

Correlational Study of Assertiveness and Test Anxiety among Undergraduates in Public Universities in Anambra State, Nigeria

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ABSTRACT

This study examined the correlation between assertiveness, and test anxiety among undergraduates in public universities in Anambra State, Nigeria. Total of 381 undergraduates selected through simple random sampling from Nnamdi Azikiwe University, Awka served as participants. The sample comprised 134 males and 247 females, aged 18–37 years ($M = 24.14$, $SD = 5.77$). Standardized measures were utilized, including the Rathus Assertiveness Schedule (measuring assertive behaviour), the Test Anxiety Inventory (evaluating test anxiety levels). A correlational research design was employed, and Pearson Product Moment analyses were conducted to test the study hypotheses. The findings revealed that assertiveness had significant negative relationship with test anxiety at $r(N=381) = -.09^* p < .05$ ($M: -6.00$, $SD: 23.85$). The study emphasizes the need for interventions to develop assertiveness order to reduce test anxiety among students.

Keywords: Assertiveness, Test Anxiety, Undergraduates, Public University, Anambra State

Introduction

The word test is known to evoke varying degrees of anxiety in students depending on the importance of the examination, perceived difficulty level of the subject, and degree of preparedness for the examination (Akinsola & Nwajei, 2013). Ironically, many undergraduates experience test anxiety before or even during an exam. In fact, a slight anxiety can actually help them to accomplish their best. However, when this distress becomes so excessive that it actually interferes with their performance on an exam, it is known as test anxiety. Therefore, test anxiety is defined as the fear students' harbour about negative results of the evaluative procedures (Rehman, et al., 2021). Rosado (2018), defined test anxiety as those overt and covert behaviours that do not in any way benefit the individual that accompany test taking and test preparation.

American Psychological Association (2023), defined test anxiety as tension and apprehensiveness associated with taking a test, frequently resulting in a decrease in test performance. Akshaya et al., (2021), saw test anxiety as a situation-specific personality trait generally regarded as having two psychological components: worry (Thoughts of doing poorly interfere with our concentration on tests) and emotionality (During tests we feel very tense'). Test anxiety is not something that happens just during examination, it can come before or on examination, hence Li et al., (2019), defined test anxiety as a combination of a confluence of physiological hyperarousal, tension, and bodily manifestations, with apprehension, trepidation, fear of inadequacy, and the tendency to magnify negative outcomes, which manifest before or during evaluative assessments.

Moreover, test anxiety is not the same as doing poorly on a certain test because your mind is on something else or as a result of lacking concentration. Most people know that having other things on their minds, such as a breakup, the death of someone close, etc, can interfere with their concentration and prevent them from doing their best on a test. Test anxiety is not when people fail to do well in examination because of one reason or the other. It is the tension that accompanies the test situation, which can reduce or alter performance (von der Embse, et al., 2018; Putwain, & Daly, 2014; Owens, et al., 2012; Zeidner & Matthews, 2011, Achebe & Onyemaechi, 2023).

Hence, test anxiety is a type of performance anxiety; a feeling someone might have in a situation where performance is important or when the pressure is on the person to do well. Test anxiety can as well be referred to the subjective experience of intense physiological, cognitive, and/or behavioural symptoms of anxiety before or during test-taking situations that interferes with test performance (Sawka-Miller, 2011). One thing that stands out from all definitions of test anxiety as we have seen above is that minimal anxiety either before or during a test is not bad, but having anxiety to the extent that it disrupts you from performing optimally is not good as such, and this is where test anxiety becomes pathological. It is no longer news that test anxiety has contributed in no small way to undergraduates' inability to perform at their best, it is then in view of remedying the situation that the current researcher has set out to investigate some variables to see

how far they will either correlate positively or negatively with test anxiety, such variable as assertiveness (Onyemaechi, 2025; Onyemaechi, et al., 2025)

Assertiveness is defined as the ability to reach one's goals for oneself through social interactions (Malti & Perren, 2011). It is the ability to express one's feelings and assert one's rights while respecting the feelings and rights of others (Pourjali & Zarnaghash, 2011). According to Pfafman, (2020), assertiveness entails properly expressing ideas, feelings, and boundaries while respecting other's rights, maintaining positive affect in the receiver, and considering potential consequences of the expression. Assertiveness is the ability to stand up for one's own rights or advocate for the rights of others in a calm, confident, and constructive manner, without resorting to aggression or passivity (Larijani et al., 2010; Law & Chan, 2015, Okonkwo, et al., 2023).

