Investigation on Mathematics Underachievement: A Case Study of Selected Secondary Schools in Kebbi State

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Abstract
Mathematics underachievement was investigated in some Selected Secondary Schools in Kebbi State and solutions to the problems identified were proffered. Three hundred secondary school students were sampled for the study using stratified random sampling and purposive techniques. Four hypotheses were postulated using Pearson Product Moment Correlation to empirically test the research questions. Questionnaires were used to collect data for analysis. The reliability of the instrument was determined through the use of test and re-test method. The correlation “r” average of 0.678 was obtained from the initial study undertaken. The study investigates the extent, on how combination of students’ attitude, family background, school physical environment and teachers’ factor had affected students’ achievement in mathematics. It was discovered that family background, students’ attitude and lack of sufficient qualified teachers contribute largely to students’ underachievement in mathematics.

Keywords: School, Teachers, Students’ Underachievement, Mathematics
Mathematics education is both useful as the foundation of technological breakthrough for any nation and is also applied in human endeavors. Despite this indispensable use, students’ poor performance at the secondary school level, especially in external examinations has become a serious concern for all stakeholders in the education of these youngsters. Performance of students in Senior School Certificate Examination (SSCE) mathematics has been on a downward trend over the years among secondary school students due to several factors. Combination of a school environment, family background, student attitude, and teachers’ factor seems to be common challenges to students’ performance in mathematics.

Underachievement, as explained by Oideachais and Lear (2011), is a situation where performance is below what is expected based on one’s ability. It can be applied to the level of an individual student, describe a class, school, or indeed a system. Teachers are able to use their professional judgment to assess and ascertain if a student is underachieving. This can include classroom observation and analysis of formative assessment or other data as appropriate. Low achievement describes the case where a student is achieving to the full extent of his or her ability but is well below average compared to her or his peers. Mathematics underachievement describes students that are average or above average in actual achievement in mathematics did not their intellectual capabilities (Suan, 2014). Underachievement in the area of education has been the concern for all academic and government institutions, despite concerted efforts and investments, the performance of students in their summative examination has not yielded significant improvement as expected. According to the West African Examination Council Executive Secretary, the performance of candidates for its examinations in the last three years is fluctuating in view of the outcome of the just-released 2018 examination (Adenipekun, 2018).

Results obtained in public examination records and enrolment of the students with underachievement in mathematics as a subject may be caused by some factors (Ogunleye, 1999). Findings have shown that there is a relationship between students’ attitude towards mathematics and achievement in mathematics (Finger and Schlesser, 2002). Akinola (2003) and Williams (2004) concluded that this directly has an influence on aspects of learning in the classroom. It was inferred that attitudes are related to academic performance when measured on terminal assessment (Dulton, 2004).

Adeogun (2001) noted that the teacher’s factor is another factor found in determining the quality of education, as it influences teaching and learning in the classroom. Rivkin et al. (2005), Harris and Sass (2008) showed that teacher quality is an integral part of the students’ achievement. Therefore, there is a need to assess secondary school teachers’ characteristics in areas of gender, qualification, experience, teaching method and teacher workload. Family background of the student is a factor that commonly contributes to students’ underachievement in mathematics.

This results from the family socio-economic status impact on students’ underachievement as most parents do not have the means to support their children in school, such as coping with their expenses and this affects the level of student concentration while in class. Negative attitude of parents, parental conception about education generally or certain subject, such as mathematics may affect the performance of students likewise. The physical condition of a school would often determine to a large extent the patronage that such school will enjoy, which may be unavoidable for children from families that are below the average standard of living or being the only school in such environment (Salman et al., 2012). The unattractive physical structure of the school building, poorly ventilated classrooms, and absence of good
library could de-motivate achievement academically which can be referred to as environment mismatch. Successful academic achievement can be based on the physical condition of a school.

