

POST-TRAUMATIC STRESS DISORDER AND ACADEMIC PRESSURE AS CORRELATE OF PANIC ATTACK AMONG SENIOR SECONDARY SCHOOL STUDENTS IN IKPOBA-OKHA LOCAL GOVERNMENT AREA OF EDO STATE

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Abstract

This study investigated the post-traumatic stress disorder and academic pressure as correlate of panic attack among senior secondary school students in Ikpoba-Okha Local Government Area of Edo State. This study investigated the relationship of post-traumatic stress disorder and academic pressure with panic attack. To guide the study, three (3) research questions were raised and were further formulated to their corresponding hypotheses. Descriptive survey research design was adopted. The population comprised all the Senior Secondary School two (SSS 2) Students in Ikpoba-Okha Local Government Area. Simple random sampling techniques were used to sample 300 SSS 2 Students. The instrument used for data collection was two set of questionnaires: Self-report scales titled the “panic attack inventory” (PAI) and Academic pressure Questionnaire (APQ). The PAI and APQ were content and face validated by three Psychometricians. Reliability coefficient of 0.85 and 0.92 were obtained for PAI and APQ respectively using the Cronbach Alpha method. The data collected were analyzed using Pearson Product Moment Correlation for hypotheses 1 and 2 while linear regression statistic was used to test hypothesis 3 at 0.05 level of significant. The findings revealed that post-traumatic stress disorder and academic pressure significantly correlate panic attack among senior secondary school students in Ikpoba-Okha Local government Area among others. Based on the findings, it was recommended that Students should be encouraged to talk about their panic attacks. Counsellors and Therapist should be employed in schools that could help students remove the negative emotional trauma that were stored from their post-traumatic experience.

Keywords: Panic Attack, Post-traumatic Disorder and Academic Pressure

Introduction

In everyday life, human beings come across different things, issues, and events that pose challenges to them. The way an individual perceives such challenges could generate diverse changes within the individual, which may lead to psychological, mental, and emotional changes. Any of these changes if not properly controlled could result in panic attack in the individual. Globally, panic attack is a problem or phenomenon with a trending effect on people across different socio-economic demographic strata (Abbasi, 2023). Panic attack can be defined as sudden, intense feeling of fear that cause physical symptom like a racing heart, fast breathing and sweating. It is a sudden, temporary feeling of fear and strong physical reactions in response to ordinary/nonthreatening situations. Eaton (2022) defined panic attack as a sudden episode of intense fear that triggers severe physical reactions when there is no real danger or apparent cause.

According to the Salami, and Walker (2019) panic attack can be described as an abrupt period of intense fear or discomfort accompanied by four or more of the following thirteen systemic symptoms: palpitation, pounding heart, accelerated heart rate, sweating, trembling or shaking, shortness of breath or feeling of smothering, feelings of choking, chest pain or discomfort, nausea or abdominal distress, feeling dizzy, unsteady, lightheaded, or faint, chills or heat sensations, paresthesias (numbness or tingling sensations), derealisation (feeling of unreality) or depersonalisation (being detached from oneself), feeling of losing control or going crazy and fear of dying. Panic attack begins suddenly and most often peaks within 10 to 20 minutes. Some symptoms continue for an hour or more. It typically has a negative impact across different areas of adolescents' lives, including social interactions and academic functioning. Panic attacks may change behaviour and function at home, school, or work.

Chege, Munene, & Oladipo, (2018) argued that if not recognized and treated, panic attack and its complications can be devastating because it can interfere with children or adolescents' relationships, schoolwork, and normal development. Panic attack symptoms include an accelerated heart rate, sweating, shaking, shortness of breath, chest pain, nausea, dizziness, depersonalisation, fear of losing control, 'going crazy', or dying. Newman (2016) described panic attacks as discrete episodes of intense fear, apprehension, or terror that are accompanied by several physical symptoms. Panic attacks can either occur for no apparent reason (spontaneously) or upon entering into or being in situations that have become associated with them (e.g., long lines, closed spaces, driving over bridges). Fear cannot be considered as a panic attack if it lasts several hours or most of the day. Studies have revealed that, there are some certain factors that could trigger panic attack in adolescent such factors are genetics, mental health condition, post-traumatic experience (Rehman 2016, Bandelow & Michaelis, 2019 and Birmaher, Brent & Axelson 2023). Research abounds that among others factors that could affect the panic attack among students are post-traumatic stress and academic pressure.

Post-traumatic stress disorder can be defined as a disorder characterized by failure to recover from after experiencing or witnessing a terrifying event. The condition may last months or years, with triggers that can bring back memories of trauma accompanied by intense emotional and physical reactions. Post-traumatic stress disorder could occur when people loss their loved ones, may be in motor accident, plane crash, exposure to violence, child abuse in form of physical, sexual and emotional abuse, and weather-related disaster like flood in 2013 that happened in many parts of the southern Nigeria.

