

THE INTERNATIONAL JOURNAL OF HUMANITIES & SOCIAL STUDIES

The Influence of Large Class Size and Cognitive Development of Primary School Pupils in Cross River State, Nigeria

Dr. Adadu Paulinus M.A.

Senior Lecturer, College of Education, Department of ECCE, School of ECCE/PES, Nigeria

Dr. Ndifon Friday O.

Lecturer, College of Education, Department of ECCE, School of ECCE/PES, Nigeria

Aboh Mary J.

Lecturer, College of Education, Department of ECCE, School of ECCE/PES, Nigeria

Abstract:

This research work looked at the effect of large class on cognitive development of pupils in Cross River State, the study made use of structured questionnaire which contained five questions following 4-point Likert scale of highly correct, correct, incorrect, and highly incorrect. The research adopted survey design to gathered data. The sample of the study comprised 300 subjects from the 3 senatorial districts of the state and t. test statistics was used for the analysis of the data, results showed that large size affects pupil's cognitive development negatively and recommendations were put forward to improve teaching/learning in the school system in the state.

Keyword: *Influence of large class size, cognitive development, primary schools*

1. Introduction

Most educators believe that it is not about how many children you have in the classroom. That it is about how you are leveraging methodology and technology to deliver one-on-one instruction. It is observed that most private schools in Cross River State can limit the number of pupils they have in each class, but public primary schools cannot. In the state public primary schools some classes can have as high as 52 pupils. Some classes can have over 80 pupils. The population of an ideal class ranges from 35 to 40 pupils giving allowance for seven periods a day (Emenbeng, Gamoron and William 200).

Cognitive development is seen by Odadele (1989). Ejiue (2010) as the growth demonstrated by human beings as they progress from a state of not knowing to knowing. This, according to them is the progress of understanding the world around us, gaining knowledge and using the knowledge. The said knowledge is gained through the process of perceiving, learning, thinking, concept formation and problems-solving, image formation and remembering.

There are a number of disadvantages of large class size; it can reduce the amount of time pupils can activity engage with the other. It can increase the disruptive behaviour in the classroom. It can reduce the amount of time the teacher can spend working with each individual pupil, it can reduce the material the teacher can cover, it can eliminate many methods of assessing pupils i.e. open-ended and writing assignments and it can reduce the learning by reducing the kind of teaching methods that the teacher can employ in his/her classroom.

Based on the above, one is tempted to ask whether large class size can have influence on the cognitive development of primary school pupils in Cross River State.

1.1. Statement of the Problem

There is need to examine the influence of large class size on primary school pupils' cognitive development in Cross River State. Pupils' cognitive development often than not is seen to be going down i.e. it is often poor. One wonders what the problem is. Could it be solely the problem of large class size? Many a time, no clear answer is on sight, therefore, this research is strictly intended to find out the influence of large class size on pupils' cognitive development in Cross River State.

1.2. Purpose/Objective of the Study

The purpose of this study is to find out the influence of large class size on cognitive development of primary school pupils in Cross River State.

1.3. Research Question

Does large class size reduce learning on the part of the primary school pupils by reducing the kind of learning methods that the teacher can employ in his/her classroom?

1.4. Statement of Hypothesis

- There is no significant relationship between large class size and pupils' cognitive development.
- There is no significant relationship between large class size and teacher's material to be covered.
- There is no significant relationship between large class size and pupils learning of domestic animals.

2. Methodology

The survey design was used to gather data in this study. This design sort to have a systematic, intense, accurate and purposeful observation of the children's behaviour and describing same as closely as possible, the researchers gathered relatively large information from the relatively large number of responses from the participants. It was simply an enquiring into the status quo.

2.1. Area and Population of the Study

The study was carried out in primary schools in Cross River State. The state emerged on September 23, 1987, when the armed forces ruling council restructured the then nineteen state structures in the country into twenty-one states with Abuja remaining as the Federal Capital Territory and the seat of Government. Cross River State has about 197 political wards, spanning across 3 senatorial districts with a population of 288,966 million people (2006 census). The population consisted of all primary 3 pupils in the primary school system in the state. The rationale including the pupils was that they were considered matured to respond to the questionnaire and had opportunity to interact with the teachers in the classroom.

2.2. Sample and Sampling Technique

Three hundred participants were used in this study as sample, stratified random sampling technique was used to reflect urban and rural primary schools of the state cutting across the three senatorial districts-northern, central and southern.

2.3. Instrument for Data Collection

The instrument used for data collection were a 15 items inventory titled "Large class size questionnaire (LCSQ) and cognitive test questionnaire (CTQ)" consisting of 15 items. A four-point Likert scale with which the respondents used to rate themselves on the items and the format was 4 highly correct 3 correct, 2 Incorrect and 1 highly incorrect, the cognitive test questionnaire comprised 15 items with 2-point scale 'Yes' or 'No'.

