

## Antecedent of Examination Anxiety among Students: The Way-Forward

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### Abstract

*Examination anxiety among students in Nigeria remains a major concern among education stakeholders. The phenomenon has been established with highly prevalent touch among Nigerian students with causal factors scattered around prevailing circumstances and individualistic experiences. This paper, a theoretical type however, examined “Antecedent of Examination Anxiety among Students: The Way-Forward”, and relied on existing literature and theoretical perspectives that explored variables under review. This study has therefore offered a nuanced understanding of the complex factors interplay for an explanation of students’ examination anxiety experiences with a prime aim of providing lasting solutions to the menace. Based on the revealing facts of challenges of examination anxiety among Nigerian students, it was recommended among other things that; students should be encouraged to adopt the option of counselling for proper guidance, students should be trained on how to apply the principle of good time management, the government should make learning environment be conducive for all learners, and the school counsellor should liaise with the appropriate stakeholders to identify the students with the challenge on time and give necessary assistance on it.*

**Keywords:** Antecedent, Examination Anxiety, Student, Way-forward

### Introduction

Examination anxiety is a prevalent issue affecting students across various educational levels. It is characterized by excessive worry and apprehension about academic assessments, which can significantly impact students' performance and well-being. Understanding the antecedents of examination anxiety is crucial for developing effective strategies to mitigate its adverse effects. This introduction explores the key factors contributing to examination anxiety among students and discusses potential pathways for addressing this issue.

Examination anxiety, also referred to as test anxiety, is a psychological condition where students experience heightened stress and unease related to academic testing. It can manifest in physical symptoms such as sweating and trembling, cognitive disruptions like impaired concentration, and emotional responses including fear and panic (Zeidner, 1998). This anxiety can interfere with a student's ability to perform to their full potential, leading to lower grades and a diminished sense of self-efficacy (Putwain, 2007).

### Concept of Examination Anxiety

The term examination anxiety has surfaced many times in educational literature due to that fact that many researchers and educational stakeholders picked up interest in it for multifarious reasons and prevailing circumstances. However, the construct ‘examination anxiety’ has been defined differently by researchers and academia based on certain criteria and yardstick that are so appealing to them. For instance, Okogu, *et.al.* (2016) described examination anxiety as a physiological condition in which people experience extreme stress, anxiety and discomfort during and/or before taking an examination. Examination anxiety has other names such as, anticipatory anxiety, situational anxiety or evaluation anxiety. Marsh (2017) viewed examination or test anxiety is a physiological over-arousal, tension and somatic symptoms, worry, dread, fear of failure and catastrophe that occur before or during of test situation. People experience extreme stress, anxiety and discomfort during or prior to the test due to its physiological effect.

There is no known genius among students however without a slight dose of examination anxiety within him or herself, but the experience becomes problematic or a menace when it erodes self-confidence and interferes with both the physiological and psychological well-being of the affected individuals. Nargis and Shilpi (2020) maintained in their study that contemporary society is best described for it test-oriented and test-consuming phenomenon where everyone lives in a test-conscious, test-giving culture that is pre-determined by the outcomes of performance in certain examinations. In this context, Nargis and Shilpi (2020) defined examination anxiety as an unpredictable worry about the consequences regarding performance, fear of being assessed, and apprehension connected to examination outcomes. The above-cited authors stressed further that this also includes irrational thoughts, unnecessary demands and expectations, and catastrophic predictions among others. From the above definitions of examination anxiety, it can be inferred that the term reflects the apprehensive feeling that students develop when faced with academic evaluation, test or exams which may manifest itself in individual in physical, emotional and cognitive form with resultant effect on academic performance, well-being and overall educational experiences. Conclusively, examination anxiety has measurable causative factors, that can be diagnosed by the experts in the field of counselling psychology and it can be treated with conscious interventional strategies under predefined behavioural outcomes and timing.

In the present time, examination anxiety has been studied from the “bio-psychosocial model” which hypothesizes the notion that examination anxiety reveals itself in an individual through behavioural, cognitive and physiological symptoms. In earlier studies, examination anxiety researchers interpreted this concept based on one dimension, but later on someone like Libert and Moris in 1967 divided it into two main components that is; “worry,” and “emotionality”, Sarason in 1984 divided it into “irrelevant thinking” and “worry”, Covington in 1985 used “worry” and “fear of failure”, while Hodapp and Benson in 1997 in their work used “distraction” and “low self-confidence” as the components of examination anxiety (Nargis & Shilpi, 2020).