Assertive individuals express their thoughts, feelings, and beliefs openly, honestly, and respectfully, ensuring their perspective is heard without infringing on the rights or emotions of others. This balance allows them to communicate effectively, resolve conflicts, and build healthy interpersonal relationships. Key features of assertiveness include the ability to articulate needs and desires clearly, express emotions appropriately, and advocate for personal boundaries while respecting others. Unlike aggressive communication, which may involve hostility or dominance, or passive communication, which avoids confrontation at the expense of personal needs, assertiveness fosters mutual respect and understanding. For instance, assertive individuals are

able to decline unreasonable requests politely, negotiate compromises, and express disagreement without escalating tension. (Onyemaechi & Okafor, 2025).

Assertiveness is an essential personal and interpersonal skill, empowering individuals to act in their best interests and maintain healthy self-esteem. It also enhances decision-making, reduces undue anxiety, and supports the development of meaningful relationships. In academic or professional settings, assertiveness can be crucial for effectively voicing opinions, contributing to discussions, and managing conflicts constructively. Building assertiveness involves developing self-awareness, practicing clear and respectful communication, and learning to handle criticism constructively. Training programs, such as assertiveness workshops or counselling, often help individuals build these skills, enhancing both their personal and professional lives. By fostering a balance between self-advocacy and empathy, assertiveness promotes not only individual growth but also harmonious social interactions (Anazonwu, et.al, 2017)

Theoretical Framework

Aaron Becks theory has been adopted as the most appropriate theoretical model to be adopted for the present study. This is because this theory unified all the variables and tried to explain how each variable is linked to another. Aaron Beck's cognitive theory is primarily focused on understanding how our thoughts, beliefs, and perceptions influence our emotions and behaviours. One of the key components of Beck's theory is the concept of cognitive distortions, where

individuals develop biased or irrational ways of thinking about themselves, others, and the world around them. These distortions can lead to emotional disturbances such as anxiety and depression, and with the case in view, test anxiety. In Beck's cognitive theory, test anxiety can be understood as the result of cognitive distortions and negative automatic thoughts related to test-taking situations. These distortions may include catastrophizing about potential outcomes, overestimating the consequences of failure, or underestimating one's abilities. Hence, assertiveness can act as protective factors against test anxiety by influencing individuals' cognitive appraisals and coping strategies. Test anxiety, a common experience among undergraduate students, can be viewed through the lens of Beck's cognitive theory. Within the context of test anxiety, assertiveness can influence how individuals cope with stressors related to academic performance. Assertive individuals may be more likely to seek support from teachers or peers, ask questions when they are unsure, and communicate their needs for accommodations or assistance. This proactive approach to managing test-related stressors can help reduce feelings of anxiety by increasing individuals' sense of control and ability to address challenges effectively.

Method

Participants

A total of three hundred and eight one (381) undergraduates from Nnamdi Azikiwe University participated in the study. All participants were within 18-37 years. The mean age of the participants was 24.14 with standard deviation of 5.77. Two sampling techniques: purposive and

simple random samplings were used to select the participants at different stages. Purposive was used to select Nnamdi Azikiwe University in Anambra state, while simple random sampling was used in selecting the faculties and departments in the study. Taro Yamani formula was used in determining the minimum sample size: $n = 1 + N(e)^2$

Instruments

Two instruments were used in the study. The instruments were:

