Study Habit and Stress as Correlates of Secondary School Students' Academic Performance in English Language and Mathematics in Rivers State

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Abstract

This study investigated study habits and stress as correlates of secondary school students' academic performance in English Language and Mathematics in Rivers State. The study adopted a correlational research design. Four research questions and four hypotheses guided the study. The population for this study is made up of 6,000 senior secondary one (SSI) students in the 261 government-owned secondary schools in the 23 Local Government Areas of Rivers State. A sample size of 450 SSI students in public schools was used for the study, drawn through a multi-stage sampling method. The instrument for data collection was a self-structured questionnaire titled: "Study Habit and Stress Questionnaire" (SHSQ). The instrument was validated by experts in Measurement and Evaluation, Department of Educational Psychology, Guidance and Counselling, Ignatius Ajuru University of Education, Port Harcourt. The reliability of the instrument was determined using the test-re-test reliability method and yielded a reliability coefficient of SHSQ ($r = 0.85$). Pearson Product-Moment Correlation was used to answer research questions and test the hypotheses at the 0.05 level of significance. The findings of the study showed that there is a very weak and significant relationship between family problems and the academic performance of secondary school students in Rivers State. It further revealed that there is a very strong and significant relationship between homework and assignments, time allocated to studying, concentration, and academic performance of secondary school students in Rivers State. Based on the findings, it was recommended that teachers are to provide proper assistance to enable students to learn at schools to perform well in examinations and assignments, and family problems should be reduced to enable secondary school students in Rivers State to do better in their academic performance.

Keywords: Study habit, stress, family problem, time allocation, concentration, academic performance.

Introduction

Academic performances signify a person's performance in a given academic area, for instance, reading or language arts, mathematics, science, and other areas of human learning. Likewise, academic performance indicates the academic subjects a child learns in school and the expected skills mastered by the pupil in each subject (Kathryn, 2021). Academic performance denotes excellence in academic discipline, irrespective of the subject, in classroom tasks, and also in extracurricular activities. Thus, excellence in sporting behaviour, confidence, communication skills, and etcetera, is inclusive. A child's learning outcomes are what is meant by academic performance. Therefore, the knowledge, skills, and ideas acquired through their course of study within and outside the classroom situation are included (Epunam in Okorie, 2018). It is the outcome of purpose and hard work, of students in their academic endeavors. Okorie (2018) further defined academic performance of pupils as the scores obtained in the subjects they studied in school. This establishes the pupils' grade in class, gives them the opportunity to develop their endowment, and advance their plan for future academic pursuits.

Steinberger (2022) noted that the academic performance of students is the yardstick for testing the educational quality of a nation, and further posited that academic performance is multidimensional and encompassing students' performance, complexly connected to cognitive, socio-emotional, and physical development. Academic performance mirrors the totality of the child, is not a single happenstance, but transpires across multiple levels and periods, through a student's life in school and vocation. Similarly, academic performance reflects how well a student is achieving his/her tasks in school.

Consequently, academic performance is evaluated in multiple ways. Thus, students are graded through written and oral tests, homework submissions, seminar presentations, and participation in class activities and discussions, demonstrating their knowledge and mastery of the subject matter. Teachers evaluate using assignments, tests, and examinations to assess students' performance. Poor academic achievement is a performance that is adjudged by the examiner and some significant others as falling below an expected standard (Okorie, 2018).

Studying is an activity involving scholastic acquisition of knowledge through the curious examination of phenomena, either from books, magazines, newspapers, and journals, or through the probing of events in the world. Braide (2018) explained that studying is a structured acquisition

of knowledge, a rationalization of information and principles that is embedded in the memory for recall and practice. Ajayi and Osalusi (2019) opined that research evidences reveal that students are responsible for their poor academic performance. It was also stated that students' factors of poor academic performance were poor study habits, psychological adjustment problems, lack of interest in the school programme, low retention, association with the wrong peers, low achievement motivation, and emotional problems.

Rabia et al. (2017) opined that study habits are correlates of academic performance. Therefore, study habits is a student's commitment, planning, and continuous applying him or themselves to learning tasks. Study habit notifies a student on how much to learn, but in their absence of them, the student's academic growth becomes limited. However, there exist differences in the study habits of students that may determine the degree of the students' academic performance.

