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# Study Habit and Academic Performance in Mathematics Among Public Secondary School Students in Obio Akpor Local Government Area of Rivers State

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**Abstract**

This study examined study habit and Academic Performance in Mathematics among secondary school students in Obio/Akpor Local Government Area of Rivers State. The study adopted the correlational research design. The population of the study comprised of 5,052 students in public secondary schools in Obio/Akpor Local Government Area of River State. The simple random sampling technique was used to draw a sample of 371 from the population using Taro Yamane formula. The instrument for data collection were self-designed questionnaires titled: "Study Habit Questionnaire and Mathematics Achievement Test". The reliability of the instrument were determined using Cronbach Alpha method and it yielded reliability coefficients of 0.70 and 0.82 respectively. Three research questions and three hypotheses were tested using Pearson Product Moment Statistics. The result of the study revealed that there is positive relationship between study habit and academic performance of students in mathematics. Based on the findings, it was recommended that parents, teachers and school counsellors should give good counsel that will propel students to establish an effective study habit which will in turn boost their academic performance.

**Keywords**: Study habit, Academic performance, Mathematics, Secondary school, Public.

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## INTRODUCTION

Academic performance of students is one of the main indicators used to evaluate the quality of education in schools (Lawrence, 2014; Odiri, 2015). Academic performance is a complex process that is influenced by several factors, such as study habits. Study habit is different individual behaviour in relation to studying (Arora, 2016), and is a combination of study method and skill. In other words, study habits include behaviours and skills that can increase motivation and convert the study into an effective process with high returns, which ultimately increases the learning. This skill is also defined as any activity that facilitates the process of learning about a topic, solving the problems or memorizing part or all of the presented materials. Study habits are

in fact the gateway to success and differ from person to person (Kamoru & Ramon, 2017; Hashemian & Hashemian, 2014).

According to previous studies, good study habits include studying in a quiet place, studying daily, turning off devices that interfere with study (such as TV and mobile phones), taking notes of important content, having regular rests and breaks, listening to soft music, studying based on own learning style, and prioritizing the difficult contents. Some of the worst study habits include procrastination, evading the study, studying in inappropriate conditions, and loud sound of music and television during studying (Ebele & Olofu, 2017; Siahi & Maiyo, 2015). Study habits are the most important predictor of academic performance and global research has revealed that study habits affect academic performance. In this regard, secondary school students are faced with a large amount of information that is difficult to organize and learn, and requires knowledge and application of study skills. Evidence suggests that learners who do not have enough information about study strategies do not attain effective and stable learning, and therefore will not have an appropriate level of academic achievement. In other words, students with better academic achievement use these skills more than those with lower academic achievement (Rezaieetbal., 2017; Eva et al., 2016).

For Okegbile (2007) academic achievement is a pedagogical terminology used while determining learner's success in formal education, which is measured through factors exerting influence essentially. The National Policy on Education (Federal Republic of Nigeria, 2013) has identified school achievement content according to school subjects which are classified as core or elective subjects. In every school setting, students are perpetually in search of academic success, the success of academic achievement is their ultimate goal. Academic achievement in mathematics can be expressed in the form of good scores and prizes as a result of hard work and exceptional performance in classroom test, assignment and examination (Robinson, 2001). A good study habit promotes academic performance of the students and high and low achievers as well as over and under achievers differ significantly with regard to quality and strength of their study habit. Learning is defined as a knowledge or skill acquired through study or by being taught. Learning is reflected in the way a child responds to environmental, social, emotional and physical stimuli and understands new information (Collins Concise Dictionary and Thesaurus of English language, 2002).

The keys to better learning and better academic achievement are good teachers, good study environment, course of study, parents cooperation, high quality books and the most important, the study habit (Robinson, 2000). Many students in Mathematics fail not because they lack ability, but because they do not have adequate study skills (Schunk, 2008). Good students are not born but are made by constant and deliberate practice of good study habit, for which there is no substitute (Ames and Archer, 1988). This is in order to improve the academic performance of students in mathematics seem essential to improve their study habit without which desired outcomes cannot be achieved.

Okesina (2008) noted that students have difficulty in scheduling their study time over other tasks. Many students spend their time for activities that may not add up to their academic success and personal development. For instance, a student spends the whole day on the

Facebook, Twitter, or Instagram. Some students also spend their precious time playing games or gambling. These activities do not have any relationship with good academic performance of students. Conversely, they erode away students' precious time that ought to be used for studying. Poor study habits have devastating consequences that could lead to academic failure. Whereas, students need to be responsible in time management to handle their studies.

