# Students and Teachers' Perception of the Causes of Poor Academic Performance in General and Further Mathematics in Sierra Leone: A Case Study of BO District Sourthern Province 

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#### Abstract

The essential basis for economics and social well being of any country lies in the understanding by its people, basic mathematical, scientific, and technological knowledge. This concern is not just about those expected to continue in further studies and professions that are related to mathematics, science, technology and economics, but a competent mathematical population forms a basis for national growth and development. There are number of different forces that have led to strong concern about the low quality of mathematical knowledge, skills values and performance among students the last few decades in Bo city. Over the years, many different perceptions about General Mathematics and Further Mathematics have been held. This study examines the poor performance among Senior Secondary students at West Africa Secondary School Certificates Examination level in Bo City, in Sierra Leone. The target population of the study included one hundred students (100) and seventy-five (75) teachers randomly selected from five (5) secondary schools in Bo city. Questionnaires were used to collect relevant data for the study. Chi-square tests were used to analyse the research questions. Other forms of data are presented in the form of percentages. Teacher qualification and student environment did not influence students’ poor performance, but teaching methods have influenced poor performance of students in General Mathematics and Further Mathematics. Teachers should encourage and motivate the student to adore the mathematics related subjects. Students must develop positive attitude towards the teacher and the subjects matter.


KEYWORDS: Academic performance; perception; qualifications, student and teacher

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## INTODUCTION

The essential basis for economics and social well-being of any country lies in the understanding by its people, basic mathematical, scientific, and technological knowledge, there are number of different forces that have led to strong concern about the low quality of mathematical knowledge, skills, values and performance among students in the last few decades in Bo City. The concern is not just about those expected to continue in further studies and professions that are related to Mathematics, science, Technology and Economics, but a competent mathematical population forms a basis for national growth and development. This concern has often revolves on how mathematically literate students are surviving in our rapid advancing scientific and technological world we live today.

In Sierra Leone for instance, the differential scholastic achievement of students has been, and still remain a source of concern and research interest to educators, government and parents. This is so because of the great importance that education has on national development of the country. Also, there is a consensus of opinion about the fallen standard of education, parents and governments are in total agreement that their investment on education is not yielding the desired dividend. Teachers also have continued to complain of students' how performances at both internal and external examination as result of peer group influence.

Technology related subjects at university, such a result are worrisome. The situation is almost the same for Further Mathematics for which the average pass was $3.7 \%$. Looking at the analysis is not surprising that the Gbamanja Commission recommended the following.

* Awarding Grant-in Aid to all female students who had gained admission to tertiary institution to study Science causes such as Mathematics Physics, Chemistry, Biology and Engineering options.
* Recruited other four thousand (4000) teachers (2008)

Education at secondary school level is supposed to be bedrock and the foundation towards higher knowledge in tertiary institutions. It is an investment as well as an instrument that can be used to achieve a more repaid economic, social, political technological, scientific and cultural development in the country. The national policy on education (2004) stipulated that secondary education is an instrument for national development general development of the security and equality of educational opportunities to all Sierra Leone children, irrespective of any real or marginal disabilities. The role of secondary education is to lay the foundation for further education and id a good foundation is laid at this level, there are likely to be no problem of subsequent level.

However, different people at different times have passed the blame of poor performance in secondary school to students because of their low retention, parental factors, association with wrong peers, low achievement motivation and the like (Aremu \& Sokan, 2003; Aremu \& Oluwole 2001).

Morakingo (2003) believed that the falling level of academic achievement is attributable to teacher own use at verbal reinforcement strategy. Others found out that the attitude of some teachers to their job is reflected in their poor attendance to lessons, lateness to school, unsavoury comments about student's performance that could damage their ego poor method of teaching and they like affect pupils' academic performance.

This research is geared towards students and teachers perception of the poor academic performance in General and Further mathematics in Sierra Leone.

## STATEMENT OF THE PROBLEM

According to Audit Service Sierra Leone Report 2009, it was observed that external examination remain poor in 2009. And out of the total three million, eight thousand one hundred and sixty thousand Leones (Le3, 080,160,000) - paid for West Africa senior School certificate (WASSCE) fees by government, the sum of two million seven hundred and eighty one, three hundred and forty eight thousand Leones (Le2, 781,348,000) was for candidates whose credit passes were low that they could not qualify for entering to any tertiary institution of learning in Sierra Leone. The poor performance of pupils in the 2008 Basic Education Certificate Examination (BECE) and West Africa Senior School Certificate Examination (WASSCE) in Sierra Leone prompted his Excellency the president to set up Professor Gbamanga commission of enquiry to investigate reasons for such dismissal performance. The table below shows results for WASSCE in Sierra Leone for 2007, 2008 and 2009 respectively in General Mathematics and Further Mathematics.

