



FUW CENTRE FOR RESEARCH JOURNAL OF EDUCATIONAL STUDIES (FUWCRJES)



IMPACT OF DEPRESSION AND TEST ANXIETY ON STUDENTS' ACADEMIC PERFORMANCE IN SECONDARY SCHOOLS IN KATSINA LOCAL GOVERNMENT AREA, KATSINA STATE, NIGERIA

¹SALIHU Ahmad Kado, ²Steve Olusegun BADA, PhD
& ³Sani ABUBAKAR, PhD

^{1, 2 & 3}*Department of Educational Psychology and Counselling Federal University,
Dutsin-Ma, Katsina State*

Corresponding Email: bdolusegun@gmail.com Phone: +2348068063806

Abstract

This study examined the impact of Depression and Test Anxiety on Students' Academic Performance in Secondary Schools in Katsina LGA, Katsina State, Nigeria. The study has 6 objectives, 3 research questions and 3 hypotheses. The study adopted a descriptive survey of correlational design. The population of the study comprised of senior secondary school students II in the 13 public secondary schools in Katsina LGA/. Simple random sampling technique was used to select 195 respondents. Three instruments were used for the data collection in this study. A test re- test method of reliability with a coefficient of 0.60, 0.64 and 0.62 were obtained, respectively using PPMC statistic. The research questions were answered using frequency and percentage, the research hypotheses were tested using Pearson Product Moment Correlation (PPMC) Statistic and t-test all at 0.05 level of significance. The study found that the level of depression among Students in Secondary Schools was low, the level of Test Anxiety was high and the level of students' academic performance was relatively low, there was no significant relationship between Depression and Students Academic Performance in Secondary Schools, there was significant relationship between Test Anxiety and Students Academic Performance. There was significant difference in the Students' Academic Performance based on gender. The study recommended among others that Professional school Psychologists and Counsellors should render psychological intervention by using cognitive behavioral techniques to counsel senior secondary school students who are depressed and with test anxiety so as to improve their academic performance. Both female and male senior secondary students should develop coping strategies to adjust to both depression and test anxiety that may affect their academic negatively

Key words: Depression, Test Anxiety, Students Academic Performance

Introduction

Depression as a mood disorder affects a person's ability to perform life activities including academic performance. It is common for people who suffer from depression to engage in self-blame, experience confusion and a feeling of hopelessness. It has been found that loss of interest aspect of depression and high level is associated with lower grade point, anxiety and poor academic performance (Eisenberg, 2019). With reference to this study, depression has the ability to influence the prevalence of academic failure in a student. For example, a student with a high neuroticism has a sensitive inclination already to react to unpleasant situations negatively. Anxiety and hostility is heightened whenever the same student is reacting to a negative stimuli with little or no self-control over his reaction making him more prone to depression thereby disrupting his normal routine functioning including academic. This student will lack the ability to concentrate while teaching and learning is going on cause his thought process and mind are clouded with negativity. Hysenbegasi, Hass and Rowland (2015) findings indicate

that depression had a significant impact on the academic productivity of secondary school students. Similarly, Suleiman (2017) examined the association between self-reported depressive symptomology and college academic performance and also found inversely significant relationship between depression and academic performance

Test anxiety is the most prevalent mental health disorder which is attracting worldwide concern, with considerable impact on cognitive function. High anxiety level can threaten individuals' mental and physical health and capable of resulting in to negative effects on students' academic performance (Alemu & Feyssa, 2020). Students with excessive anxiety may experience genuine problems during their schooling. Sisbane (2019) in his finding revealed that students who possesses high test anxiety levels are more likely to have poor academic achievement, with less classroom engagement. Ugochukwu (2024) indicates in his finding that there is no correlation between test anxiety levels and academic achievement of students in the Federal Capital, Abuja. However, their finding contradicts Syokwaa, (2024) who found that there was significance relationship between anxiety and academic performance among freshmen college students.