Considering the importance of study skills and habits of students, and the important role they play in the academic achievement of students, and taking into account that study habits vary from person to person and from place to place, and also as the results of related studies are different from each other, the present study was designed and implemented. Our goal was to investigate the relationship between study habits and academic performance in mathematics among public secondary school students in Obio/Akpor Local Government Area of Rivers State.

**STATEMENT OF THE PROBLEM**

The extent to which students excel or perform in their studies depends on the kind of study habit, they develop and uses to a very large extent. Over time poor study habit had led to low quality of a person's life in many different ways. It is believed that student who lacks effective and efficient means of studying or do not have enough information about study strategies do not attain effective and stable learning, and they will not have an appropriate level of academic achievement. Unchecked, poor study habit may lead to examination anxiety and depression, and also with tragic results. They often feel incompetent, unloved, or inadequate due to the outcome. People who struggle with poor study habit are consistently afraid about making mistakes or letting other people down. It also influences motivation, as people with a healthy, and also negate people's desire to go into further academic goal attainment (Echebe, 2014; Koote, 2011). It is on this premises that this study intent to examine the relationship between study habit and academic performance in mathematics among public secondary school students in Obio/Akpor Local Government Area of Rivers State.

**PURPOSE OF THE STUDY**

The aim of this study was to examine study habit and academic performance in mathematics among public secondary school students in Obio/Akpor Local Government Area of Rivers State.

Specifically, the objectives of the study were to:

1. Examine the relationship between study habit and academic performance in mathematics among public secondary school students' in Obio/Akpor Local Government Area of Rivers State.
2. Identify the relationship between study habit and academic performance in mathematics among male public secondary school students' in Obio/Akpor Local Government Area of Rivers State.
3. Assess the relationship between study habit and academic performance in mathematics among female public secondary school students' in Obio/Akpor Local Government Area of Rivers State

**Research Questions**

In order to adequately evaluate this study, the following questions are raised:

1. What is the relationship between study habit and academic performance in mathematics among public secondary school students' in Obio/Akpor Local Government Area of Rivers State?
2. What is the relationship between study habit and academic performance in mathematics among male public secondary school students' in Obio/Akpor Local Government Area of Rivers State?
3. What is the relationship between study habit and academic performance in mathematics among female public secondary school students' in Obio/Akpor Local Government Area of Rivers State?

**Hypotheses**

The following null hypotheses was tested in order to achieve the objectives of the study:

1. There is no significant relationship between study habit and academic performance in mathematics among public secondary school students' in Obio/Akpor Local Government Area of Rivers State?
2. There is no significant relationship between study habit and academic performance in mathematics among male public secondary school students' in Obio/Akpor Local Government Area of Rivers State?
3. There is no significant relationship between study habit and academic performance in mathematics among female public secondary school students' in Obio/Akpor Local Government Area of Rivers State?

**METHODOLOGY**

The study adopted the correlational research design. The population consisted of 5,052 public secondary school students in Obio/Akpor Local Government Area of Rivers State (RSSSSB, 2021). The simple random sampling technique was used in selecting a sample size of 371 from the population using Taro Yamane's formula. The instruments for data collection were self designed questionnaires titled: Study Habit Questionnaire (SHQ) and Mathematics Achievement Test (MAT). The reliability of the instruments were determined using the Cronbach Alpha method and it yielded reliability indexes of 0.70 and 0.82 respectively. The research questions and hypotheses were answered and tested using Pearson Product Moment Correlation Method.

**Presentation of Result**

**Research Question One**

What is the relationship between study habit and academic performance in mathematics among public secondary school students' in Obio/Akpor Local Government Area of Rivers State?

**Hypothesis One**

There is no significant relationship between study habit and academic performance in mathematics among public secondary school students' in Obio/Akpor Local Government Area of Rivers State.

**Table 1: Relationship Between Study Habit and Academic Performance in Mathematics Among Public Secondary School Students' in Obio/Akpor Local Government Area of Rivers State.**

**Correlations**

| | | Study Habit | Academic performance in mathematics |
|---|---|---|---|
| Study Habit | Pearson Correlation | 1 | 0.72** |
| | Sig. (2-tailed) | | 0.01 |
| | N | 371 | 371 |
| Academic performance in mathematics | Pearson Correlation | 0.72** | 1 |
| | Sig. (2-tailed) | 0.01 | |
| | N | 371 | 371 |

**. Correlation is significant at the 0.05 level (2-tailed).

Table 1 reveals that the relationship between study habit and academic performance in mathematics among public secondary school students' in Obio/Akpor Local Government Area of Rivers State. is 0.72. This result shows that there is a strong positive relationship between relationship between study habit and academic performance in mathematics among public secondary school students'. This result shows that as scores on Study Habit increases there is a corresponding increase in the scores on academic performance in mathematics among public secondary school students' in Obio/Akpor Local Government Area of Rivers State.