From the available records, it can be inferred that the concept of examination anxiety has evolved over the years into a multi-layered idea which has resulted in responses from different components that include behavioural, physiological, emotional and cognitive components. Contemporary researchers utilize various instruments such as standardized measuring tools to investigate examination anxiety behaviour among students. However, according to Nargis and Shilpi (2020), the first known instrument for measuring examination anxiety was devised by Mandler and Sarason in 1952 which comprised 42 items aimed at measuring the experience before and during intelligence tests and course examinations, and six years later, another test anxiety scale consisting of 21 items, was developed by Sarason alone in 1958 which was expanded in 1972 by Sarason to 37 items. It is also on record that Suinn in 1969 developed a test anxiety behaviour scale consisting of 50 items, which acclaimed global recognition for its efficient assessment of students’ behavioural condition at the time of examination anxiety finally in 1980, Spielberger, et.al developed a test anxiety inventory (TAI) that was widely recognised as a standardized measurement scale for test anxiety, and it consists of 20 items that put worry and emotionality components into consideration (Nargis & Shilpi, 2020). Indeed, examination anxiety scales abound in foreign perspectives, but such instruments are rarely available in the Nigerian perspective.

### **Examination Anxiety Theoretical Perspectives**

Examination anxiety is a common issue among students and several theories have evolved to help explain its causes and effects. The following theories, however, are explored on examination anxiety.

#### ***Cognitive Appraisal Theory (Lazarus and Folkman):***

This theory suggests that anxiety arises from an individual’s evaluation of a situation. If students appraise an exam as a threat rather than a challenge, they are more likely to experience anxiety. Their belief in their ability to cope with the prevailing situation or on the other hand, lack of such ability, plays a crucial role in examination anxiety level. The concept of cognitive appraisal theory was advanced in 1966 by psychologist Richard Lazarus in the book entitled “Psychological Stress and Coping Process”. According to this theory, stress is perceived as the imbalance between

the demands that are so placed on the individual and the individual's resources to cope with such demands (Lazarus & Folkman, 1984).

The holds the view that the process of evaluating and interpreting stressful or threatening situations determines to a large extent, the emotional responses that an individual comes about such as examination anxiety. The theory is premised around the three components of an activating agent or a stressor that triggers a distressing response (stimulus), followed by cognitive appraisal which is the processing effect on available stimulus that is, its evaluation, putting into consideration some factors like; the relevance of the stimulus, the threat embedded in it, and the coping capacity to withstand the threat. The third component in this context is an emotional response, which results in experiences such as fear, anxiety and panic among other emotional responses. However, cognitive appraisal theory is helpful for not confined to discrete categorical emotions, but rather looking at a wide range of emotional experiences to account for examination anxiety, and giving explanations on why people may experience the same eliciting event but report different emotions, while its dimensional measures accounts for differences between emotions. On the other side of its credibility, quick and non-conscious appraisals may not be possible through this theory. Finally, this theory does not answer whether an individual can experience an emotion without any appraisal at all on it.

Richard Lazarus according to Gumban (2024) emphasized individual differences in the role of primary and secondary appraisals. While primary appraisals focus on the initial evaluation of a prevailing situation (for example, threat, loss, opportunity and so on), it is heavily influenced by a person's subjective evaluation, and secondary appraisals on the other hand, assess an individual's coping resources and ability to handle the situation. This multifaceted approach highlights the complexity of emotional experience, and perhaps understanding these different views as enshrined in the cognitive appraisal theory can be instrumental in therapists guiding clients toward healthier emotional responses.

***Test Anxiety Model (Charles Spielberger):***

Charles Spielberger's model focuses specifically on test anxiety and differentiates between trait anxiety (general tendency to be anxious) and state anxiety (anxiety in response to specific situations like tests). His theory highlights the cognitive and emotional components of test anxiety, including worry and emotionality. The test anxiety model of Spielberger is a prominent framework in psychology which gives a clearer picture of how anxiety affects performance on tests and other evaluative situations. Spielberger's model which was developed in the 1970s, differentiates between two types of test anxiety that is; state and trait anxiety.

