random sampling technique was used for the study. The total population of the study is 150 parents of grade 12 students, only 44 males and 70 females were drawn as the sample of the study. Results indicated that home and family support is the most significant factor that determines a learner's performance. In another allied study by Alonso Diaz, Woitoschach, and Alvarez (2017) on parental involvement and academic performance. And found that Parental involvement styles have an effect on achievement at an individual and school level.

Conclusion

Based on the findings of this study, it is concluded that parental education levels and parental involvement play a significant role in shaping the academic achievement of secondary school students in Dala Education Zone, Kano State, Nigeria. The study revealed that students whose parents possess higher educational qualifications tend to perform better academically, likely due to greater exposure to learning resources, informed guidance, and more supportive home learning environments. Furthermore, active parental involvement such as monitoring schoolwork, attending school meetings, and encouraging educational aspirations was found to positively correlate with improved academic outcomes. These findings underscore the critical importance of both parental literacy and engagement in promoting educational success among adolescents in the region. Consequently, strategies aimed at improving student achievement in Dala Education Zone should incorporate efforts to strengthen parental involvement and enhance adult education awareness, particularly among less-educated parent populations.

Recommendations

Based on the conclusions drawn from the study the following recommendations are proposed:

1. Government and non-governmental organizations should expand access to adult literacy and continuing education programs, particularly targeting parents with low formal education levels. This would enable them to better support their children's academic development.
2. School counsellors should collaborate with parents to identify students facing academic challenges and design home-based support interventions. This would create a unified support system between home and school.
3. Schools in the Dala Education Zone should establish structured programs that actively involve parents in their children's academic progress. Activities such as regular parent-teacher conferences, academic performance updates, and family learning workshops can strengthen this collaboration.
4. Local education authorities and community leaders should organize sensitization campaigns that emphasize the importance of parental involvement and education in promoting academic success. These campaigns should be delivered in local languages to reach a broader audience.
5. Education policymakers should include clear guidelines on parental engagement in school improvement plans. School heads should be mandated to develop frameworks that encourage parent participation in school governance and academic monitoring.

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