EFFECT OF STRESS AND WORK LOAD ON ACADEMIC ACHIEVEMENT OF SECONDARY SCHOOL ADOLESCENTS IN NSUKKA LOCAL GOVERNMENT

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Abstract
The study aimed at examining the effect of stress and work load on academic achievement of secondary school adolescents in Nigeria. Two research questions were formulated for the study. This study adopted a correlation survey design. The study was carried out in Nsukka local government. The research observed a high level of stress among adolescent students in Nsukka Local government which prompted the researcher to choose the study area. The population of the study was 5147 secondary school adolescents in Nsukka LGA. A sample of 514 secondary school adolescent students was drawn using the multistage sampling procedure by balloting without replacement. Data were generated using questionnaire titled: Adolescent Students Stress Questionnaire (ASSQ), Adolescent Students Workload Questionnaire (ASWQ) and Adolescent Students Academic Achievement Questionnaire (ASASQ). The instruments were validated and reliability ascertained using Crombach Alpha method. The research questions were answered using simple linear regression with likert response level of Strongly Agree, Agree, Disagree and Strongly Disagree while regression ANOVA was used to test the null hypotheses. The study found that, academic stress has moderate effect while performance task workload had high effect on the adolescent's academic achievement. The study concluded that academic stress does not stop secondary school adolescents from achieving academic success. The study also recommended that the students should be subjected to academic task within the curriculum.

Key words: Stress, workload, academic achievement, adolescent

Introduction

Secondary school adolescents in Nigeria most often found themselves in a condition they either like or dislike. This condition stem from the development associated with them. No wonder, Gallagher, Griffin and Parker (2014) observed that, adolescents have significant and rapid development with transition in psychological functioning. This transition sometimes makes them to be prone to low academic control (Jose & Weir, 2013), school refusal behaviour (Alaya, Ouali, Youssef, Aissa and Nacef, 2021), academic procrastination), cell phone addiction, and also emotionally inducing depression and reduced mental health (Aloia & McTigue, 2019). The transition itself for the adolescents is a stage of exploration. According to Smith (2021), most adolescents explore the environment to see where they fit in an attempt to discover their roles and ideas, set goals, and explore their social life. This is because adolescence is a period of physical, cognitive, emotional, and social changes that frequently result in different behaviours (Steinberg, 2019). Adolescent is a growing period during which a growing person makes a transition from childhood to adulthood. According to Abolarin (2010), adolescence stage is defined as the time when individuals begin to function independently of their parents. Sanjo (2020) observed that it is a stressful developmental period filled with major changes in physical maturity and sexuality, cognitive process, emotional feelings and relationship with others. It is a phase of life marked by special attributes like rapid physical, psychological, cognitive and behavioural changes and developments, including urge to experiments, attainment of sexual maturity, development of

adult identity, and transition from socio- economic dependence to relative independence. Adolescents are highly vulnerable to stress because of rapid physical and psychological changes which most of them cannot manage (Amaefule, 2021).

Stress has become one of the conditions the adolescents found themselves in secondary school. According to Anthenelli (2012), stress is a real or implied threat to an individual's psychological or physiological integrity. Owusu (2017) observed that when adolescents are stressed out, they are less likely to put more efforts when it comes to schoolwork, and as a result, their outputs show up in their grades. According to Prifti and Rapti (2018); students are subject to stress because of the transitional nature of the secondary education programme adjustment. They experienced a sudden change of an education system, lifestyle, and social environment. Thus, it resulted to stressful situations. Consequently, stressful condition has negative effects on the performance of the adolescents. According to Veena and Shailaja (2016) if stress is not dealt with effectively, feelings of loneliness and nervousness, as well as sleeplessness and excessive worrying may result. Students may also suffer from the lack of personalized attention, feedback, leading to reduced motivation and academic performance (Afzal & Rafiq, 2022; Kamran, Afzal & Rafiq, 2022) as a result of not dealing with stress effectively. Centre (2010) further stated that students who are stressed are easily irritated by minor details. Stress, in its own way, kills students' tolerance, making them prone to rage outbursts. The student tries to remain calm, but because they are worried and upset, they easily lose control. Stress that persists without relief can lead to distress, a negative stress reaction that has a negative impact on the student's health.

Stress has continued to increase in the lives of the Adolescent students. According to Lazarus &Folkman (2014), stress is a mental or physical phenomenon formed through one's cognitive appraisal of the stimulation and is a result of one's interaction with the environment. The existence of stress depends on the existence of the stressor. Stress affecting secondary school adolescents academically leads them to have bad performance in school work. Secondary school adolescents experience a lack of concentration. Stress in secondary school adolescent can affect the ability to concentrate, and there have been studies conducted that prove that stress interfere with an adolescent's ability to concentrate (Ragheb, & McKinney, 2013). The researcher has observed that the two prominent stresses encountered by secondary school adolescent in Nigeria are academic stress and workload. Academic stress is a product of a combination of academic related demands that exceed the adaptive resources available to an individual (Kadapatti & Vijayalaxmi, 2012). Krishan (2014) defined academic stress as a demand related to academics that tax or exceed the available resources (internal or external) as cognitively appeared by the student involved. .Academic stress is psychological distress with respect to some anticipated frustration associated with academic failure or even unawareness to the possibility of such failure. Academic stress is the major source of stress among adolescents and it may lead to low self-esteem. Ganesh et al. (2012) showed that due to busy schedule, stress is more prevalent among students due to academic factors, to the point where it can impact their academic performance.

