



## EXPLORING TEST ANXIETY AND ACADEMIC ACHIEVEMENT AMONG STUDENTS OF FEDERAL COLLEGE OF EDUCATION GIDAN MADI, SOKOTO STATE

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### ABSTRACT

Test anxiety is a prevalent psychological issue that adversely affects students' academic achievement and well-being, particularly in tertiary institutions. This study examined the causes of test anxiety and its relationship with the academic achievement of students enrolled in the Nigerian Certificate in Education (NCE) program at the Federal College of Education, Gidan Madi, Sokoto State. A sample of 80 students was conveniently selected, and data were collected using a structured questionnaire adapted from Spielberger's Test Anxiety Inventory, complemented by semi-structured interviews with 30 students. The questionnaire demonstrated a test-retest reliability of 0.85. Quantitative results revealed a mean test anxiety score of 68.5, indicating high anxiety levels, while Pearson's correlation analysis showed a significant negative relationship between test anxiety and academic achievement ( $r = -0.45$ ,  $p = 0.01$ ), suggesting that higher anxiety is associated with lower achievement. Qualitative findings identified fear of failure, inadequate preparation, and socio-economic pressures as major sources of test anxiety. The study underscored the need for targeted interventions, including academic support programs, counseling services, and awareness initiatives, to alleviate anxiety and enhance student performance.

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### INTRODUCTION

Test anxiety is a pervasive issue in educational psychology, defined as the excessive fear and worry experienced by students in academic testing situations. It can significantly impair performance and lead to a range of emotional and physical symptoms, including nervousness, confusion, and even panic attacks (Mazzilli, 2021). According to research, test anxiety is not just a result of academic challenges



but is often tied to emotional regulation, cognitive appraisal of performance, and perceived consequences of failure (Yohannes , 2022).

Research suggests that test anxiety has cognitive, emotional, and physiological dimensions. Cognitively, students with test anxiety may experience disrupted attention and memory recall, leading to poor test performance despite adequate preparation (Zeidner, 2021). Emotionally, test anxiety often leads to feelings of helplessness and fear of failure, which can have long-term effects on a student's self-esteem and motivation (Putwain & Symes, 2020).

Test anxiety is an emotional, cognitive, and physiological reaction to evaluative situations which remains a persistent educational challenge worldwide and is particularly salient in college and university students in Nigeria. Test anxiety is commonly conceptualized as a multidimensional construct that includes worry (cognitive concerns about performance), emotionality (physiological arousal), and behavioral/phobic responses that impair performance (Spielberger, 2020; Cassady & Johnson, 2022). The cognitive dimension is often called cognitive test anxiety which has been shown to be especially detrimental to examination performance because intrusive worries and catastrophic thinking consume working memory resources needed for complex cognition (Cassady & Johnson, 2022). International research therefore distinguishes between the cognitive and somatic components of test anxiety and links higher cognitive anxiety to poorer test outcomes, maladaptive study behaviors (e.g., procrastination), and lower academic motivation (Cassady & Johnson, 2022; Spielberger, 2020).

In Nigeria the educational environment characterized by high-stakes examinations, intense competition for limited professional and employment opportunities, and cultural expectations linking educational success to social mobility which creates conditions that can amplify test anxiety in college students. Empirical Nigerian studies conducted across different regions and institutions report high prevalence of test/examination anxiety and highlight multiple proximal and distal sources. For example, a correlational study of undergraduates at Usmanu Danfodiyo University, Sokoto, found significant inverse relationships between test anxiety and both intrinsic and extrinsic academic motivation; the authors point to parental and institutional expectations, fear of failure, and anticipatory worry as common antecedents of test anxiety in their sample (Yawa, Martina, & Busari, 2023). Similarly, studies in other Nigerian tertiary institutions have linked test anxiety to poor study habits, low academic self-confidence, perceived instructor factors, and socio-economic stressors (Okobia & Oji, 2021; Oyama & Oyama, 2022). These Nigerian studies not only confirm the negative academic correlates observed internationally but also identify locally salient sources such as family honor/expectations, disruptions due to industrial actions or infrastructural deficits, and the disproportionate emphasis on terminal examinations for progression that require context-sensitive investigation.