Academic performance is the extent to which a student has attained a short or long term educational goals. Academic performance is important because it is strongly linked to the positive outcomes we value. (Janelle, 2011). Academic instruction is arguably the primary business of education and measurement of academic performance occurring at multiple levels for different purposes. For example, classroom teachers often conduct formative and summative test in order to evaluate student's mastery while some are designed primarily to measure progress at a school level.

Academically, students who have lower level of depression and anxiety are likely to abuse alcohol, engage in substance abuse and perform poorly. Unity and Igbudu (2015), examined influence of Gender on Students' Academic Achievement in mathematics Subject. The results showed that female students perform less than their male counterpart with a mean score of 1.98 and 2.26 for mathematics as against a mean score of 2.44 and 3.13 for female and male students respectively. Therefore, it is as a result of the above gap that this study seeks to examine the Impact of Depression and Test Anxiety on Students Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State

Statement of the Problem

Depression and test anxiety are major factors contributing to variety of negative outcomes including psychological distress, academic underachievement, and academic failure. It has been observed that senior secondary school students in Nigeria are facing with depression and test anxiety pressure during classroom and examination activities, as they exhibit feeling of fear of tests/examinations and aggressive behaviour in classroom. Students who exhibit these behaviours tend to develop fear, worry, loss of interest and focus towards their career goals in school. During this process, they also find it difficult

to withstand the stress tension and lack the coping skills and ability to make proper decision which significantly and negatively has impact on their academic performance most especially in mathematics.

Chipas (2020) revealed that effects of depression and anxiety on students' academic achievement are inimical to academic progress and help the students to be dull class. He further stress that the academic achievement of students might be double minded because of the destructive nature of test anxiety disorder which has become a total spiritual disease or epidemiology that has eaten deep into the fabric of students in Nigeria. Also, Fulton (2016) found that students having high test anxiety levels frequently exhibit low self-assurance in their capabilities to handle academic demands because they lack the necessary skills to succeed and consequently, lack control over their actions or are losing control over them. Chukwu, (2014), explained worry as a cognitive component as it is related to mental perceptions and thinking about personal academic achievement scores. It comprises stress, fear, worry and negative thoughts result to poor achievement scores and failure in examinations. Therefore, this study found it necessary to investigate the Impact of Depression and Test Anxiety on Students Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State.

Objectives of the Study

The main objective of this study is to examine the Impact of Depression and Test Anxiety on Students Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State. Specifically, the study seeks to determine:

1. The level of Depression among Students in Secondary Schools in Katsina Local Government Area, Katsina State
2. The level of Test Anxiety among Students in Secondary Schools in Katsina Local Government Area, Katsina State
3. The level of Students' Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State
4. The significant relationship between Depression and Students Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State
5. The significant relationship between Test Anxiety and Students Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State
6. The significant difference in the Students' Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State based on gender

Research Questions

The following research questions were raised to guide the conduct of this study:

1. What is the level of Depression among Students in Secondary Schools in Katsina Local Government Area, Katsina State?

2. What is the level of Test Anxiety among Students in Secondary Schools in Katsina Local Government Area, Katsina State?
3. What is the level of Students' Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State?

Hypotheses

The following null hypotheses were formulated and tested in the study.

- H₀₁:** There is no significant relationship between Depression and Students Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State
- H₀₂:** There is no significant relationship between Test Anxiety and Students Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State
- H₀₃:** There is no significant difference in the Students' Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State based on gender

Methodology

This study adopted a descriptive survey of correlational research type. This type of study seeks to establish what relationship exists between two or more variables. Usually, such studies indicate the direction and magnitude of the relationship between the variables. The population of the study comprised of senior secondary school students II in the 13 public secondary schools in Katsina Local Government Area, Katsina State. Simple random technique was used to select 15 senior secondary school students II both male and female in the entire 13 public senior secondary schools in Katsina Local Government Area, Katsina State.

Therefore, the sample of this study makes 195 respondents. Three instruments were used for the data collection in this study. These included; Adolescents Depression Scale (ADS), Test Anxiety Scale (TAS) and 25 Multiple Choice Questions in Mathematics (MCQ) with a question carries four (40 marks. The instruments were validated by experts, it was equally subjected to test re- test method and Pearson Moment Correlation Statistics was used to determine the reliability coefficients 0.60, 0.64 and 0.62. The research hypotheses were tested using Pearson Product Moment Correlation (PPMC) Statistic and t-test all at 0.05 level of significance.