The result also indicate that the relationship between study habit and academic performance in mathematics among public secondary school students' in Obio/Akpor Local Government Area of Rivers State is significant at 0.05 level of significance. The null hypothesis is therefore rejected. This is because the p-value (0.01) is less than the level of significance (0.05). The result of the null hypothesis is that there is a significant relationship between study habit and academic performance in mathematics among public secondary school students' in Obio/Akpor Local Government Area of Rivers State.

**Research Question Two**

What is the relationship between study habit and academic performance in mathematics among male public secondary school students' in Obio/Akpor Local Government Area of Rivers State?

**Hypothesis Two**

There is no significant relationship between study habit and academic performance in mathematics among male public secondary school students' in Obio/Akpor Local Government Area of Rivers State.

**Table 2: Relationship Between Study Habit and Academic Performance in Mathematics Among Male Public Secondary School Students' in Obio/Akpor Local Government Area of Rivers State.**

**Correlations**

| | | Study Habit for Male | Academic performance in mathematics |
|---|---|---|---|
| Study Habit for Male | Pearson Correlation | 1 | 0.66** |
| | Sig. (2-tailed) | | 0.04 |
| | N | 121 | 121 |
| Academic performance in mathematics | Pearson Correlation | 0.66** | 1 |
| | Sig. (2-tailed) | 0.04 | |
| | N | 121 | 121 |

**. Correlation is significant at the 0.05 level (2-tailed).

Table 2 reveals that the relationship between study habit and academic performance in mathematics among male public secondary school students' in Obio/Akpor Local Government Area of Rivers State is 0.66. This result shows that there is a strong positive relationship between relationship between study habit and academic performance in mathematics among male public secondary school students'. This result shows that as scores on study habit for male increases, there is a corresponding increase in the scores on academic performance in mathematics among male public secondary school students' in Obio/Akpor Local Government Area of Rivers State.

Table 2 indicates that the relationship study habit and academic performance in mathematics among male public secondary school students' in Obio/Akpor Local Government Area of Rivers State is significant at 0.05 level of significance. The result of the null hypothesis is rejected. This is because the p-value (0.04) is less than the level of significance (0.05). The result of the null hypothesis is that there is a significant relationship between study habit and academic performance in mathematics among male public secondary school students' in Obio/Akpor Local Government Area of Rivers State.

**Research Question Three**

What is the relationship between study habit and academic performance in mathematics among female public secondary school students' in Obio/Akpor Local Government Area of Rivers State?

**Hypothesis Three**

There is no significant relationship between study habit and academic performance in mathematics among female public secondary school students' in Obio/Akpor Local Government Area of Rivers State.

**Table 3: Relationship Between Study Habit and Academic Performance in Mathematics among Female Public Secondary School Students' in Obio/Akpor Local Government Area of Rivers State.**

**Correlations**

| | | Study Habit for Female | Academic performance in mathematics |
|---|---|---|---|
| Study Habit for Female | Pearson Correlation | 1 | 0.54** |
| | Sig. (2-tailed) | | 0.00 |
| | N | 250 | 250 |
| Academic performance in mathematics | Pearson Correlation | 0.54** | 1 |
| | Sig. (2-tailed) | 0.00 | |
| | N | 250 | 250 |

**. Correlation is significant at the 0.05 level (2-tailed).

Table 3 reveals that the relationship between a study habit and academic performance in mathematics among female public secondary school students' in Obio/Akpor Local Government Area of Rivers State is 0.54. This result shows that there is a moderate positive relationship between study habit and academic performance in mathematics among female public secondary school students'. This result shows that as scores on study habit among female increases, there is a corresponding increase in the scores on academic performance in mathematics among female public secondary school students' in Obio/Akpor Local Government Area of Rivers State.

Table 3 indicates that the relationship between study habit and academic performance in mathematics among female public secondary school students' in Obio/Akpor Local Government Area of Rivers State is significant at 0.05 level of significance. The result of the null hypothesis is rejected. This is because the p-value (0.00) is less than the level of significance (0.05). The result of the null hypothesis is that there is a significant relationship study habit and academic performance in mathematics among female public secondary school students' in Obio/Akpor Local Government Area of Rivers State.