Study habit contributes extensively to the improvement of reading proficiency and understanding of subjects. Dike and Maclean (2024) noted that study habit is an indispensable and imperative aspect for creating a knowledgeable society. Similarly, students' study habits form their personality throughout life and help them to acquire appropriate judgment technique, and to generate new ideas. Habit is a behaviour exhibited without thinking and is particularly hard to stop. A person's habit is composed of inimitable behaviour of how exact things are done or allowed by such an individual. Habit, therefore, is relative because each acts distinctively. Thus, the common attitude and disposition of individual study habits are dissimilar.

Braide (2018) opined that study habits are the penchant learners have acquired in relation to secluded studying over time. Thus, a student's learning disposition is categorized by their study habits. Therefore, study habits are the practice of executing the abilities of learners in knowledge acquisition for mastery. Consequently, study habits are the various orientations, processes, procedures, and schemes adopted by individual students while studying, and this functions as guidance for learning. Thus, individual behaviour is steered by habit, and in the studying process, the different habits or skills students espouse define their academic performance.

Similarly, Uzoeshi (2012) stated that stress is any demand or condition that affects an individual's normal way of functioning, which induces him or her to take extra steps in order to cope with such a demand or condition. It is those demands that make an individual mobilize additional resources to be healthy or effective in his environment. Therefore, stress is an unavoidable part of life

according to Selye in Abdulrahman and Kawthara (2019) that can imperil students' physical and mental health, academic success and life generally. Maclean (2024) noted that stress occurs when an individual cannot control or manage work environment stressors, which results in negative work attitudes. In the case of students, it is seen when the students' attitude to learning is grossly affected, leading to poor study habits.

Bower and Murphy in Uzoeshi (2012) viewed stress as any stimulus or force that changes an organism in some significant way for better or worse; however these values are defined. Stress, therefore, is the demand made on an organism to adapt, to cope, or to adjust to environmental stimuli, and can on the health and academic performance of students. Oduwaiye et al. (2017) alluded to stress as being an incongruity between stressors (environmental demands) and the person's competence in accomplishing the demands. Likewise, stress is an unpleasant response of students to disproportionate workload demands on them. Secondary school students experience stress associated with transformations in their daily routine, which arises as they are confronted by overwhelming circumstances they are unable to bear, like novel tasks, interpersonal relationships, and increased workload, financial and family stress.

Secondary school students have academic success as their major goal. For this goal to be achieved, it requires dedication, sacrifice, self-discipline, motivation, and cordial relationships between students and teachers. Students at this level are saddled with a lot of responsibilities and challenges, Imonikebe in Oduwaiye et al. (2017), which may sometimes result in stress. Therefore, stress is grappled with by individuals differently based on the impact of the stressor on the individual's performance, either by increasing positivity, which is known as eustress, or increasing negativity, which is termed distress (Akinmayowa & Kadiri, 2018).

Adepoju and Oluchukwu (2021) decried the persistent poor performance of secondary school students in public examinations such as the Senior School Certificate Examinations (SSCE) in Nigeria in recent times. Education industry stakeholders and researchers have identified several factors as the causes of poor performance of students in public examinations. Hence, study habits and stress may affect the academic performance of students in certificate examinations. Consequently, the thrust of this investigation therefore, is to ascertain study habits and stress as correlates of students' academic performance in secondary schools in Rivers State, Nigeria.

Statement of the Problem

The researcher observed that there are many cogent factors of poor academic performance which have been identified at the secondary level of education, the students, substantially, are pivotal. Students' factors of poor academic performance may be due to poor study habits, emotional adjustment dilemma, school dislike, low retention memory, negative peer influence, low achievement motivation and psychological problems. Other factors may include absenteeism, truancy, lack of interest in classroom lessons, and learning disability. Likewise, low cognitive ability, medical problems, stress and students' inability to understand examination questions format may cause poor academic performance of students. Thus, the education sector is beset with a momentous continuing crisis rooted in the declining academic performance of secondary school students. This decrease in the qualitative standard of learning questions the ability of the school system to equip learners with the knowledge, skills, and competencies necessary for maximum self-development. Hence, the present study investigated study habits and stress as correlates of students' academic performance in secondary schools in English Language and Mathematics in Rivers State.

