

INFLUENCE OF OVERCROWDED CLASSROOM ON PUPILS' ACADEMIC ACHIEVEMENT IN PUBLIC PRIMARY SCHOOLS IN IDEMILI SOUTH LOCAL GOVERNMENT AREA OF ANAMBRA STATE, NIGERIA

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Abstract

The study examined the influence of overcrowded classroom on pupils' academic achievement in public primary schools in Idemili South Local Government Area of Anambra State. Three research questions were answered and one null hypothesis was tested at 0.05 level of significance. The descriptive survey design was adopted for the study. The population comprised 361 teachers and 45 head teachers working in the forty-five public primary schools in the local government area. A sample size of 180 study participants, made up of 30 head teachers and 150 teachers were selected for the study using simple random sampling technique. A four point rating scale questionnaires containing 15 items tagged "Overcrowded Classroom Questionnaire" OCQ was used for data collection. Analysis was done using mean scores and t-test. Findings revealed that overcrowded classrooms have negative influence on pupils' academic achievement and that inadequate school facilities is also a negative factor influencing pupils' academic achievement. Result of the study revealed that there is no significant difference between the mean responses of head-teachers and other teachers on the influence of overcrowded classroom on pupils' academic achievement. Based on the findings, the researchers concluded that class size is an important factor in determining pupils' academic achievement in classrooms. It was recommended among others that the school management should adhere strictly to the recommended pupils-teacher ratio and employ more teachers as well as create more class out of large ones to help reduce overcrowding in school. Furthermore, governments at all levels should provide more facilities in public schools to enhance pupils' academic achievement.

Keywords: Classroom, Overcrowded Classroom, Achievement, Academic Achievement.

Introduction

Education is a productive vehicle for economic, social-cultural and political development of nations and individuals. It is universally recognized as an instrument for enlightenment and progress. It is with this understanding that education is considered as an indispensable input for national development and an avenue for empowering citizens of any nation (Onokpanu, 2016). Education, in this perspective is perceived as cornerstone of economic growth and social development and a principal means of improving the welfare of individuals. A

comprehensive outlook into the Nigerian educational system shows that, it is systematically structured into pre-primary, basic, senior secondary and tertiary education. Primary education is the bedrock on which other levels of education are built. The National Policy on Education (2004) refers to it as Education given in an institution for children normally aged 6-11. This is the level that prepared pupils for secondary Education. It is necessary that basic skills are inculcated into learners as specified in the objectives. The primary school education is not only designed to provide permanent literacy and numeracy and the ability to think objectively but also deposit in pupils sound basis for scientific and reflective thinking and the ability to adapt to his changing environment. No wonder, Orukotan (2007) opined that, the primary school educational system has always played an indispensable role in shaping further educational advancement and economic realities of any society. In Nigeria, primary education is provided for children between the ages of 6-11 years. It has a duration of six years. It is the foundation of all education levels and also the bedrock of the entire educational system. The success of other levels of education depends on the success of primary education. This is because education cannot be an instrument part excellence for achieving national development where primary education is not effectively managed to accomplish its aims and objectives (Ajayi & Adeosun, 2004). Teachers are the backbone of the entire education system. Their effectiveness is perhaps the most vital function affecting the future development of education process (Adeyemi, 2008).

The establishment of primary schools in Nigeria has witnessed tremendous growth since independence. Likewise, enrolment has been on the increase due to national population growth and the increased demand for education which has led to overcrowding in the primary school system, resulting in overstretching of human and physical resources (Ayodele, Oyebanjo & Oyemi, 2009). Due to community and individual participation in education today, the number of primary schools has increased geometrically in view of the desire for primary school education (Ayodele, 2016). The astronomical increase in primary school education seems to have led to congested classrooms in primary schools in many states across the country and Anambra State appears not to be left out of this problem. Raheem (2003) reported that admission into primary school gallops annually in spite of the decay and inadequate infrastructures in the system. This accounts for overcrowded classrooms in primary schools in Idemili South in Anambra State. Overcrowded classroom can be a situation whereby more people are living within a single dwelling than there is space for, so that movement is restricted, privacy limited, hygiene impossible, and rest very difficult. The effects on quality of life due to overcrowding as a result of children sharing a classroom includes, increased physical contact, lack of privacy, poor hygiene practices, inability to care adequately for sick members and finally poor academic achievement among the pupil. Although there are many problems associated with overcrowded classroom on pupils' academic achievement as there are with other physical factors, nevertheless, Ayodele (2002) and Nuska (2012) revealed that perhaps overcrowded classroom causes a variety of problems and it seems that pupils in overcrowded schools and classrooms do not score as high on achievement tests and exams as pupils in non-overcrowded spacious classrooms.

