

Study Habits and Students' Achievement in Mathematics in Ikono Local Government Area, Akwa Ibom State

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Abstract

The study entitled study habits and students' achievement in mathematics is designed to identify form and find out measures to stamp out these unhealthy study habits if any that are eating deep into the fabric of our Educational System. The study is a survey type. Two hypotheses were raised and tested at 0.05 level of significance. The sample of the study consisted of 120 senior secondary two mathematics students in 2017/2018 session selected from the study area. The instrument used in gathering data were Students' Study Habits Questionnaire (SSHQ) and SS II second terminal examination result for 2017/2018 academic session. Independent t-test statistic was used to analyse the data obtained. The result shows that there is a significant relationship between students' study habits and students' achievement in Mathematics. There was no significant difference between male and female students' achievement in mathematics that possess good study habits. Based on the findings, it is recommended among others that school administrators, mathematics teachers, government and parents should create a conducive environment, so as to inculcate and enhance good study habits among mathematics students.

Keywords: Study habits; Students' achievement and mathematics; Conducive environment

1.Introduction

Reading habits are well-planned and deliberate pattern of study which has attained a form of consistency on the part of students toward understanding academic subjects and passing at examinations. Reading habits determine the academic achievements of students to a great extent. Both reading and academic achievements are interrelated and dependent on each other. Students often come from different environments and localities with different levels of academic achievement. Therefore, they differ in the pattern of reading habits. While some students have good reading habits, others tend to exhibit poor reading habits. Academic achievement means how much knowledge the individual has acquired from the school (Bashir & Mattco, 2012).

Palani (2012) is of the opinion that, effective reading is important avenue of effective learning and reading is interrelated with the total educational process and hence, educational success requires successful meaning with them. It requires identification and comprehension. Comprehension skills

help the learner to understand the meaning of words in isolation and in context. Before the advent of the television, both the young and the old found enough time to read. Apart from teachers, other professionals used to spend their leisure time in reading both English and vernacular literature. English medium schools almost always demanded extra reading from their students. But all these have become a thing of the past. Palani (2012) further added that, nowadays, reading habit has lost its importance as both the young and the old are glued to the television. As far as educational institutions are concerned, coaching students for the examinations seems to be the all and end of our educational system.

Singh (2011) examined academic achievement and study habits of higher secondary students. The study was conducted on one hundred (100) higher secondary students randomly selected from two higher secondary schools. The result indicates that girls and boys differ significantly in their study habits and academic achievement.

Bhan and Gupta (2010) on the other hand examined study habits and academic achievement among the students belonging to scheduled caste and non-scheduled caste group. The results revealed that sex has no significant impact on the study habits and academic achievement of students.

Gallo (2007) said “books, yield their best to you, if you read them at the age at which each particular masterpiece can ideally be chewed and digested”. There is little knowledge about the everyday reading practice of tertiary education students and how these practices affect their academic achievement. Everyday reading consists of individuals’ reading activities for a variety of purposes, such as for relaxation or information (Issa, et al, 2012). They believe that from middle childhood through adulthood, reading becomes a major component of studying, and much information learned through studying is initially acquired through reading. Thus everyday reading activities in which students engage may, considerably influence their studying skills and subsequent academic performance. There is a general sense in which one appreciates the link between good habits of reading and the academic performance of students generally, (Issa et al., 2012).

Guthrie, Benneth & McGough, (2007) believe that “reading” is the act of getting meaning from printed or written words, which is the basis for learning and one of the most important skills in everyday life, Issa et al (2012) further explain that reading is usually associated with books as only the written words provide a complete picture of the act of reading. It means that through reading, the individual is able to build or fix things, enjoy stories, discover what others believe and develop ideas or beliefs of their own. Thus, reading provides the key to all forms of information necessary for our day-to-day survival and growth.

Perhaps, due to lack of good reading habits among students, academic performance with respect to their examination result has been in dismay nowadays creating a great source of worry and concern for all stakeholders in the educational sub-sector (Issa et al, 2012). The setting of “crashed programme,” quite prevalent in the school systems today has not been supportive in the development of the good practices of reading. Thus, the enthusiasm associated with the urge to engage in reading practices voluntarily, pleasurably and extensively is almost nearly absent among the greater number of students in the schooling system today (Issa et al, 2012).

