TIMBOU-AFRICA PUBLICATION INTERNATIONAL JOURNAL NOVEMBER, 2024 EDITIONS.

INTERNATIONAL JOURNAL OF EDUCATIONAL RESEARCH AND LIBRARY SCIENCE
VOL. 6 NO. 8 E-ISSN 3026-8478 P-ISSN 3027-186X

RELATIONSHIP BETWEEN STRESS AND TEXTS ANXIETY ON PERFORMANCE OF ECONOMICS STUDENTS IN KANO STATE, NIGERIA

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DOI: https://doi.org/10.70382/tijerls.v06i8.005

ABSTRACT

The study investigated the relationship between stress and texts anxiety on performance of Economics students in Kano State, Nigeria. Two research questions with its corresponding hypotheses guided the study. A correlational research design was adopted. Population of all 7,333 students offering Economics from 17 public secondary school

INTRODUCTION

Education plays a pivotal role in the development of individuals and society, with academic performance often serving as a measure of students' success and future potential. Economics, as a subject offered in Nigerian secondary schools, is crucial for equipping students with knowledge on how to manage resources effectively and contribute to national development. However, various factors, including stress and test anxiety, significantly impact students' academic achievement in subjects like Economics. This study seeks to examine how these psychological factors influence students' performance in Kano State.

Stress refers to the mental, emotional, or physical strain that arises when an individual faces challenges or pressure. In the academic context, students experience stress due to various reasons such as heavy workloads, unrealistic expectations from teachers or parents, and

in Kano State, Nigeria, and 365 students offering Economics were as a sample size of the study. Stress Questionnaire (SQ) and Anxiety Questionnaire (AQ) was used as instruments anchored on five pints Likert scale. SQ and AQ were validated which gave 0.77, 075 validity indexes and 0.77 and 0.76 reliability indexes.The SQ and AQ ware administered and data collected was analyse using Pearson's correlation coefficient (r) to answer the research questions while regression analysis was used to test the hypotheses at the 0.05 level of significant. Finding revealed that here is significant relationship between stress and students' academic performance in Economics and there is significant relationship between test anxiety and students' academic performance in Economics. the study recommended that, schools should enhance students' academic performance by addressing factors like teaching quality, study environments, and socio-economic challenges, offering counseling services, mentorship programs, and innovative teaching methods.

Keywords: Tests Anxiety, Stress, Economics, Students Kano State

fear of failure. Lazarus and Folkman (1984) as cited in Galle, Azi and Goshit, (2024) described stress as "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding their resources and endangering their well-being." This definition emphasizes the subjective nature of stress, where an individual's perception plays a key role. Cohen, Manion, & Morrison, (2018) defined stress as the psychological and physical strain or tension generated by adverse or demanding circumstances." They highlight that stress has both mental and physical dimensions. Ogden (2000) stress is described as "a negative emotional experience accompanied by predictable biochemical, physiological, and behavioral changes directed either toward altering the stressful event or accommodating to its effects." This definition emphasizes the emotional and adaptive aspects of stress.

Test anxiety, on the other hand, is a specific type of performance anxiety that manifests before or during examinations. It is characterized by excessive

worry, fear of negative evaluation, and cognitive distractions that hinder concentration and learning.Tests, anxiety, and stress are among the key psychological and academic factors influencing students' outcomes, with varying impacts on male and female students. According to Galle and Kukwi (2020) affirmed that stress and anxiety surrounding tests and examinations often impair academic achievement in Economics by interfering with cognitive abilities and motivation. Test anxiety is a physiological condition in which people experience extreme stress, anxiety, and discomfort during and/or before taking a test/examination. These responses can drastically hinder an individual's ability to perform well and negatively affect their social, emotional and behavioral development and feeling about themselves and school (Salend, 2012).

Rana and Mahmood (2010), and Putwain et al (2010) argued that characteristics of the test environment such as nature of the task difficulty atmosphere, time constraint, examiner's characteristics, mode of administration and physical setting could affect the level and anxiousness felt by the student. Galle, Azi and Goshit, (2024) affirmed that a low anxious test taker is able to focus greater attention on the tasks required of them while taking the test while a high anxious test taker is focusing on their internal self and anxiety they are feeling. Anxious test takers do not perform adequately on a test, as their attention is divide between themselves and the test in cognitive.