There are other major acts of violence such as the crisis in the Niger Delta Area, cultism and killing of innocent students by cult members in our society. Religious crisis, chieftaincy tussle, bullying and public coercion, are source of traumatic events confronting students today, especially at the secondary school level. Triggers, such as sounds, smells, or places connected to the trauma, can precipitate panic attacks by evoking vivid memories and intense fear responses. During a traumatic event, individuals may become conditioned to associate certain internal or external cues with the intense fear and stress experienced. These conditioned cues, known as triggers, can evoke panic attacks even when there is no obvious danger. Desoete, & De Weerd (2017) in their study found that post-traumatic experience has a significant relationship with panic attack.

Moroz (2005) viewed post-traumatic stress as something that persist after a traumatic incident has ended and continues to affects the student's ability to self-regulation, both physically and emotionally. Post-traumatic symptoms in children and adolescent students may encompass one or more of a broad range of behaviours, including terrified responses to sights, sounds or other sensory input that remind the child of the traumatic experience(s). Difficulty in sleeping, and concentrating, aggression, anxiety and depression are all triggered by post-traumatic stress. Post-traumatic symptoms in children and adolescent students may encompass one or more of a broad range of behaviours, including terrified responses to sights, sounds or other sensory input that remind the child of the traumatic experience(s). Ferguson, (2020) in his study on the relationship between post-traumatic stress and panic attack found that, there is a significant relationship between post-traumatic stress and panic attack among undergraduate students.

Academic pressure is another factor that may triggers panic attack in students. Academic pressure can be defined as the stress and discomfort that arises from intense demands and expectations to perform well academically, stemming from both internal desires and external factors like parents, teachers, and peers. While mild pressure can be motivating, excessive academic pressure can lead to negative consequences, including anxiety, depression, burnout, and potential drops in academic performance or future employment (Eaton, 2022).

Craske (2018) categorised academic pressure into internal and external pressure. The author further explained that internal Pressure is student's own desire to achieve, fear of failure, or the pursuit of perfection which are capable of creating academic pressure while external pressures may occur as a result of unmet parental expectations, demands from teachers for high grades or challenging workloads, competition with peers for grades or limited academic resources and broader societal expectations or anxieties about future

career. Academic pressure from high expectations, demanding workloads, and competitive environments can act as triggers for panic attacks, especially during high-stakes periods like exams or presentations. In a study conducted by Agarwala (2021) on Hot Flashes and Panic Attacks: a Comparison of Symptomatology, Neurobiology, Treatment, and a Role for Cognition, the author found that academic pressure significantly influence panic attack among secondary school students. Also, Diler, Birmaher, Brent & Axelson (2023) and Agarwala (2021) found that there is a significant relationship between academic pressure and panic attack.

As the secondary school students' transit from one stage of development to another, panic attack may impact them negatively preventing them to achieve the developmental milestones as desired. Panic attack among secondary school students may be as a result of internal factor such as psychological disorders resulting from post-traumatic disorder or external factor as academic pressure.

In the light of the above, there is the need to assess the effect of post-traumatic stress disorder (PTSD) on panic attack among senior secondary school students.

Statement of Problem

Sudden deaths among Nigerians both at home and abroad directly or indirectly linked with the surge of emotions could be as a result of panic attack. Panic attack is among the most prevalent of mental disorders and it is associated with high societal burden (Ramkumar 2024). It is characterized by sudden, intense fear or discomfort, often accompanied by physical symptoms. It can manifest as a sense of impending doom, fear of loss of control, or even fear of death. Panic attacks are characterized by sudden, intense fear or discomfort, often accompanied by physical symptoms. Panic Attack if not properly handled or manage can lead to heart problem, cardiac arrest, sudden death and so on.

In recent times, panic attack among adolescents in Nigeria has become widespread within Edo State particularly in Ikpoba-Okha Local Government Area. Effort has been made by the government to tackle this problem ranging from the National Health Policy (2013) to the Mental Health Bill (2020). The National Health Policy was made to provide an essential framework for mental health care in Nigeria to guide health systems in prevention, treatment, and management of panic attack among others. Others were public awareness campaigns led by Non-Governmental Organisations (NGOs) directed at reducing the risk surrounding panic attack and encouraged openness about struggles, Helpline and support lines initiatives to assist those at distress, religious outreach and Training of Healthcare workers in identifying and managing panic attack (Oguntola 2022). However, Diler, Birmaher, Brent & Axelson (2023) found that there is high prevalence of panic attack among secondary school students.

