

# **Relationship Between Test Anxiety and Academic Performance of Students in Selected Colleges of Education in North Western Nigeria**

**Dr. Jamilu Bello**

Department of Educational Foundations  
Yusuf Bala Usman College of Education and Legal Studies, Daura  
Katsina State, Nigeria  
Gmail;jamilufalale@gmail.com  
08155552170

---

## **Abstract**

This study examined the relationship between test anxiety and academic performance of students in selected Colleges of Education in North-Western Nigeria. A sample of 373 students was drawn from the population of 12,971 in four (4) selected Colleges of Education in North-Western Nigeria. The design used for the conduct of this study is descriptive design of the correlational type. This research design was used because it enables the researcher not only to observe methodologically existing attributes in the population but also to see correlation between some variables. Two instruments were used in obtaining the data for the study. Adopted version of Test Anxiety Inventory (TAI) to measure test anxiety and an adaptation of objective tests version in general education courses was used to measure academic performance of students. Three hypotheses were raised and tested and the results obtained showed that test anxiety and academic performance were positively related and significant for both the male and female students in the Colleges of Education in North-western Nigeria. Based on the analysis, it found that; Students' academic performance is related to their test anxiety also the test anxiety of the male students was not that significantly different from that of the female and the academic performance of the male students was not that significantly different from that of the female. Based on these findings therefore, it is recommended that effort should be made towards training in the development and sustenance of positive learning processes. Conclusively, emphasis was made on developing self-awareness among learners so as to produce learners who are emotionally stable, capable of controlling their anxiety, resilient to stress, rational in their thinking, flexible in their approach, confident in themselves, and with positive attitude towards themselves and their abilities.

**Key words;** Test anxiety, Students, College of Education, Nigeria

---

## **Introduction**

Education is the best fundamental tool for national development because no nation will develop without educating its youths therefore, education is very important in the country. The purpose of the educational experience is learning, a process through which students develop skills and knowledge through a variety of experiences that are designed and monitored by teachers Fafunwa(1976: 264-268). The best legacy a nation can give to her citizen is education. This is because the educational attainment of her citizenry and the quality of a nation's education determines the developmental strides of the nation. In Nigeria, education does not only provide knowledge and skills but also inculcates values, training of instincts and fostering right attitudes and habits to students (Onyango, 2017).

The out-come for the many students who pass through this system is to emerge with confidence as contributing members of their societies. In Nigeria, people are usually judged by what their achievements are, and how they compare with those of others, and how early they are able to attain success in life. A teacher in a professional usage is a person trained or recognized and employed to help learning in a classroom situation in order to achieve set educational goals. In ordinary usage

however, the term is often used to refer to anybody who imparts information or knowledge or merely instructs another (Adeyinka, 2002).

The implementation of any curriculum depends to a large extent on the availability of the right type of educational personnel and their willingness to impart the desired knowledge to a learner. The education for the good life has been one of the most persistent concerns of students' motivation throughout the ages (Fafunwa, 1976). Education is expected to affect behavior of educated people or the people being educated. Education is equated at times with achievement, certification or accomplishment (Salawu, 2000).

In Nigeria today, as in many other African countries, the society is more complex than it was in the past. This has inevitably meant that a more contemporary methods of solving problems need to be applied than the simple methods of the past. In Nigeria the fundamental objective of education is the ability of an individual to think and find new solution to his/her problems and society at large. According to Salawu (1993), teachers are the agents of socialization of their children; they shape the behavior of these children directly or indirectly. Children adopt values and behaviors similar to those of their teachers.

At all the level of education, educational measurement and evaluation plays significant role in quantifying categorically individual learner performance just as tests and examinations at all stages of education, especially at higher education level have been considered an important and powerful tool for decision making in our competitive society, with people of all ages being evaluated with respect to their performance, skills and abilities. Higher levels of anxiety may produce such symptoms as rapid heartbeat, sweating, increased blood pressure, nausea, and dizziness (Nicholson, 2009).

