Class Size and Academic Performance of Primary School Pupils in English and Mathematics in Rivers State

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Abstract: The study used the ex-post-facto research design to examine the appropriateness and effect of age on academic performance of primary school children in Rivers State in English Language and Mathematics. Simple random and stratified sampling techniques were used to choose 498 Primary 4 pupils from 29 classes of 20 schools in 5 local government areas of Rivers state and their teachers. The instruments of the study were English and Mathematics Competency Test (EMCT) which was used to collect information about the academic performance; the Class size and Primary School Pupils Performance Questionnaire (EPSPPQ) was used to collect information on the number of children in the class. The study had 2 research questions and 1 hypothesis. The research questions were answered with mean and standard deviation, while the hypothesis was tested with t-test at a significance level of 0.05. The result showed that class size was appropriate in majority of the schools. Only 24.3% of the classes used in the study had more than the recommended 35 pupils. The size of the class had no significant impact on the academic performance of the learners. The researcher believed that the class sizes might have been affected by the Covid-19 restrictions of 2020 and recommend further studies to be done in this area with a much bigger sample.

Keywords: Class Size, Academic Performance, Rivers State.

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Introduction

Class size is the number of pupils in a classroom for continuous prepared lesson delivery by a teacher. The Pupil-Teacher ratio is the average number of pupils per teacher in the classroom. The pupil-teacher ratio is essential for quality education (Ikediashi & Amaechi, 2012). Class size and Pupil-Teacher Ratio could mean the same thing or different things altogether. In situations where a teacher teaches one class only as is the case with most primary school, it means the same thing. In situations where the teacher teaches one or two subjects in several classes, it does not mean the same thing (Eboatu & Ehirim, 2018).

The pupil-teacher ratio could be high or low. A high pupil-teacher ratio means that there are a lot of children in the class. This suggests that the classroom teacher is responsible for a large number of pupils. Having a high pupil-teacher ratio has implications for education because it means that the children have a lower access to the teacher in the classroom. This implies that the higher the teacher pupil rate, the lower the access of pupils to the teacher. A low pupil-teacher ratio, on the other hand means that there are few children in the class. This suggests that the classroom teacher is responsible for a small number of pupils. This is important for education because it means that the children have greater access to the teacher in the classroom than if there were more children (UNESCO, 2015).
Class size is an extremely popular reform issue among stakeholders in education. Intuitively, it is believed that smaller classes have a better learning outcome than students in large classes. Small classes allow teachers to adapt their instruction to the needs of the individual students and take their peculiar characteristics into consideration. The class teacher can easily adapt instruction to the development of the individual students rather that constantly treating them as a group. With such adaptive instruction some students receive more time, instruction and help from the teacher than other students. This is beneficial to academically weak students who can get the necessary attention they need to grow. It is also beneficial to academically strong students who can be helped to grow their pace rather than being dragged down by their less able colleagues in the traditional classroom setting. Some benefits of small classes are the following:

a. More time and opportunity to give individual students the attention they need
b. Less pressure is placed on the physical space and resources in the classroom
c. Less pupil misbehaviour as disciplinary issues are detected more easily than in large classes.
d. Teachers are able to devote more time to educational content of the class and less time on classroom management issues like maintaining order.
e. Teachers are able to identify the weaknesses and strength of their students more easily through evaluation.
f. Students can more easily able to identify their weaknesses and strengths because they get feedback for assessment tests done (Jensen, 2015; Adimonyemma, Akachukwu & Igboabuchi, 2018; Owoeye & Yara, 2011).

Large school classes occur as a result of population increase without commensurate increase in infrastructure in the schools. It results in the following problems:

a. Over bloated classrooms
b. Students receive their lessons while standing
c. Students sitting on the floor and writing on their laps
d. Students not seeing the board because they are too close, too far or have their view blocked by others
e. Teachers not being able to see their students in the class resulting in disciplinary issues in class
f. Teachers not being able to go round to see their pupils’ classwork
g. Teachers not being able to mark the pupils’ workbooks and homework in time
h. It affects the study practical lessons (Adimonyemma, Akachukwu and Igboabuchi, 2018; Eboatu and Ehirim, 2018).