The cognitive interference model suggests that students experiencing anxiety may struggle with concentration and memory recall during exams, leading to lower academic performance. Moreover, the continuous exposure to academic stress can lead to burnout, further diminishing students' ability to succeed (**Eysenck**, 1970 as cited in Galle, et'al (2020). In this context, it is critical to explore how male and female students respond differently to academic pressure. Abe and Gbenro (2024) affirmed that, female students tend to engage in more emotional coping strategies (e.g., seeking social support) but may still experience performance dips due to overwhelming anxiety, while the male students may use problem-focused strategies or display avoidance behaviour, sometimes resulting in inconsistent academic results in Economics.

Economics is a fundamental subject offered at the senior secondary level in Nigeria. It provides students with essential knowledge about production, distribution, consumption, and the role of government policies in economic growth. Success in Economics is necessary for students pursuing careers in business, finance, and public administration. However, achieving high performance in Economics requires critical thinking, problem-solving skills, and the ability to apply theoretical concepts to real-life situations (Galle, 2024). These cognitive demands, coupled with the pressure to perform, may contribute to stress and anxiety among students. Kano State, located in the northwestern region of Nigeria, has a diverse student population with varying socio-economic backgrounds. Secondary schools in the state face challenges such as overcrowded classrooms, limited educational resources, and socio-cultural pressures, all of which can heighten students' stress levels.

Statement of the Problem

Stress and test anxiety negatively influences academic performance of students in Nigerian secondary education, especially in subjects like Economics. Stress can lead to underperformance, misinterpretation, and computational errors. Both genders may experience headaches, insomnia, or fatigue. The relationship between anxiety and academic performance is inverted, with moderate stress motivating but excessive stress counterproductive. Managing anxiety is crucial for optimal performance. Additionally, poor time management affects both groups, leading to procrastination and reliance on last minute cramming, which diminishes comprehension and retention. Socially, stress can also trigger withdrawal and isolation, depriving students of peer collaboration, a crucial aspect of mastering Economics. It is against the background that this study investigate impact of stress and texts anxiety on Economics achievement of Secondary School Students in Kano State, Nigeria.

Research Questions

1. What is the relationship between stress and students' academic performance in Economics?

2. What is the relationship between test anxiety and students' academic performance in Economics?

Research Hypotheses

Ho1: There is no significant relationship between stress and students' academic performance in Economics.

Ho2: There is no significant relationship between test anxiety and students' academic performance in Economics

EMPIRICAL STUDIES

Galle, Azi and Goshit, (2024) findings revealed that, there is a significant impact of examination, tests anxiety and stress on students' academic performance in Econometrics, and there is significant impact of examination, tests anxiety and stress on male and female students' academic performance in Econometrics. Galle, Atiku and Bala (2020) found that a significant negative relationship exists between test anxiety scores and students' academic achievement scores, which a cognitive factor (worry) contributes highly in test anxiety than affective factors (emotional). Foley Herts, Borgonovi, Guerriero, Levine, Beilock (2017) found that students reporting higher levels of math anxiety had lower levels of math performance than their peers who reported lower levels of math anxiety. Moreover, they also found that countries with higher scores had lower levels of country-level math anxiety. Abe and Gbenro (2024) findings showed there was no significant difference in the mean of observable test and anxiety behaviour between male and female students, and also, students' gender and class did not have any significant influence on their test anxiety level.

MATERIAL AND METHOD

Design

The study utilised is the correlational research design. The primary aim is to examine the relationship between variables (stress, test anxiety, and academic performance), not to establish cause-and-effect relationships. Creswell (2014)

states that correlational research is appropriate when the goal is to understand relationships among variables rather than establish causation.

Population and Sampling Technique

Population comprises of all 7,333 students offering Economics from 17 public secondary school in Kano State, Nigeria, and the sample size of the study consist of 365 students offering Economics using stratified random sampling. For a population of **7,333,** the required sample size with a **95% confidence level** and a **5% margin of error** is approximately. Finally, Cochran's Formula was used to obtain 365 as sample size of the study.