Table 1: General Mathematic

| Year | Total Number of Candidate | Credit (A1-C6) \% | Failed (above C6) \% |
| :--- | :--- | :--- | :--- |
| 2007 | 18397 | 4 | 96 |
| 2008 | 23799 | 4 | 96 |


| 2009 | 2922 | 5 | 95 |
| :--- | :--- | :--- | :--- |
| Data source: WASSCE |  |  |  |

Table 2 Further Mathematics

| Year | Total Number of Candidate | Credit (A1-C6) \% | Failed (above C6) \% |
| :--- | :--- | :--- | :--- |
| 2007 | 384 | 4 | 96 |
| 2008 | 2770 | 4 | 96 |
| 2009 | 2084 | 5 | 96 |

From the above tables 2007 - 2009 academic year students' performance in the above subjects prove to be absolutely poor, hence average of $4.3 \%$ of the total number of students offering General Mathematics at WASSCE level maintain a credit or better. Considering that General Mathematics is a prerequisite for admission for all Science and Technology related subjects at university level such result is worrisome. The situation is almost the same for Further Mathematics for which the average percentage pass was $3.7 \%$ looking at the above analysis is not surprising.

## JUSTIFICATION

All over the country, there is a consensus of opinion of the fallen standards of education in Sierra Leone, parents and Government are in total agreement in the opinion that, their huge investment on education is not yielding the desired dividend. Teachers also complain of student's low performance at both internal and external examination.

The West Africa senior School Certificate Examination (WASSCE) results conducted by West Africa Examination Council (WAEC) justified the problematic nature and generalization of poor secondary school students' performance in different school subjects.

The question as early statement, what is the cause of this fallen standard and poor academic performance of students? Is the fault entirely that of teachers or students or both of them? It is that students of today are non-achievers because they have low intelligence quotient and a good neutral mechanism to be able to act purposefully, think rationally and deal effectively with academic tasks? Or is it because teachers are no longer putting in much commitment as before? Or is it in teacher method of teaching and interaction with pupils? Or is the poor performance of students caused by parents. Neglect separation and poverty? The present study therefore sought to find out students and teacher perception on the causes of poor academic performance among secondary school students in Bo city.

## THE PURPOSE OF STUDY

The purpose of this study sets out clearly among other things to: Finding out whether there is significant difference between methods of teaching and academic performance qualification to teachers and academic performance qualification to teachers and academic performance and students' environment and poor academic performance.

## RESEARCH QUESTIONS

This research will attempt to answer the following questions:
i. What is the perception of teachers on students' poor performance and teachers' qualification?
ii. What is students' perception on teachers' qualification and students' poor academic performance?
iii. What is the perception of teachers on students' poor performance and teachers' method of teaching?
iv. What is the students' perception on their academic performance and teachers' methods of teaching?
v. What is teachers' perception on students' environment and students' poor performance?
vi. What is the students' perception on students' environment and poor academic performance

## RESEARCH OBJECTIVES

The specific objectives of the study are to identify
a) Demographic information of respondents' and gender
b) To use Chi-Square test to know
i. The perception of teachers on students' poor performance and teachers' qualification.
ii. The students' perception on teachers' qualification and students' poor academic performance.
iii. The perception of teachers on students' poor academic performance and teachers' method of teaching.
iv. The students' perception on their poor academic and teachers' method of teaching.
v. The teachers' perception on students' environment and students' poor performance.
vi. The students' perception on students' environment and poor academic performance.

## STUDY AREA

This study was carried in five (5) randomly selected senior secondary schools in Bo, Bo City. The following schools for the purpose of the study where
i. Ahmadiya Muslim Secondary School (AMSS)
ii. Bo Government Secondary School (Bo School)
iii. Christ the King College (CKC)
iv. Queen of the rosary Secondary School (QRS)
v. Saint Andrew's Secondary School (UCC)

## SCOPE OF THE STUDY

The study seeks to investigate of students and Teachers Perception of the consensus poor Academic performance in five (5) randomly selected senior secondary Schools in Central part of Bo City.

