



**EFFECTS OF EXAMINATION ANXIETY ON UNIVERSITY
STUDENTS' ACADEMIC PERFORMANCE IN
NORTHWEST UNIVERSITY, KANO, NIGERIA**

Shuaibu Mohammed,

Surajo Halilu,

Maryam Ali Muhammadⁱ

Department of Arts and Social Sciences Education,

Faculty of Education,

Northwest University, Kano, Nigeria

Abstract:

This study examined the effects of examination anxiety on university students' academic performance in Northwest University, Kano State, Nigeria. Descriptive survey design was employed. Purposive sampling techniques were used to select 350 respondents comprising of 203 male and 147 female students in the study area respectively. Data collection was carried out using Effects of Examination Anxiety Questionnaire (EEAQ) for students. The instrument was subjected to face and content validity by experts. Cronbach Alpha reliability was used to obtain 0.83 reliability index. To achieve the purpose of the study, two null hypotheses were formulated and tested. Data collected was analyzed using Mean Score, Standard Deviation and t-test Statistics at 0.05 level of significance using SPSS v16. Results obtained revealed that there is no significant difference between male and female students on causes as well as effects of examination anxiety regarding their academic performance. Based on the findings, the study recommended that counsellors as well as other educators should create enabling learning environment for students free of tension and unnecessary stress so as to minimize anxiety and amongst others.

Keywords: effects, causes, examination anxiety, university, students, academic performance

ⁱ Correspondence: email shamjaz16@gmail.com, lauratcj@gmail.com, mimimhammad22@yahoo.com

1. Introduction

Anxiety is a phenomenon that people frequently encounter in their daily life. Anxiety can be described as the tense, unsettling anticipation of a threatening but vague event; a feeling of uneasy suspense (Rachman, 2004). However, university students have a great deal to create anxiety, especially in study process. These are like difficulty of subjects, new roommates, identity crises, cultural shock, and relationship problems which increases anxiety. Anxiety disorders are rising among students (Leta, 2001). But keep feeling anxiety could interrupt students' academic performance. Individual with high anxiety levels have experience symptom age during university years.

Examination anxiety, which is also termed as "test anxiety" in research literature, is a state of uneasiness, worry or feeling of uncertainty about an impending or ongoing evaluation programme. Chapel et. al. (2005) posits that test anxiety as a multi-dimensional phenomenon that involves worry, emotionality, and behavioral reply to being preoccupied by the possible negative outcome of academic scores. Studies have shown that a high level of examination anxiety leads to poor academic achievement (Sweetnam, 2002). He maintains that examination anxiety "*affects both high achievers and low achievers with similar results; poor performance at evaluation time in school*". Thus, examination anxiety serves as stress, tension and strain that interfere with the proper functioning of an individual's body and mind. It is important to note that nowadays test or an examination has become an inherent part of our society. It has become more extensive not only in education but in every sphere of life and many important decisions are specifically based on test or examination results.

Moreover, tests are very important phenomena in schooling. Expectedly, students must take several tests in the course of their schooling as the results of such are essential for number of reasons. For instance, the results are used to make important decisions about students and educational programs including determining levels of curriculum mastery, report card grades, grade level promotions, honours, and graduation (Carter et. al., 2005).

However, academic performance is the highlight as a critical issue in the university. Research indicated that psychophysiology difficulties produce in turn affect the performance of students academically (McCarty, 2007), and also poor academic performance as defined by diagnosis of learning disability or multiple filled on academic subjects. Feeling anxious in the classroom did not enhance learning of any sites. Mostly students did not have awareness of examination anxiety disorders. Though, academic performance is a term used to describe the rating of a student

following an examination. This is an important aspect of a student's life and is known to be influenced by various factors including anxiety and level of hard work/preparations done prior to the examination (Eysench and Derkshen, 2009).