Spielberger et al. (1970) referred to 'state anxiety' as a temporary, situational anxiety a person experiences in response to a specific test or evaluative situation which may vary depending on the context and the individual's current emotional state. For example, a student might feel high levels of state anxiety before an important exam but not during other times. The trait anxiety, on the other hand, is defined as a more stable characteristic of an individual, that is centred on a general tendency to experience anxiety across various situations, and not just during tests taking periods alone. People with high trait anxiety may be more likely to experience state anxiety and other forms of anxiety that are more broadly defined. Spielberger's test anxiety model emphasizes the distinction between temporary situational anxiety and more enduring personality traits, providing a framework for understanding and addressing test-related stress. The TAM remains one of the prominent psychological frameworks that account for how individual students experience anxiety in testing situations. The theory encapsulates three main components which are; cognitive (is concerned about; performance, self-evaluation, and fear of failure), affective (is concerned about; emotional responses such as apprehension, nervousness, uneasiness and tension) and the behavioural component (which involves; avoidance behaviours, procrastination, and performance deficits).

The model has practical applications for developing interventions to reduce test anxiety, such as relaxation techniques, cognitive-behavioural strategies, and test-taking skills. It provides a framework for designing programmes to help students manage their anxiety. Besides, the model has substantial empirical evidence which has validated its concepts and measures, and Spielberger's State-Trait Anxiety Inventory (STAI) has been widely used and tested in various contexts. The model has been criticized for emphasis on the State-Trait Anxiety Inventory (STAI) to measure anxiety, which

may not always capture the full range of an individual's anxiety experience and as such, these tools can be influenced by self-report biases and may not account for all situational nuances that surrounding the experience.

#### **Antecedents of Examination Anxiety**

**Academic Pressure and Expectations:** One of the primary antecedents of examination anxiety is the pressure to achieve high academic standards. Students often face expectations from parents, teachers, and themselves to excel academically. This pressure can create a fear of failure and contribute to anxiety (Parker, 2000).

**Previous Negative Experiences:** Past experiences with examinations play a significant role in shaping current anxiety levels. Students who have had negative experiences, such as poor performance or harsh feedback, may develop a heightened sense of dread towards future assessments (Hembree, 1988).

**Lack of Preparation:** Inadequate preparation is another critical factor. When students feel unprepared for an exam, their anxiety levels tend to rise. The feeling of being unprepared can stem from poor study habits, procrastination, or an inability to grasp the material (Cassady & Johnson, 2002).

**Test Anxiety Trait:** Some students may have a predisposed tendency towards anxiety, which can make them more susceptible to experiencing examination anxiety. This trait can be influenced by individual differences in personality and cognitive style (Sarason, 1984).

**Educational Environment:** The classroom environment and teaching methods also contribute to examination anxiety. A high-stakes testing culture, a lack of supportive teaching practices, and an overly competitive environment can exacerbate students' anxiety levels (Chamberlain, 2009).

There is no single factor that can be pinpointed as the sole cause of test or examination anxiety among students but rather a combination of many factors with negative consequences. However, educational literature has documented endless causal factors of examination anxiety among different categories of students. For instance, Nnorom, Anyanwu and Stephen (2020) in their study categorised such factors into student factors, school and parental factors with their antecedent effect on performance. Nargis and Shilpi (2020) stated that generally speaking, students feel the utmost fear of examination by anticipating their poor performances and failure, and this phenomenon causes examination anxiety more than anything in individual students. Moreover, the causal factors of this problem emanated from student' factors, school factors and parental factors, societal factors among other categorical factors that can cause examination anxiety

Among students. When looking for the causes of examination anxiety among students, it is advisable to look out for this from different dimensions both within and outside of the anxious persons.