The National Policy on Education, which contains regulations about what should go on or take place in the Nigerian school system, stipulates that for teaching and learning to be effective at the Primary level of education, the teacher-pupil ratio should be 1:35 (FRN, 2013). This is the maximum pupil-teacher ratio required by schools of this level of the education system. This means that while primary schools in the country are encouraged to go below this ratio, no primary level classroom is expected to have more than 35 pupils to one teacher.

Literature available on the country’s pupil-teacher ratio has shown different things over the years. Afangideh and Jude (2016) complained in their article ‘The Challenges of Minimum Standards and Quality Control of Primary Education in Nigeria’ which was published in the IOSR Journal of Research and Method in Education of December, 2016 that one of the challenges was School population increase. They said the country had 2,912,600 pupils in primary school in 1960. This number had increased to 3,894,500 in 1970 and 20 million by 1995. This they said was growing without a corresponding increase in the number of teachers.
They said as a result of this there was a high pupil-teacher ratio in Nigerian primary schools which was not healthy for the school system. They gave the 2015/2016 pupil-teacher ratio in a table showing the summary of 2nd Term Pupil Enrolment in Akwa Ibom State in southern Nigeria. In this table the Teacher: Pupil ratio of Akwa Ibom State, a neighbouring state to Rivers State, which is gotten from the Universal Basic Education Board of Uyo (Afangideh & Jude, 2016), shows that the local government area with the smallest ratio has 1:44 and the highest ratio is 1:452. None of these local government areas met the 1:35 teacher/pupil ratio required in the Nigerian educational system (FRN, 2013).

Kalagbor and Owondah (2014) are of the view that for the Nigerian child to enjoy a reasonable quality of education, the issue of adequate number of qualified teachers to cater for the increase in pupil enrolment is school is imperative. They revealed in their study that there were 8,045 teachers in 1045 primary schools in Rivers State which had an enrolment of 445,730 pupils in the 2005/2006 academic year. This was a teacher-pupil ratio of 1:55. By 2008, the teacher-pupil rate in Rivers State public schools had risen to 1:100 (Kalagbor, 2008). This was similar to reports from other states by other researchers. Ajibola (2008) reports than an average classroom in primary and junior secondary schools in the Nigerian public school system had between 70 and 120 children. Enogholase (2008) revealed that Edo State had a teacher-pupil rate of 1:180. In a study carried out and published by Kalagbor (2016) on factors influencing students; academic performance in private and public secondary schools in Rivers State, he reported that these schools had a teacher-pupil ratio of up to 1:250 in public schools while the private schools were within the government stipulated 1:40.

Literature available on the effect of class size/pupil-teacher ratio on students’ academic performance has shown different views over the years. Some researchers have seen no effect of class size on students’ academic achievement while others have seen a negative effect of class size on students’ achievement. Some of this literature is presented here. Adimonyemma, Akachukwu and Igboabuchi (2018) investigated the psychological and sociological impact of class size on students’ academic performance across selected public senior secondary schools in Idemili North Local Government Area of Anambra State. Self-administered questionnaires was administered on a sample of one hundred and fifty (150) senior secondary two (SS2) and senior secondary three (SS3) students in three selected public senior secondary schools was used. One hundred and forty (140) valid questionnaires were received from the randomly selected students The result of the study found that large class size had negative effect on students’ academic performance in biology. It was also observed that class size has psychological and social effect on students’ academic performance generally. The study recommended a reduction of class size in the schools. The discovered the following problems with large classes:

a. Students had difficulty in following and seeing what has been written on the class room board

b. The teachers found it difficult to devote time to help students develop appropriate practical skills; hence this can impede students’ performance.

c. Large class size has significant impact on the appropriateness of teachers’ instructional strategies.