A Chief Examiner also reported that the results of our public examinations had shown markedly a decline in the percentage of passes in mathematics (W.A.E.C., 2011). Mathematics as an all-inclusive subject in schools is important to the Nation and individual. Qualitative education is therefore important in mathematics education. Mathematics is also a subject that is related to other subjects. Unfortunately, despite the importance of mathematics and its applications in our everyday life, Nigeria students’ performance in Senior School Certificate Examination (SSCE); West African Examination Council (WAEC) and National Examination Council (NECO) has been consistently very poor. The low level of students’ achievement in this subject area is still of great concern to all stakeholders (Zalmon and Wonu, 2017). Unfortunately, most students now seek alternative means to pass their examinations through malpractices and most times with the assistance of their teachers during the examination. It is therefore important to proffer solution to the causes of poor achievement in mathematics.

**Literature Review**

Some researchers have made effort to develop strategies to find a solution to the problem of underachievement of students in mathematics. Mathematics has often been described as a subject that has the ability to confuse, frighten and frustrate students. Such experience if had, can affect the attitude towards mathematics as an adult. Mathematics also described as one of the subjects that are most poorly taught, widely hated and not properly understood in elementary schools, in fact, most girls run away from the subject.

Abdurrahman and Garba (2014) conducted research on the impact of motivation on students’ academic achievement in the junior secondary school of Kebbi State with a sample of 383 students. The result showed that there is a significant gender difference impact motivation and academic achievement of highly motivated student in mathematics. The study recommended among others that individual differences in ability, background, and attitude should be taken into consideration when students are to be motivated.

Joseph (2014) examined the extent to which school variables, such as school location, school type, and school proprietorship relatively and collectively contribute to students’ performance in mathematics. Data were obtained from 853 respondents out of the sample of 1000 students. The result showed that school proprietorship was the variable that has a significant effect on students’ performance in mathematics. This is coherent with research result of Wilson et al., (2002) that schools which emphasize parental and community involvement, who’s teaching staff model responsible behaviour and mutual respect were more likely to also have staff who employed constructivist teaching methods and which indirectly impact positively on mathematics achievement among their students.

It was hence described that school attributes of mutual respect among teachers, students, parent and community involvement is a characteristic of privately owned schools in the study location but this is rare in government/public schools. Among the recommendations was that the schools in rural areas should be given special attention, with a view to improving the educational resources available for the teaching and learning of mathematics. Government and Non-Governmental organizations can lend a hand in this respect and thus raise the socioeconomic status of these rural schools which is in agreement with the finding of Aremu and Oluwole (2001).
Teachers’ perception on the causes of students' poor mathematics performance in secondary schools of Kebbi State is another research conducted by Abdurrahman et al., (2015) in order to investigate teachers’ perception on the causes of students' poor academic performance. Poor academic performance was described as any performance that falls below a desired standard of education and noted that education at secondary is the bedrock, being the foundation towards higher knowledge in tertiary institutions else there are likely to be no problem at subsequent levels. Finding from observation shows that teachers’ qualification, teachers’ method of teaching and students’ environment have an influence on students’ poor academic performance.

Eduwem et al. (2017) performed a research based on the prediction of students’ academic performance in mathematics at the thinking level from students’ psychological factors (self-concept, test anxiety, interest in schooling, attitude towards mathematics, motivation and locus of control) and performance at the lower cognitive levels (knowledge and understanding), using simple random sampling survey in selecting 300 S.S.2 students from six secondary schools in Calabar Metropolis of Cross River State. The findings showed that the students’ performance in mathematics at a higher cognitive level depends on some psychological factors and their performance at the lower cognitive levels, test anxiety has a significant positive relationship with academic achievement, though relationship between self-concept and academic achievement was subjected to debate due to unexpected result which was explained to be possible in the case of students learning under a harsh condition, such as highly populated classroom.