## RESEARCH DESIGN

The researcher randomly selected five (5) senior secondary schools in Bo City, to consult with the teachers and student about some of the problems affecting the student and teachers perception of the causes of poor academic performance in general mathematics and further mathematics teaching at school. The study adopted descriptive survey design. This is because the researcher is only interested in determining the influence of the independence variables on the dependent variables without manipulating any of the variables. The variables that were identified in the study for research questions and data collection instrument were.
i. Student's poor or academic performance and teacher's qualifications
ii. Student's poor academic performance and teachers method of teaching
iii. Student's environment and poor academic performance.

This study of the poor performance toward general mathematics and Further Mathematics on both subjects was done using the qualities method. This was done by using a questionnaire name where student and teachers used a liker scale to gather the data for quantitative aspect of the study. The Information were analysed for a correlation between the variables in the study. The results of the questionnaire name were placed in to themes for reporting. The researcher attempted to record student; and teachers; reaction to the impact of attitude on classroom performance. In addition to the liker scale questions; the subject were asked to qualify their answer with a brief explanation or comment. The student and teachers were notified of the study. The participants did maintain complete anonym is the study. The surveys were returned to the researcher through person to person process. The researcher collected all of the surveys and the data was placed into statistical analysis.

## SAMPLING PROCEDURE AND SAMPLE SIZE

Simple random sampling was used to select five (5) major Secondary Schools in Bo City. The standard of the schools was also taken into consideration for better yield of result.

## INSTRUMENTATION

The main instrument designed for the study is a self-designed questionnaire on perception of student's poor academic performance. The questionnaire contained two (2) sections:

## A - Contains information

B- Requires responses of alternation options from the respondents. Options ranged from strongly disagree. The researcher used the following instruments in the study:
i. Well-structured questionnaire, which helped the researcher to attain high response rate.
ii. An informal interview was used to complement the effect of the questionnaire. This was done in the form of conversational discussion.
iii. A secondary data from examination office was obtained formally

## DATA COLLECTION

At the various schools, the researcher and the introduced himself to the principal, class teachers and the student and briefed the college authorities and the student about the purpose of his visit and study. The researcher equally explained to the subject what their role should be during the training programme. The researcher the randomly selected the number of student needed for the study, gave them the questionnaire and explained to them how to respond to it.

The process of responding to the questionnaire was explained to the student to ensure that valid data were collected. The researcher printed and administered one hundred and seventy five questionnaires to both student and teachers. One hundred (100) were administered to student and seventy five (75) to the teachers.

Eight five (85) questionnaires were collected from student and seventy (70) from the teachers. Therefore a total of fifty five (55) out of one hundred and seventy five (175) were collected from both teacher and student. Primary data were collected from the student and teachers to determine the performance of student in general mathematics and further mathematics at WASSCE. The data obtained were analysed using frequency count and chi-Square statistical analysis with the formula.

$$
\chi^{2}=\frac{(O-E)^{2}}{\mathrm{E}} \quad \text { Where } \chi^{2}=\text { Chi-Square }
$$

$\mathrm{E} \quad \mathrm{O}=$ Observed frequency

$$
\mathrm{E}=\text { Expected frequency }
$$

## TREATMENT OF DATA

The data collected were compiled organized and interpreted. This led to the computation of percentages of teachers and student responses to the questionnaire and interviews based on their perception of the problems. Inferential statistics (analysis of frequency count and Chi-Square) were the two methods used to analyse the collected data

## HYPOTHESES

In attempting to reach decisions, it is useful to make assumption about the population involved. Such assumptions, which may or may not be true, are called statistical hypothesis. They are generally statements about the probability distribution of the populations. Chi-Square test was to test the null and alternative hypothesis.