With respect to the psychological impact of class size on students’ performance, it was revealed that:

a. Students felt shy to speak in large class size and also find it really hard to express themselves in a large class; also,

b. The atmosphere becomes noisy and stressful, thereby breeding the opportunity to miss lessons without the notice of the teacher in large class size. There is therefore enough reason to agree that large class size has psychological impacts on students’ academic performance.
The social impact of class size on students’ academic performance revealed the following:

1. Teacher – student’s interaction is mostly neglected in large class size. Furthermore, it was observed that

2. Teachers were not able to identify students who need extra tuition and attention during lesson period in large class size.

Mahlo (2015) carried out a study that compared class size (learner-teacher ratio) on academic achievement of Grade 12 learners of the Capricorn District in the Limpopo Province of South Africa. A simple random sample was drawn from the population of 339 schools, comprising of 51 principals, 158 teachers and 290 learners from 51 schools. The School Environmental Questionnaire (SEQ) collected data on the school environment, while the Capricorn District Academic Summary Report of the Grade 12 collected data on academic achievement. The data analysis technique used was the t-test. The results showed no significant difference in learner-teacher between low and high achieving schools indicating that the class has no significant relationship with academic achievement.

Adunola, (2013) carried out a study that examined the relationship between class size and academic performance of students using for selected secondary school in Agege Local Government Area of Lagos State as case study. Four null hypotheses were raised and analysed using the simple percentage statistical analysis. One of these hypotheses which is relevant to this study is that there is no significant relationship between class size and academic performance of students in secondary schools. The result of the findings showed that large classes negatively affect academic performance. This is because it affects overcrowding in classes, teaching methods and appropriateness of available resources.

Owoeye and Yara (2011) carried out a study looked at the class size as it relates to academic performance of students in Ekiti state of Nigeria between 1990 and 1997. The study population was the results of the West African School Certificate Examinations (WASCE) conducted between 1990 and 1997 in 50 secondary schools in both rural and urban areas of the state. One validated instrument Students’ Class Size Questionnaire (SCSQ) was used for data collection. One hypothesis was formulated and answered. Data were analysed using mean and t – test. The result showed that there was no significant difference in the academic achievement of students in small and large classes from urban schools (t = 1.49; p < 0.05); there is no significant difference between performance of students from rural large and rural small classes (t = 0.58; p < 0.05). There was a conflict between the result of the study and the recommendations of the study which advises that policy makers and government should ensure that more classrooms are built and number of students in a class should not be more than 30. If the class size did not have any effect on academic performance, then why was it important for the researcher to recommend more classrooms and teachers?

Uhrain (2016) carried out a study on the effect of class size on students’ achievement. This was in response to proposed increase in class size for all schools due to a mandatory budgetary reduction for school districts in South Carolina, USA. This was against the existing Lazear theoretical framework that suggested than smaller class size impacted positively on students’ learning by minimizing problematic behaviour, creating positive learning environment and forging better relationship with classmates and teachers. The study which used a correlational design with a sample of 17,582 Teacher-issued-end-of-course numerical student grades (TIECNSG) from 5 secondary schools revealed that in 9 courses an increase in class size resulted in an decrease in student grades, while it increased in 8 courses. The result was there for declared inconclusive for positive or negative impact of class size. The finding suggested that other variables, besides class size, affects students’ performance in schools.

Laraib, Ahmad and Ul Islam (2015) carried out a study on the relationship between class size and academic achievement in Elementary schools in Gujrat, India. This was a correlational study which had 5th grade children make up the population of the study. Twenty five (25) randomly
selected public made up the sample of the survey. The study revealed that there were more pupils in class than was recommended for schools in India. They concluded that there was a strong negative correlation between class size and academic achievement.