Therefore, many students experience examination anxiety especially in Nigeria where many examinations are centralized and highly competitive. For instance, examinations such as the West African School Certificate Examination (WASCE), National Examination Council (NECO), Unified Tertiary Matriculation Examination (UTME) and Post-UTME test are highly competitive and therefore stress the acquisition of knowledge at all costs by the students, since performance in these exams is necessary for obtaining admission for higher education at universities, polytechnics and colleges of education. An important factor that should be taken into consideration is examination anxiety. Coupled with the fact that students perceive examinations as a "do or die" affair in Nigeria and are therefore considerably pressurized to the extent that they experience high levels of stress, nervousness and apprehension while taking such examinations (Olaitan and Moroluyo, 2014).

Thus, that feeling of nervousness is perfectly normal response that nearly everyone experiences when faced with any challenging task. If these experiences persist, it can constitute a serious problem that can affect academic performance of the students involved, hence the need to pay attention to it. It is against this background that this study investigated the effects of examination anxiety on university students' academic performance in Northwest University, Kano, Nigeria.

However, examination or test anxiety as a phenomenon has received considerable attention since 1950s. It is considered to be a common educational problem, referring to a situation when students do not feel confident about their abilities, which is reflected especially in performance and test results. However, researchers in the field of education conducted several studies on anxiety and how it affected students' academic performance considering the fact that this phenomenon has a variety of sources. For example, Sansgiry and Karita Sail's conducted a study in 2006, who worked on test anxiety among pharmaceutical undergraduates at the University of Houston (Texas) reported that second year students manifested a higher level of test anxiety compared to students in other didactic levels. Davis, DiStefano and Schuntz (2008) supported this view in a study of 2,215 first-year college students (56% female and 44% male). The students were asked to complete the Cognitive-Appraising Processing Subscale of the Emotional regulation during Test Taking Scale (developed by Schuntz et. al., 2004) and the Test Anxiety Scale of learning and Study Strategies

Inventory (developed by Weinstains and Meyer, 1987). A strong correlation between test anxiety and SAT and general quantitative scores was discovered in the study.

Hassanzadeh, Ebrahimi and Mahdinejad (2012) find similar result in their study. According to them, the student's level of anxiety can cause a student's academic performance to suffer even more depending on the length of time they suffer from test anxiety. However, test anxiety according to some researchers, may be influenced by varied factors such as environmental factors (Aremu and Sokan, 2003); teacher factor and psychological factors within the students (Ngwoke, 2010).

Furthermore, researches of examination anxiety different possibilities have been examined. For example, some studies have identified the root of test anxiety as lying in students' poor preparation. Those studies suggest that some students ineffectively organize or process information and they perform poorly on examinations because of this. In Nigerian context, studies (e.g., Oludipe, 2009; Akanbi, 2010; Adewuyi, et. al., 2012) have also attested that low test-anxious students performed better than high test-anxious students on both numerical and non-numerical subjects. This could be because test anxiety makes it hard for students to concentrate on test and perform adequately (Onyeizugbo, 2010).

According to interference model, students with test anxiety focus on irrelevant stimuli; physical distractions and inappropriate cognitions, which negatively affect their performance (Sarason, 1975). This is not to say that some dosage of anxiety is not needed at all. Normally some degree of anxiety or arousal is needed by individual to succeed in academic endeavor (Farooqi, Ghani and Spielberg, 2012). Cassady and Johnson (2002) also reported that moderate, but low or high cognitive anxiety was related with high examination performance. This result has been found in many studies.

However, research indicates that anxiety affects students' performance negatively not only at secondary school but at the university level as well. The effects of examination anxiety on university students' academic performance as revealed by Eysench and Derkshen (2009) is not always obvious and new research funded by Economic and Social Research Council (2012) suggests that there may be hidden costs. The research found that anxious individuals find it harder to avoid distractions and take more time to turn attention from one task to the next than their less anxious peers. They further stated that a lot of the negative effects of anxiety appear to be caused by difficulties with controlling attention.