Test anxiety scale

The scale contains 20 items and was developed by Spielberger (1980). The items are scored on a 4 point Likert response pattern ranging from 1= almost never to 4= almost always. The aim of the scale is to measure anxiety proneness in tests, examinations and evaluative situation. Some items of the scale are “I feel confident and relaxed while taking tests”, “while taking examination I have an uneasy, upset feeling”. The scale has two subscales and they are 1. Worry- which refers to excessive preoccupation and concern about the outcome of a test, especially the consequences of failure, and the following items of the inventory measure it, and the items are: 3, 4, 5,6,7,14,17 and 20. 2. Emotionality- which refers to an individual’s behavioural reactions and feelings aroused by test situations, and emotionality is measured by the following items – 2, 8,9,10,11,15,16 and 18. There is no time limit for completing the test anxiety inventory according to the original authors. There is direct and reverse scoring of items. The reverse items of the scale is item 1, and the rest is direct scoring items. Spielberger (1980), provided original psychometric properties for American samples, while Omoluabi (1993), provided the properties

for Nigerian samples. The norms as reported by Omoluabi (1993), are as follows: worry subscale 13.21 for male and 12.47 for female and the emotionality subscale 14.24 for male and 14.27 for female. The total for male is 34.77 and 34.37 for female. The time intervals for the test retest reliability results reported here are 21 days for the American samples and 72 days for the Nigerian samples. Test anxiety inventory was correlated with state trait anxiety inventory forms X- I and X-2 by Spielberger, et al (1970) to obtain the following concurrent validity coefficients; for X- I (men .67 and female .34) and X-2 (for men .54 and female .48). For the Nigerian samples X-1 (.19 for both male and female) and X-2 (.62 for both male and female). The Nigerian norms or mean scores are the basis for interpreting the scores of clients. Scores that are higher than the norms indicate typical manifestation or worrying, emotionality or general test anxiety. Scores lower than the norms indicate the absence of test anxiety. The present researcher established a Cronbach alpha reliability of .88 using 50 undergraduates from Chukwuemeka Odimegwu Ojukwu University, Igbariam.

Rathus Assertiveness scale

It is a 30 item inventory developed by Rathus (1973), designed to assess assertive behaviour or social boldness or the extent to which an individual claims rights, voices out true feelings in social settings. The inventory contains items such as “most people seem to be more aggressive and assertive than I am”, I am careful to avoid hurting other people’s feelings, even when I feel I have been injured”. The inventory has both direct scoring and reverse scoring. The items of the inventory are scored in a Likert format ranging from +3 which is very much like me to – 3 which

is very unlike me. The following items of the inventory are scored directly – 3,6,7,8,10,18,20,21,22,25,27,28 and 29, whereas the following are reverse scored items – 1,2,4,5,9,11,12,13,14,15,16,17,19,23,24,26 and 30. Rathus (1973), provided the original psychometric properties for American samples while Anumba (1995, as cited by Omoluabi, 1997), provided the properties for Nigerian samples. The reliability coefficient reported by Rathus (1973) are Split – half = .77, and eight – week interval test retest = .78. Anumba (1995, as cited by Omoluabi, 1997), obtained a concurrent validity coefficient of .25 by correlating Rathus scale with Index of peer relations by Hudson et al (1986). The Nigerian norms as reported by Anumba (1995, as cited by Omoluabi, 1997), are 48.25 for male and 48.61 for female. The Nigerian norms or mean scores are the basis for interpreting the scores of clients. Scores higher than the norms indicate that the client is assertive while scores lower than the norms indicate non- assertiveness. The present researcher established a Cronbach alpha reliability of .75 using 50 undergraduates from Chukwuemeka Odimegwu Ojukwu University, Igbariam.

Procedure

The researchers approached the heads of the different departments selected with letter of introduction. The researcher was given approval to meet the students, with the help of the course representatives of each level in the selected Departments in the university. The minimum number of participant was determined through Taro Yemani method. Furthermore, the questionnaires were administered to each of the selected Department in the Departmental class and only those

students who were available and consented to complete the questionnaire participated in the study (accidental sampling). Questionnaires were administered with the help of the different class representatives, who were adequately intimated before the administration of the questionnaires. Rapport was established with the students, and the confidentiality of the process was assured them. All the participants were encouraged to complete the instruments and submit immediately.

Ethically, participants were duly informed about the purpose, methods, potential risks, and benefits of the study in clear, accessible language. They voluntarily agreed to participate after being informed of all aspects of the study that could influence their decision. The researcher provided an opportunity for participants to ask questions, and participants signed a consent form to demonstrate their willingness to participate. Participants were assured of the confidentiality of all processes and the data they submitted. The participants were duly informed that participation was entirely voluntary, without coercion or undue pressure, and that they could withdraw at any time without penalty or negative consequences.