Academic achievement is defined in terms of test and examination achievement of pupils. It can also refer to what the pupils have learned or what skills the pupils have learned and are usually measured through tests and examination assessments (Sanrock, 2016). The

descriptive assessment information will usually be translated through grading system such as Grade Point Average (GPA) since it provide information of the students' academic achievement across time. Experience has shown that class size is a major contributing factor to the assumed teachers' ineffectiveness in many primary schools in the State. For instance, it has been observed that students may be too difficult to control by teachers in many of the large classes due to over congestion of student in this classes (Akudu, 2007). Experience has also shown that teachers tend to lose the ability to attain or establish effective teaching in the overcrowded classroom than small classroom and this problem of large class size in primary schools has been attributed to several factors such as the introduction of too many subjects on primary school time table, which invariably has given birth to accommodation of all the subjects on the school time table couple with the shortage of qualified teaching personnel to teach these subjects (Akudu, 2007). Another problem is the problem of inadequate instructional materials such as graphs, pictures, charts and so on which are very germane for effective instructional delivery in primary schools. These materials are expected to compliment the process of teaching and learning, if they are adequately provided. Even though teachers appear to vary in their attitudes towards teaching large classes, most of them seem not to be favourably disposed to the teaching of large classes and as it is well known; teachers are the backbone of the entire education system, primary education system inclusive. Teachers' productivity therefore appears to be a function of class size among others. It is against this background, that the present study was contemplated to investigate the influence of overcrowded classrooms on pupil's academic achievement in public primary schools in Idemili South Local Government Area of Anambra State.

Research Questions

The following research questions were formulated to guide the study.

1. What is the influence of overcrowded classroom on pupils' academic achievement in public primary schools in Idemili South Local Government Area of Anambra State?
2. To what extent does class size influences pupils' academic achievement in public primary schools in Idemili South Local Government Area of Anambra State?
3. How do inadequate school facilities influence pupils' academic achievement in public primary schools in Idemili South Local Government Area of Anambra State?

Hypothesis

The following hypothesis was tested at .05 level of significance.

1. There is no significant difference in the mean ratings of head teachers and teachers on the influence of overcrowded classroom on pupils' academic achievement in Idemili South Local Government Area of Anambra State.

Method

The study adopted descriptive survey research design. The population of the study comprised all the 361 teachers and 45 head teachers working in the forty-five public primary schools in Idemili South Local Government Area in Anambra State. Thirty schools were randomly selected from the forty-five schools in the Local Government Area. The head teachers and five teachers; who were randomly selected from each school, making a total of 180 respondents formed the sample of the study. The instrument employed for data collection was a structured questionnaire titled "Overcrowded Classroom Questionnaire" OCQ, constructed

by the researchers. The instrument consisted of two parts. Part A was designed to gather demographic data of the respondents. Part B of the instrument consists of 15 items in accordance with the research questions that guided the study, structured on 4-point rating scale designed to elicit information on the influence of overcrowded classroom of pupils' academic achievement in public primary schools.

The validity of the instrument was determined by two senior lecturers, one in the Department of Educational Foundations and another in Measurement and Evaluation, from the Faculty of Education, Nnamdi Azikiwe University, Awka. The expert's corrections and suggestions were incorporated into the final draft of the OCQ. The reliability of the instrument was established by administering copies of the questionnaire to 20 teachers and 10 head teachers in Idemili North Local Government Area of Anambra State; who are not part of the research population. The data collected were analyzed using Cronbach Co-efficient Alpha. The result of the analysis showed a reliability co-efficient value of 0.80. Therefore, the instrument was considered adequate for the study. The researchers adopted direct delivery method to administer the questionnaire on the respondents. This ensured a hundred percent return of the questionnaires administered on the respondents. Data collected were later statistically analyzed using descriptive statistics (arithmetic mean and standard deviation). The hypothesis was tested using t-test at .05 level of significance.

Results

Research Question 1:

How does overcrowded classroom influences pupils' academic achievement in public primary schools in Idemili South Local Government Area of Anambra State?