Test anxiety is bound to manifest among students anytime a test is sequenced, students continue to worry, a moderate anxiety is necessary to motivate excellent performance, but anxiety prompted by lack of preparedness for test has damaging effects on learners' academic performance. Meanwhile, pressure of scoring high in tests, fear of passing/failing a course, environment of the examination hall and lack of clarity in instruction for students are some of the reasons for test anxiety in students as a result of high anxiety level on undergraduate students' academic performance in educational courses in recent time.

Spielberger (1966; 1979) was one of the first researchers to investigate test anxiety in a systematic manner. In 1966, Spielberger conducted studies in which he selected 24 high anxiety students and 24 low anxiety students enrolled in introductory Psychology courses at Duke University and the University of North Carolina. Anxiety was determined using scores on the Taylor Manifest Anxiety Scale. Spielberger found that in testing situations, the higher anxiety group demonstrated overall poorer performance as task difficulty increased

According to Hansen (2000), student's academic performance depends on different socio-economic, psychological and environmental factors. The students performance is affected by different factors such as learning abilities because new paradigm about learning assume that all

students can and should learn at higher levels but it should not be considered as constraint because there are other factors like race, gender, sex that can affect students' performance. Adediwura and Tayo (2007) sees academic performance as the display of knowledge attained or skills developed in school subjects designed by test and examination scores or marks assigned by the subject teachers. They added that it could be any expression used to represent students' scholastic standard or average scores of students in an examination.

Poor academic performances among students in Colleges of Education are caused by complex and diverse factors. Thus, Bakare (1986: 96) grouped the factors into four major groups of factors resident in the society which include anti-intellectual value, ethnic conflicts, inequitable distribution of resources etc; factors resident in the school such as deficient physical environment, poor quality teaching, inadequate teaching equipment etc.; factors resident in the family which include nature of discipline, family relationships, socio-economic status etc, and factors resident in the child which include personality factors, deficient examination strategies, lack of basic cognitive skills etc.

### **Statement of the Problem**

Many teachers are not efficient in terms of selecting the method which they should apply for a particular group to encourage learning in students. This is because students, by consideration, are not from same background. Therefore, their knowledge, experience, home background, age, interest and many more must differ. From, experience and reports, the researcher noted that students in the area of study used to get agitated whenever the issue of assessment came up. And this, somehow, results in poor performance not necessarily because of them being poor performing students but, just due to their anxious state of mind. Thus, positive test anxiety leads students to develop such traits as self-confidence and the ability to see themselves realistically, they can then assess their relationship with others accurately and this lead to good academic performances. When on the other hand the test anxiety is negative, students develop feeling of inadequacy and inferiority. They are uncertain and lack confidence. This leads to poor academic performances in colleges of education in Nigeria.

### **Research Questions**

In order to carry out this research study, the researcher set to find answers to the following questions:

1. Is there any relationship between test anxiety and the academic performance of the students in Colleges of Education in North-western Nigeria?
2. Is there any difference between male and female students' test anxiety in Colleges of Education in North-western Nigeria?
3. Is there any difference between male and female students' academic performance in Colleges of Education in North-western Nigeria?

### **Research Objectives**

It is the objectives of this study to find out:

1. If there is any relationship between test anxiety and academic performance of students in the Colleges of Education in North Western Nigeria.

2. If there is any difference between male and female students' test anxiety in Colleges of Education in North-western Nigeria.
3. If there is any difference between male and female students' academic performance in Colleges of Education in North-western Nigeria.

### Research Hypotheses

In order to provide answers to the research questions stated earlier, the following hypotheses are formulated to guide the study:

**H0<sub>1</sub>** There is no significant relationship between test anxiety and academic performance of students in Colleges of Education in North-western Nigeria.

**H0<sub>2</sub>** There is no significant difference between male and female students' test anxiety in Colleges of Education in North-western Nigeria.

**H0<sub>3</sub>** There is no significant difference between male and female students' academic performance in Colleges of Education in North-western Nigeria.