Ogbodo (2010) identifies three main types of reading habits. These are Hobby, recreational and concentration. A hobby is an activity one does because one derives some joy and satisfaction from doing it. After formal education’s attainment, some people like reading as their hobby. Its purpose is to widen the reader’s horizon areas like educational, religious, political, economic, current affairs, fiction and non-fiction. The practice of reading as a

hobby helps one to be versatile in knowledge in many areas and the person can discuss issues knowledgeably with others.

1.1 Statement of the Problem

The problem most students have that contributes to their poor performance in tests and examinations is lack of proper reading habits. For an excellent performance, there is the need for the student to form good reading and study habits. At present, due to the influence of the mass media, people do not show

much interest in reading books, magazines and journals, among others (Palani, 2012). Even the cankerworm of examination malpractices may be traceable to the prevalent poor reading interests and habits among the wide spectrum of students. In addition, the by-products of scientific and technological inventions and innovations have also contributed greatly to the dwindling fortunes of the good practice of reading among majority of the students. Today, many students prefer to watch movies and other shows on the television, listening to audio-CDs, watching video-CDs, among others (Isaa, 2012). Many parents and teachers complain about students of our generation who have not developed reading habits among themselves. Officials of the West African Examination Council and Teachers of Mathematics complain of the kind of answers to Mathematical questions written by today's generation of students (WAEC, 2014). The net result is the poor performance of many students in final examinations. One of the many issues confronting students nowadays is perhaps, not their inability to read but their lack of interest in mathematics. From the assertion above, the work was conducted to examine the reading habits among students and the effects on their academic performance in secondary schools, specifically among students in Ikono Local Government Area of Akwa Ibom State.

1.2 Purpose of the Study

- 1.To examine the influence of study habits on students' achievement in mathematics.
- 2.To examine the influence of study habit on male and female students achievement in mathematics.

1.3 Significance of the Study

Specifically, examination bodies may no longer spend huge amounts of money in reprinting examination question papers as a result of leakages. Unhealthy study habit may become historical issue if examination bodies use the services of seasoned God fearing clergymen as examination officials, supervisors, invigilators and paper-markers. The governments, parents and guardians may no longer continue to waste their resources on students and candidates who may be expelled from their respective institutions as a result of unhealthy study habits. Foreign countries will no longer look down on certificates awarded by the nation's educational institutions during employment and further education. It may help students who have the zeal to study hard in selecting classmates as friends who inculcate positive study habits.

1.4 Research Hypotheses

The following research hypotheses were raised to guide the study:

1. There is no significant difference between students who possess good study habit and those with bad study habits in terms of mathematics achievement.
2. There is no significant difference between male and female students' achievement in mathematics who possess good study habits.

1.5 Methodology

This section describes the design of the study, the area of the study, population, sample and sampling technique, instrument, validity of instrument, data collection and analysis.

1.6 Design of the Study

The study is survey in nature, because the elements are studied in their natural setting.

1.7 Area of the Study

This research work was conducted in the senior secondary schools in Ikono Local Government Area of Akwa Ibom State.

1.8 Population and Sample

All senior secondary class two students in the sixteen (16) schools constituted the population for this study, two schools were selected with total number of 120 SSII students based on the fact that they met the following criteria: schools that have boarding facilities, schools that register candidates for WAEC and NECO for the past 16 years. Schools that have at least 3 qualified mathematics teachers as well as mathematics laboratory. This sample size was representative enough to make meanings in the study.

1.9 Instrument and Data Collection

The instrument for data collection was the questionnaire. This instrument was divided into four parts – A, B, C, and D in conformity with the two research hypotheses. The researcher personally administered the questionnaire assisted by teachers in each of the schools. The return rate of the completed copies of the questionnaire was 100 percent. The response categories used were the modified Linkert Scale Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD), and Undecided (UD). These were rated 5, 4, 3, 2 and 1 respectively.