Design and Statistics

The study was a survey research, and correlational design was employed for the study because the objective of the study was to establish the relationship that exist among, test anxiety, grit, assertiveness and locus of control. Pearson Product Moment analysis was used in interpreting the

data collected. The justification for using Pearson Product Moment analysis was that the study examined the relationship between one independent variable and one dependent variable.

Result

Descriptive and Pearson Product Moment Statistics Table of Test anxiety and Assertiveness

Sources	Mean	Std. Deviation	Test anxiety	Assertiveness
Test anxiety	46.97	14.55	1.00	
Assertiveness	6.00	23.85	-.09*	1.00

Results showed that assertiveness had significant negative relationship with test anxiety at $r(N=381) = -.09^* p < .05$ (M:-6.00, SD: 23.85). This means that as assertiveness increases test anxiety decreases.

Discussion

The key finding of this study was that a negative correlation existed between assertiveness and test anxiety. This suggests that individuals who are more assertive tend to experience lower levels of anxiety in test situations. The negative correlation between assertiveness and test anxiety suggests that individuals who are more comfortable expressing their needs, setting boundaries, and advocating for themselves may be better equipped to handle the stress and pressure associated with testing situations. Assertive individuals typically exhibit higher levels of

self-confidence and emotional regulation, which may help them approach exams with a sense of control and reduced fear of failure. Furthermore, assertiveness may contribute to the development of adaptive coping strategies that buffer against anxiety in high-stakes academic settings. The present study's findings align with previous research on assertiveness and test anxiety. For example, studies by Gonzalez, et al., (2018), who conducted a research on the relationship between assertiveness, academic performance and anxiety in a sample of Mexican students in secondary education. Their findings indicated a statistical negative relationship between assertiveness and anxiety. Similarly, research by Abdolghaderi et al., (2021), did a work on the effectiveness of assertiveness training on social anxiety and coping with stress among high school female students.

One potential mechanism for this negative correlation is that assertive individuals are more likely to engage in proactive coping strategies. Assertiveness involves clear communication of one's needs and feelings, which may extend to an ability to seek support or manage expectations effectively. For instance, assertive individuals may be more likely to reach out for help when faced with difficult coursework or test preparation, thereby reducing feelings of helplessness that often accompany anxiety. Moreover, assertiveness may contribute to a stronger sense of self-efficacy, leading individuals to feel more capable of handling the demands of a test situation. Assertiveness is also closely tied to emotional regulation—the ability to manage and respond to emotional experiences in a healthy and constructive way. Individuals who are assertive may be more adept at managing test-related anxiety by acknowledging their feelings without becoming

overwhelmed by them. This ability to acknowledge and regulate emotions could mitigate the physiological and cognitive responses that typically accompany test anxiety, such as racing thoughts or physical symptoms like sweating and heart palpitations.

The implication is that assertiveness as factor that reduces test anxiety offers practical strategies for addressing this common issue among university undergraduates. Educators, counsellors, and clinical psychologists can integrate assertiveness training into academic support programs; since, undergraduate students can be encouraged to inculcate them. Also, assertiveness training can equip students with communication and boundary-setting skills, helping them manage academic demands and interpersonal conflicts effectively.

Conclusion

This study provides valuable insights into how these psychological constructs interact and influence students' experiences with test-related anxiety. The findings highlight the need for interventions that promote assertiveness while addressing students' perceptions of test anxiety. Programs that encourage students to internalize a sense of agency and take proactive steps to manage stress may enhance their ability to navigate academic challenges effectively. From the findings of this study, the following recommendations are made:

1. Universities should implement workshops and activities designed to enhance students' assertiveness. These programs can include goal-setting exercises, resilience-building strategies, and role-playing scenarios to practice assertive communication.

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2. Educators and university authorities should identify students prone to test anxiety and provide targeted interventions, such as relaxation techniques, time management skills, and personalized study strategies.
3. Counsellors and clinical psychologists should design programs that combine assertiveness training, and cognitive restructuring to help students reframe their beliefs about control and responsibility.

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