### Research Design

The design used for the conduct of this study is descriptive design of the correlational type. This research design was used because it enables the researcher not only to observe methodologically existing attributes in the population but also to see correlation between some variables. The design also permits the researcher to measure a great number of variables and their interrelationships at the same time (Gaille, 2020). In this study, the variables of interest under study are students' test anxiety and academic performance. Measure of students' test anxiety is the independent variable because it is antecedent to academic performance which is the dependent variable

### Research Methodology

The data was collected by the researcher and his research assistances using face to face and direct delivery techniques in administration and collection of the questionnaires so as to ensure significant return rate of the completed questionnaire. The respondents' were advised in order to give sincere responses as the exercise is basically for research purpose and academic assessment only.

### Population of the Study

The populations of this study were Nigerian Certificate in Education students (NCE II) from Colleges of Education in the North-western part of Nigeria. In all, there are a total of fifteen (15) Colleges of Education in the North-Western Nigeria with their population of 41,200 NCE II students. The Colleges of Education are of three categories; Federal, States' and private (males and females) students.

**Table 3.2:** Students' Population of Fifteen (15) Colleges of Education in the Seven (7) States

S/N	College of Education	Males	Females	Total
1.	Shehu Shagari College of Education (SSCOE), Sokoto State	945(2.3%)	522(1.3%)	1, 467(3.6%)

2.	Zamfara State College of Education, Maru	1, 029(2.5%)	203(0.5%)	1,232(2.9%)
3.	IsahKaita College of Education (IKCOE), Dutsinma. Katsina State	1, 905(4.6%)	601(1.5%)	2, 506(6.1%)
4.	Sa'adatuRimi College of Education, Kumbotso. Kano State	4,900(11.9%)	2,866(6.9%)	7,766(18.8%)
5.	Adamu Augie College of Education (AACOE),Argungu. Kebbi State	1, 045(2.5%)	656(1.6%)	1, 701(4.1%)
6.	Jigawa State College of Education, Gumel	1, 454(3.5%)	791(1.9%)	2,245(5.4%)
7.	Kaduna State College of Education (KSCOE) GidanWaya, Kafanchan	2,193(5.3%)	1,661(4.0%)	3,854(9.4%)
8.	College of Education, Kazaure, Jigawa State	1,026 (2.5%)	452(1.1%)	1,478(3.6%)
9.	Federal College of Education (FCE) Zaria, Kaduna State	1,750(4.2%)	1,115(2.7%)	2,865(6.9%)
10.	Biga College of Education, Sokoto	657(1.6%)	325(0.8%)	9,82(2.4%)
11.	Jama'atu College of Education (JACE), Kaduna	943(2.3%)	556(1.3%)	1,499(3.6%)
12.	Federal College of Education (Technical), Bichi Kano State	2,340(5.7%)	1,655(4.0%)	3,995(9.7%)
13.	Federal College of Education (Technical), Gusau	900(2.2%)	420(1.0%)	1,320(3.2%)
14.	Federal College of Education (FCE) Kano City	3,560(8.6%)	2000(4.9%)	5,560(13.5%)
15.	Federal College of Education (FCE) Katsina	1,878(4.6%)	852(2.1%)	2,730(6.6%)
	<b>Total</b>	<b>26,525</b> <b>(64.4%)</b>	<b>14,675</b> <b>(35.6%)</b>	<b>41,200</b> <b>(100%)</b>

**SOURCE:** Research and Statistics Units of the States' Ministries of Education, Ministries for Higher Education, and Ministries for Science and Technical Education Boards (2023)

### Sample and Sampling Techniques

Sample for the study was drawn from the entire population, which served as representative of the population from which results were obtained. Deliberately, four (4) states' Colleges of Education were selected for the study. A purposive sampling technique was used to obtain the sample of the NCE II students from those Colleges of Education. Furthermore, it is to be noted that in each of the College, the Schools of Early Childcare Education and Primary Education Studies were used.

In each of the schools, two (2) Departments; Department of Early Childcare Education (ECCE) and the Department of Primary Education Studies (PES) were also selected. This is in consideration of the fact that all the selected Colleges of Education have these Departments. The sample size of 373 was used in line with Krejcie and Morgan's (1970) Table for determining sample size. The distribution determined the number of students' sample size from each of the selected College of Education in North-western Nigeria.