Instrumentation

The researchers developed two instruments entitled "Stress Questionnaire (SQ)" and Anxiety Questionnaire (AQ)"contained 33 items anchored on five pints Likert scale: Strongly Agree =SA, Agree=AG, Neutral=NU, Disagree=DA, Strongly Disagree=SD. The SQ and AQ were validated and pilot tested, which yielded 0.77, 075 validity indexes for SQ and AQ. In addition, the reliability indexes of 0.77 and 0.76 for SQ and Standardized AQ respectively.

The SQ and AQ ware administered and data collected was analyse using Pearson's correlation coefficient (r) to answer the research questions while regression analysis was used to test the hypotheses at the 0.05 level of significant.

RESULTS

Research Questions/Hypotheses

RQ1: What is the relationship between stress and students' academic performance in Economics?

Table 1 Summary of Pearson Product-Moment Correlation Coefficient (PPMC)

	No of Cases	R	R Square	Adjusted R Square	Std, Error of Estimate
Stress	365	-0.35	0.55	.025	.45128

a. Predictors: (Stress), Students Academic Performance-X

The result in Table 1 shows summary of PPMC coefficients (r) r-0.35, adj-R=0.25, indicates a weak to moderate negative relationship between stress and students' academic performance in Economics. This implies that weak students' academic performance in Economics associated with higher level of stress, though there is still a substantial amount of variation in stress that is not explained by students' academic performance in Economics. Given that R^2 = 0.55 this suggests that 55% of the variance in stress can be explained by students' academic performance in Economics. The remaining 45% of the variance in stress is due to other factors not captured by students' academic performance in Economics. Drawing inferences from the **Ho1:** there is no significant relationship between stress and students' academic performance in Economics, was tested at the 05 level of significant using regression analysis as displayed in Table 2.

Table 2: Regression Coefficients Analysis

	Unstandardized Coefficients		Standardized Coefficients	T	Df	Sig	95.0% Confidence Interval	
	B	Std. Error	Beta				Lower Bound	Upper Bound
(Constant)	2.984	.077		21.594	364	.010	55.501	71.777
Stress=X	.064	.049	.142	2.193		.029	0. 71	0.170

Table 2 shows regression equations for predicting stress on the students academic performance in Economics is Y = 2.984 + 0.077X. Implies that for a unit increase in X (stress), and Y(students academic performance in Economics) will increase by 0.077%. At the 95% confidence level, df=364, t-test=2.193, Sig(P)=0.029, that is P<0.05. Ho_1 is not retained, hence there is significant relationship between stress and students' academic performance in Economics.

RQ2: What is the relationship between test anxiety and students' academic performance in Economics?

Table 3 Summary of Pearson Product-Moment Correlation Coefficient (PPMC)

	No of Cases	R	R Square	Adjusted R Square	Std, Error of Estimate
Anxiety	365	-0.36	0.55	.025	.45128

a. Predictors: (Anxiety), Students Academic Performance X

The result in Table 3 shows summary of PPMC coefficients (r) r-0.36, adj-R=0.25, indicates a weak to moderate negative relationship between test anxiety and students' academic performance in Economics. This implies that weak students' academic performance in Economics associated with higher level of test anxiety, though there is still a substantial amount of variation in test anxiety that is not explained by students' academic performance in Economics. Given that $R^2 = 0.55$ this suggests that 55% of the variance in test anxiety that can be explained by students' academic performance in Economics. The remaining 45% of the variance in test anxiety is due to other factors not captured by students' academic performance in Economics. Drawing inferences from the **Ho2:** there is no significant relationship between test anxiety and students' academic performance in Economics, was tested at the 05 level of significant using regression analysis as displayed in Table 4.

Table 4: Regression Coefficients Analysis

	Unstandardized Coefficients		Standardized Coefficients	t	Df	Sig	95.0% Confidence Interval	
	B	Std. Error	Beta				Lower Bound	Upper Bound
(Constant)	2.984	.077		21.594	364	.010	55.501	71.777
test anxiety =X	.064	.049	.142	2.193		.029	0. 71	0.170

Table 4 shows regression equations for predicting test anxiety the students academic performance in Economics is Y = 2.984 + 0.077X. Implies that for a unit increase in X (test anxiety), and Y(students academic performance in Economics) will increase by 0.077%. At the 95% confidence level, df=364, t-

test=2.193, Sig(P)=0.029, that is P<0.05. Ho_2 is not retained, hence there is significant relationship between test anxiety and students' academic performance in Economics.