Teachers were hence advised to provide an enabling environment that is suitable for sustaining achievement at lower cognitive abilities in our secondary schools. Teachers should adopt scaling used in the research to measure the psychological factors of students, to determine what treatment to be adopted for the students demanding special attention. Also that, the study should be replicated to other places of learning; the prediction equation should be adopted by schools' counselors and administrators to predict students' academic performance.

Ajayi et al. (2011) lamented over the existence of low levels of mathematics attainment among students at every segment of the educational system in the country, despite the importance accorded to the subject in the society. Based on the research finding from the investigation on the effects of attitude and self-concept on achievement in senior secondary school mathematics in Ogun State, emphasis was placed on students’ attitude toward mathematics and self-concept as an important factor that jointly has an effect on mathematics achievements. The attitude was said to contribute subsequently to the difficulties students commonly encounter in learning and understanding of mathematics as it commonly affects the students’ education.

Due to the importance of mathematics to learning in school and other day-to-day life activities, it is therefore not only compulsory for the award of SSCE but a basic requirement for entry into institutions of higher learning where students could go to pursue courses in their areas of interest. Students are expected not to have less than five credit (including Mathematics and English) to be granted admission into a higher institution of learning. The influence of students’ attitude towards mathematics, however, may be determined by that teachers’ method of teaching and personality which could have a great impact on students’ positive attitude towards mathematics. There is a clear indication that the percentage of students who pass mathematics at credit level and above is lower compared to those who fail. Table 1 shows evidence of Senior Students performance in SSCE
Table 1: Students’ performance in mathematics, West African Senior School Certificate Examination (2009-2016)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total no of candidate</th>
<th>No of students with credit (A1-C6)</th>
<th>% of students with credit (A1-C6)</th>
<th>D7-F9</th>
<th>% of students with D7-F9</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>1373009</td>
<td>425633</td>
<td>31.00</td>
<td>947367</td>
<td>69.00</td>
</tr>
<tr>
<td>2010</td>
<td>1351557</td>
<td>453447</td>
<td>33.55</td>
<td>898110</td>
<td>66.45</td>
</tr>
<tr>
<td>2011</td>
<td>1540250</td>
<td>587630</td>
<td>38.93</td>
<td>952620</td>
<td>61.07</td>
</tr>
<tr>
<td>2012</td>
<td>1672224</td>
<td>819390</td>
<td>49.00</td>
<td>852834</td>
<td>51.00</td>
</tr>
<tr>
<td>2013</td>
<td>1543683</td>
<td>555726</td>
<td>36.00</td>
<td>987957</td>
<td>64.00</td>
</tr>
<tr>
<td>2014</td>
<td>1692435</td>
<td>529732</td>
<td>31.30</td>
<td>1162703</td>
<td>68.70</td>
</tr>
<tr>
<td>2015</td>
<td>1593442</td>
<td>544638</td>
<td>34.18</td>
<td>1048804</td>
<td>65.82</td>
</tr>
<tr>
<td>2016</td>
<td>1544234</td>
<td>597310</td>
<td>38.68</td>
<td>946924</td>
<td>61.32</td>
</tr>
</tbody>
</table>

Source: Test development division, West African Examination Council, Lagos, Nigeria (As in Zalmon & Wonu, (2017)).

Though in a recent development, a drastic improvement in the performance of students in SSCE was observed but marred with various forms of examination malpractices as a result of mass cheating, which is evident in almost all states of the federation (WAEC, 2017). This is an indication that there is/are impeding challenge(s) that is/are preventing success in summative examination, which are yet to be addressed. Though, these challenges seem insurmountable by the teachers and students. They have rather adopt alternative means for students to pass the summative examination. The perceived increase in the level of students’ performance, attained in the SSCE would therefore be described as a mirage. This trend can be anemic to the future of a nation. This will in addition lead to discouraged and uninterested students who lack the confidence and motivation to learn.