1) $\boldsymbol{H}_{I}$ : Teachers perceive that teachers' qualification does not affect poor academic performance among secondary school students.
$\boldsymbol{H}_{o}$ : Teachers perceive that teachers' qualification does affect poor academic performance among secondary school students.
2) $\boldsymbol{H}_{I}$ :Students' perceive teachers' Qualification does not have impact on their academic performance
$\boldsymbol{H}_{o}$ : Academic performance. Students' Perceive Teachers' Qualification does have impact on their academic performance.
3) $\boldsymbol{H}_{\boldsymbol{I}}$ : Teachers' method of teaching and learning materials does not influence students' academic performance.
$\boldsymbol{H}_{o}$ : Teachers' method of teaching and learning materials does influence students' academic performance.
4) $\boldsymbol{H}_{I}$ : Teachers do not perceive students environment as influencing their academic performance.
$\boldsymbol{H}_{o}$ : Teachers do perceive student environment as influencing their academic performance.
5) $\boldsymbol{H}_{1}$ : Students' perception that teachers' methods of teaching and learning materials do not influence students' academic performance.
$\boldsymbol{H}_{o}$ Students perceive that teachers' method of teaching and learning materials do influence students' academic performance.
6) $\boldsymbol{H}_{1}:$ Teachers do not perceive students environment as influencing their academic performance.
$\boldsymbol{H}_{o}$ : Teachers do perceive student environment as influencing their academic performance

## THE RESULT OF PRIMARY DATA

The chapter presents the results of study. It does so on the context of the research question in chapter one. The results of analysis are presented as follows:

## DEMORGRAPHIC INFORMATION OF RESPONDENTS

## Table 3: Gender of respondents

| Respondents | Male |  | Female |  | Total |
| :--- | :--- | :--- | :--- | :--- | :---: |
|  | No. | $\%$ | No. | $\%$ | $\%$ |
| Teachers | 50 | 71.4 | 20 | 28.6 | 100 |


| Students | 52 | 62.4 | 32 | 37.6 | 100 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Table $\mathbf{3}$ shows the gender of respondents. It could be observed that seventy teachers were given questionnaire. Fifty male ( $71.4 \%$ ) responded to the questionnaire and twenty female ( $28.6 \%$ ) responded to the questionnaire. It is observed that eighty four students were given questionnaire, and out of which sixty two percent ( $62.4 \%$ ) responded to the questionnaire and thirty eight female ( $37.6 \%$ ) responded to the questionnaire.

Table 4: Perception of academic performance and Teachers' poor academic performance questionnaire.

| Items | Variable | SA | A | UU | D | SD | Raw <br> Total |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | Lack of quality of teachers has an <br> adverse effect in the poor performance <br> of students | 23 <br> $(8)$ | 32 <br> $(21)$ | 4 <br> $(2)$ | 17 <br> $(36)$ | 6 <br> $(15)$ | 82 |
| 2 | Most teachers do not have adequate <br> knowledge of their subject matter | 2 <br> $(16)$ | 22 <br> $(42)$ | 4 <br> $(4)$ | 85 <br> $(73)$ | 50 <br> $(29)$ | 163 |
| 3 | Teacher's extreme dependence on <br> textbooks can lead to poor academic <br> performance | 4 <br> $(16)$ | 17 <br> $(43)$ | 1 <br> $(4)$ | 115 <br> $(75)$ | 31 <br> $(30)$ | 168 |
| 4 | Seminars, workshop, in-service course <br> are not organized for teachers | 15 <br> $(11)$ | 40 <br> $(43)$ | 3 <br> $(3)$ | 42 <br> $(53)$ | 18 <br> $(21)$ | 118 |
| 5 | Inadequate teaching skill <br> $(13)$ | 38 <br> $(36)$ | 3 <br> $(3)$ | 70 <br> $(62)$ | 22 <br> $(25)$ | 139 |  |
| 6 | Poor status of teachers with economic <br> stress have drained the motivation of <br> the teachers | 22 | 45 | 2 |  |  |  |
| $(8)$ | $(21)$ | 6 <br> $(2)$ <br> $(36)$ | 8 <br> $(15)$ | 83 |  |  |  |

## HYPOTHESIS:

$\boldsymbol{H}_{0}$ : Teachers perceive that teachers' qualification does not affect poor academic performance among secondary school students
$\boldsymbol{H}_{I}$ : Teachers perceive that teachers' qualification does affect poor academic performance among secondary school students

At $5 \%$ level of significance Degree of freedom :(r-1) $(\mathrm{c}-1)=(5-1)(6-1)=4 * 5=20$
$\chi^{2}($ table $)=31.41$
$\chi^{2}($ calculated $\left.)=\underline{(23-8)^{2}}+(\underline{32-21})^{2} \underline{(4-2}\right)^{2} \cdots+(2-2)^{2}+(\underline{6-37})^{2}+(\underline{8-15})^{2}=$
$\begin{array}{lllll}821 & 2 & 27\end{array}$
$\chi^{2}(\mathrm{cal})=228.5$

## DISCUSSIONS

Since the $\chi^{2}$ (228.5) calculated is greater than $\chi^{2}$ (31.41) table, we reject the null hypothesis and accept that alternative hypothesis

## CONCLUSIONS

Teachers perceive that teachers qualification affect poor academic performance among Secondary School Students.