Understanding the nature and impact of panic attacks among secondary school students is crucial for developing effective strategies to support their mental health. By identifying triggers, risk factors, and appropriate interventions, educators, parents, and mental health professionals can create a supportive environment that addresses students' needs and promotes their overall well-being. Hence, this study investigates post-traumatic stress disorder and academic pressure as correlate of panic attack among secondary school students in Ikpoba-Okha.

Research Questions

To guide the study, the following research questions were raised:

- i. Does Post-traumatic stress disorder correlates panic attack among senior secondary school students in Ikpoba-Okha Local government Area?
- ii. Does academic pressure correlates panic attack among senior secondary school students in Ikpoba-Okha Local government Area?
- iii. Do Post-traumatic stress disorder and academic pressure significantly predict panic attack among senior secondary school students in Ikpoba-Okha Local government Area?

Hypothesis

To further guide the study, research questions were formulated to their corresponding hypotheses

- i. Post-traumatic stress disorder does not significantly correlate panic attack among senior secondary school students in Ikpoba-Okha Local government Area.
- ii. Academic pressure does not significantly correlate panic attack among senior secondary school students in Ikpoba-Okha Local government Area.
- iii. Post-traumatic stress disorder and academic pressure do not significantly predict panic attack among senior secondary school students in Ikpoba-Okha Local government Area.

Aim and Objectives of the Study

The aim of this study is to examine post-traumatic stress disorder and academic pressure as correlate of panic attack among senior secondary school students in Ikpoba-Okha Local Government Area of Edo State. Specifically, the objectives are to:

- i. investigate if the post-traumatic stress disorder correlate panic attack among senior secondary school students in Ikpoba-Okha Local government Area.
- ii. examine academic pressure correlate panic attack among senior secondary school students in Ikpoba-Okha Local government Area.
- iii. evaluate the post-traumatic stress disorder and academic pressure predict panic attack among senior secondary school students in Ikpoba-Okha Local government Area.

Methods

The descriptive survey research design was adopted for the study as the research design. The population of the study comprised of 4025 SSS 2 students in Twenty-one (21) public senior secondary schools in the local government area of Ikpoba-Okha. A total of three hundred (300) senior secondary two (SS2) students were selected as the sample for the study. Stratify random sampling technique involving multi-stage was used. First, the schools were stratified into six (6) schools (male schools, female schools and mixed school) from the 21 public schools. Secondly, fifty (50) students were randomly selected from the sampled schools.

The research instrument for this study was two sets of questionnaires: Post-traumatic Stress Disorder and Academic Pressure Questionnaire (PTSDAPQ) and Self-report scales titled "panic attack inventory (PAI)". The PTSDAPQ contains 12 items of 4-point likert type, ranging from strongly agreed to strongly disagree. PAI contains thirteen (13) items which measure the symptoms of panic attack experienced by the respondents. The items were on four likert type (All the time, Most of the time, Some of the time and never).

The instrument was validated by three experts. The reliability was ascertained using Cronbach alpha Statistics reliability and coefficient values of 0.89 and 0.85 for PTSDAPQ and PAI respectively were obtained. The researcher with the aid of research assistance (teachers) administered the instrument to the sampled students. Data collected were analyzed using Pearson Product Moment Correlational Statistics for hypotheses 1 and 2 while linear regression was used for hypothesis 3. All hypotheses were tested at 0.05 alpha level of significance.

Findings

The results of the study are presented in the following tables:

Hypothesis 1: Post-traumatic stress disorder does not significantly correlate panic attack among senior secondary school students in Ikpoba-Okha Local government Area.

Table 1: Correlation between Post-traumatic stress disorder and panic attack

Variables	N	r	sig. (2-tailed)
Post-traumatic Stress Disorder	300	.79	.000
Panic Attack			

$\alpha = 0.05$

Table 1 above showed r-value of .79 and a p-value of 0.000. Since the p-value is less than the alpha level the null hypothesis which states that Post-traumatic stress disorder does not significantly correlate panic attack

among senior secondary school students is rejected. Hence, Post-traumatic stress disorder significantly correlate panic attack among senior secondary school students in Ikpoba-Okha Local government Area. Also, the correlation coefficient of 0.79 shows that there is a positive correlation between the independent variable (post-traumatic stress disorder) and the dependent variable (panic attack).

Hypothesis 2: Academic pressure does not significantly correlate panic attack among senior secondary school students in Ikpoba-Okha Local government Area.