A review of some Nigerian empirical literature points to at least four overlapping categories of sources



that together shape test anxiety in college students: (1) individual psychological factors, (2) academic and pedagogical factors, (3) socio-familial and cultural pressures, and (4) structural/institutional conditions. First, individual psychological factors include trait anxiety, low self-efficacy, maladaptive study habits (including procrastination), and comorbid mental health symptoms (e.g., depressive symptoms). Nigerian correlational studies commonly report that students with lower academic self-confidence and weaker study strategies report higher test anxiety and lower intrinsic motivation (Yawa, 2023). These individual factors are consistent with cognitive models of test anxiety that emphasize intrusive worry and self-evaluative concerns as mechanisms that reduce cognitive resources at test time (Cassady & Johnson, 2022; Spielberger, 2020).

Second, academic and pedagogical factors have been repeatedly implicated in Nigerian samples. Nigerian students often describe examinations as the dominant measure of success (high-stakes testing), and lecturers' pedagogical styles, unclear assessment expectations, and misalignment between coursework and examinations contribute to anticipatory anxiety. Empirical work in Nigerian universities and colleges has documented links between perceived exam importance, poor feedback, and increased worry about performance factors that drive both preparatory stress and on-test cognitive disruptions (Okobia & Oji, 2021; Chigbu, 2022). The literature suggests that curriculum overload, unclear marking schemes, and frequent high-pressure assessments elevate students' appraisal of threat, increasing physiological arousal and worry before tests. Third, socio-familial and cultural pressures exert a strong influence on students' test anxiety in Nigeria. Several Nigerian studies report that parental expectations, the social consequences of perceived failure (e.g., shame, reduced marriage prospects, or diminished family status), and peer comparison function as powerful motivators that can tip normal evaluative nervousness into debilitating anxiety. For many Nigerian college students the stakes of poor performance extend beyond individual achievement to perceived family honor and future financial stability; as a result, worry about disappointing significant others often surfaces as a recurrent source of test anxiety in qualitative and quantitative studies (Yawa 2023).

Beyond documenting sources, Nigerian research has begun to map mediating and moderating pathways. For instance, some studies indicate that academic motivation mediates the relationship between test anxiety and performance, students with higher intrinsic motivation may experience test anxiety differently than those driven by extrinsic rewards; conversely, poor motivation can magnify anxiety's negative effects on concentration and study persistence (Yawa 2023).

The general problem of test anxiety which is defined as a pattern of excessive worry, emotional distress, and physiological arousal that interferes with performance in evaluative situations becomes especially pronounced when examined within the specific context of college students in Nigeria due to the interaction of universal cognitive mechanisms and distinctive sociocultural and institutional pressures.



Globally, test anxiety arises when students appraise examinations as threatening to self-worth or future goals, triggering intrusive worry that disrupts concentration and working memory; however, in Nigeria this basic psychological process is intensified by an education system that places extraordinary weight on high-stakes examinations as primary gateways to academic progression, professional certification, and social mobility.

For Nigerian college students, examination outcomes often determine not only grades but also access to scarce employment opportunities in a highly competitive labor market, thereby magnifying fear of failure and performance-related worry. This pressure is further reinforced by strong familial and cultural expectations that equate academic success with family honor and economic responsibility, making poor performance psychologically costly beyond the individual student. Consequently, while test anxiety is a common phenomenon in students worldwide, its manifestation in Nigerian college students reflects a convergence of cognitive vulnerability, socio-familial obligation, and systemic constraints, narrowing the broad global problem into a context-specific issue that demands localized empirical investigation and targeted interventions within Nigerian higher education.

This study explores the sources of test anxiety in students of Federal College of Education, Gidan Madi, investigating factors such as personal beliefs, academic preparation, and socio-cultural influences.

### **Statement of the problem**

Despite the recognition of test anxiety as a significant barrier to academic success, little research has been conducted specifically on its sources in students of Federal College of Education, Gidan Madi Sokoto. Previous studies have largely focused on secondary and tertiary education levels, with a limited emphasis on the teacher training colleges. This research aims to fill this gap by exploring the sources of test anxiety in FCE students, considering factors such as personal characteristics, academic pressures, teaching methods, and socio-cultural influences. Understanding these sources is crucial for developing effective interventions to mitigate test anxiety and improve students' academic experiences.

The study examines the psychological, emotional, and social factors contributing to test anxiety in students of Federal College of Education, Gidan Madi Sokoto, while also identifying institutional and educational practices that may exacerbate or alleviate this condition. In doing so, the research will provide valuable insights into the ways in which the Nigerian educational system can better support students in managing academic stress, particularly in teacher training colleges.



