

Parental Involvement and Academic Performance of Primary Six Pupils in Basic Science in Calabar Municipality Local Government Area, Cross River State, Nigeria

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Abstract

The study was undertaken to investigate parental involvement and primary six academic performance in Basic science in Calabar Municipality, Cross River State, Nigeria. One null hypothesis was formulated to guide the study. The research adopted correlational design. The population was four thousand primary six pupils (4,000), while the sample size was 200 primary six pupils selected from 10 primary schools. The null hypothesis was tested at 0.05 level of significance using Pearson's Product Moment Correlation Analysis. The hypothesis with regards to parental communication pattern and pupil's academic performance in basic science was significant. This implies that parental involvement in their children's education, in terms of parental communication skill, is a determining factor of academic performance of pupils in basic science. It was therefore recommended that parents should have cordial and effective communication with their children particularly at the primary school level.

Keywords: parental, involvement, communication, academic, performance

Introduction

The scientific study of living things and their natural environment is named basic science. Basic science is defined as the scientific discipline of mathematics, physics, chemistry, and biology. Basic science is one of the compulsory subjects in primary schools; it is the foundation of all the subsequent science subjects in secondary and tertiary institutions. It is where the fundamental acquisition of scientific knowledge, skills, understanding and scientific attitude are developed in children at the primary schools, to enhance their contribution to a scientific and technological world.

The curriculum guide (Igbokwe, 2015) enumerated the goals of primary science as follows:

- To develop basic curiosity and scientific interest in children.
- To develop the ability to inquire and solve problems.

- To acquire basic scientific knowledge and concepts about living things and their natural habitats.
- To become familiar with the language of science and be equipped with the language to communicate ideas in scientific related context in primary schools science.

Regarding the relevance of basic science to primary education, Federal Republic of Nigeria (FRN, 2014) emphasised on the development of scientific and reflective thinking in pupils as one of the major objectives of primary education in Nigeria. Therefore, basic science plays a significant role in the society. It remains the medium where scientific knowledge, skills, scientific literacy and attitude are inculcated into the children at the early age. It prepares pupils for the real world of opportunities such as medicine, pharmacy, engineering, medical laboratory, food science and environmental studies (Igbokwe, 2015).

UNESCO (2007) noted that science has to play a leading role in transforming the present Nigerian society into an emerging knowledge society. In this regard, there is a need to build learning communities all over the country and in particular, the young generations. Hence, improving the teaching of mathematics, science and technology stands as a major tool in promoting quality human resources which is indispensable in sustainable development.

According to Gray and Cheung (2009), the relevance of basic science to human existence and their natural environment cannot be over-emphasized; but the proficiency in basic science as well as academic performance of pupils in the foundational level becomes poorer in internal and external examinations, such as common entrance examination. According to Eggen and Kauchak (2001), poor academic performance of pupils is attributed to lack of teachers' motivation, poor infrastructural facilities, unqualified and lack of trained teachers, attitudes of pupils towards learning and inadequate competent science teachers. The learner's interest, intelligence, cognitive styles and other individual characteristics such as age, gender, and socioeconomic background play important role in effective teaching and learning. Other variables such as motivation, self-control, self-concept and learning styles, strategies and approaches, are pertinent in academic achievements.

Brown (2000) attributed the failure of pupil in basic science to pupils' unpreparedness and negative attitude towards learning. Adedokun (2011) asserted that teachers have a vital role to play to adequately prepare the young ones for their productivity in the society they may find themselves, in order to actualize their educational goals and objectives. The researcher added that the quality of academic achievement depends to a great extent on

the quality of teachers in terms of academic and professional qualification and experience. Teachers' level of competency in terms of mastery of subject matters and their level of commitment and dedication to their teaching are very crucial and critical in teaching and learning process.

From the foregoing, it is evident that the problems are enormous. Parental involvement, especially when it has to do with parental communication, may affect the academic performance of pupils. According to Guolang (2011), parental involvement is a determinant of positive interest, attitude towards effective learning of their children which enhances their educational achievement. He added that parental involvement in their children's education predominantly has a significant relationship with their academic performance. Parental involvement in a child's early childhood education has a grave impact on a child's academic performance (Hill & Craft, 2003).

However, it is observed that children whose parents are involved in their education in terms of establishing a good communication pattern with their children in assisting in their assignments, listening to their complaints, and participating in the school activities, and relating with their class teachers, tend to perform better than their counterparts whose parent are not involved in their education (Hill & Craft, 2003). Parents have strong influence on their child. They have a direct influence that is stronger than that of teachers. Therefore, parents' positive attitude and support towards their children's education is considered pertinent. It has a significant relationship with their academic performance.