The literatures reviewed shows clearly that most of the empirical studies includes one or two of students’ attitude, teacher’s factor, family background and physical condition of a school as part of the factors causing underachievement in mathematics from studies based in the North-West geo-political zone of Nigeria. Results of this research with respect to the selected variables investigated would be of importance and as reference for researchers, since it provides a better understanding on some of the factors that account for the performance of students in mathematics.

**Statement of the Problem**
Mathematics being one of the subjects required for development, especially in area of technology has become the number one enemy subject to most students today. Most students perform well in other subjects but often fail or deficient in mathematics. They now have the view that mathematics is a magical subject and teachers don’t bother on best method in teaching students, despite the use of mismatched learning environment for students from parent without value for education. However, failure to meet the required achievement in examination is a complex matter to pin point the blame to a particular challenge facing students and causing students underachievement in mathematics. It is in the light of this that this study investigates the extent, on how combination of students’ attitude, family background, school physical condition and teachers’ factor had affected students’ achievement in mathematics.

**Research Questions**
The research questions raised in this study are:
1) Do parents’ backgrounds influence students’ performance in mathematics?
2) Do students’ attitudes towards mathematics influence their performance in mathematics?
3) Do the teachers’ characteristics influence students’ achievement in mathematics?
4) Does school physical environment influence students’ performance in mathematics?

Research Hypotheses
To empirically test the research questions, the following research hypotheses were postulated;

HO₁: There is no significant relationship between parental background and students’ achievement in mathematics.

HO₂: There is no significant relationship between students’ attitude and achievement in mathematics.

HO₃: There is no significant relationship between teachers’ factor and students’ achievement in mathematics.

HO₄: There is no significant relationship between school physical environment and students’ achievement in mathematics.

Research Methodology
Descriptive survey design was adopted for this study. Descriptive statistics were employed in describing the demographic characteristics of the respondents as well as the research questionnaire. The use of PPMC (Pearson Product Moment Correlation) and Multiple Regression were used in testing the hypotheses.

This study was conducted in Kebbi State, Nigeria. Kebbi State is one of the seven states that make up the North-West Geo-political zone of Nigeria. The state has 21 Local Government Area Councils and shares boundaries with Sokoto State, Niger State, Zamfara State, Dosso Region in the Republic of Niger and the nation of Benin. The councils are subdivided into three senatorial districts. It has a total area of 36,800 km².

The sample for the study consisted of 300 SSS III students drawn from 20 mixed public schools randomly selected through the use of a dip-hat method. From each of the 6 schools, 50 students were randomly selected to form the 300 samples using stratified random sampling technique. The sample consists of 210 boys and 90 girls from Senior Secondary School III that are already in the terminal class and preparing for SSCE. The researchers limited the sample to SSS III because it is assumed that these students have had enough cognitive exposure from their mathematics teachers and can give honest and independent opinion about themselves, the teachers’ characteristics, and impact on their school location. The Teacher survey questionnaires were distributed to mathematics teachers in the Senior Secondary Schools in each selected schools that were involved in the study. Also, the student survey questionnaire was distributed to SSS III students of the sampled schools. However, the researcher was able to collect back (97%) of the questionnaire.

An instrument is considered valid when it measures what it is purported to measure, such as the objectives of the study. The main research instruments used for data collection in this study include teacher and student questionnaire. The purpose of using a survey questionnaire was to obtain information about the characteristics or opinions of the respondents. The content validity of the instrument was designed in such a way that all the items in the list of the questionnaire were answered by the research questions. The reliability of this instrument was determined through the test and re-test method, carried among 20 students in a school that were not part of this study. The exercise was conducted over a period of three weeks and the average Pearson Product Moment Correlation Co-efficient of 0.067 was obtained. This showed that the instrument is reliable and could be used for this study.
Results