The researcher's intention to select four (4) States' Colleges of Education out of the fifteen (15) Colleges of Education in the seven (7) states was through the direct and purposive technique and is what (Fox, 1969) called deliberate selection. Consequently, the four (4) states Colleges of Education formed the sample of the study. Thus, a total number of twelve thousand nine hundred and seventy-one (12,971) students in the four (4) selected States' Colleges of Education in North-western Nigeria.

Furthermore, proportionate sampling method was used to pick the sample size from each College of Education. Consequently, the total number of the population in the four (4) selected states' Colleges of Education was twelve thousand nine hundred and seventy-one (12,971) students and the total number of the students sampled from the (4) Colleges of Education was three hundred and seventy-three (373) students.

### **Instrumentation**

To achieve the objectives of this study, two (2) sets of instruments were used in measuring students' test anxiety and their academic performance. These instruments were adopted by the researcher.

### **Description of Test Anxiety Inventory (TAI)**

The Test Anxiety Inventory (TAI) (Spielberger et al., 1980), a tool that measures individual differences in test anxiety, was used to measure test anxiety. The tool requires participants to report how frequently they experience specific anxiety symptoms in test-taking situations. Each item on the tool has a possible score of one (least anxious) to four (most anxious). An example of a statement on the TAI is "During examinations I get so nervous that I forget facts I really know".

### **Validity and Reliability of Test Anxiety Inventory**

The validity of the Test Anxiety Inventory was originally established using correlations with six other anxiety measures and 4 measures of personality (Spielberger et al., 1980). The anxiety measures used were the Test Anxiety Scale, the Worry and Emotionality Questionnaire, the State-Trait Anxiety Inventory (Anxiety Trait and Anxiety state scales), and the Exam anxiety Scale. According to (Spielberger et al., 1980) the 20 items were checked and validated by a group of expert at the Drake University, U.S in the Department of Education. Furthermore the 20 items were checked and revalidated again by some experts/lecturers in the Department of Educational foundation, Usmanu Danfodiyo, University Sokoto, Nigeria, that the instruments is OK, the quality of the items and the instrument reported that, the TAI has construct validity. Therefore, the instrument was judged to be valid, thus the current researcher adopted it for use in this study

TAI test-retest reliability for college students after three weeks was .80 (Spielberger et al., 1980). The alpha coefficients for five normative samples ranged from .92 to .96. The Test Anxiety Inventory (TAI) has meaningful structures, adequate internal consistency, and good term test re-test reliability and good longer-term stability as adopted by (Spielberger et al., 1980). Furthermore, in adopting this, instrument, new reliability was determined by test-retest method whereby it was re-tested in some Colleges of Education in north western Nigeria; Jigawa State College of Education, Gumel, Kano State and Kaduna State College of Education (KSCOE) GidanWaya, Kafanchan. A reliability index of .83 was realized, and thus the current researcher adopted it for use in this study.

### **Administration of Test Anxiety Inventory**

The administration of test anxiety inventory is in line with Likert scale style based on (Almost Never, Sometimes, Often and Almost Always) therefore, The TAI is a 20-item paper and pencil test that takes 5-10 minutes to administer and measures two major components of test anxiety: worry and emotionality. The tool requires participants to report how frequently they experience specific anxiety symptoms in test-taking situations. Each item on the tool has a possible score of one (least anxious) to four (most anxious). An example of a statement on the TAI is "During examinations I get so nervous that I forget facts I really know." The respondents will be given 20 minutes to respond to the questionnaires, and then to collect back serially from the respondents to allow easy assessment.

### **Description of Academic Performance Test**

The researcher adapted versions of General Education examination questions to come up with the academic performance test. The academic performance test includes questions from general education courses of guidance and counseling, educational psychology, educational technology, sociology of education, curriculum studies, philosophy of education, research in education e.t.c. NCE II syllabus were used to measure their academic performance; this is because all the students irrespective of their departments, offer these general Education courses. The justification for using the objective tests is that the questionnaires and marking schemes as well as marked scripts are moderated by experts in Education.