Aims and Objectives of the Study

1. Determine the relationship between the writing of homework and assignments and the academic performance of secondary school students in Rivers State.
2. Find out the relationship between the time allocated to studying and secondary school students' academic performance in Rivers State.
3. Determine the relationship between concentration and secondary school students' academic performance in Rivers State.
4. Examine the relationship between family problems and secondary school students' academic performance in Rivers State.

Research Questions

1. To what extent does writing of homework and assignments relate to secondary school students' academic performance in Rivers State?
2. To what extent does time allocated to studying relate to secondary school students' academic performance in Rivers State?

3.   To what extent does concentration relate to secondary school students' academic performance in Rivers State?

4.   To what extent do family problems relate to secondary school students' academic performance in Rivers State?

Hypotheses

1.   There is no significant relationship between homework and assignments and secondary school students' academic performance in Rivers State.

2.   There is no significant relationship between the time allocated to studying and secondary school students' academic performance in Rivers State.

3.   There is no significant relationship between concentration and secondary school students' academic performance in Rivers State.

4.   There is no significant relationship between family problems and secondary school students' academic performance in Rivers State.

Methods

The research design for this study is a correlational design. The study was carried out in Rivers State. The population of this study was 6,000 SS1 students in the 261 government-owned secondary schools in the 23 Local Government Areas in Rivers State. The sample size for this study was 450 students in the study area drawn using a multistage sampling method. A self-structured instrument was used for data collection titled: "Study-Habit and Stress Questionnaire" (SHSQ). The instrument was validated for face and content validity by experts in Measurement and Evaluation, Department of Educational Psychology, Guidance and Counselling, Ignatius Ajuru University of Education. The reliability of the instrument was determined using the test retest method. The instrument yielded a reliability coefficient of ($r=0.85$). The instrument was administered by the researcher with the help of one research assistant. Pearson Product Moment Correlation was used to answer the research questions and test the null hypotheses at 0.05 level of significance.

Results

Research Question One: To what extent does writing of homework and assignments relate to secondary school students academic performance in Rivers State?

Hypothesis One: There is no significant relationship between homework and assignments and secondary school students' academic performance in Rivers State.

Table 1: Pearson's Product Moment Correlation Analysis on the Relationship between Homework and Assignments and Secondary School Students' Academic Performance in Rivers State

Correlations

		Homework and Assignment	Academic Performance
Homework and Assignment	Pearson Correlation	1	0.82**
	Sig. (2-tailed)		0.00
	N	450	450
Academic Performance	Pearson Correlation	0.82**	1
	Sig. (2-tailed)	0.00	
	N	450	450

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

Table 1 presents the Pearson's Product-Moment Correlation result showing the relationship between homework and assignments and secondary school students' academic performance in Rivers State. The correlation coefficient, $r = 0.82$, indicates a strong positive relationship between the two variables. This implies that an increase in students' engagement with homework and assignments is associated with a corresponding improvement in their academic performance. Furthermore, the significance value ($p = 0.00$) is less than the 0.05 level of significance, indicating that the relationship is significant. Therefore, the result suggests that homework and assignments play an important role in enhancing students' academic achievement. In other words, consistent engagement with homework and assignments contributes positively and meaningfully to students' learning outcomes in secondary schools within Rivers State.

Research Question Two: To what extent does time allocated to studying relate to secondary school students' academic performance in Rivers State?

Hypothesis Two: There is no significant relationship between time allocated to studying and secondary school students' academic performance in Rivers State.

Table 2: Pearson's Product Moment Correlation Analysis on the Relationship between Time Allocated to Studying and Secondary School Students' Academic Performance in Rivers State.

Correlations

		Time allocated to study	Academic Performance
	Pearson Correlation	1	0.77^{**}
Time allocated to study	Sig. (2-tailed)		0.00
	N	450	450
	Pearson Correlation	0.77^{**}	1
Academic Performance	Sig. (2-tailed)	0.00	
	N	450	450

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

Research Question Three: To what extent does concentration relate to secondary school students' academic performance in Rivers State?

Hypothesis Three: There is no significant relationship between concentration and secondary school students' academic performance in Rivers State.