2. Statement of the problem

Research on examination anxiety in Nigeria seems to be limited. However, this phenomenon affects a considerable number of students and impairs their performance. Considering the fact that examination anxiety is a complex and problematic area, especially in a society like Nigeria where students at all levels display high test anxiety in their examination as a result of inadequate learning skills or insufficient preparedness, which on many occasions, results to weakened performance of students across all gender and the likes. Therefore, this study sought to determine whether there is difference between the causes as well as effects of examination anxiety on students' academic performance in Northwest University, Kano State, Nigeria.

3. Research Hypotheses

The following research hypotheses were formulated to guide this study:

H₀₁: There is no significant difference between the causes of examination anxiety of male and female students in Northwest University, Kano.

H₀₂: There is no significant difference between the effects of examination anxiety of male and female students in Northwest University, Kano.

4. Methodology

4.1 Research Design

This study employed descriptive survey research. Descriptive research design determines and reports the way things are (Mugenda and Mugenda, 2003). This research design is appropriate for this study because it involves an analysis about the effects of examination anxiety on university students' academic performance.

4.2 Population

The population of the study comprised all students studying at Faculty of Education, Northwest University, Kano, Nigeria. As at the time of this study, there were 1656 students in the three departments of Faculty of Education.

4.3 Sample size and sampling technique

The sample technique for the study was selected randomly from Faculty of Education, Northwest University, Kano. Based on Research Advisors (2006) recommendation the

appropriate sample size for the population of 1656 students is 350. However, purposive sampling technique was employed to sample 203 male and 147 female students respectively and this allowed for good sample presentation.

4.4 Instrument(s) for the Data Collection

The researchers developed a questionnaire for students titled; Effect of Examination Anxiety Questionnaire (EEAQ) as instrument for data collection. The questionnaire was subdivided into two sections; Section A was designed to collect respondents' personal data such as; gender, age and education level while section B consists of statements related to the variables of this study. On which the respondents were asked to indicate their opinion on modified four points Likert scale with close ended items as Strongly Agree (4), Agree (3), Disagree (2) and Strongly Disagree (1) points.

4.5 Validity and Reliability of the Instrument

Experts from department of Education Bayero University Kano and department of Arts and Social Sciences Education in Northwest University, Kano carried out face and content validity of the instrument. For reliability, the instrument was trail tested on twenty students in faculty of Social and Management Sciences which does not constitute part of this study. Cronbach Alpha reliability was used for pilot testing the instrument in regard to internal consistency of items and the result yielded an index of 0.83 reliability signifying good reliability index.

However, the questionnaire was self-administered by the researchers to the students and collected back on-the-spot after been duly completed to minimize loss of research instrument.

4.6 Data Analysis

The data collected was analyzed using independent sample t-test statistics in testing the stated hypotheses using Statistical Packages for Social Science (SPSS) version 16.

5. Results

H₀₁: *"There is no significant difference between causes of examination anxiety of male and female students in Northwest University, Kano."*

To test this hypothesis, the differences was determined using Independent sampled t-test at 0.05 level of significance as presented in table 1 below;

Table 1: Difference between of Male and Female Students on Causes of Examination Anxiety

Gender	N	Mean	Std. Dev.	Df	t-cal	sig.(2-tailed)	Decision
Male	203	19.83	3.17	348	-2.632	0.697	Accepted
Female	147	20.86	4.15				

As indicated in Table 1, it shows that female students have a mean of 20.86 and standard deviation of 4.15 while male students have a mean of 19.83 and standard deviation of 3.17. The result of the analysis revealed that mean scores of female students is significantly higher than the mean scores of male students. Where $t = -2.632$, $df = 348$, 2-tailed test and $P = 0.697 > \alpha = 0.05$. Therefore, the null hypothesis is accepted since $p > \alpha$. This means that there is no significant difference between male and female students on causes of examination anxiety. The difference was in favour of female students showing higher mean than their male counterpart indicating lower level of causes of examination anxiety.