### **Validity and Reliability of the Academic Performance Test**

The 50 items objective tests in General Education Courses test were checked and validated by some lecturers of the Department of Educational Foundations, Usmanu Danfodiyo University, Sokoto. The syllabus of NCE II Students was used by the researcher in developing the test and then it was revalidated by the same experts/lecturers. Their validation leads to a unanimous agreement of the test satisfying both content and face validities. This was considered adequate enough for use for the current study.

Using the measures of Pearson product moment correlation coefficient statistics, the designed test was administered by the researcher to a set of 222 students from Sa'adatu Rimi College of Education, Kano. After four weeks the same group of NCEII students sat again for a re-test of the same test items in order to ascertain the reliability of the items. At the end, the reliability of the tests on the test recorded a high co-efficient Alpha of 0.73, as reliability index. This was considered adequate enough for the conduct of the study.

### Method of Data Analysis

The results obtained from these instruments were subjected to Pearson product moment correlation coefficient 'r' statistics used for the hypotheses. The justification for using Pearson product moment correlation coefficient (PPMC) for the hypotheses was because these hypotheses are looking for correlation between two variables only.

### Data Presentation, Analysis and Discussion

**H<sub>01</sub>:** There is no significant relationship between test anxiety and academic performance of the students.

This hypothesis was tested by subjecting the test anxiety and academic performance scores of the students to a Pearson *r*-test analysis as shown in Table 1.

**Table 1: Relationship of Test Anxiety and Academic Performance**

Variables	N	Mean	Std. Deviation	<i>r</i> -Cal	<i>p</i> -Value	Decision
Test Anxiety	373	78.08	28.913	.708	.000	H <sub>0</sub> Rejected
Academic Performance	373	75.05	33.732			

Source: Fieldwork (2024)

$\alpha \leq 0.05$

From the result of table 1, test anxiety and academic performance were positively related and significant,  $r(371) = .708, p < .05$ . Because the *p*-value is less than the .05 level of significance, it indicates that students' test anxiety is related to their academic performance. Therefore, H<sub>01</sub> which states that there is no significant relationship between test anxiety and academic performance of the students was rejected.

**H<sub>02</sub>:** There is no significant difference between male and female students' test anxiety in Colleges of Education in North-western Nigeria.

This hypothesis was tested by subjecting the test anxiety of the male and female students to a *t*-test analysis as shown in Table 2.

**Table 2: Gender Difference in the Test Anxiety of the Students**

Variables	N	Mean	Std. Deviation	<i>t</i> -Cal	<i>p</i> -Value	Decision
Male	217	77.75	28.678	-.258	.797	H <sub>0</sub> Accepted
Female	156	78.53	29.323			

Source: Field Work (2024)

$\alpha$ -value= 0.05



Results on table 2 show that difference between male (Mean = 77.75) and female (Mean = 78.53) students' test anxiety was not significant,  $t = (371) -.258; p > 0.05$ . Thus, the hypothesis is accepted. This indicates that there is no significant difference between male and female students' test anxiety because the p-value of .797 was more than the  $\alpha$ -value of 0.05 level of significance. This implies that no significant difference exists between male and female students' test anxiety.

**H0<sub>3</sub>:** There is no significant difference between male and female students' academic performance in Colleges of Education in North-western Nigeria.

This hypothesis was tested by subjecting the academic performance of the male and female students to a *t*-test analysis as shown in Table 3.

**Table 3: Gender Difference in the Academic Performance of the Students**

Variables	N	Mean	Std. Deviation	<i>t</i> -Cal	<i>p</i> -Value	Decision
Male	217	74.70	34.498	-.238	.812	H <sub>0</sub> Accepted
Female	156	75.54	32.741			

Source: Field Work (2024)

$\alpha$ -value= 0.05

Results on table 3 show that difference between male (Mean = 74.70) and female (Mean = 75.54) students' academic performance was not significant,  $t = (371) -.238; p > 0.05$ . Thus, the hypothesis is accepted. This indicates that there is no significant difference between male and female students' academic performance because the p-value of .812 was more than the  $\alpha$ -value of 0.05 level of significance. This implies that no significant difference exists between male and female students' academic performance.