Causes of examination anxiety have been well documented over the years in the works of different authorities most of which pointed to causal factors such as; poor study habits or ill-preparation, past experience of poor examination performance, and underlying anxiety disorder among other factors. Some situational causes of examination anxiety have been linked to lack of understanding of the subject matter, being unprepared, perfectionism (as most students who have high perfectionism and high self-criticism tend to have high examination anxiety and do worse on exams), feeling intimidated by taking exams in a crowded classroom and a poor testing history (Cherry, 2022). It is also on record that examination anxiety among students is caused by some mental variables such as low self-esteem or negative self-talk, fear of failure, a sense of being out of control, fear of disappointing significant others such as parents, teachers and peers, seeing grades as a measure of one's overall value and high expectations from performance (Cherry, 2022). For instance, students are far more likely to experience anxiety before and during an examination if they are preoccupied with the thought that they will perform poorly on it. People who suffer from anxiety have been discovered to have a persistent and overwhelming feeling of fear that prevents them from carrying out their normal daily activities (Robinson et al., 2013). From a psychological perspective, Sullivan claimed that anxiety may be passed from parent to child through the process of imitation (Kaela & Kathryn, 2016). Akinduyo et al. (2023) also revealed in their empirical study that although so many things are responsible for examination anxiety among students emerging facts about this challenge among students are that gender and age played a prominent role. It is evident, however, that previous studies did not agree on particular causes of examination anxiety among students and in this context, no generally agreed causes have been established for the concept under review.



### **Prevalence of Examination Anxiety among Students**

Studies abound around the world attempting to unveil the prevalence level of examination or test anxiety among students at different levels of education. Students around the world have been found experiencing examination anxiety at a point in time in their academic life (Dalkiran et al., 2014). Cassady (2014) stated that globally, between 25 and 40% of students struggle with examination anxiety while Alkowitz, et al. (2022) noted that between 15 and 20 per cent of high school pupils have severe examination anxiety around the globe. According to Bassey and Bassey (2018), the Nigerian experience was not different as examination anxiety was listed as one of the conditions that are contributing to poor learning outcomes among students which affects about 90% of students in both Rivers and Imo States. In a research conducted by Anosike, et al. (2022), the result indicated that anxiety symptoms were very common among students of higher institutions of learning in Nigeria. Peter (2020) noted that students had examination or test anxiety at all academic levels.

In the study conducted by Haruna, Gurjiya and Lukman (2023), it was revealed that examination anxiety was prevalent among undergraduates. However, their study unveiled further that the prevalence of examination anxiety among undergraduates did not differ on the basis of gender, age group, and students' faculty, whereas a significant difference was discovered among the various levels of the undergraduate programme in the university. From the global scene, Kavakci et al. (2014) affirmed that test or examination anxiety is somewhat more prevalent among students who intended to take university entrance examinations and this examination anxiety experience was more prevalent among female students than their male counterparts. Another study conducted among the Nigerian student population by Onukwufor and Ugwu (2018) suggested that examination or test anxiety was prevalent among students and female students had more prevalent experience than their male students counterparts in the previous studies. There are a crop of studies which have established the prevalence of examination anxiety among students all over the world few of them are the studies of; Nunez-Pena, et al. (2016); Abdel and Hassan (2017); Oladipo and Ogungbamila (2013) and Onukwufor and Ugwu (2018) all which have suggested high level of test anxiety among students. It therefore evident from all the available studies that students have not experienced equal levels of anxiety in the course of their examination and test-taking, even within the locality the experience was not tally. This might suggest that individualism arises in this context and no static benchmark can be used to study this variable across the board.

### **Manifestations and Effect of Examination Anxiety among Students**

Academic anxiety is a common issue that students cannot ignore if they want to achieve success in life in fact, studies have suggested that there are two main types of examination anxiety which include; disruptive anxiety (that is; a form of anxiety that affects an individual's behaviour before or during examinations which may hurt individual's performance in examination) and facilitative anxiety (that is; moderate or a normal level of anxiety that does not have a significant negative impact on an individual's performance in examination) (Haruna, Gurjiya & Lukman, 2023).

Educational literature has rolled out some signs and manifestations of examination anxiety among students. These comprise those that are expressible through physical symptoms, psychological and emotional symptoms and cognitive expressions. Physiologically, symptoms of examination anxiety may also include neurological, such as headache, paresthesia, fasciculation, vertigo, or presyncope before or during an examination; digestive, such as abdominal pain, nausea, diarrhoea, indigestion, dry mouth, or bolus; stress hormones released in an anxious state have an impact on bowel function and can manifest physical symptoms that may contribute to or exacerbate irritable bowel syndrome (IBS); respiratory, as shortness of breath or sighing breathing; cardiac, as palpitations, tachycardia, or chest pain before or during an examination; muscular, as fatigue, tremors, or tetany; cutaneous, as perspiration, or itchy skin; and urogenital, as frequent urination, urinary urgency, dyspareunia, or impotence, chronic pelvic pain syndrome (World Health Organization, 2016; Testa, et al., 2021).