Eboatu and Ehirim (2018) carried out a study that examined the perceived impact of class size on academic achievement of junior secondary school students in Awka North Local Government Area of Anambra State. The study used the descriptive survey design and was guided by four research questions. They are as follows:

a. What is the class size of junior secondary schools in Awka North Local Government Area of Anambra State?

b. What is the perceived impact of large class size on students’ academic achievement in junior secondary schools in Awka North Local Government Area of Anambra State?

c. What is the perceived impact of small class size on students’ academic achievement in junior secondary schools in Awka North Local Government Area of Anambra State?

d. What strategies should be adopted in addressing the problem of class size in junior secondary schools in Awka North Local Government Area of Anambra State?

The result of the finding showed that class size affected students’ academic achievement through interaction between teachers and students. Students in small classes definitely performed better academically. This is because the students interact better in class and with their teachers to get information and clarifications. They recommend ensuring that government stipulated class sizes be maintained by building more schools and classrooms for more conducive teaching-learning environment.

Chingos and Whitehurst (2011) carried out a review of various studies on the effect of class size and academic achievement of pupils in elementary and secondary school students in the United States of America. The purpose of the study was on the impact of the various findings on legislative actions by states. This was because the economic downturn of 2009 to 2011 had forced states and school districts in America to rethink their policy of mandating Class Size Reduction (CSR) and maintaining small classes. There were serious implications of increasing or reducing class population by just one student in a country that had 49.3 million public school children. Decreasing or increasing classes by just one student saved or added as much as $12 billion per year in teachers’ salary alone.

The report of this study revealed that there were varying views/literature supporting negative and positive effects of small class size on academic achievement. It reported that there was not enough strong research base to support continuous maintenance of the Class Size Reduction (CSR) policy. The most influential and credible study that supported the CSR policy was the Student Teacher Achievement Ratio (STAR) study carried out in Tennessee in the 1980s. This study revealed that students’ achievement was increased by equivalent of 3 additional months of learning when classes were reduced by 32% from 22 to 15. This study was supported by findings in Florida and Israel that also found benefits of smaller classes. Similar studies carried out in Florida, Connecticut and East Asia nations that perform at higher levels than the United States on international examinations showed no effect of small groups. Findings in California were mixed and inconclusive.

Adimonyemma, Akachukwu and Igboabuchi (2018) carried out a study on the impact of class students’ academic performance in Biology in Idemili North local Government Area of Anambra State. The paper investigated the impact of class size on students’ academic performance across selected public senior secondary schools in Idemili North Local Government Area of Anambra State. In this study, the effect of class size directly on students’ performance; psychological effect of class size on students’ performance and social effect of class size on students’ academic performance were analysed. Self-administered questionnaire was used as instrument for data collection in the study. A sample of one hundred and fifty (150) students in three selected public
senior secondary schools was used. Senior Secondary Two (SS2) and Three (SS3) students were used for the study. The analysis was done using descriptive statistics, percentage and frequencies. It was found that large class size had negative effect on students’ academic performance in biology. It was also observed that class size had psychological and social effect on students’ academic performance.

The conclusion of this study was that other factors besides class size was responsible for the performance of students. In Texas, where half million students from over three thousand students were used for one the studies, the researchers found positive effect of smaller classes on reading and mathematics on 4th and 5th graders but no effect on earlier or later grades. In California where Class Size Reduction (CSR) was mandated in schools resulting in reduction from 30 to 20 students, additional 25,000 new teaching positions were created in the first two years. These positions were filled by teachers without certification or prior teaching experience. The also said small class could not be fingered for higher academic performance. This is supported by the fact that East Asian nations have outperformed the United States in international examinations in spite of having very large classes.

Reducing class size is a popular education policy for parents, teachers, policy makers and politicians. It is an issue that crops up whenever discussion about students’ performance in the educational system is on. In spite of extensive research on class size, however, not much is still known to say conclusively whether class size affects achievement positively or negatively, so there is need for more work on it (Jensen, 2015). The purpose of this study was to do the following:

**Aim and Objectives of the Study**

The aim of the study was to investigate the appropriateness and influence of class size on academic performance of primary school pupils in Rivers State in English and Mathematics. The objectives of the study were to the following:

1. Determine the appropriateness of Class size of primary school teachers in Rivers state.
2. Ascertain the influence of Class size on Academic performance of children in primary schools in Rivers State.