Discussion of Findings

The result in Table 1 shows summary of PPMC coefficients (r) r-0.35, adj-R=0.25, indicates a weak to moderate negative relationship between stress and students' academic performance in Economics. This implies that weak students' academic performance in Economics associated with higher level of stress, though there is still a substantial amount of variation in stress that is not explained by students' academic performance in Economics. Given that R^2 = 0.55 this suggests that 55% of the variance in stress can be explained by students' academic performance in Economics. The remaining 45% of the variance in stress is due to other factors not captured by students' academic performance in Economics. Drawing inferences from the **Ho1 in** Table 2 shows regression equations for predicting stress on the students academic performance in Economics is Y = 2.984 + 0.077X. Implies that for a unit increase in X (stress), and Y(students academic performance in Economics) will increase by 0.077%. At the 95% confidence level, df=364, t-test=2.193, Sig(P)=0.029, that is P<0.05. Ho_1 is not retained, hence there is significant relationship between stress and students' academic performance in Economics. This finding corroborated that of Galle, Azi and Goshit, (2024) findings revealed that, there is a significant impact of examination, tests anxiety and stress on students' academic performance in Econometrics, and there is significant impact of examination, tests anxiety and stress on male and female students' academic performance in Econometrics. Abe and Gbenro (2024) findings showed there was no significant difference in the mean of observable test and anxiety behaviour between male and female students, and also, students' gender and class did not have any significant influence on their test anxiety level.

Finally, result in Table 3 shows summary of PPMC coefficients (r) r-0.36, adj-R=0.25, indicates a weak to moderate negative relationship between test anxiety and students' academic performance in Economics. This implies that weak students' academic performance in Economics associated with higher

level of test anxiety, though there is still a substantial amount of variation in test anxiety that is not explained by students' academic performance in Economics. Given that $R^2 = 0.55$ this suggests that 55% of the variance in test anxiety that can be explained by students' academic performance in Economics. The remaining 45% of the variance in test anxiety is due to other factors not captured by students' academic performance in Economics. Drawing inferences from the **Ho2 in** Table 4 shows regression equations for predicting test anxiety the students academic performance in Economics is Y = 2.984 + 0.077X. Implies that for a unit increase in X (test anxiety), and Y(students academic performance in Economics) will increase by 0.077%. At the 95% confidence level, df=364, t-test=2.193, Sig(P)=0.029, that is P<0.05. Ho_2 is not retained, hence there is significant relationship between test anxiety and students' academic performance in Economics. this finding is in agreement with that of Galle, Atiku and Bala (2020) found that a significant negative relationship exists between test anxiety scores and students' academic achievement scores, which a cognitive factor (worry) contributes highly in test anxiety than affective factors (emotional). Foley Herts, Borgonovi, Guerriero, Levine, Beilock (2017) found that students reporting higher levels of math anxiety had lower levels of math performance than their peers who reported lower levels of math anxiety. Moreover, they also found that countries with higher scores had lower levels of country-level math anxiety.

Conclusion

The study concluded that other factors, beyond stress and test anxiety, may play a more substantial role in determining the academic performance of students in Economics. These could include teaching methods, socio-economic factors, study habits, or intrinsic motivation.

Recommendations

1. Schools and policymakers should explore other variables such as teaching quality, study environments, or socio-economic challenges that may have a stronger impact on students' academic performance.

Conducting further studies to identify these factors can help create more targeted interventions.

2. Schools should adopt a broader approach to student support by providing counseling services, mentorship programs, and workshops on effective study techniques. These initiatives can help address various academic and non-academic challenges students face.
3. Teachers should focus on innovative, student-centered teaching methods to enhance engagement and comprehension in Economics. Practical applications, interactive lessons, and technology-based teaching tools can make the subject more accessible and enjoyable for students.

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