Table 1: Mean and standard deviation on overcrowded classroom and academic achievement

S/N	Item Statements	$\bar{X}$	SD	Decisions	$\bar{X}$	SD	Decisions
1	Overcrowded classroom have negative impact on pupils' academic achievement.	3.60	1.57	Agreed	3.49	1.49	Agreed
2	Overpopulated classroom negatively affect the delivery of instruction.	3.50	1.50	Agreed	3.43	1.45	Agreed
3	Inadequate seats for pupils in the classroom have negative effect on pupils' academic achievement	3.13	1.28	Agreed	3.39	1.43	Agreed
4	Teachers find it difficult to measure pupils' level of achievement in overcrowded classroom.	3.53	1.45	Agreed	3.42	1.45	Agreed
5	Effective use of teaching aids is not negatively affect by overcrowded classroom.	2.13	1.17	Disagreed	1.91	1.26	Disagreed
Grand Mean & Standard Deviation		3.18	1.39	Agreed	3.13	1.42	Agreed

From the result of the findings from the analysis of research question 1, it was discovered that items 5 falls under the disagreed level for both head teachers and teachers with means of 2.13

and 1.91 respectively. Items 1, 2, 3, & 4 all falls within the agreed level with the mean of above 2.50 for all the respondents. As shown by the grand mean of 3.18 and 3.13 for head teachers and teachers respectively, it is generally agreed that overcrowded classroom influences pupils' academic achievement in primary schools in Idemili South Local Government Area of Anambra State.

Research Question 2:

To what extent does class size influence pupils' academic achievement in public primary schools in Idemili South Local Government Area of Anambra State?

Table 2: Mean and standard deviation on class size and academic achievement

S/N	Item Statements	$\bar{X}$	SD	Decisions	$\bar{X}$	SD	Decisions
6	Class size has great effect on pupils' academic achievement.	3.13	1.28	Agreed	3.45	1.45	Agreed
7	Effective class management is easily achievable in small class than in large class.	3.00	1.22	Agreed	3.39	1.43	Agreed
8	Pupils participate more in small class than large class during teaching and learning.	3.30	1.37	Agreed	3.13	1.28	Agreed
9	Number of pupils in class has great impact on pupils' academic achievement.	3.07	1.25	Agreed	3.32	1.39	Agreed
10	Large class size has adverse effect on pupils' classroom interaction.	3.13	1.28	Agreed	3.55	1.53	Agreed
	Grand Mean & Standard Deviation	3.13	1.28	Agreed	3.37	1.42	Agreed

Table 2 showed that the respondents irrespective of designation agreed to the five items on the table shown by their mean scores which are above 2.50, the decision level. This shows that the items influence pupils' academic achievement to a great extent in public primary schools in Idemili South Local Government Area of Anambra State.

Research Question 3:

How does inadequate school facilities influence pupils' academic achievement in public primary schools in Idemili South Local Government Area of Anambra State?

Table 3: Mean and standard deviation on inadequate school facilities and academic achievement

S/ N	Item Statements	$\bar{X}$	SD	Decisions	$\bar{X}$	SD	Decisions
11	Availability of school facilities have impact on pupils' academic achievement	3.37	1.42	Agreed	3.32	1.39	Agreed
12	Inadequate funding of primary school has negative effect on pupils' academic achievement.	3.23	1.34	Agreed	3.45	1.49	Agreed
13	Poor infrastructures and low staff morale have negative impact on pupils' academic achievement.	3.43	1.46	Agreed	3.53	1.52	Agreed
14	Inadequate supervision of primary schools in turn jeopardizes pupils' academic achievement.	3.20	1.32	Agreed	3.45	1.47	Agreed
15	Lack of motivation and poor funding are the greatest problem militating against teacher productivity on pupils' academic achievement.	1.73	1.36	Disagreed	1.76	1.47	Disagreed
Grand Mean & Standard Deviation		2.99	1.38	Agreed	3.10	1.45	Agreed

Data on Table 3 revealed that items 11, 12, 13, and 14 fall within the agreed level of above 2.50. Item 15 however, fall within the disagreed level with the means for head teachers and teachers respectively. The grand means of 2.99 and 3.10 showed that both head teachers and teachers agreed that inadequate school facilities influence pupils' academic achievement in public primary schools in Idemili South Local Government Area of Anambra State.

Hypothesis I

There is no significant difference in the mean ratings of head teachers and teachers on the influence of overcrowded classroom on pupils' academic achievement in public primary schools in Idemili South Local Government Area in Nigeria.

This null hypothesis was tested using t-test at .05 level of significance and the results are presented in table 4, below:

Table 4: T-test summary analysis of the head teachers and teachers' responses on the influence of overcrowded classroom on pupils' academic achievement

Groups	N	$\bar{X}$	Sd	Df	Cal-t	Crit-t	Remarks
Head teachers	30	3.18	1.39				
Teachers	150	3.13	1.42	178	0.18	1.96	No significance Difference

Table 4 showed that the calculated t-value of 0.18 was less than the critical t-value of 1.96. This implies that there is no significant difference in the mean responses of the head teachers and teachers in respect to the influence of overcrowded classroom on pupils' academic achievement in public primary school in Idemili South Local Government Area of Anambra State. The null hypothesis was therefore, accepted.