**Research Questions**

The study was guided by the following research questions:

1. To what extent is the class size of primary schools in Rivers state appropriate?
2. What is the influence of Class size on Academic performance of children in primary schools in Rivers State?

**Hypotheses.** The study is guided by one hypothesis, and it is as follows:

H₀ - There is no significant influence of Class size on Academic performance of children in primary schools in Rivers State.

**Research Design, Instruments and Administration of Instruments**

The design for this study is the Ex-post-facto. This is because the study sought to describe the current status of the problem of the study. The area for the study is Rivers State of Nigeria. The population of the study was the classrooms, children and teachers of the 2,661 primary schools in Rivers State. This is made of 949 government schools and 1,712 private schools with a population of 304,003 pupils, comprising 133,447 pupils in urban school and 170,556 pupils in rural areas. The Random and Stratified sampling techniques were used for the study. The instruments of the study were English and Mathematics Competency Test (EMCT) which was used to collect information about the academic performance; the Class size and Primary School Pupils Performance Questionnaire (CPSPPQ) was used to collect information on the number of children in the class. The instruments were consistent in measuring what they were required to
measure. The reliability done with the pupils’ test was used to determine the reliability coefficient of the instrument. This required the test-retest method to establish Coefficient of stability using the Pearson Product Moment Correlation. The reliability coefficient was 0.67 for the pupils’ test and 0.71 for the teachers’ questionnaire which adjudged the instruments to be reliable. The instruments for the study were administered directly on the public primary school pupils and their teachers with the permission of the head teachers and education supervisors of the various local government authorities of the government schools. For the private schools it was administered with the permission of the school heads and proprietors. The Head teachers and Class teachers were given a time frame for the conduct of the test. The test was administered with the assistance of the class teachers for. Primary 4 was used for this study.

Data Presentation, Analysis and Discussion

This section is used to present, analyse and discuss the data of the study.

Research Question 1: To what extent is the class size of primary schools in Rivers state appropriate?

Table 1: Summary of the Percentage distribution the Class Size of Pupils in Basic 4 classes in primary schools in Rivers State

<table>
<thead>
<tr>
<th>S/N</th>
<th>Class size</th>
<th>Number</th>
<th>No of Pupils</th>
<th>Percentage of Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1-10</td>
<td>13</td>
<td>84</td>
<td>45%</td>
</tr>
<tr>
<td>2</td>
<td>11-20</td>
<td>5</td>
<td>79</td>
<td>17%</td>
</tr>
<tr>
<td>3</td>
<td>21-35</td>
<td>8</td>
<td>217</td>
<td>28%</td>
</tr>
<tr>
<td>4</td>
<td>36 and above</td>
<td>3</td>
<td>121</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>29</td>
<td>498</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 1 shows the details of class size and the number of classes of each class size. There were 13 classes that had 1-10 pupils. These 13 classes had a total of 84 children and represented 45% of the classes used for the study. There were 5 classes with 11-20 pupils which had 79 children and represented 17% of the classes. There were 8 classes with 21-35 pupils which had 217 children and represented 28% of the classes. There were 3 classes that had above 35 pupils with a population of 121 and represented 10% of the classes used for the study.