2.4. Validation of the Instrument

The instrument (LSCQ) and (CTQ) were subjected to face and content validation by submitting them to 2 lecturers who are experts in Early Childhood Care and Education of the Cross-River State College of Education Akamkpa. These experts made very useful suggestions and corrections which were reflected in the final modification of the items in the questionnaire.

2.5. Reliability of Instrument

When the responses were analyzed using Cronbach Alpha reliability coefficient values of 0.92 and 0.93 were obtained for the sections of the instruments indicating that the items in the instruments were homogenous and reliable.

3. Method of Data Collection and Analysis

The researcher personally visited the schools and administered the inventories on the subject and collected the questionnaire the same day. Data collected were analysed using t.test.

3.1. Hypothesis Testing

3.1.1. Hypothesis 1

There is no significant difference between large class size and primary school pupil's cognitive development in term of ability to read three lettered words.

	N	X	SD	Crit.v	Cal.v	DF	F
Variable: large class size	300	72060	19.4731	1.96	7.384	298	=0.05
Ability to read 3 lettered words	300	360750	122530				

Table 1: T-Test Comparison on the Relationship between Large Class Size and Pupil's Ability to Read 3 Lettered Words

Table 1 shows that there is significant relationship between children's Ability to read 3 lettered words is reduced due to large class size because the calculated value 7.384 is greater than the critical value 1.96 at 0.05 level of significance and so the null hypothesis is rejected.

3.1.2. Hypothesis II

There is significant difference between large class size and pupils' cognitive development in terms of their ability to write three lettered words.

	N	X	SD	Crit.v	Cal.v	DF	F
Variable: large class size	300	35,5250	15,4240	1.96	7.276	298	=0.05
Ability to write 3 lettered words	300	360750	122530				

Table 2: T-Test Comparison of the Relationship between Large Class Size and Children's Cognitive Development in Terms of Ability to Write 3 Lettered Words

Table 2: Shows that there is significant relationship between large class size and pupils' cognitive development in terms of their ability to write 3 lettered words. The critical value is 1.96 while the calculated value is 7.276 at 0.05 significant level hence it is significant.

3.1.3. Hypothesis III

There is no significant relationship between large class size and pupils' cognitive development in terms of ability to identify domestic animals.

	N	X	SD	Crit.v	Cal.v	DF	F
Variable: large class size	300	72060	19.4731	1.96	7.384	298	=0.05
Ability to identify domestic animal	300	360750	122530				

Table 3: Comparison of the Relationship between Large Class Size and Pupil's Cognitive Development in Terms of Ability to Identify Domestic Animals

Table 3: shows that there is a relationship between large class size and pupils' cognitive development in terms of their ability to identify domestic animals. The critical value is 1.96 while the calculated value is 11.95 at 0.05 level of significance.

4. Results and Discussion

The results of the hypotheses show that large class size has significant influence on pupils' cognitive development. From the findings, primary schools with 52 to 80 pupils reduces the kind of learning method adopted by the teacher while primary schools with ideal class ranging from 35 to 40 pupils giving allowance for seven periods a day maximizes the kind of learning method adopted by the teacher. The findings also indicate that large class size ranging from 52 to 80 pupils reduces the material to be covered as well as reduce the learning on the part of the pupils. These findings are in line with Eherenberg, Gamoron & William (2000) Jankins (1989) who discovered in their study that there is not only a reduction in methodology and technology but also descriptive behaviour, reduction in what is learnt by the pupils and material to be covered by the teacher.

5. Conclusion

In conclusion therefore, it has been observed that pupils' cognitive development can improve much better through effective and manageable class size.

6. Recommendation

For the school to achieve the objective of effective teaching/learning, the following in terms of planning should be adopted:-

Ministry of Education has to have an ideal class ranging from 35 to 40 pupils in each school as against 50 to 80 pupils. Ministry of Education has to build more schools and hire more teachers to handle the various small manageable classes.

Adequate infrastructural provisions such as laboratories, libraries and equipment must be sort for the various schools.

There has to be also adequate supervision of teaching/learning to ensure to ensure effectiveness and success.

7. References

- i. Adesina, S. (1990) Educational Management FDP Educational Series. Fourth Dimension Publishing Company Ltd. Enugu, Nigeria.
- ii. Ejue, J. B. (2010), Lecture Notes on Cognitive Development Theory of Jean Piaget (unpublished).
- iii. Ehrenbery, D.J Gamoron, B, & William, J.D. (2000) Class Size and Pupils Achievement" Connell Higher Education Journal, Connell University Press U.S.A.
- iv. Ezeocha, P. A, (1982) "Staff Personnel Administration in Secondary Schools" Lecture Notes.
- v. Jenkins, J. (1989). Large Class Size and Its Effects. Connell Higher Education Journal Connell University Press, U.S.A.
- vi. Beliarry C. (2008) "The State of the world's Children, Childhood under Threat Vol. New York, P. 3.
- vii. Ladan M. T. (2008). The structure of the Child's Rights Act (2003) Nigerian Bar Journal Vol. 3 No. 3 P. 79
- viii. United Nations Conventions on the Right of the Child (1989). Article 1.