### Summary of Findings

Based on the analysis, the following are the summary of the major findings of this study.

1. Students' academic performance is related to their test anxiety.
2. The test anxiety of the male students was not that significantly different from that of the female.
3. The academic performance of the male students was not that significantly different from that of the female.

### Discussion of Findings

From the analyzed data, this study indicated that test anxiety of students is related to their academic performance in Colleges of Education in North-western Nigeria. In this respect, a notable study that give support to the finding that test anxiety of students is positively related to their academic performance is the one by Hassan and Ravi (2022) where results revealed that there is a significant and positive relationship between test anxiety in relation to academic achievement of secondary school students. Furthermore, results from von der Embse, Jester, Roy and Post (2018) indicated that test anxiety was significantly and negatively related to a wide range of educational performance outcomes. Another notably study is that by Amalu (2017) which noted that for some students, the mention of tests, examinations or thinking about assessments or assignment deadline

trigger off some feeling of uneasiness and nervousness which may affect performance if allowed to become too much. Additionally, the study by Sridevi (2013) lent support to the finding by showing that there is a positive high correlation between general anxiety and test anxiety. However, studies that are not supportive of this finding include that of Arya and Aujla (2024), Rehman, Javed and Abiodullah (2021), Okogu, Mark and Umudjere (2016), Salihu, Atiku and Bala (2016), Senthil and Kadhiraavan (2015), Steinmayr, Crede, McElvany and Wirthwein (2015), and that of Putwain (2008).

The study further indicated that there is no significant difference between male and female students' test anxiety and academic performance. These findings are supported by the works of Rehman, Javed and Abiodullah (2021), Alemu and Feyssa (2020), Salihu, Atiku and Bala (2016), and that of Senthil and Kadhiraavan (2015) where they pointed out that females show significantly higher test anxiety level compared to male students. The studies also indicated differences in the academic performance between the sexes.

### **Implications for Counselling**

Based on the findings of study, the researcher is implying that since it was established in this study that test anxiety of students is related to their academic performance, school counselors should employ the extensive use of individual and group counselling techniques to help students improve on their school adjustment towards devising personal means of overcoming test anxiety in order to improve upon their academic performance. Thus, school counselling programmes should apply the tenets of existing counseling theories such as the eclectic counselling theory of Fredrick Thorne (1945-1980). Consequently, school counselors could help learners to be logical in their approach to all academic problems using their intellectual resources thereby freeing themselves from emotional anxiety which is detrimental to good academic performance. Thus, this study will enable guidance counselors to understand the need to encourage students to face academic work positively by helping them to develop self-awareness, self-understanding and self confidence which are essential for success in school.

### **Conclusion**

Emphasis was made on developing self-awareness among learners so as to produce learners who are emotionally stable, capable of controlling their anxiety, resilient to stress, rational in their thinking, flexible in their approach, confident in themselves, and with positive attitude towards themselves and their abilities.

### **Recommendations**

The study forwarded the following recommendations:

1. The need for teachers, parents and counsellors to work hand in hand in finding ways through which students' test anxieties should be greatly reduced and managed considering the psychological factors leading to severe test anxiety among students.
2. Students to be empowered to understand the importance and power of their individual personalities as vital in maximally achieving in all aspects of life and encourage students to thoroughly study in order to increase their confidence level and leave no room for self-doubt or self-defeating behavior

3. Parents, governments and other relevant stake holders should ensure that students are provided with all opportunities to improve upon and build better socio-economic standings so as to ensure taking adequate care of educational responsibilities.