Ugbe et al. (2020) found in their study that during test tasking, most students get so nervous that they forget some facts that they have previously learnt. Empirical studies which were conducted on examination anxiety indicated that both high and low levels of anxiety were the main obstacles that

negatively affect students' level of academic achievement and the accomplishment of their goals, however, a high level of examination anxiety obstructs students' ability to remember, think, judge and perform mentally accurately, and a low level of anxiety on the other hand, leads to weakening motivation, while a medium level of anxiety increases motivation, hence, examination anxiety can be considered as a motive or an obstacle to mental and academic achievement based on its severity level and the individual differences within the study groups in educational institutions at any learning stage (Haruna, Gurjiya & Lukman, 2023). If academic anxiety is not properly addressed, it can have many serious, severe and long-lasting consequences on students' academic activities.

According to Marsh (2017), anxiety contributed to students' low test and exam results. The psychological distress, academic underachievement, and failure that students experience are all related to examination anxiety. Reducing examination anxiety among Nigeria Certificate in Education (NCE) students thus because they are prospective teachers, whose role as facilitators of knowledge in the upcoming generation cannot be overemphasised. Should anxiety disrupt their performance in training but they manage to pass through; it may later impede their efficiency in imparting the knowledge in pupils. Hence, a need for psychological interventions to help NCE students overcome anxiety before, during and after examination periods. Some of the effective counselling approaches to reducing examination anxiety in students are problem-solving skills and self-instructional talk training; which are parts of the components of social cognition and cognitive behavioural process.

Nargis and Shilpi (2020) stated that examination anxiety is a major factor contributing to a variety of negative outcomes, including psychological distress, academic underachievement, academic failure, and insecurity among students. However, such a student with an optimum level of anxiety performs well in the examination but an excessive level of examination anxiety deteriorates the performance in the examination (Abbasi & Ghosh, 2020). It is glaring that without any underlying anxiety, many students can do well on their exams, but they perform poorly because of their debilitating levels of anxiety before and during the exams. Consequently, test anxiety may limit educational or vocational development, as test scores and grades influence entrance to many educational or vocational training programmes in modern society. However, by the experience of examination anxiety, every student has different symptoms and different levels of intensity. Shukla (2013) categorized these symptoms under four dimensions: i. Physical symptoms: the signs include; nausea or diarrhoea, extreme body temperature changes, dry mouth, headache, sweating, rapid heartbeat, shortness of breath, light-headedness; ii. Emotional symptoms: with signs such as; feelings of helplessness, anger, excessive feelings of fear, uncontrollable crying, disappointment, depression, iii. Behavioural symptoms: such as; substance abuse, fidgeting, avoidance, pacing, and finally, iv. Cognitive symptoms: signs such as negative thinking, difficulty of organizing thought, negative self-talk, racing thoughts, comparing oneself to others, going blank, difficulty in concentrating, and feelings of dread. Examination anxiety is a very serious problem of modern days and its consequences are found in several forms like trauma, psychological disorder, and suicidal thoughts, which call for proactive measures to curb its menace.

### **Solutions to the Problems of Examination Anxiety among Students**

Addressing examination anxiety requires a multi-faceted approach that includes both preventive and intervention strategies. Here are some effective ways to move forward:

**Promoting Effective Study Strategies:** Educators and students can benefit from focusing on developing effective study habits and time management skills. Providing resources and training on study techniques can help students feel more prepared and reduce anxiety (Wong & Csikszentmihalyi, 1991).

**Fostering a Supportive Environment:** Creating a supportive and low-pressure academic environment is essential. This includes implementing formative assessments that reduce the stakes of individual tests and encouraging a growth mindset (Dweck, 2006).

**Providing Psychological Support:** Schools should offer access to counselling services and stress management workshops. Teaching students coping mechanisms such as relaxation techniques, mindfulness, and cognitive restructuring can help manage their anxiety (Zeidner, 1998).