H₀₂: *“There is no significant difference between the effects of examination anxiety of male and female students in Northwest University, Kano.”*

To test this hypothesis, the differences was determined using Independent sampled t-test at 0.05 level of significance as presented in table 2 below;

Table 2: Difference between of Male and Female Students on Effects of Examination Anxiety

Gender	N	Mean	Std. Dev.	Df	t-cal	sig.(2-tailed)	Decision
Male	203	16.52	2.12	348	-0.024	0.136	Accepted
Female	147	16.52	2.10				

As shown in Table 3, it indicates that male students have a mean of 16.52 and standard deviation of 2.12 while female students also has a mean of 16.52 and standard deviation of 2.10. The result of the analysis revealed that mean scores of male and female students is significantly the same. Where $t = -0.024$, $df = 348$, 2-tailed test and $P = 0.136 > \alpha = 0.05$. Therefore, the null hypothesis is rejected since $p > \alpha$. This implies that there is no significant difference between male and female students on effects of examination anxiety.

6. Discussion of Findings

Results from Table 1 of this study revealed that there was no significant difference between male and female students on the causes of examination anxiety. This result was supported by Hassanzadeh, Ebrahimi and Mahdinejad (2012) when they affirm that student's level of anxiety can cause a student's academic performance to suffer even more depending on the length of time they suffer from test anxiety. This result was also supported by Aremu and Sokan (2003) who revealed that examination or test anxiety may be caused or influenced by varied factors such as environmental factors, teacher factor and psychological factors within the students. (Ngwoke, 2010). Similarly, the finding also conforms with the work of Katja et. al. (2009) who observed that anxiety is common cause of poor academic performance among students.

Results from Table 2 of this study further revealed that there was no significant difference between male and female students on the effects of examination anxiety. This implies that gender does not have a significant effect in determining the academic performance of students. This is corroborated with the view of Eysench and Derkshen (2009) when they found that anxious individuals find it harder to avoid distractions and take more time to turn attention from one task to the next than their less anxious peers. They further stated that a lot of the negative effects of anxiety appear to be caused by difficulties with controlling attention. This finding is also in support with Sweetnam (2002) when he noted that examination anxiety *"affects both high achievers and low achievers with similar results; poor performance at evaluation time in school"*. Similarly, this finding was unlike studies by Mazumdar et al. (2013) which indicated that females were anxious than male students.

7. Conclusion and Recommendations

Examination anxiety, which is expressed as a state of uneasiness, worry or feeling of uncertainty about an impending or ongoing evaluation programme. And also a common problem faced by students during examination which negatively affects students' performance. However, in this paper we have examined the extent to which examination anxiety has effects on university students' academic performance. As most of the respondents did experienced anxiety during examination as well as during study process, where 75% of them agree and strongly agreed that they performed better when are not anxious than when they are anxious. Therefore, the study concluded that there is no significant difference between the effects and causes of examination anxiety of

male and female students. Based on the findings of this study, the researchers made the following recommendations:

- Students should be informed effectively on content, test techniques, examination format as well as type rating system in order to decrease examination anxiety and consequently improve their performance.
- Students should be prepared effectively for any examination so that they would be able to develop confidence in themselves and this may prevent examination related anxiety.
- Counsellors as well as other educators should create enabling learning environment for students free of tension and unnecessary stress so as to minimize anxiety.
- Further research should be conducted to examine the various intervention programs that may help students reduce examination anxiety and also improve their academic performance.

References

1. Adewuyi, T. O., Taiwo, O. K., & Olley, B. O. (2012). Influence of examination anxiety and self-efficacy on academic performance among secondary school students. *Ife Psychologia*, 20(2), 60-68.
2. Akanbi, S. T. (2010). Test Anxiety as a Correlate of Academic Achievement among Senior Secondary School in Ogbomoso Area of Oyo State. *African Journal of Educational Research*, 14(1&2), 89-97.
3. Aremu, A. O. and Sokan, B.O. (2003). A multi-causal evaluation of academic performance of Nigerians for National Development, In *Education this Millennium*. (Eds, Ayodele-Namisaie, O.I.A., Nwabueze, & Oladiran) MacMillan Nigeria Ltd. Ibadan
4. Carter, E. W., et. al. (2005). Preparing adolescents with high-incidence disabilities for high stakes testing with strategy instruction. *Preventing School Failure*, 49(2), 55-62
5. Cassady, J. C., & Johnson, R. E. (2002). Cognitive Test Anxiety and Academic Performance. *Contemporary Educational Psychology*, 27(2), 270-295.
6. Chapell, M. S., Blanding, Z. B., Silverstein, M. E., Takahashi, M., Newman, B., Gubi, A., McCann, N. (2005). Test Anxiety and Academic Performance in