However, parental involvement in their children's education in terms of communication pattern is very important. Parent-child communication has a strong relationship with their academic performance. Parental communication deals with ways, manners, styles, approaches, tactics and strategies that parents employ to interact with their children. It plays a vital role in total development of a child. Communication enables parents/children to express their thoughts and teaching without fear of being scolded or disregarded. Effective communication helps children to develop confidence in themselves, as well as on their parents, which invariably improves their academic performance (Gray & Cheung, 2009).

Caro (2011) asserts that parent-child relationship can either make or mar a child. The researcher added that parent-child relationship without a bond may likely cause lack of interpersonal intelligence, which may bring about insensitive and unstable behavioural issues. Parents who do not establish a good communication pattern with their children at a tender age, may affect their expression of thought and feeling when required. A research by Jeynes (2007) revealed that children who have a good communication pattern with

their parents perform better in their academics. Offondike (2012) carried out a research work on parent-child communication pattern, self-esteem and academic achievement of students in biology. The sample size comprises of four hundred and eighty (480) senior secondary II students (SS2). The findings of the study revealed that parent-child communication pattern has a significant relationship with their academic performance in Biology.

This study was anchored on Bandura's Social Cognitive theory (Bandura, 1995). According to the theory, interaction between parent and children influences their self-esteem and self-evaluation, which enable them to carry out a given task, thus enhancing their academic performance. This amplifies the role of parental involvement in children's academic performance, hence giving a justification for the present study.

Hypothesis

Ho1: There is no significant relationship between parental communication pattern and academic performance of primary six pupils in Basic science in Calabar Municipality.

Methodology

The research design adopted was correlational design. This design systematically collects data about a group of individuals who have the same characteristics, through the use of written or verbal data collection, instruments, interview, questionnaires, telephone, mails and internet connecting participants' responses on facts and opinions that enable the researcher to establish probable relationship between the variables.

The sample for the study comprised two hundred primary six pupils selected from the total population of 4,000 primary six pupils in schools in Calabar municipality. The instruments used for data collection were: Parental Involvement Questionnaire (PIQ) and Basic Science Achievement Test (BAT). PIQ consisted of two parts: sections A and B. Section A covered the personal data of the respondents, while B was a four Likert scale requiring the respondents to respond according to how they agreed or disagreed to the statement therein. Strongly Agreed (SA) represents 4 points, Agree (A) represents 3 points, Disagree (D) represents 2 points, and Strongly Disagree (SD) represents 1 point. It has twelve (12) items. The BAT contains ten (10) multiple objective test items.

The instrument used for data collection was validated by experts in the field of research. The reliability was done by trial testing, using 30 pupils who were not part of the sample. Cronbach alpha was used to calculate the reliability; it had the reliability of 0.85. The researchers visited all the sampled schools for the study and sought for permission from the headmaster/headmistress of each of the schools sampled; the teachers were

approached for assistance. Copies of the questionnaire and the achievement test were administered to the respondents directly. The researchers supervised the filling of the questionnaire items and the achievement test by the pupils alongside with the assistance of the subject teacher in the classroom. At the end of the exercise, the researcher collected the filled questionnaire for analysis. All the copies of the questionnaire were retrieved. The data generated was analysed using Pearson Product Moment Correlation.

Presentation of results

Ho1: There is no significant relationship between parental communication pattern and academic performance of primary six pupils in Basic science in Calabar Municipality.

Table 1: Pearson’s product moment correlation statistical analysis of relationship between parental communication and academic performance of primary six pupils in Basic science. (N-200)

Variable	$\sum X$	$\sum X^2$	$\sum XY$	r-cal
	$\sum Y$	$\sum Y^2$		
Parental communication	5220	10494	975.9	0.8517
Academic performance	5021	12490		

Level of significance - 0.05, df -198, r-critical - 0.159

This result was significant as the calculated value of 0.8517 was greater than critical value of 0.159 at 0.05 level of significance with 198 degree of freedom. The null hypothesis was therefore rejected, this implies that there was a significant relationship between parental communication and academic performance of primary six pupils in basic science in Calabar Municipality of Cross River State, Nigeria.

Discussion of the findings

The result of hypothesis one revealed that parental communication is significantly related to academic performance of primary six pupils in basic science. According to Guolang (2011), parental involvement is a determinant of positive interest and attitude towards effective learning of their children which enhances their educational achievement. The author also added that, parent-child communication has a significant relationship with pupil’s academic performance in basic science. In the same dimension, Caro (2011) asserts that parent-child relationship has a great relationship with pupil’s academic achievement in basic science. The implication of this study is that the pupil whose parent has an effective communication pattern tends to perform better in Basic science.

Conclusion

The study investigated parental involvement in their children's education and academic performance in basic science. The result of the findings strongly suggests that parent-child communication increases the academic performance in basic science.

Recommendations

Based on the findings, it was recommended that parents should establish effective communication pattern with their children particularly at the primary school level.

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