**Encouraging Parental Involvement:** Educating parents about the impacts of pressure and providing them with

strategies to support their children can help mitigate the external pressures that contribute to anxiety (Parker, 2000).

**Implementing Policy Changes:** Educational institutions may consider policy changes that reduce the emphasis on high-stakes testing and incorporate a broader range of assessment methods. This can help alleviate the anxiety associated with traditional exams (Chamberlain, 2009).

There are lots of strategies that can help the students to cope with their examination anxiety experience and reduce its levels. Previous researchers have documented some of the evidence-based solutions. For instance, Alkhawatli et.al (2022) stated adequate preparation for the test at hand is the best way to go and most the effective way to reduce test-taking anxiety. Those preparations include; giving oneself enough time to study, using appropriate study habits such as flow charts and diagrams, practising on old or past exam questions, organizing study groups with friends, making an organized studying schedule and sticking to it, positive thinking, maintaining regular exercise (a fitness-oriented exercise schedule has anxiolytic properties), asking for help avoid perfectionism and expect setbacks. Other vital things to avoid test-related stress include; getting enough rest and sleep before exams, avoiding using drugs, avoiding worrying about how fast other people finish their tests, ordering questions from less difficult to most difficult ones, taking good nutrients, and seeking counselling help.

Huntley, et.al (2019) in their study also affirmed that psychological interventions have been most commonly applied to treating test or examination anxiety among students. They maintained further that psychological interventions for examination anxiety fall into two broad categories: behaviour therapy (BT) and cognitive-behavioural therapy (CBT). BT focuses on reducing the affective or emotional dimension of TA, typically through relaxation techniques. The main interventions were progressive muscle relaxation which involves the sequential relaxation muscle groups or systematic desensitization which involves counterconditioning techniques to teach muscle relaxation while visualizing a hierarchy of increasingly stressful examination anxiety-related scenes. Further relaxation methods tested were cue-controlled relaxation which involves training to relax muscle groups in response to self-induced cues, or exposure-based interventions such as implosive therapy or flooding that involve real or imagined exposure to the feared object or situation and are underpinned by classical conditioning principles (Huntley, et.al, 2019).

Huntley, et.al. (2019) explained further that one of the most prominent interventions for anxiety disorders is CBT which is based upon the work of Beck and colleagues. Its main aim is to identify negative automatic thoughts (NATs) and cognitive distortions which lead to and maintain examination anxiety among students such as; 'overgeneralization', whereby individual students draw broad conclusions based on a single event (for example, a student getting a low grade and thinking that he is completely inadequate). Therapists guide clients to recognize and challenge their NATs by first labelling the cognitive distortion contained within NAT and then followed by logical disputation for example, exploring the evidence for and against the NAT, and finally, replacing those negative automatic thoughts with appropriate ones.

### **Conclusion**

The present study relied mostly on secondary information from empirical and theoretical studies of the previous researchers. From the review of different sources, this study concluded that examination anxiety is a general concern of students at all levels of education and it is caused by different factors within and outside the anxious individuals. It is a diagnostic in different forms of manifestations and can be treated in behaviourist and cognitive dimensions among other psycho-social treatment options under the supervision of professionals such as counsellors/psychologists.

Understanding the antecedents of examination anxiety is critical for developing effective interventions and support systems for students. By addressing factors such as academic pressure, previous negative experiences, preparation, individual traits, and the educational environment, we can work towards creating a more supportive and less anxiety-inducing academic experience. Implementing comprehensive strategies involving study skills enhancement, supportive environments, psychological support, parental involvement, and policy changes will be crucial in addressing and alleviating examination anxiety among students.

### Recommendations

This study having established the root causes of examination anxiety among students, it gives its recommendations as follows:

1. Students should be encouraged to adopt the option of counselling for proper guidance.
2. Students should be trained on how to apply the principle of good time management
3. The government should make the learning environment be conducive for all learners.
4. The school counsellor should liaise with the appropriate stakeholders to identify the students with the challenge on time and give necessary assistance on it.
5. Study groups should be held by competent students who have mastered the art of teaching better to influence others in the group.
6. Examination should be made in continuous assessment at all levels to avoid total failure.

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