Table 5: Perception of students in their poor academic performance and teachers' qualification

| Items | Variable | SA | A | UU | D | SD | Raw <br> Total |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | Lack of quality of teachers has an <br> adverse effect in the poor performance <br> of students | 75 <br> $(27)$ | 50 <br> $(43)$ | 4 <br> $(18)$ | 52 <br> $(78)$ | 41 <br> $(56)$ | 222 |
| 2 | Most teachers do not have adequate <br> knowledge of their subject matter | 30 <br> $(40)$ | 59 <br> $(62)$ | 4 <br> $(29)$ | 142 <br> $(113)$ | 87 <br> $(81)$ | 322 |
| 3 | Teacher's extreme dependence on <br> textbooks can lead to poor academic <br> performance | 28 <br> $(30)$ | 62 <br> $(58)$ | 115 <br> $(18)$ | 80 <br> $(135)$ | 102 <br> $(125)$ | 387 |
| 4 | Seminars, workshop, in-service course <br> are not organized for teachers | 30 <br> $(45)$ | 58 <br> $(71)$ | 18 <br> $(30)$ | 135 <br> $(129)$ | 125 <br> $(92)$ | 366 |
| 5 | Inadequate teaching skill <br> $(41)$ | 54 <br> $(64)$ | 13 <br> $(27)$ | 160 <br> $(117)$ | 72 <br> $(81)$ | 332 |  |
| 6 | Poor status of teachers with economic <br> stress have drained the motivation of <br> the teachers | 42 <br> $(38)$ | 91 <br> $(60)$ | 6 <br> $(26)$ | 113 <br> $(109)$ | 60 <br> $(72)$ | 312 |

## HYPOTHESIS:

$\boldsymbol{H}_{o}: \quad$ Students' perceive teachers' Qualification does not have impact on their Academic performance.
$\boldsymbol{H}_{\boldsymbol{l}}$ : Students' perceive teachers' Qualification does have impact on their academic performance

## CALCULATION

At 5\% level on significance
Degree of freedom:
$\chi^{2}($ calculated $)=\frac{(75-27)^{2}}{72}+\frac{(50-43)^{2}}{27}+(4-18)^{2} \cdots+(6-26)^{2}+(113-109)^{2}+(60-72)^{2}=$
$\chi^{2}(\mathrm{cal})=$.

## DISCUSSION

Since the $\chi^{2}$ (459.6) calculated is greater than $\chi^{2}(31.41)$ a table we reject the null hypothesis
and accept the alternative hypothesis.

## CONCLUSION

Students perceive teachers' qualification as having impact on their academic performance
Table 6: Perception of teachers on the influence teachers' method of teaching and learning materials on students' poor academic performance

| Items | Variable | SA | A | UU | D | SD | Raw <br> Total |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | Large number of Students accommodated <br> in a classroom make the teacher not do <br> have classroom management | 22 <br> $(6)$ | 49 <br> $(16)$ | 0 <br> $(1)$ | 10 <br> $(41)$ | 0 <br> $(18)$ | 81 |
| 2 | Teachers are not innovative in <br> methodology | 4 <br> $(12)$ | 18 <br> $(32)$ | 0 <br> $(2)$ | 112 <br> $(85)$ | 33 <br> $(36)$ | 167 |
| 3 | Instructional materials are not provided for <br> the teachers to use in teaching various <br> subjects. Teachers never organize inter- <br> class and inter school debates for the <br> students | 15 <br> $(9)$ | 20 <br> $(25)$ | 2 <br> $(1)$ | 70 <br> $(66)$ | 22 <br> $(28)$ | 129 |
| 4 | Inadequate supervision of the inspectors in <br> secondary schools | 6 <br> $(10)$ | 22 <br> $(26)$ | 4 <br> $(1)$ | 75 <br> $(169)$ | 28 <br> $(29)$ | 135 |
| 5 | Teacher do not plan their adequately 2 <br> $(13)$  | 14 <br> $(36)$ | 93 <br> $(2)$ | 79 <br> $(41)$ | 189 |  |  |
| 6 | There are no adequate textbooks in schools | 15 <br> $(9)$ | 51 <br> $(24)$ | 2 <br> $(1)$ | 34 <br> $(63)$ | 22 <br> $(27)$ | 124 |

## HYPOTHESIS

$\boldsymbol{H}_{0}$ : teachers' method of teaching and learning materials does not influence students' academic performance.
$\boldsymbol{H}_{1}$ : teachers' method of teaching and learning materials does not influence students' academic performance.