## **Research Objectives**

The objectives of the study are:

1. To study the level of test anxiety in students of Federal College of Education, Gidan Madi.
2. To examine the relationship between test anxiety and academic achievement among students of Federal College of Education, Gidan Madi.
3. To explore the causes of test anxiety in students of Federal College of Education, Gidan Madi.

## **Research Questions**

1. What is the level of test anxiety in students of Federal College of Education, Gidan Madi?
2. What are the causes of test anxiety in students of Federal College of Education, Gidan Madi?
3. Is there significant relationship between test anxiety and academic achievement of students of Federal College of Education, Gidan Madi?

## **Hypothesis**

There is no significant relationship between test anxiety and academic achievement in students of Federal College of Education, Gidan Madi.

## **Methodology**

### **Research Design**

This study adopted a mixed-methods descriptive cross-sectional research design, integrating both quantitative and qualitative data collection techniques to provide a comprehensive understanding of the sources of test anxiety among students of the Federal College of Education (FCE), Gidan Madi, Sokoto State.

### **Population and Sample**

The target population comprised all students of the Federal College of Education, Gidan Madi. For the quantitative phase, a total of 80 students were conveniently selected. Convenience sampling was employed due to the accessibility and availability of participants, as many were not accessible at the time of the survey. For the qualitative phase, 30 students were conveniently interviewed.



## Instrumentation

A structured questionnaire, adapted from the Test Anxiety Inventory (TAI) developed by Spielberger (1980), was employed to assess students' levels of test anxiety. The instrument comprised Likert-scale items evaluating cognitive, physiological, and behavioral components of test anxiety. Content validity was established through expert review by specialists in Educational Psychology. Reliability was determined using the test-retest method, yielding a coefficient of 0.85. The questionnaire was administered twice, at a two-week interval, to students from the study population who were not part of the main sample, and the results were correlated to establish stability over time. Students' academic achievement was measured using their Grade Point Averages (GPAs), which were obtained from official college records to ensure accuracy and objectivity.

In addition to the questionnaire, semi-structured interviews were conducted to gather qualitative data on students' lived experiences and perceptions of test anxiety. The questionnaire was administered during regular class sessions with approval from the college authorities. Participants were informed about the purpose of the study, assured of confidentiality, and notified that their responses would be used strictly for research purposes. Interviews were conducted in private settings to ensure confidentiality and encourage open and honest responses.

## Methods for Data Analyses

Quantitative data were analyzed using the Statistical Package for Social Sciences (SPSS). Descriptive statistics (mean and standard deviation) were used to summarize levels of test anxiety, while inferential statistics, specifically the Pearson Product Moment Correlation (PPMC), were employed to examine the relationship between test anxiety and academic achievement. Qualitative data from the interviews were analyzed using thematic analysis, which involved coding, categorizing, and identifying recurring themes and patterns related to the sources and effects of test anxiety.

## Results

### Quantitative Findings

**Table 1: Mean Score for Test Anxiety in Students**

| Variable     | Mean | Standard Deviation |
|--------------|------|--------------------|
| Test Anxiety | 68.5 | 14.3               |

Table 1 shows that students have a mean test anxiety score of 68.5 with a standard deviation of 14.3, indicating that, on average, students experience a relatively high level of test anxiety. The standard deviation suggests that while most students' anxiety levels cluster around the mean, there is some



variability, with some students experiencing lower or higher anxiety than the average. Thus, this implies that test anxiety is a prominent concern among the student population, with a notable range of individual differences.

**Table 2: Pearson Product Moment Correlation (PPMC) between Test Anxiety and academic achievement**

| Variable          |       | p-value |
|-------------------|-------|---------|
| Test Anxiety      |       |         |
|                   | -0.45 | 0.01    |
| Acad. Achievement |       |         |

Table 2 shows the Pearson Product Moment Correlation (PPMC) between test anxiety and academic achievement. The correlation coefficient ( $r = -0.45$ ) indicates a moderate negative relationship, meaning that as students' test anxiety increased, their academic achievement tended to decrease. The p-value ( $p = 0.01$ ) is less than the standard significance level of 0.05, indicating that this relationship is statistically significant and unlikely to have occurred by chance. In practical terms, this suggests that higher levels of test anxiety negatively impact students' academic achievement

### Qualitative Findings

Themes emerging from the interviews included:

- 1. Fear of Failure:** Students expressed a deep fear of failing exams, linked to personal disappointment and family expectations. Example: "I am afraid to fail my examination, which makes me feel anxious whenever exams approach."
- 2. Inadequate Preparation:** Limited study time and resources contributed to anxiety. Example: "To be honest, I do not prepare in time whenever examinations approach, which is why I always feel worried."
- 3. Socio-Economic Pressure:** Financial difficulties forced students to balance academic work with part-time jobs, increasing stress. Example: "We normally do some work to support ourselves financially, and as a result, we hardly find time to study."