Characteristics of Respondents

Table 2: Gender Distribution of Respondents

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Male</th>
<th>Female</th>
<th>No Response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>206 (68.67%)</td>
<td>85 (28.33%)</td>
<td>9 (3.00%)</td>
<td>300 (100%)</td>
</tr>
<tr>
<td>Teachers</td>
<td>8 (72.73%)</td>
<td>3 (27.27%)</td>
<td>-</td>
<td>11 (100%)</td>
</tr>
</tbody>
</table>

Table 3: Teachers’ Working Experience

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-8 Years</td>
<td>2</td>
<td>18.18</td>
</tr>
<tr>
<td>9-14 Years</td>
<td>4</td>
<td>36.36</td>
</tr>
<tr>
<td>15 Years and Above</td>
<td>5</td>
<td>45.46</td>
</tr>
</tbody>
</table>

Table 4: Teachers’ Academic Qualification

<table>
<thead>
<tr>
<th>Qualifications</th>
<th>Respondents</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HND Statistics</td>
<td>2</td>
<td>18.18</td>
</tr>
<tr>
<td>BSc. Statistics</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>BSc. Mathematics &amp; PGD</td>
<td>4</td>
<td>36.36</td>
</tr>
<tr>
<td>BSc. Mathematics</td>
<td>5</td>
<td>45.46</td>
</tr>
<tr>
<td>Others</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 5: Availability of Relevant Teaching Materials

<table>
<thead>
<tr>
<th>Availability of Instructional Materials for Teaching-Learning Mathematics</th>
<th>Respondents</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>3</td>
<td>27.27</td>
</tr>
<tr>
<td>No</td>
<td>8</td>
<td>72.73</td>
</tr>
</tbody>
</table>

Table 6: Teachers’ Workload Per Week

<table>
<thead>
<tr>
<th>Number of Mathematics Classes Taken per Week</th>
<th>Respondents</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 15 Classes</td>
<td>5</td>
<td>45.45</td>
</tr>
<tr>
<td>&gt;=15 Classes</td>
<td>6</td>
<td>54.55</td>
</tr>
</tbody>
</table>

Hypothesis One: There is no significant relationship between family background and students’ achievement in mathematics.

Table 7: Result of relationship between students’ achievement and family background

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>Df</th>
<th>R</th>
<th>Sig. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ achievement</td>
<td>290</td>
<td>0.6966</td>
<td>0.4605</td>
<td>250</td>
<td>0.325**</td>
<td>0.000</td>
</tr>
<tr>
<td>Family background</td>
<td>291</td>
<td>0.7795</td>
<td>0.24328</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

P<0.01

Table 2 shows correlated “r” value of 0.325 implying positive and significant relationship between family background influence and students’ achievement in mathematics. Family background variable is significant (β=0.553, p<0.00) with poor performance of students resulting from high level of poor parental background. Based on the analysis carried out, the null hypothesis one was rejected.
Hypothesis Two: There is no significant relationship between students’ attitude and achievement in mathematics.

Table 8: Result of relationship between students' achievement and students' attitude

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>Df</th>
<th>R</th>
<th>Sig. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ achievement</td>
<td>290</td>
<td>0.6966</td>
<td>0.4605</td>
<td>136</td>
<td>0.570**</td>
<td>0.000</td>
</tr>
<tr>
<td>students’ attitude</td>
<td>291</td>
<td>0.7312</td>
<td>0.16750</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

P<0.01

The table 8 shows that the correlated value is 0.570 indicating there is correlation and significant relationship between students’ attitude and achievement in mathematics. The regression (β = 1.030, p < 0.000) reveals that the poor students’ performance is as a result of high level of negative attitude of students towards mathematics because the performance of students decreases as students increase in negative attitude to mathematics. So the null hypothesis was rejected.

Hypothesis Three: There is no significant relationship between teachers’ factor and students’ achievement in mathematics.