## Calculation

At 5\% level on significance

Degree of freedom: $(\mathrm{r}-1)(\mathrm{c}-1)=(5-1)(7-1)=4 \times 6=24$
$\chi^{2}$ (table) $=36.41$
$\chi^{2}(\mathrm{cal})=\underline{(22-6)^{2}}+(\underline{49-16})^{2}+(\underline{(0-1})^{2} \cdots+(2-1)^{2}+(\underline{34-63})^{2}+(22-7)^{2}$
$\begin{array}{llllll}6 & 4 & 1 & 1 & 63 & 27\end{array}$
$\chi^{2}{ }_{(\text {call })}=329.03$

## DISCUSSION

Since the $\chi^{2}{ }_{(329.03)}$ calculated is greater than $\chi^{2}(36.410)$ table we reject the null hypothesis
and accept the alternative hypothesis.

## CONCLUSION

Teacher's method of teaching and learning materials influences students' academic performance.

Table 7: Perception of students on the influence of teachers' method of teaching and learning materials on students poor performance

| Items | Variable | SA | A | UU | D | SD | Raw <br> Total |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | Large number of Students accommodated in a <br> classroom make the teacher do not have <br> classroom management | 61 <br> $(52)$ | 133 <br> $(16)$ | 4 <br> $(7)$ | 58 <br> $(127)$ | 32 <br> $(78)$ | 288 |
| 2 | Teachers are not innovative in methodology | 18 <br> $(30)$ | 37 <br> $(66)$ | 31 <br> $(9)$ | 218 <br> $(16)$ | 60 <br> $(98)$ | 364 |
| 3 | Instructional materials are not provided for the <br> teachers to use in teaching various subjects. <br> Teachers never organize inter-class and inter <br> school debates for the students | 29 <br> $(36)$ | 61 <br> $(73)$ | 9 <br> $(9)$ | 158 <br> $(178)$ | 145 <br> $(108)$ | 402 |
| 4 | Inadequate supervision of the inspectors in <br> secondary schools | 21 <br> $(28)$ | 58 <br> $(61)$ | 2 <br> $(8)$ | 159 <br> $(149)$ | 39 <br> $(91)$ | 337 |
| 5 | Teacher do not plan their adequately | 4 <br> $(79)$ | 289 <br> $(10)$ | 132 <br> $(116)$ | 432 |  |  |
| 6 | There are dedicated to their teaching subjects | 26 <br> $(31)$ | 56 <br> $(69)$ | 7 <br> $(9)$ | 172 <br> $(169)$ | 116 <br> $(102)$ | 372 |
| 7 | There are no adequate textbooks 8in schools | 39 <br> $(30)$ | 83 <br> $(66)$ | 3 <br> $(8)$ | 129 <br> $(160)$ | 108 <br> $(97)$ | 362 |

## HYPOTHESIS

$\boldsymbol{H}_{o}$ : Students' perception that teachers' methods of teaching and learning materials do not influence students' academic performance.
$\boldsymbol{H}_{\boldsymbol{l}}$ : Students perceive that teachers' method of teaching and learning materials do influence students' academic performance

## Calculation

At 5\% level of significance.

Degree of freedom $=(r-1)(c-1)=(5-1)(7-1) 4 \times 6=24$
$\chi^{2}$ (cal) $=36.41$
$\chi^{2}$ (cal) $=\frac{(61-24)^{2}}{24}+\left(\frac{(133-52)^{2}}{52} \frac{(4-7)^{2}}{7} \cdots \frac{+(3-8)^{2}}{8}+\frac{(129-160}{160}\right)^{2}+\left(\frac{108-97}{97}\right)^{2}$
$\chi^{2}$ (cal) $=446.6$

## DISCUSSION

Since the $\chi^{2}{ }_{(446.0)}$ calculated is greater than $\chi^{2}{ }_{(36.41)}$ table we reject the null hypothesis and accept the alternative hypothesis