Results

Answering of Research Questions

Research Question One: What is the level of Depression among Students in Secondary Schools in Katsina Local Government Area, Katsina State?

Table 1: Showing frequency and percentage level of Depression among Students in Secondary Schools in Katsina Local Government Area, Katsina State

Levels	Frequency	Percentage
Low	116	59
High	79	41
Total	195	100.%

Table 1 revealed the level of Depression among Students in Secondary Schools in Katsina Local Government Area, Katsina State. It showed that 116 (59%) of the respondents have low score while 79 (41%) of the respondents have high score. This implies that the level of Depression among Students in Secondary Schools in Katsina Local Government Area, Katsina State was low.

Research Question Two: What is the level of Test Anxiety among Students in Secondary Schools in Katsina Local Government Area, Katsina State?

Table 2: Showing frequency and percentage level of Test Anxiety among Students in Secondary Schools in Katsina Local Government Area, Katsina State

Levels	Frequency	Percentage
Low	57	29
High	138	71
Total	195	100.%

Table 2 revealed the level of Test Anxiety among Students in Secondary Schools in Katsina Local Government Area, Katsina State. It showed that 138 (71%) of the respondents have high score while 57 (29%) of the respondents have low score. This means that the level of Test Anxiety among Students in Secondary Schools in Katsina Local Government Area, Katsina State was high.

Research Question Three: What is the level of Students' Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State?

Table 3: Showing frequency and percentage level of Students' Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State

Levels	Frequency	Percentage
Low	105	54
High	90	46
Total	195	100.%

Table 3 revealed the level of Students' Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State. It showed that 105 (54%) of the respondents have low score while 90 (46%) of the respondents have high score. This means that the level of Students' Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State was low.

Testing of Hypotheses

H0₁: There is no significant relationship between Depression and Students Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State

Table 4: Showing Correlation between Depression and Students Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State

Variables	N	Mean	SD	df	Cal .r- Value	P-value	Decision
Depression	195	22.57	11.18	193	.846	.118	Accepted
Students Acad. Perf.	195	20.46	10.09				

P>0.05

Table 4 revealed that the r-value is (.846) and the p-value of (.118) with $p > 0.05$ at level of significance and 193 degree of freedom. Therefore, the null hypothesis which states that there is no significant relationship between Depression and Students Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State was accepted. This indicates that there was no significant relationship between Depression and Students Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State

H0₂: There is no significant relationship between Test Anxiety and Students Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State

Table 5: Showing Correlation between Test Anxiety and Students Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State

Variables	N	Mean	SD	Df	Cal .r- Value	P-value	Decision
Test Anxiety	270	24.47	12.16	268	.726	.000	rejected
Students Acad. Perf.	270	21.26	10.11				

P<0.05

Table 5 revealed that the r-value is (.726) and the p-value of .000 with $p < 0.05$ at 0.05 level of significance and 193 degree of freedom.. Therefore, the null hypothesis which states that there is no significant relationship between Test Anxiety and Students

Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State is rejected. This indicates that there was significant relationship between Test Anxiety and Students Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State

H0₃ There is no significant difference in the Students' Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State based on gender

Table 6: Showing significant difference in the Students' Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State based on gender

Variable	Group	N	Mean	SD	Df	t-value	Sig (2-tailed)	Decision
Academic Performance	Male	118	2.73	0.33	193	0.224	.000	rejected
	Female	77	2.59	0.08				

P<0.05

Table 6 revealed t-test analysis on difference between male and female students Academic Performance was presented. The table revealed a mean score of 2.73 with standard deviation of 0.33 for male students, while a mean score of 2.59 with standard deviation of 0.08 was obtained for female students. The table further indicates a calculated t-value of 0.224 at 193 degree of freedom with the t-value of 000 ($p < 0.05$). Therefore, the null hypothesis was rejected. This implies that there is significant difference in the Students' Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State based on gender.