Table 9: Result of relationship between students' achievement and teachers' factor

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>Df</th>
<th>R</th>
<th>Sig. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ achievement</td>
<td>290</td>
<td>0.6966</td>
<td>0.4605</td>
<td>136</td>
<td>-0.225**</td>
<td>0.007</td>
</tr>
<tr>
<td>Teachers’ factor</td>
<td>142</td>
<td>0.5211</td>
<td>0.50132</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

P<0.01

The table 9 shows a sharp negative correlation coefficient value of -0.225 indicating there is significant negative (contrast) relationship between teachers’ factor and students’ achievement in mathematics. Regression indicating (β = -103, p > 0.005) Teachers’ factor is not significant with students’ achievement in mathematics. The null hypothesis is therefore accepted.

Hypothesis Four: There is no significant relationship between school physical condition and students’ achievement in mathematics.

Table 10: Result of relationship between students’ achievement and School physical condition

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>Df</th>
<th>R</th>
<th>Sig. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ achievement</td>
<td>290</td>
<td>0.6966</td>
<td>0.4605</td>
<td>136</td>
<td>0.082</td>
<td>0.165</td>
</tr>
<tr>
<td>School physical condition</td>
<td>142</td>
<td>0.5523</td>
<td>0.18225</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

p>0.05

The table 10 shows the calculation coefficient of 0.082 indicating there is significant relationship between school physical condition and students’ achievement in mathematics. Regression value suggests (β = 0.197, p > 0.265) school physical environment condition has significance on students’ achievement in mathematics. The null hypothesis is rejected.

Discussion of Results

Based on the findings, it was revealed that there exists a significantly high positive relationship between family background and students’ performance in mathematics. It was noticed in the students' respondents’ questionnaire that from the entire questions asked, all showed that virtually all the students 267 (89%) were predominantly victim of the effect of family background as they indicated “most parents do not live peacefully with their wards at home”. This indicates family background as a general problem confronting most students and students from lower socio-economic status are more likely to encounter problems such as
parents’ inability to cope with such students’ school expenses and basic needs (Kogce et al., 2009).

Though some of the students 148 (49.33) responded that their parents organize extra lesson for them on mathematics at home. This is believed to go a long way to affect psychological behavior and the responses of students from such homes when in mathematics classes, in respect to both teachers and colleagues (Ajayi et al., 2011). It was also revealed that there exists a significant positive relationship between students’ attitude and performance in mathematics. As observed from a response, 152 (50.67%) respondents portrayed the absence of guidance and counseling section in their school, and (60.33%) teachers do not revisit past questions with their students in order to get them familiar with how to answer WAEC and NECO questions.

Based on finding and rejection of the null hypothesis, it is evident that mathematics teachers are trained and experienced which is in agreement with findings of Omwenga (2014). However, the numbers of teachers are few compared to a population of students and these results in high workload on teachers. These teachers do not have sufficient time with learners; they are thereby prevented from covering their syllabus before the period when students are to write their final examinations. Meanwhile, the problem of some of these students is their inability to sit down and learn or study on their own for a long period of time. This is described as attention span by Suydam and Weaver (1975) in Ajayi et al., (2011) and the inability of students to remember formulas after reading might be attributed to the problem of attention span. It may, of course, be the reason why most students (51.67%) complained about failure to remember things read or that they easily forget formulas.

Pajares (1997) described memory problem as a factor to successful learning of mathematics, due to the inability to retrieve from memory critical information (formula) when solving the problem. This is sad, as most of these students have none to guide or advise them when faced with challenges, even when doing a personal study, especially in mathematics. They are left with what their friends tell them or what they think is right and which may, in turn, influence their learning style or even lead to discouragement in the subject (DeBourgh, 2008). There is a significant relationship between school physical condition and students' achievement in mathematics. There is evidence of correctness based on related research, which states that students’ underachievement can also result from overpopulated classes, lack of (sufficient) instructional materials for teaching and learning (Bassi, 2001). Meanwhile, smaller class size has been described to be equally very important in school design (Adeyemi and Adeyemi, 2014). It was revealed that most (84%) of the students’ classrooms are overpopulated during mathematics lessons. For these reasons, Yara (2012) concluded that schools with more facilities obtain better results than those with fewer facilities.