Table 3: Pearson's Product Moment Correlation Analysis on the Relationship between Concentration and Secondary School Students' Academic Performance in Rivers State

Correlations

		Concentration	Academic Performance
	Pearson Correlation	1	0.85^{**}
Concentration	Sig. (2-tailed)		0.00
	N	450	450
	Pearson Correlation	0.85^{**}	1
Academic Performance	Sig. (2-tailed)	0.00	
	N	450	450

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

Research Question Four: To what extent does family problems relate to secondary school students' academic performance in Rivers State?

Hypothesis Four: There is no significant relationship between family problems and secondary school students' academic performance in Rivers State.

Table 4: Pearson's Product Moment Correlation Analysis on the Relationship between Family Problems and Secondary School Students' Academic Performance in Rivers State

Correlations

		Family Problem	Academic Performance
Family Problem	Pearson Correlation	1	0.38**
	Sig. (2-tailed)		0.00
	N	450	450
Academic Performance	Pearson Correlation	0.38**	1
	Sig. (2-tailed)	0.00	
	N	450	450

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

Discussion of Findings

The result in Table 1 shows that the extent of the relationship between homework and assignments and secondary school students' academic performance in Rivers State is very strong. While the result of hypothesis one indicated that there is a significant relationship between homework and assignments and secondary school students' academic performance in Rivers State. This finding is consistent with the study carried out by Oluwatimilehin and Owoyele (2012), which revealed that of all the study habits' subscales, 'teacher consultation' was most influential, while the 'time allocation exercise, concentration, note taking, reading, and assignments were regarded as less integral to students' academic performances.

The result in Table 2 shows that the extent of the relationship between time allocated to studying and secondary school students' academic performance in Rivers State is strong. While the result

of the tested hypothesis two indicated that there is a significant relationship between time allocated to studying and secondary school students' academic performance in Rivers State. This finding is in agreement with the study of Ogundipe and Falade (2018), which revealed that time spent attending lectures, self-study, and work group and or tutorials was positively correlated with their academic performance. Furthermore, Ogunniyi and Nwalo (2016) revealed that there was a significant relationship between time allocation and academic achievement of undergraduates in cataloguing and classification in library schools.

Table 3 shows that the extent of the relationship between concentration and secondary school students' academic performance in Rivers State is very strong. While the result of the tested hypothesis three indicated that there is a significant relationship between concentration and secondary school students' academic performance in Rivers State. These findings are consistent with the study of Olatunji et al. (2016) in their study, which revealed that concentration, lack of reading habit, and class size were the major identified factors affecting the performance of undergraduates, while Cumulative Grade Point Average and Continuous Assessment and Examination were the best means of measuring students' success.

The result in Table 4 shows that the extent of the relationship between family problems and secondary school students' academic performance in Rivers State is weak. Furthermore, the result of the tested hypothesis four indicated that there is a significant relationship between family problems and secondary school students' academic performance in Rivers State. The study is consistent with the study of Essien et al. (2020), which revealed that family stability significantly influenced their academic performance in Social Studies.

Conclusion

The study investigated the relationship between study habits and stress as correlates of academic performance of secondary school students in English Language and Mathematics in Rivers State. However, the findings of the study showed that homework and assignments, and concentration had a very strong correlation with students' academic performance. Also, time allocated to studying had a strong correlation with students' academic performance. These results imply that in order to improve students' academic performance in secondary schools, time allocated to homework and assignments should be increased, and also make daily reports. These results imply that in order to improve students' academic performance in Rivers State, teachers must spend more time on academic counselling, parent-teacher communication, and tutoring, and allocate adequate resources to enhance parental involvement. Based on the findings of the study on the relationship between study habits and stress with the academic performance of secondary school students in Rivers State, it can be concluded that the increase in the allocated time for homework and assignments and parent-teacher communication will facilitate students' academic performance and also help teachers to manage their stress.

Recommendations

1. Teachers provide the proper assistance in enabling the students to learn at school, so that they can perform well in exams and assignments.

2. Students should allocate time to themselves for self-development, so that they can develop intellectually, be social beings, and live life to the fullest.

3. Students should try to build confidence in their ability to concentrate on their studies and to discover their aptitude for finding new information to solve problems.

4.   Secondary school students' family problems should be reduced in all state secondary schools in Rivers State to enable them to perform better in their academic performance.

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