Table 2: Summary of the Percentage the distribution of the Class Size of Pupils in Basic 4 classes in primary schools in Rivers State

<table>
<thead>
<tr>
<th>S/N</th>
<th>Class Size</th>
<th>Number of Pupils</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>35 and below</td>
<td>377</td>
<td>75.7%</td>
</tr>
<tr>
<td>2</td>
<td>36 and above</td>
<td>121</td>
<td>24.3%</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>498</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 2 also shows the summary of descriptive statistic on the distribution of the Class Size of Basic 4 classes in primary schools in Rivers State. In this table, however, the summary is presented showing the class size according to the maximum number of pupils recommended for Nigerian primary schools in the National Policy on Education (FRN, 2013). The table shows that 377 of the 498 pupils used for the study, representing 75.7% fall within the recommended maximum class size of 35, while 121 representing 24.3% is above the recommended maximum class size of 35. This information is shown clearly in the circle chart of fig. 1.
Research Question 2: What is the influence of Class size on Academic performance of children in primary schools in Rivers State?

Table 3: Summary of Descriptive Statistic on the Influence of Class-size on the Academic Performance of Children in Primary Schools in Rivers State

<table>
<thead>
<tr>
<th>Subject</th>
<th>Class size</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>36 and above</td>
<td>121</td>
<td>55.66</td>
<td>31.79</td>
<td>2.89</td>
</tr>
<tr>
<td></td>
<td>35 and below</td>
<td>377</td>
<td>56.76</td>
<td>28.12</td>
<td>1.45</td>
</tr>
<tr>
<td>English Language</td>
<td>36 and above</td>
<td>121</td>
<td>57.85</td>
<td>27.54</td>
<td>2.50</td>
</tr>
<tr>
<td></td>
<td>35 and below</td>
<td>377</td>
<td>57.14</td>
<td>29.07</td>
<td>1.50</td>
</tr>
</tbody>
</table>

The result from Table 3 shows the summary of descriptive statistic on the influence of class-size on the academic performance of children in primary schools in Rivers State. It shows that pupils in the class-size of 36 and above had Mathematics performance mean score of 55.66, SD=31.79 whereas those who are in the class-size of 35 and below had Mathematics performance mean score of 56.76, SD=28.12. It further shows that pupils in the class-size of 36 and above had English Language performance mean score of 57.85, SD=27.54 whereas those in the class-size of 35 and below had English Language performance mean score of 57.14, SD=29.07.

H₀: There is no Significant Influence of Class-size on the Academic Performance of Children in Primary Schools in Rivers State
Table 4: Summary of Descriptive Statistic on the Influence of Class-size on the Academic Performance of Children in Primary Schools in Rivers State

<table>
<thead>
<tr>
<th>Class size</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36 and above</td>
<td>121</td>
<td>55.66</td>
<td>31.79</td>
<td>-.363</td>
<td>496</td>
<td>.717</td>
</tr>
<tr>
<td>35 and below</td>
<td>377</td>
<td>56.76</td>
<td>28.12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36 and above</td>
<td>121</td>
<td>57.85</td>
<td>27.54</td>
<td>.239</td>
<td>496</td>
<td>.811</td>
</tr>
<tr>
<td>35 and below</td>
<td>377</td>
<td>57.14</td>
<td>29.07</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The result from Table 4 shows the summary of independent sample t-test on the influence of class-size on academic performance of children in primary schools in Rivers State. Regarding Mathematics, the pupils in the class-size of 36 and above had Mathematics Performance mean score of 55.66, SD=31.79 whereas their counterparts in the class-size of 35 and below had Mathematics performance mean score of 56.76, SD=28.76. The independent sample t-test shows that there is no significant influence of class-size on Mathematics performance of children in primary schools in Rivers State (t=.363, p>.05). Regarding English Language, the pupils whose class-size was within 36 and above had English Language Performance mean score of 57.85, SD=27.54 whereas their counterparts in the class-size of 35 and below had English Language performance mean score of 57.14, SD=29.07. The independent sample t-test shows that there is no significant influence of class-size on English Language performance of children in primary schools in Rivers State (t=.239, p>.05). The null hypothesis three was not rejected in each case.

Findings

1. The result shows that the dominant class-size where the pupil’s study had 35 and below pupils. This was so for 75% of the pupils. Thus, class size can be said to be fairly appropriate.