### Discussion

The findings suggest that test anxiety among students of Federal College of Education, Gidan Madi is high and influenced by both internal and external factors. Cognitive factors such as fear of failure and inadequate preparation were prominent contributors, consistent with previous studies highlighting the role of self-perception and expectations (Ayodele & Adeola, 2021; Alhassan, 2023).



Socio-economic pressures, including financial difficulties and the need to work part-time, were also identified as significant stressors, reinforcing the link between external life circumstances and academic anxiety.

The negative correlation ( $r = -0.45$ ,  $p < 0.01$ ) between test anxiety and academic achievement indicates that students with higher anxiety tend to perform worse academically. This aligns with prior research showing that excessive anxiety can interfere with concentration, memory, and exam performance (Mazzilli, 2021; Zeidner, 2021; Yohannes, 2022). Compared to Oyama (2022), who reported high test anxiety, the present study confirms a similar trend among college students, emphasizing the pervasive nature of this issue in higher education contexts.

## Conclusion

Test anxiety is a significant concern for students of Federal College of Education, Gidan Madi. Both internal factors (fear of failure, inadequate preparation) and external factors (socio-economic pressures) contribute to its prevalence. The negative impact of test anxiety on academic achievement highlights the need for targeted interventions, such as stress management programs, counseling services, and academic support strategies, to improve both student well-being and educational outcomes.

## Recommendations

1. **Academic Support:** Students should receive targeted support in study skills and time management to help reduce anxiety related to academic preparation.
2. **Counseling Services:** The College should provide access to counseling services to help students manage anxiety and stress.
3. **Parental and Societal Awareness:** Efforts should be made to reduce the societal pressure placed on students, particularly regarding academic achievement.

## References

- Alhassan, A., Ibrahim, M. S., & Bello, H. (2023). Mental health challenges in Nigerian students: Test anxiety and its impact on academic achievement. *Nigerian Journal of Psychology and Education*, 38(1), 47-59.
- Ayodele, O. T., & Adeola, E. O. (2021). Teaching methods and student anxiety in Nigerian higher



- education. *Journal of Educational Studies*, 33(4), 98-109.
- Beilock, S. L., & Ramirez, G. (2020). Test anxiety and its effects on learning and performance. *Current Directions in Psychological Science*, 29(3), 236-243.
- Cassady, J. C., & Johnson, R. E. (2022). Cognitive test anxiety and academic achievement. *Contemporary Educational Psychology*, 27(2), 270–295.
- Mazzilli, M. T., Gatti, M., & Rodrigues, L. M. (2021). Cognitive and emotional aspects of test anxiety. *Educational Psychology*, 31(2), 112-126.
- Oyama, A. D., & Oyama, G. A. (2022). Assessment of anxiety on test dishonesty in undergraduate students in University of Calabar, Cross River State, Nigeria. *British Journal of Education*, 10(4), 1–21.
- Okobia, D., & Oji, J. O. (2021). Test anxiety and academic achievement in undergraduate students in College of Education, Agbor, Delta State, Nigeria. *International Journal of Innovative Research and Development*, 10(11).
- Putwain, D. W., & Symes, W. (2020). Test anxiety and achievement: The role of self-regulation. *Learning and Individual Differences*, 78(3), 22-38.
- Spielberger, C. D. (2020). Preliminary professional manual for the Test Anxiety Inventory. Consulting Psychologists Press.
- Yawa, A. W., Martina, I., & Busari, A. (2023). Test anxiety and academic motivation in Usmanu Danfodiyo University students, Sokoto State, Nigeria. *Integrity Journal of Education and Training*, 7(3), 50–54.
- Yohannes, A., Hailu, M., & Zewdie, S. (2022). The impact of test anxiety on students' performance in Ethiopian universities. *Educational Psychology Review*, 34(4), 87-103.
- Zeidner, M. (2021). Test anxiety: *The state of the art*. Springer Science & Business Media.