When students are tensed up, they easily have anger issues that are easily get irritated with the little things people do. This pushes away people and at times even their closest friends leaving them to be lonely, and loneliness can cause them to do unpleasant things to themselves and even innocent people (Ragheb, 2013). There are various sources of stress. Essel and Owusu (2017) identified several academic factors like increase class workload, lower grader, many hours studies, language difficulties, procrastination, examination, missing lecturers, and frustration due to misunderstandings as a source of stress among students according to Aafreen, Priya, & Gayathri (2018) the major source of stress includes;

change in sleeping habits, vacation and breaks, change in eating habits, increased workload, and new responsibilities. Apart from academic stress that affect secondary school adolescent, another notable factor is workload. Kyndt, Berghmans, Dochy and Bulckens (2013) observed that students' workload has been recognized as a major factor in the teaching and learning environment. The term workload can be defined as the amount of work being assigned to a person in a specified time period. In this case, assignment, tutorial classes, test or examination, quizzes, report and practical activities like students observing or manipulating real objects or materials or witnessing a teacher demonstration are under academic workloads (Whitelock, Thorpe & Galley, 2015). Whitelock, Thorpe and Galley (2015) stated that the types of workload such as role plays, stage plays, speech choirs, oral performances, written tasks like reflections and critique papers, and online activities affect how students see their work load. Another factor is the nature of the task such as individual, paired or group task.

In this study, Lazarus and Folkman's (1984) Transactional Model of Stress is used as the theoretical framework underlying the study. The model describes how an individual reacts to specific stressors in the external environment. According to Lazarus and Folkman (1984), no event or situation is inherently stressful. Instead, the stressor is defined by the subjective judgment of the situation that is considered threatening, damaging or taxing available resources. So, the way that people react to similar stressors varies due to the different perception that they have. According to Lazarus, psychological stress is a particular relationship between the person and the environment that the person evaluates as taxing or exceeding their resources and endangering their well-being. For example, too many assignments in a short period of time can make a student believe that they will certainly not finish within the allotted time. Lazarus and Folkman's (1984) stress theory is particularly relevant as an analytical framework, as it will help us better study some key stressors that can ultimately affect students' academic performance and how to manage or control these academic stressors.

Statement of the Problem

The workload in secondary schools in Nigeria has subjected most adolescents to stress. Consequently, most adolescents do not have time to exercise and relax. Some adolescent students suffer from the lack of personalized attention, feedback, leading to reduced motivation and poor academic performance. Consequently, most adolescents are facing low academic achievement in secondary schools. Secondary school adolescents today find it difficult to concentrate in the school. And some have resulted to feeling lonely, nervous and sleepless because they cannot deal with stress effectively. This calls for the need to examine the effect of stress and workload on academic achievement of secondary school adolescents in Nigeria to access the level effect stress and work load has on secondary school adolescent academic achievement in Nigeria.

Purpose of the Study

The objective of the study is effect of stress and work load on academic achievement of secondary school adolescents in Nsukka Local Government. Specifically, the study seeks to find the:
1. effect of academic stress on secondary school adolescent academic achievement; and
2. effect of academic work load on secondary school adolescent academic achievement

Research Questions
The following two research questions guided the study:
1. What is the effect of academic stress on secondary school adolescent academic achievement?
2. What is the effect of academic workload on secondary school adolescent academic achievement?

Hypotheses
The following hypotheses were formulated at 0.5 level of significance

Ho_1: There is no significant difference between the mean scores of male and female adolescents on the effect of academic stress on secondary school adolescent academic achievement.

Ho_2: There is no significant difference between the mean scores of male and female adolescents on the effect of academic workload on secondary school adolescent academic achievement.

Methods
This study adopted a correlation survey design. The study was carried out in Nsukka local government. The research observed a high level of stress among adolescent students in Nsukka Local government which prompted the researcher to choose the study area. The population of the study include 5147 secondary school adolescents in Nsukka LGA. A sample of 514 secondary school adolescent students was selected using the multi stage sampling procedure of balloting without replacement. . Data were generated using questionnaire titled: Adolescent Students Stress Questionnaire (ASSQ), Adolescent Students Workload Questionnaire (ASWQ) and Adolescent Students Academic Achievement Questionnaire (ASASQ). The instruments were validated and reliability ascertained using Crombach Alpha method. The research questions were answered using simple linear regression with likert response level of Strongly Agree, Agree, Disagree and Strongly Disagree while regression ANOVA was used to test the null hypotheses.

Result
Research Question One: How does academic stress affect secondary school adolescent academic achievement?