## CONCLUSION

Students perceive that teachers' method of teaching and learning material do influence students' academic performance.
Table 8: Perception of teachers' and students' environment and their poor performance

| Items | Variable | SA | A | UU | D | SD | Raw <br> Total |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | Student have no negative attitude to their studies | 17 <br> $(21)$ | 40 <br> $(45)$ | 4 <br> $(2)$ | 22 <br> $(14)$ | 6 <br> $(7)$ | 89 |
| 2 | Most students' background/environment do not <br> stimulate learning or studies | 24 <br> $(22)$ | 41 <br> $(46)$ | 0 <br> $(2)$ | 14 <br> $(15)$ | 13 <br> $(7)$ | 92 |
| 3 | Level of the parents' education affects their <br> children's' academic performance | 20 <br> $(20)$ | 41 <br> $(46)$ | 2 <br> $(2)$ | 21 <br> $(15)$ | 7 <br> $(7)$ | 91 |
| 4 | Poor group influence students | 20 <br> $(22)$ | 63 <br> $(49)$ | 3 <br> $(2)$ | 2 <br> $(15)$ | 7 <br> $(7)$ | 95 |
| 5 | Divorce among parents affects the academic <br> performance of students | 25 <br> $(20)$ | 43 <br> $(43)$ | 1 <br> $(2)$ | 14 <br> $(14)$ | 2 <br> $(7)$ | 85 |

## HYPOTHESIS

$\boldsymbol{H}_{o}$ : Teachers do not perceive students environment as influencing their academic performance
$\boldsymbol{H}_{I}: \quad$ Teachers do perceive student environment as influencing their academic performance

## CALCULATION

At 5\% level of significance.
Degree of freedom $=(r-1)(c-1)=(5-1)(5-1)=4 \times 4=16$
$\chi_{(\text {cal) }}^{2}=26.3$
$\chi_{\text {(cal) }}^{2}=\frac{(17-21)^{2}}{21}+{\underline{(40-45})^{2}}_{45}^{+(4-2)^{2}} \underset{2}{\ldots+(1-2)^{2}}+2 \frac{(14-14)^{2}}{}+\left(\frac{(2-7)^{2}}{14} 7\right.$
$\chi^{2}$ (cal.) $=39.46$

## DISCUSSION

Since the $\chi^{2}{ }_{(39.46)}$ calculated is greater than $\chi^{2}{ }_{(26.3)}$ table we reject the null hypothesis and accept the alternative hypothesis

## CONCLUSION

Teachers do perceive student environment as influencing their academic performance

Table 9: Perception of student on students' environment and their poor academic performance

| Items | Variable | SA | A | UU | D | SD | Raw <br> Total |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | Student have no negative attitude to their studies | 46 <br> $(53)$ | 99 <br> $(108)$ | 13 <br> $(9)$ | 118 <br> $(94)$ | 71 <br> $(83)$ | 347 |
| 2 | Most students' background/environment do not <br> stimulate learning or studies | 41 <br> $(49)$ | 79 <br> $(101)$ | 3 <br> $(8)$ | 102 <br> $(88)$ | 98 <br> $(77)$ | 323 |
| 3 | Level of the parents' education affects their <br> children's' academic performance | 40 <br> $(49)$ | 82 <br> $(100)$ | 2 <br> $(8)$ | 92 <br> $(87)$ | 104 <br> $(77)$ | 320 |
| 4 | Poor group influence students | 44 <br> $(40)$ | 90 <br> $(81)$ | 7 <br> $(7)$ | 77 <br> $(71)$ | 42 <br> $(62)$ | 260 |
| 5 | Divorce among parents affects the academic <br> performance of students | 63 <br> $(50)$ | 131 <br> $(90)$ | 13 <br> $(7)$ | 29 <br> $(79)$ | 53 <br> $(69)$ | 289 |

## HYPOTHESIS

$\boldsymbol{H}_{o}: \quad$ Student perceive that environment do not affect their academic performance
$\boldsymbol{H}_{1}: \quad$ Student perceives that environment do affect their academic performance

## CALCULATION

At 5\% level of significance.
Degree of freedom $=(r-1)(c-1)=(5-1)(5-1) 4 \times 6=16$
$\chi_{(\text {cal })}^{2}=26.3$
$\chi^{2}$ (cal) $=\underline{(46-53)}^{2}+(\underline{99-108})^{2} \underline{(13-9)^{2}} \cdots \underline{+(13-7)^{2}}+(\underline{29-79})^{2}+(\underline{(53-69})^{2}$
$\chi^{2}{ }_{\text {(cal. })}=117.6$