Summary of findings

The finding of this study was summarized as follows:

1. The level of Depression among Students in Secondary Schools in Katsina Local Government Area, Katsina State was low.
2. The level of Test Anxiety among Students in Secondary Schools in Katsina Local Government Area, Katsina State was high.
3. The level of Students' Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State was low.
4. There was no significant relationship between Depression and Students Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State.
5. There was significant relationship between Test Anxiety and Students Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State.
6. There was significant difference in the Students' Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State based on gender.

Discussions of findings

The result of the research question one revealed that level of Depression among Students in Secondary Schools in Katsina Local Government Area, Katsina State was low. The finding of this study does not agree with Ogachi (2020) who examined relationship between Level of Depression and Pathological Internet Use among Senior Secondary School Students. It was found that the level of depression among Senior Secondary School Students is high and they consequently use internet as a coping strategy. Also, Lyer and Khan (2021) found that an emotional problem with feelings of hopelessness and helplessness, depression is a prevalent problem among secondary school students across the world with a devastating effect on students, though it is treatable.

The result of the research question two revealed that the level of Test Anxiety among Students in Secondary Schools in Katsina Local Government Area, Katsina State was high. This implies that students experience high level of test anxiety which do not allow them to perform better. This finding corroborates with the finding of James (2018) who investigated the Levels of Test Anxiety as Predictor of Students' Achievement in Chemistry in Public Secondary Schools. The study found that the level of Test Anxiety among the chemistry students in public secondary schools was high and consequently influence their performance to be low.

The result of the research question three revealed that Students' Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State was low. This implies that students experience academic stress. The finding of this study does not corroborate with Nassiuma (2020) who investigated of the relationship between depression, test anxiety and academic performance in secondary schools. It was found the level of academic performance the secondary school students was low. It was equally evident that they lack of concentration in the class, being absent minded, lack of enthusiasm and motivation for learning, distrust of the school and society at large, violent outburst, erratic and negative behavior, numbness among others. This also made learning low and unproductive. Also, For example, approximately 50% of children with depression also have problems with anxiety, attention deficient hyperactivity disorder, conduct disorder, oppositional deficient disorder and substance abuse.

The result of hypothesis one revealed was no significant relationship between Depression and Students Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State. This implies that depression in the finding of study do not responsible for the students' poor academic performance. The finding of this study disagrees with Hysenbegasi, Hass and Rowland (2015) who found out that depression had significant impact on the academic productivity of secondary school students. Similarly, Suleiman (2017), examined the association between self- reported depressive symptomology and college academic performance and also found inversely significant relationship between depression and academic performance.

The result of hypothesis two revealed that there was significant relationship between Test Anxiety and Students Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State. The finding of this study do not agree with Ugochukwu (2024), who found that there is no correlation between test anxiety levels and academic achievement of students in the Federal Capital, Abuja. However, their finding contradicts Syokwaa, (2024) who found that there was significance relationship between anxiety and academic performance among freshmen college students. This further confirmed that the students who experience high level of test anxiety tend to perform less than the expectations,

The result of hypothesis three revealed that there was significant difference in the Students' Academic Performance in Secondary Schools in Katsina Local Government Area, Katsina State based on gender. This means that male students perform better in mathematics than female despite the both experience high level of test anxiety. The finding of this study agrees with Unity and Igbudu (2015) who examined the influence of gender on Students' Academic Achievement in mathematics Subject. The results showed that female students perform less than their male counterpart with a mean score of 1.98 and 2.26 for mathematics as against a mean score of 2.44 and 3.13 for female and male students respectively.

Conclusions

Based on the findings of this study, the followings conclusions were reached; level of Depression among Students in Secondary Schools was low. The level of Test Anxiety among Students in Secondary Schools was high and the level of students' academic performance was relatively low. It was further concluded that there was no significant relationship between Depression and Students Academic Performance in Secondary Schools. This means that the depression does not have positive impact on the students' low level of academic performance in mathematics. There was significant relationship between Test Anxiety and Students Academic Performance in Secondary Schools. This implies that high level of the test anxiety responsible for the low level of students' academic performance in mathematics. There was significant difference in the Students' Academic Performance in Secondary Schools based on gender. This further confirmed that male students perform better than their female counterpart in mathematics despite the fact that the both gender experience test anxiety.