Table 2: Correlation between Academic Pressure and panic attack

<i>Variables</i>	<i>N</i>	<i>r</i>	<i>sig. (2-tailed)</i>
Academic Pressure			
Panic Attack	300	.85	.002

$\alpha = 0.05$

Table 1 above showed r -value of .85 and a p -value of 0.002. Testing at alpha level of 0.05 the p -value is less than the alpha level hence, the null hypothesis which states that academic pressure does not significantly correlate panic attack among senior secondary school students is rejected. Therefore, academic pressure significantly correlates panic attack among senior secondary school students in Ikpoba-Okha Local government Area. Also, the correlation coefficient of 0.85 shows that there is a positive correlation between the independent variable and the dependent variable.

Hypothesis 3: Post-traumatic stress disorder and academic pressure do not significantly predict panic attack among senior secondary school students in Ikpoba-Okha Local government Area.

Table 3: Regression Analysis of Post-traumatic Experience Academic Pressure and Panic attack

<i>Model</i>	<i>sum of squares</i>	<i>df</i>	<i>mean square</i>	<i>F</i>	<i>Sig (2-tail)</i>	<i>Decision</i>
Regression	1342.194	2	671.097			
Residual	5129.726	297	26.039	25.773	.000	Significant
Total	6471.920	299				

$r = .329$, $r^2 = .108$ Adjusted R Square = .104 Standard Error = 3.890

Table 3 above shows an F -value of 25.773 and a p -value of .000. Testing at an alpha level of .05 the p -value is less than the alpha level, so, the null hypothesis which stated that post-traumatic stress disorder and academic pressure do not significantly predict panic attack among senior secondary school students is rejected in favour of the alternative hypothesis. Hence, Post-traumatic stress disorder and academic pressure significantly predict panic attack among senior secondary school students in Ikpoba-Okha Local government Area.

The analysis result of hypothesis 3 showed r value of .329, r^2 value of .108 (11%) and adjusted r^2 value of .104. From the analysis, the r value shows a positive prediction between the independent variable and the dependent variable. Also, the r^2 value of .108 indicates that the independent variable accounts for 11% variations in the dependent variable. That is, post-traumatic stress disorder and academic pressure as the predicting variables account for 11% of the variation in the dependent variable (panic attack).

Discussion of Findings

The findings from hypothesis one revealed that post-traumatic stress disorder significantly correlate panic attack among senior secondary school students in Ikpoba-Okha Local government Area. This implies that post-traumatic stress disorder is a trigger of panic attack among secondary school students. Post-traumatic experiences significantly increase the risk and frequency of panic attacks, which can arise from the psychological conditioning and physiological arousal associated with a traumatic event. Triggers, such as sounds, smells, or places connected to the trauma precipitate panic attacks by evoking vivid memories and intense fear responses. During a traumatic event, these students become conditioned to associate certain internal or external cues with the intense fear and stress experienced. These conditioned cues, known as

triggers, evoke panic attacks even when there is no obvious danger. This finding agreed with the finding of Desoete, & De Weerd (2017) who found in their study that post-traumatic experience have a significant relationship with panic attack. Also, the finding is in consonant with the finding of Ferguson (2020) who found that there is a significant relationship between post-traumatic stress and panic attack among undergraduate students. This study has been able to establish that post-traumatic stress disorder is a trigger of panic attack among senior secondary school students.

Again, the finding from hypothesis two revealed that, academic pressure significantly correlates panic attack among senior secondary school students in Ikpoba-Okha Local government Area. This implies that, academic pressure both internal and external trigger panic attack. Academic pressure from high expectations, demanding workloads, and competitive environments can act as triggers for panic attacks, especially during high-stakes periods like exams or presentations. This finding is in agreement with the finding of Diler et al., (2023) who found that there is a significant relationship between academic pressure and panic attack. This study has been able to establish that academic pressure both internal and external is a trigger of panic attack among senior secondary school students.

Finally, the findings from hypothesis three revealed that post-traumatic stress disorder and academic pressure significantly predict panic attack among senior secondary school students in Ikpoba-Okha Local government Area. This finding agreed with the finding of Muthusamy (2022) who found that, there is a significant influence of post-traumatic stress disorder and academic stress with panic attack among undergraduate students. This study again has been able to establish that post-traumatic stress disorder and academic pressure are predictors of panic attack among senior secondary school students.

Conclusion

Based on the findings of this study, it was concluded that the post-traumatic stress disorder and academic pressure significantly trigger panic attack among senior secondary students in Ikpoba-Okha local Government Area of Edo State.

Recommendations

Based on the findings of the study, the following recommendations were made.

- i. Counsellors and Therapist should be employed in schools that could help students remove the negative emotional trauma that were stored from their post-traumatic experience.
- ii. Students should be enlightening that in as much as examination is importance in educational system, failure in a particular examination is not an end to success.
- iii. Students should be encouraged to talk about their panic disorder attacks in respective of their sex, age or social economics status.

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