Discussion of Results

Findings of the study revealed that overcrowded classrooms have negative influence on pupils' academic achievement. The analysis of the items in research question 1 showed that the respondents agreed that overcrowded classroom have negative impact on pupils' academic achievement; over populated classroom negatively affect the delivery of instruction; inadequate seats for the pupils in the classroom have negative effect on their academic achievement; teacher find it difficult to measure pupils' level of achievement in overcrowded classrooms; and effective use of teaching aids is negatively affected by overcrowded classroom. This finding is in agreement with Ayodele (2003) and Akudu (2007) who discovered that pupils in overcrowded schools and classrooms do not score high on achievement tests and exams as pupils in uncongested classrooms. Ayodele's study revealed that the low score obtained by pupils in overcrowded classroom are the functions of inadequate school facilities, poor delivery of instruction by the teachers, ineffective use of teaching aids amongst others. This finding is in tandem with the earlier findings of Adesina (2007), who opined that overcrowding in public primary schools have cumulated to overstretching of human and physical resources on ground. Perhaps, inadequate seats for the pupils in the classrooms could be as a result of enormous pressure on the existing seats and over bloated number of pupils in a classroom. The respondents also disagreed that effective use of teaching aids is not negatively affected by overcrowded classroom.

Findings of the study revealed that class size has great effect on pupils academic achievement; effective class management is easily achievable in small class; pupils participate more in small class than in large class during teaching and learning; number of pupils in class has great impact on pupils' academic achievement; and large class size has adverse effect on pupils classroom achievement. This finding is in line with Abiodun (2012) who observed that teachers would prefer to teach small class where they can easily manage their students and impart knowledge to them with little or no stress. Abiodun's study revealed that the choice of teaching small classes by teachers is as a result of students' better participation in small classes than in large classes during teaching and learning; which increase their productivity. This is also supported by Olaleye et al (2012) who noted that overcrowding of classrooms

significantly affect effective teaching and learning. They revealed that overcrowding of classroom negatively affects academic achievement of students, being the major factor responsible for poor achievement of students in public schools. They further stated that if the problem is to be solved, both the Federal and State governments should make the building of additional classrooms and provision of students' furniture a priority in their educational planning at all levels.

The analysis of items in the research question 3 showed that respondents agreed that availability of school facilities have positive impact on pupils' academic achievement; inadequate funding of primary school has negative effect on pupils' academic achievement; poor infrastructure and low morale have negative impact on pupils' academic achievement; inadequate supervision of primary schools jeopardizes pupils' academic achievement; and adequate motivation and proper funding are the greatest tools to enhance pupils' academic achievement. The findings of the study revealed that poor infrastructure have negative impact on pupils' academic achievement. This is in agreement with Olaleye et al (2012) who stated that shortages of infrastructural facilities are due to overcrowding of classrooms. Williams (2003) disagreed with this finding as he maintained that he did not see school buildings as one of the critical variables affecting school academic achievement. Also Owoye (2001) in his submission was also not in agreement with the findings as he stated that he did not find any useful relationship between structures or facilities and academic achievement.

Conclusion

It is a known fact that education is an instrument for socio-political cum economic transformation; primary education the bedrock on which other levels of education are built. Based on the result of the study, it is no doubt that the present state of overcrowdedness, lack of teachers and infrastructures in public primary schools in Idemili South Local Government Area and Nigeria in general contributed highly to poor achievement among Nigerian pupils and students. It is obvious from the findings that class size is an important factor in determining the academic achievement of pupils in class. Hence, the National Policy on Education (FRN, 2004) recommended at the primary school level the pupil-teacher-ratio (PTR) of 35:1; which aimed at enhancing quality teaching for better academic achievement among pupils. To achieve this, overcrowded classrooms must be decongested in addition to provision of adequate school facilities and infrastructures necessary for improved teaching and learning processes.

Recommendations

To achieve the national goals and objectives of Nigerian Education and improve academic achievement of primary school pupils this paper recommended:

1. The head teachers and teachers should adhere strictly to the recommended pupils-teachers ratio to avoid overcrowded classes with their impending consequences.
2. The school management should employ more teachers as well create more classes out of large ones to help reduce overcrowding in public primary schools.
3. Federal and State government should provide more school facilities in public primary schools to enhance pupils' academic achievement.
4. Non-governmental organizations, private philanthropists and other stakeholders should support primary education financially so as to ensure the recruitment of more

teachers; prompt payment of serving teachers; provision of infrastructures such as buildings, furniture and fittings etc to reduce the problem of overcrowdedness in public primary schools.

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