The research revealed that there exists no significant relationship between teachers’ factor and students’ performance in mathematics. This result is an indication that there are good teachers but few and not surprising as recently asserted to by the Kebbi State Commissioner for Education that the expansion of schools in the state does not correspond with the expansion of school structures and the number of qualified teachers. Unfortunately, the ratio of qualified mathematics teacher to students in each local government is in a ratio of one to one thousand plus (Lawal, 2017). Though some other researchers had also indicated that there is no significant relationship between teacher qualification and students’ performance (Lydia and Migosi, 2015; Aaronson et al., 2007). While Adeogun (2001), reported that the lack of qualified teachers may lead to consistent poor performance of students in subjects like mathematics.
Based on research finding, it was however noticed that most of the schools have only one mathematics teacher or teacher(s) without required qualification. Also, 6 (27.27%) out of 11 (100%) teacher respondents; complained of having more than 15 mathematics lesson periods to take per week. Based on the arguments and teachers’ response to our questions, it is glaring that mathematics teachers are really doing their work effectively. The problem is the lack of sufficient teachers.

Most schools lack human resources which have led to the high workload on the few mathematics teachers that are doing the work. So the instances of examination misconduct (malpractice) in states as announced by the Registrar/Chief Executive of NECO at the release of June/July 2017 results (Opar, 2017) is evidence to the lack of staff capacity. Presently, teachers are stretched across the curriculum. Most of the teachers 7 (63.64%) complained of lack of instructional materials while 4 (36.36%) agreed on having instructional materials for teaching mathematics in their schools, which could be due to lack of proper distribution of these instructional materials.

The absence of government support arguably contributes to corrupt practices in schools because it is possible that the government does not put some of the schools into consideration when distributing mathematics instructional materials for teaching or that the school head does not make such available for the teachers to use in their various schools. Responses showed that mathematics is not taught in the early hours of the day. This can be attributed to non-availability of teachers to take most of the classes concurrently at early hours of the day or negligence on the part of those charged with the responsibility of preparing a school timetable to accord importance to the teaching of mathematics in the early periods of the day.

**Conclusion**

The result of this research shows that there are good and qualified teachers in the state but they are very few in number. This has led to the over laboring of the few ones that are available and which in turn is affecting the students' achievement in mathematics. There is often misplacement of priority for mathematics, as one of the important subjects that are best understood when taught at right time (especially, early hour of the day) and good or conducive environment. The displacement of any/both of those conditions commonly leads to students’ underachievement. Impact of family background though seems to be a silent issue but visible in society affects students’ achievement in mathematics. Because, little can only be achieved by a student (especially in mathematics) whose need has not been duly met or attended to by the parents with a good accord. Parents should also endeavor to provide all the needed materials and support that will enhance the better performance of their wards in mathematics. Most students have developed a negative attitude towards mathematics because of their experience over time as they often call it a magical subject. Sufficient qualified and experienced teachers in the field of mathematics are needed to be employed in secondary schools in order to rescue the situation and this can be achieved through the unanimous effort of both Government and Parents. Students should also change their negative attitudes towards the learning of mathematics while teachers of mathematics use appropriate teaching methods in teaching students in the classroom. The state of most school buildings is devastating, coupled with lack of adequate learning facility, overpopulated classrooms and lack of working library which call for interventions from government and nongovernmental organization.
Recommendations
1. The government should make the learning environment more conducive in secondary schools by providing all the necessary infrastructures that facilitate teaching-learning.
2. Only qualified teachers of mathematics should be employed, exposed to regular seminars, workshops and of course, in-service training when needed.
3. School authorities should be more alive to their duty of supervision.
4. Parents should motivate their wards to learn mathematics.

References