## DISCUSSION OF FINDINGS

The result of research question one and hypothesis one (Table 1) indicated that there is a positive relationship between study habit and academic performance in mathematics among public secondary school students' in Obio/Akpor Local Government Area of Rivers State. The result of this study is in agreement with Ebele and Olofo (2017) who revealed that there is significant relationship between study habits and students' academic performance.

The result of research question two and hypothesis two (Table 2) indicated that there is a positive relationship between study habit and academic performance in mathematics among male public secondary school students' in Obio/Akpor Local Government Area of Rivers State. The positive relationship between study habit and academic performance in mathematics among male public secondary school students' in Obio/Akpor Local Government Area of Rivers State mean that as scores on students' study habit among male increases, there is a corresponding increase in scores on academic performance in mathematics among male public secondary school students' in Obio/Akpor Local Government Area of Rivers State and vice versa. The result of this study is not in agreement with Okesina (2019) whose findings indicates that there was no significant difference in the causes of poor study habits of students.

The result of research question three and hypothesis three (Table 3) indicated that there is a positive relationship between study habit and academic performance in mathematics among female public secondary school students' in Obio/Akpor Local Government Area of Rivers State. The result of this study is in agreement with Bent et al. (2018) that study habits significantly accounted for 44% variance in students' academic performance.

## CONCLUSION

Based on the results of this study, the researcher concluded that Study habit, Study habit of male, study habit of female significantly relates to academic performance in Mathematics among Public Secondary School Students in Obio/Akpor Local Government Area of Rivers State. It was also concluded that Study Habit positively and significantly predicted the Academic Performance in Mathematics among Public Secondary School Students in Obio/Akpor Local Government Area of Rivers State.

## RECOMMENDATIONS

Based on the results of the study, the following recommendations were made:

a. Students who have poor study habit should be identified and referred to Guidance counsellors.
b. Students should be enlightened on skills that will help them identify their areas of weakness be it poor study habit and the best way to deal with it. This will help them perform excellently in mathematics.
c. The ministry of education should endeavour to carry out seminars conferences and workshop this will help train teachers and equip them on how to encourage their students who has phobia for mathematics, to the develop good study habit.

## References


Arora, R. (2016). Academic achievement of adolescents in relation to study habits. *International Journal of Indian Psychology*, *3*(9), 48–54.

Benti, J., Esia-Donkoh, K., & Ghanney, R. A. (2018). Study habits of students: Keys to good academic performance in public junior high schools in the Ekumfi District of Ghana. *International Journal of Quantitative and Qualitative Research Methods, 6*(3), 10-23.

Ebele, U. F. & Olofu, P. A. (2017). Study habit and its impact on secondary school students' academic performance in biology in the Federal Capital Territory, Abuja. *Educational Research and Reviews, 12*(10), 583-588.

Echebe, P. (2014). *Basic foundation for career choice for students: Counselling approach.* University of Port Harcourt Press.

Federal Republic of Nigeria (2004). *National Policy on Education. 4th Edition,* NERDC

Hashemian, M. & Hashemian, A. (2014). Investigating study habits of library and information sciences students of Isfahan University and Isfahan University of medical sciences. *Iran Journal of Med Education, 14(9)*, 751-757.

Hornsby (2001). *Oxford advanced learners dictionary*. Oxford University Press.

Koote, D. E. (2011). *Academic discipline and career choice: a comprehensive approach to career foundation for schools and colleges.* Cel-Bez Publishing Company Nigeria Ltd.

Lawrence, A.S.A. (2014). Relationship between study habits and academic achievement of higher secondary schools. *Indian Journal of Applied Research, 4(*6), 143-145.

Odiri, O. E. (2015). Relationship of study habits with mathematics achievement. *Education Practice*, 6(10), 168–170.

Okegbile, A. S. (2007). Achievement in school core subjects, student's adjustment and study habit factors. In: Babangida, I. (ed). *Predictive approach faculty of education and arts*. University Press.

Okesina, F. (2019). Causes of poor study habits of students as expressed by primary school teachers in Nigeria. *Mimbar Sekolah Dasar, 6*(1), 1-10.

Oluwatimilehin, J. T. B. & Owoyele, J. W. (2012). Study habits and academic achievement in core subjects among junior secondary school students in Ondo state, Nigeria. *Bulgarian Journal of Science and Education Policy, 6*(1), 155-169.

Robinson, H. H. (2000). *Effective study.* Harper and Brothers.

Schunk, D., Pintrich, P. & Meece, J. (2008). *Motivation in education: Theory, research, and application.* Pearson.