## DISCUSSION

Since the $\chi^{2}{ }_{(117.6)}$ calculated is greater than $\chi^{2}{ }_{(26.3)}$ table we reject the null hypothesis and accept the alternative hypothesis

## CONCLUSION

Student perceive that environment do affect their academic performance

## SUMMARY OF FINDINGS

1. Perception of teachers on student's poor academic performance and teachers qualification, since the $\chi^{2}{ }_{(228.5)}$ calculated is greater that $\chi^{2}{ }_{(31.41)}$ table we reject the all hypothesis and then accept the alteration hypothesis.
2. Perception of student on their poor academic performance and teacher's qualification, since the $\chi^{2}{ }_{(459.4)}$ calculated is greater than $\chi^{2}{ }_{(31.49)}$ table we reject the null hypothesis and accept the alteration hypothesis.
3. Perception of teachers on the influence of teacher's method of teaching and learning material on student poor academic performance, since $\chi^{2}{ }_{(329.03)}$ calculated is greater than $\chi^{2}{ }_{(36.41)}$ table we reject the null hypothesis and accept the alteration hypothesis.
4. Perception of student on the influence of teachers and learning materials on student poor academic performance, since the $\chi^{2}{ }_{(446.0)}$ calculated is greater than $\chi^{2}{ }_{(36.41)}$ table we reject the null hypothesis and accept the alteration hypothesis.
5. Perception of teachers on the student's environment and their poor performance, since the $\chi^{2}{ }_{(39.46)}$ calculated is greater than $\chi^{2}{ }_{(26,3)}$ table we reject the all hypothesis and accept the alteration hypothesis.
6. Perception of student on student environment and their poor academic performance, since the $\chi^{2}{ }_{(117.6)}$ calculated is greater the $\chi^{2}{ }_{(26.3)}$ table we reject the all hypothesis and accept the alteration hypothesis.
7. Moreover it has been revealed that the students are facing enormous constraints in learning general mathematics constraints involve: difficulties to understand the concept taught cost of learning materials, inefficiency of teachers.
8. Furthermore, in the finding departments are not given the much-needed motivation to kindle the efficiency of teaching general mathematics and further mathematics; finally, it has been revealed that the teachers in the department are facing great constraints in the teaching of General and Further mathematics. Some of these constraints includes: inadequate and inappropriate class size for individual attention, limited amount of time allocated to the subject of teaching and the expansions of teachers due to insufficiency in the schools.

## DISCUSSION OF FINDINGS

The purpose of this study was to determine if there is a correlation between a student and teachers' perception of the cases of poor academic performance in General and Further mathematics in the classroom.

A five point liker scale survey was used to access the poor performance toward General Mathematics and Further Mathematics of eighty five (85) students and seventy (70) teachers in five (5) randomly selected secondary schools. The first three questions in the survey were to gather some general demographic information about the respondents. They asked for the respondents' name, gender and age. The eighteen questions were to access the responses at alternative opinion from the respondents. Options ranged from strangely agree to strongly disagree.

For research question one and two, teachers believed that students' poor academic performance is not influenced by teachers' qualification; while students perceived that teachers' qualification affect their academic. The difference in their perception could be because students have high expectations for teachers that could teach them and therefore believe that any teacher that does not meet up to such expectations will not aid their academic performance. However, from the conclusion above, student perception states that students' poor academic performance is influence by teachers' qualification.

Also, only teachers perceive that teachers, method of teaching and learning material influence students' academic performance. That is the fallen level of academic achievement is attributed to teachers' non-use of verbal reinforcement strategy. Student's disagreement to this may be because they perceive that students' personal factors affect their academic performance more that teachers' method of teaching and learning environment.

## CONCLUSION

Based on the findings, the following conclusions were arrived at:

1. Teachers perceive that, teachers qualification affect poor academic performance among secondary school students
2. Student perceive teachers qualification as having impact on the academic performance
3. Teacher's method of teaching and learning materials influences student's academic performances.
4. Student perceives that teacher's method of teaching and learning material do influence student academic performance
5. Teacher's do perceive student environment as influence their academic performance
6. Student perceive that environment do affect do their academic performance

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