1.10. Validity of the Instrument

To establish the validity of this instrument two measurement and evaluation experts went through the construct for both face and content validations. The corrections and suggestions were considered and built into the final copy of the questionnaire.

1.11 Method of Data Analysis

Data collected were analyzed in line with the two research hypotheses using independent t-test. All hypotheses were tested at 0.05 significant level.

1.12 Analysis

The data collected were analyzed under the following subheadings/tables

1. t-test comparison of mean achievement scores in mathematics between students with good study habits and those with bad study habits.

2. t-test comparison of mean achievement scores in mathematics between male and female students that possess good study habits

Hypothesis 1

There is no significant difference between students who possess good study habits and those with bad study habits in terms of mathematics achievement.

Table 1: Summary of t-test Analysis between students who possess good study habits and those with bad study habits in terms of mathematics achievement

| Variables | N | \bar{x} | SD | DF | t-cal | t-crit | Decision at P < 0.05 |
|--------------------------------|----|-----------|-------|-----|-------|--------|----------------------|
| Students with good study habit | 60 | 50.6 | 15.13 | | | | |
| | | | | 118 | 2.89 | 2.00 | Significant |
| Students with bad study habit | 60 | 42.5 | 16.58 | | | | |

Table 1 shows that the t-calculated value (2.89) is greater than critical value (2.00). Hence the null hypothesis is rejected.

This implies that there is a significant difference between students who possess good study habit and those without good study habit in terms of mathematics achievement.

Table 1 also reveals that students that possess good study habit perform significantly better than students with bad study habit in terms of mathematics achievement.

Hypothesis 2

There is no significant difference between male and female students' achievement in mathematics who possess good study habit

Table 2: t-test analysis of mean achievement score between male and female students with good study habit in terms of mathematics achievement

| Variables | N | \bar{x} | SD | DF | t-cal | t-crit | Decision at P < 0.05 |
|-----------|----|-----------|-------|----|-------|--------|----------------------|
| Male | 30 | 47.0 | 12.28 | | | | |
| | | | | 58 | 0.12 | 2.00 | Not significant |
| Female | 30 | 45.6 | 15.95 | | | | |

Table 2 reveals that the t-calculated value (0.12) is less than t-critical value (2.00) with degree of freedom 58 at 0.05 significant level. Hence the null hypothesis is accepted. This implies that there is no significant difference between male and female students' achievement in mathematics who possess good study habits.

2. Discussion of the Findings

The findings of the study as presented in Table 1 shows that students who possess good study habits performed significantly better than students with bad study habits in terms of mathematics achievement. This result is in agreement with (Issa et al, 2012) who said that bad reading habit leads to poor academic achievement. The result is also in line with Palani (2012) who said that effective reading is important avenue of effective learning and effective reading is interrelated with the total educational process and hence educational success requires successful meaning with them.

The findings of the study as presented in table 2 shows that there is no significant differences between male and female students' achievement in mathematics who possess good study habits. This result in line with Bhan and Gupta (2010) who found that gender has no significant impact on the study habits and the academic achievement of students.

3. Conclusion

From the findings of this study, it is concluded that students who possess good study habits performed significantly better than students with bad study habits in terms of mathematics achievement.

It is also concluded that boys and girls that possess good study habits do not differ significantly in mathematics achievement.

4.Recommendations

Based on the analysis and finding presented in this study, the researcher makes the following recommendations:

- 1.The use of Godfearing people or people with unquestionable character as examination officials, supervisors and invigilators should be adopted by all examination bodies.
- 2.Scholarship should be given by government and philanthropic organizations to students that take at most the 10th position so as to motivate other students to take their lessons serious.
- 3.Seminars and workshops should be conducted regularly for the serving teachers so as to expose them to the new methods and techniques in teaching.
- 4.School administrators should discourage the practice of promoting students from lower class to higher class on trail. This strongly encourages students to develop unhealthy study habit.
- 5.School administrators, mathematics teachers, government and parents should create a conducive environment so as to inculcate and enhance good study habits among mathematics students.

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