Recommendations

Based on the findings of the study, the following recommendations were made.

1. Classroom teachers should pay more attention to students with depression, test anxiety and refer them to schools psychological and counselling centers in order to reduce students' emotional challenges.

2. School administrators and teachers should be given adequate resources they needed through regular training in order to reduce students' depression and test anxiety to boost their confidence not only in mathematics but other various subjects.
3. Professional school Psychologist and Counsellor should render Psychological intervention using cognitive behavioral techniques to counsel secondary school students who are depressed and with test anxiety so as to improve their academic performance.
4. Both female and male senior secondary students should develop coping strategies to adjust to both depression and test anxiety that may affect their academic negatively

REFERENCES

- Alemu, B. M., & Feyssa, T. (2020). The Relationship between Test Anxiety and Academic Achievement of Grade Ten Students of Shirka Woreda, Oromia Regional State, Ethiopia. *African Educational Research Journal*, 8(3), 540-550.
- Chukwu, L.O. (2014). Relationship among Test Anxiety, Academic Achievement and Interest of Senior Secondary School Students in Geometry in Enugu State. Retrieved October 2016 from file:///D:/C2AO/anxietybchukwu-LINDA O.pdf.
- Elsenberg, C. (2019). *College students Depression and Academic performance*. Depression forums web page
- Fulton, B. A. (2016). The Relationship between Test Anxiety and Standardized Test Scores. Retrieved September 2016 from <http://D:/testanxiety.USA.pdf>.
- Hysenbegasi, A., Hass, S.L & Rowland, C.R. (2015). *The Impact of depression on the Academic productivity of University students*. Journal of Mental Health Policy Economic, 8. 145-151. Journal of American Academy of Child and Adolescent Psychiatry. 35. 34-37
- James, N. O. (2018). Levels of Test Anxiety as Predictor of Students' Achievement in Chemistry in Public Secondary Schools in Kenya. *International Journal of Psychology and Behavioural Science*, 8(4): 70-76. doi: 10.5923/j.ijpbs.20180804.03.
- Jannelle, R. (2011). Why is Academic success important? Sakatchewan School Board Association
- Iyer, K & Khan, Z. A (2021). Depression. A review. School of Biosciences and Technology, Vellore Institute of Technology, Vellore
- Nassiuma, D.K. (2020). An investigation of the relationship between depression, test anxiety and academic performance in secondary schools in Nyeri District, Kenya. *Global Journal of Educational Research*, 8(1&2), 1-
- Ogachi, F. M., (2020). Relationship between Level of Depression and Pathological Internet Use among Senior Secondary School Students. *Cypriot Journal of Educational Sciences*, 14(2), 201-207
- Sisbane, F. Z. (2019). Exam anxiety and its Relationship to Academic Achievement: a Descriptive Study for First Year Secondary School Students in Mostaganem. *Journal of Human Development*, 6(4), 9-21.

- Suleiman, J. A. (2017). *Influence of Depression on Academic Performance among secondary school students in Kaduna State*. Department of Educational Psychology and Counselling. Ahmadu Bello University Zaria
- Syokwaa, K. A. (2024). The Relationship between Anxiety Levels and Academic Achievement among Students in Selected Secondary Schools in Lang'ata District, Kenya. *Journal of Educational and Social Research*, 4(3), 403-413.
- Ugockukwu, A. U. (2024). Relationship between Test Anxiety and Academic Achievement among Senior Secondary School Students in Federal Capital Territory, Abuja, Nigeria. *Journal of Research in Humanities and Social Science*, vol 12(12), p 06 – 13 doi: 10.35629/9467-12120613.
- Unity, O., & Igbudu, U. (2015). Influence of Gender on Students' Academic Achievement in mathematics Subject in Public Secondary Schools in Oredo Local Government Area of Edo State, Nigeria. *Journal of Educational and Social Research*, 5(2), 101-106.
- World Health Organization (2020). Depression and other common Mental Disorders