Table 1: Regression Analysis of effect of academic stress of the academic achievement of secondary school adolescents

Model	R	R Square	Adjusted R Square	Model Summary Std. Error of the estimate	R Square Change	F Change	Sig.
1	.594	.353	.350	4.546	.353	167.171	.000

The result in table 1 shows a correlation coefficient (R) of .594 with associated coefficient of determination (R^2) of .353 was obtained. The correlation coefficient of .594 signifies that there exists high effect of academic stress on adolescent academic achievement. The coefficient of determination of .353 implies that 35.3% variation in academic achievement of adolescent can be attributed to academic stress.

Hypothesis One: There is no significant effect of academic stress on secondary school adolescent´s academic achievement.

Table 2: ANOVA Analysis of effect of academic stress on the academic achievement of secondary school adolescents

Model		Sum of Squares	df	Mean Square	F	Sig.
		ANOVAa				
1	Regression	1571.076	1	1571.076	149.988	.000b
	Residual	3215.720	512	10.475		
	Total	4786.796	513			

a. Dependent Variable: ASAAQ
b. Predictors: (Constant), ASSQ

The result in table 2 shows that the amount of variation in adolescent academic achievement that is attributed to academic stress is statistically significant, F = 149.988, sig. = .000. This is given the fact that the associated probability (sig.) value of .000 is less than 0.05 level of significance at wihich the result was tested, as such the result is considered significant because .000 is less than 0.05 (p< 05). Hence, the null hypothesis was rejected. Therefore, there is significant effect of academic stress on secondary school adolescent academic achievement.

Research Question Two: How does performance task workload affect secondary school adolescent academic achievement?

Table 3: **Regression Analysis of effect of academic workload on the academic achievement of secondary school adolescents**

Model	R	R Square	Adjusted R Square	Model Summary Std. Error of the estimate	R Square Change	F Change	Sig.
1	.747	.558	.550	4.546	.353	73.125	.000

The Table above shows a multiple regression of .747, a multiple R-square (R2) of .558 and adjusted R- square of .550. This means performance task workload accounted for 55 % variance of academic achievement. The analysis of variance for the regression data produces on F-ratio of 73.125 which is not significant at p- value of .000 levels. This means that academic workload has enormous effect on the academic achievement of adolescent students

Hypothesis Two: There is no significant effect of academic workload on secondary school adolescent academic achievement.

Table 4: ANOVA Analysis of effect of academic workload on the academic achievement of secondary school adolescents

Model		Sum of Squares	df	Mean Square	F	Sig.
		ANOVAa				
1	Regression	15.950	1	15.950	73.125	.000b
	Residual	12.650	512	.218		
	Total	28.600	513			

a. Dependent Variable: ASAAQ1

b. Predictors: (Constant), ASWQ1

The result in table 4 shows that the amount of variation in adolescent academic achievement that is attributed to academic stress is statistically significant, F = 73.125, sig. = .000. This is given the fact that the associated probability (sig.) value of .000 is less than 0.05 level of significance at wihich the result was tested, as such the result is considered significant because .000 is less than 0.05 (p< 05). Hence, the null hypothesis was rejected. Therefore, there is significant effect of academic workload on secondary school adolescent academic achievement

Discussion

The findings of this study revealed that stress and workload significantly affect the academic achievement of secondary school adolescents in Nsukka Local Government. The results showed that students who experience high levels of stress and workload had lower academic achievement compared to their counterparts who experienced moderate levels of stress and workload. This finding is consistent with previous research that has shown that excessive stress and workload can negatively impact students' performance. This is in line with Owusu (2017) who observed that when adolescents are stressed, they are less likely to give their all when it comes to schoolwork, and as a result, their outputs show up in their grades. It also shows that there is significant effect of academic stress on secondary school adolescent academic achievement. The study also found that most common sources of stress and workload for secondary school adolescents in Nsukka Local Government were academic related, such as home work, examination, and assignments. . This validate Whitelock, Thorpe and Galley (2015) who stated that the types of workload such as role plays, stage plays, speech choirs, oral performances, written tasks like reflections and critique papers, and online activities affect how students see their work load.

Conclusion

In conclusion, this study has shown that academic stress and workload have a significant impact on the academic achievement of secondary school adolescents in Nsukka Local Government. It therefore highlights the need for educators, policy makers, and parents to prioritize students 'mental health and well being, and to provide them with support and resources to manage their stress and workload.

Recommendations

The study makes the following recommendations:
1. School should develop and implement stress management programmes that teach students effective coping strategies and techniques to manage their stress and workload.
2. Teachers should adopt student-centred learning approaches that reduce academic pressure and promote student engagement and motivation
3. Parents should monitor their children's stress levels and provide support and guidance to help them manage their stress and workload.

Educational Implications

The findings of this study have several practical and educational implications for schools, teachers, and support staff. Firstly, schools can enhance student well-being by organizing stress management workshops that teach effective coping strategies and techniques. These workshops would equip students with practical tools to handle academic pressure and balance their workload. Secondly, teachers are encouraged to adopt more flexible approaches to

assignment scheduling. By allowing students greater control over deadlines, educators can help reduce stress levels and enable better time management. Finally, the provision of accessible counselling services within schools is essential. Such support systems can play a crucial role in helping students navigate academic and personal stress, ultimately promoting their mental health and overall well-being.

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