2. There is no significant influence of class-size on the academic performance of children in primary schools in Rivers State.

Discussion of finding

Appropriateness of Class Size of Primary Schools in Rivers State

The result from Table 2 shows that 121 of the pupils representing 24.30% were in classes which had over the recommended class size of 35 whereas 377 pupils representing 75.70% were in classes with class size 1-35. The 121 pupils who represented 24.30% of the pupils were found in 3 out of the 29 classes used for the study as shown in Table 2. This represented approximately 10% of the classes. The highest number of children seen in any one class was 42 pupils. There were 13 classes of 1-10 pupils representing 45%; 5 classes of 11-20 class size representing 17% and 8 classes of 21-35 class size representing 28% of the classes. These results show that majority (90%) of the classes had class sizes that are appropriate and well within the recommended 35 pupils in a class (FRN, 2013). This finding is in agreement with earlier findings of the UNESCO UIS (2020) and National Bureau of Statistics (2018) which established that the average class size of primary schools in Rivers State was below 20. This is, however, at variance with results of most studies on class size in Nigerian and Rivers schools that put the figure much higher Kalagbor (2008) and Ajibola (2008) put the class population in Nigerian schools at 70 to 120 while Kalagbor and Ow honda (2014) put the class population at 55.

Influence of Class-size on Academic Performance of Children in Primary Schools

The result from Table 4 shows that pupils in the class-size of 36 and above had Mathematics performance mean score of 55.66, SD=31.79 whereas those who are in the class-size of 35 and below had Mathematics performance mean score of 56.76, SD=28.12. It further shows that pupils in the class-size of 36 and above had English Language performance mean score of 57.85, SD=27.54 whereas those in the class-size of had English Language performance mean score of 57.14, SD=29.07. The class size appeared to have no impact on the academic achievement of the
learners. When put to statistical test, the result from Table 3 shows there were no significant influence of class-size on Mathematics performance ($t=.363, p>.05$) and English Language performance ($t=.239, p>.05$) of children in primary schools in Rivers State. The null hypothesis three was not rejected in each case.

The finding of this study is in disagreement with that of Eboatu and Ehirim (2018) which examined the perceived impact of class-size on the academic achievement of junior secondary students in Akwa North Local Government Area of Anambra State and revealed that class size affects student academic achievement through interaction between teachers and students. It is also at variance with Adunola (2013) who reported that large classes negatively affect academic performance.

The findings of this study, however, agree with the reports of Owoeye and Yara (2011), Uhrain (2016) and Chingos & Whitehurst (2011) who could not establish any positive or negative effect of class size on academic performance. Chingos & Whitehurst (2011) was emphatic is starting that while politicians and education reformists usually point to reducing class size as the major emphasis in improving education, there was not enough studies to show that the problem of education was class size. He supported his report with studies in Florida, Connecticut, Ohio and California in the United States which had inconclusive results. He also pointed to the fact that East Asian nations that had outperformed the United States in every known international examination at every level of education were notoriously known to have the largest classes in the world.

**Recommendations**

The following recommendations were made as a result of the findings of the study on class size and academic performance of primary school children in Rivers state:

1. It is important to maintain the small class size that was experienced in most of the Basic 4 classes used for the study. Most of the small classes in the public schools is as a result of the regulations connected to the Covid-19 pandemic.

**Limitations of the Study**

There are several limitations to this study. They are the following:

1. The Covid-19 pandemic caused delays in the testing because schools were told to restrict entrance into their school premises. It was difficult getting the necessary permission to do the field work.

2. The COVID-19 pandemic made the authorities in Nigeria in general and Rivers State in particular to restrict class sizes. Even though this study was done post pandemic, it is not clear whether the restrictions were responsible for the reduced class sizes found in most schools

3. The study was restricted to only English Language and Mathematics because of logistic problems.

4. The present spate of insecurity made it difficult to freely go to some local government areas that would have been beneficial for the study.

**References**