- Undergraduate and Graduate Students. *Journal of Educational Psychology*, 97(2), 268-274.
7. Davis, H. A., DiStefano, C. and Schuntz, P.A. (2008). Identifying patterns of appraising tests in first-year college students: Implications for anxiety and emotion regulation during test taking. *Journal of Educational psychology*, 100(4), 942-960.
 8. Economic and Social Research Council (2012). *Anxiety's Hidden Cost in Academic Performance* Available at <http://www.sciencedaily.com> on January 17, 2017
 9. Eysenck, M. and Derkshen, N. (2009). *European Psychologist*. 14, 168-175,
 10. Farooqi, Y. N., Ghani, R. Spielberger, C. D. (2012). Gender differences in test anxiety and academic performance of medical students. *International Journal of Psychology and Behavioural Sciences*, 2(2), 38-43.
 11. Hassanzadeh, R. Ebrahimi, S., & Mahdinejad, G. (2012). Studying test anxiety and its relationship with self-efficacy, metacognitive beliefs and some effective predictable variables. *European Journal of Social Services*, 30(4), 511-522.
 12. Katja, B., Knappe S, Dipl, P. and Daniel S. (2009). Psychiatric Clinical. *North American Journal*, 32 483-524,
 13. Leta, S. (2001). Depression Rates among College Students on the Rise. *The Daily California*. Available at http://www.dailycal.org/article/6206/depression_rates_among_college_students_on_the_ris on January 12,2017
 14. McCraty, R. (2007). *When Anxiety Causes Your Brain to Jam, use Your Heart*. Institute of Heart Math. Available at http://www.heartmath.com/company/proom/archive/encounter_journal_brain_jam.html. on January 12, 2017
 15. Mazumdar, H. et al. (2013). *Advances in Applied Science Research*, 3 (1):399 –406
 16. Mugenda, O. M. and Mugenda. A. G. (2003). *Research methods; Qualitative and Qualitative Approach*. Nairobi; University press
 17. Ngwoke, D. U. (2010). Creating enabling environment for equity in gender participation in global economic system. *International Journal of Educational Research*, 10(2), 18-29.
 18. Olaitan, A. W. and Moroluyo, A. T. (2014). Contributions of Test Anxiety, Study Habits and Locus of Control to Academic Performance. *British Journal of Psychology Research*, 2(1), 14-24.

19. Oludipe, B. (2009), "Influence of test anxiety on performance levels on numerical tasks of secondary school physics students", *Academic Leadership*. Vol. 7 No. 4, pp. 23-28.
20. Onyeizugbo, E. U. (2010). Self-efficacy and test anxiety as correlates of academic performance. *Educational Research*, 1(10), 477-480.
21. Ranchman, S. (2004). *Anxiety*. (2nd ed). New York: Psychology Press Ltd
22. Sangiry, S. S. and Kavita Sail, B.S. (2006), "Effect of Student's perceptions of course loads on test anxiety", *American Journal of Pharmaceutical Education*, Vol. 70 No. 2, pp. 1-6.
23. Sarason, I. G. (1975). Test anxiety and the self-disclosing coping model. *Journal Consult Clinical Psychology*, 43, 148-152.
24. Sweetam, K. R. (2002). *Test Taking Strategies and Student Achievement*. Cloquet, Minncsola; Running Head

Creative Commons licensing terms

Author(s) will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Education Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflicts of interest, copyright violations and inappropriate or inaccurate use of any kind content related or integrated into the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).