## References

- Adediwura, A. &Tayo, B. (2007). Perception of teachers' knowledge attitude and teaching skills as predictor of academic performance in Nigerian secondary schools. *Educational Research and Review*, 2, 165-171.
- Adeyinka, A. (2002). Teacher Quality and Quantity as correlates of Secondary School Students' academic Performance. *The Nigerian Journal of Guidance and counseling*, 8(1), 98 – 111
- 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.
- Amalu, M. N. (2017). Cognitive Test Anxiety as a Predictor of Academic Achievement among Secondary School Students in Makurdi Metropolis, Benue State. *International Journal of Scientific Research in Education*, 10(4), 362 – 372.
- Arya, R. & Aujla, G. K. (2024). Association of Academic Achievement with Intelligence and Anxiety among Undergraduate Students. *Educational Administration: Theory and Practice*, 30(5), 8299-8308. Doi: 10.53555/kuey.v30i5.4350
- Bakare, C.G.M. (1986). *Construction and Validation of Student Problem Inventory*. Ibadan: Psycho- Educational Research Productions.
- Fafunwa, B. A. (1976). *History of Education in Nigeria*. London: Allen and Unwin.
- Hansen, J.B. (2000). *Students Performance and Student Growth as measure of Success: An Evaluator's Perspective*. Paper Presented at Annual Meeting of the American Education Research Association, New Orleans, Louisiana, April 25, 2000.
- Hassan, D. & Ravi, K. (2022). A Study of Relationship between Test Anxiety and Academic Achievement of Secondary School Students. *International Journal of Multidisciplinary Educational Research*, 11(3[7]), 14 – 19. DOI: <http://ijmer.in.doi./2022/11.03.123>
- Nicholson, A. M. (2009). Effect of test anxiety on student achievement (ACT) for college bound students. *Dissertation Abstract International*. DAI-A-70/70, AAT 3366126.
- Okogu, J. O., Mark, O. &Umudjere, S. O. (2016). Examination anxiety and students' academic performance: Social studies approach. *International Journal of Educational Policy Research and Review*, 3 (1), 1 – 5.
- Onyango, G. (2017). The impact of socio-economic status on academic performance of students in west Budama constituency, Tororo District, Uganda. *Journal of Education and Evaluation*, 4 (6), 34 – 45
- Putwain, D. (2008). Test anxiety and GCSE performance: The effect of gender and socio-economic background. *Educational Psychology in Practice*, 24(4), 319-334. DOI: 10.1080/02667360802488765
- Rehman, S., Javed, E. &Abiodullah, M. (2021). Effects of Test Anxiety on Academic Achievement at Secondary School Level in Lahore. *Bulletin of Education and Research*, 43 (3), 67 – 80.
- Salawu A. A. (1993). Relationship between Adolescent Perceptions of Parents' Behavior and their Self-Concept. *Ife PsychologiA: An International Journal*, 3(2); 148-162.

- Salawu, A. A. (2000). The impact of Home Background on Academic Achievement and Its Implication for counseling. *Sokoto Educational Review*, 4, 55-59
- Salihu, A. G., Atiku S. & Bala, M. A. (2016). *Relationship between tests anxiety and students' academic achievement in educational measurement and evaluation in Usmanu-Danfodiyo University Sokoto State*. Work submitted to the Faculty of Education and Extension Services, Usmanu Danfodiyo University Sokoto.
- Senthil, J. K. & Kadiravan, S. (2015). Personality and Test Anxiety of School Students. *International Journal of Education and Psychological Research*, 4 (2), 9 – 13.
- Spielberger, C. D., Gonzales, H. P., Taylor, C. J., Anton, W. D., Algaze, B., Ross, G. R., & Westberry, L. G. (1980). *Test anxiety inventory*. (Available from Consulting Psychologists Press, Inc., 3803 E. Bayshore Road, Palo Alto, CA 94303)
- Sridevi, K. V. (2013). A Study of Relationship among General Anxiety, Test Anxiety and Academic Achievement of Higher Secondary Students. *Journal of Education and Practice*, 4 (1), 122 – 130
- Steinmayr, R., Crede, J., McElvany, N. & Wirthwein, L. (2015). Subjective Well-Being, Test Anxiety, Academic Achievement: Testing for Reciprocal Effects. *Frontiers in Psychology*, 6(1994).doi:10.3389/fpsyg.2015.01994
- von der Embse, N., Jester, D., Roy, D. & Post, J. (2018). Test anxiety effects, predictors, and correlates: A 30-year meta-analytic review. *Journal of Affective Disorders*, 227, 483 – 493. <https://doi.org/10.1016/j.jad.2017.11.048>