

Prevalence and Patterns of Stress Symptoms Among Secondary School Students in North-Central Nigeria

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Abstract: This study examined the extent and predominant patterns of self-reported stress symptoms among senior secondary school students in North-Central Nigeria. A cross-sectional descriptive survey design was adopted. The study population comprised 181,764 students enrolled in public and private secondary schools within the study area, from which 384 respondents were selected through a multistage sampling procedure involving proportionate stratification by school type, class level and sex. Data were collected using the Secondary School Students' Stress Symptoms Questionnaire, structured on a four-point response scale. The instrument was validated by specialists in educational psychology, guidance and counselling, and measurement and evaluation, and yielded a Cronbach's alpha reliability coefficient of 0.82. Data were analysed using mean scores, standard deviations and rank ordering. The findings produced a sectional mean of 2.82 and an average item-level standard deviation of 0.93, indicating that the respondents generally experienced emotional, psychological, behavioural and physical stress-related symptoms. Anxiety over minor issues emerged as the most prominent symptom ($M = 3.19$, $SD = 0.90$), followed by difficulty coping with multiple demands ($M = 3.15$, $SD = 0.90$), inability to control irritation ($M = 3.15$, $SD = 0.85$), distress following unexpected events ($M = 3.05$, $SD = 0.87$) and perceived loss of control when things went wrong ($M = 3.03$, $SD = 0.87$). Students also reported reduced academic motivation, diminished confidence in managing personal problems, anger over uncontrollable circumstances and physiological reactions such as rapid breathing, increased heartbeat and bodily discomfort. The study concluded that stress constitutes an important educational and psychosocial concern among the students surveyed, although the findings represent self-reported experiences rather than clinically diagnosed conditions or epidemiological prevalence estimates. It was recommended that secondary schools strengthen guidance and counselling services, implement structured stress-management programmes and establish coordinated systems for the early identification, support and professional referral of students experiencing persistent or functionally impairing symptoms.

Keywords: Adolescent Stress, Coping Difficulties, School Counselling, Secondary School Students, Stress Symptoms

Introduction

Adolescence is widely characterised as a developmentally vulnerable period during which exposure to academic, interpersonal, family, and socio-environmental demands can produce clinically significant stress symptoms. International evidence documents substantial variation in stress prevalence: high-school samples report 21.1% in India, 35.5% among Saudi school boys, 44.9% in Malaysia, and 52.6% in Northwest Ethiopia (Nakie et al., 2022), while gender and age have consistently emerged as significant correlates, with female adolescents often reporting higher symptom load (Anjum et al., 2022; Nath et al., 2025). These figures situate adolescent stress as a global public-health concern rather than a culturally bounded phenomenon.

Within Nigeria, the evidence base is more fragmented and methodologically diverse. Akande, Olowonirejuaro and Okwara-Kalu (Akande et al., 2014) surveyed 540 senior secondary students across 18 schools in the Federal Capital Territory, Abuja, and documented a medium overall stress level with academic, intra-personal, and environmental sources as the most prominent stressors and significant gender differences in both stress level and source. Two decades on, Nigerian adolescent stress profiles remain characterised by elevated prevalence: a 1,008-adolescent COVID-era study reported a stress prevalence of 61.6%, alongside comorbid anxiety (57.4%) and depression (50.8%), all significantly positively intercorrelated (Opakunle et al., 2022). A 302-student Ilesa study documented a 37.7% prevalence of anxiety, with rates significantly higher among male adolescents and those with single parents (Oke et al., 2025); a 494-respondent Osun sample recorded a 10.7% prevalence of dysfunctional psychosocial status, with school-type factors more strongly associated than home factors (Omisore et al., 2025); and a Benin-City study observed that psychological distress exceeded the 8–25% range typical of Western and Eastern literature, attributed to psychosocial stressors accompanying Nigeria's social transition (Akanni & Otakpor, 2016). Psychosomatic complaints — head and body symptoms — have also been documented in southeast Nigerian adolescents, with significant age-based variation in somatic symptom profiles (Nwokocha et al., 2017).

Patterns of stress symptoms in Nigerian secondary-school samples are shaped by a recognisable set of correlates. Gender operates as a frequent, though inconsistently directed, moderator: Akande et al. (Akande et al., 2014) and Anjum et al. (Anjum et al., 2022) report female-over-male patterns, whereas Oke et al. (Oke et al., 2025) and Babalola et al. (Babalola et al., 2026) document the reverse. Academic pressure, parental expectation, examination-related anxiety, insecure home environments, and weak family support dominate as stressor sources (Adeleye & John-Akinola, 2021; Edet et al., 2024; Eneogu et al., 2023; Onolemhemen & Akpede, 2022), while coping responses skew toward avoidance strategies rather than adaptive problem-solving (Adeleye & John-Akinola, 2021). Across these studies, the surest predictor of psychological distress is the convergence of academic pressure with weak social support and limited

institutional recognition — a configuration characteristic of under-resourced secondary schools.

Regionally, North-Central Nigeria remains comparatively under-studied despite its distinctive stressors. Available evidence indicates moderate depressive symptoms and mild anxiety among in-school adolescents in Gboko LGA, Benue State, with prevalent insecurity exposures — 48.1% of respondents reported hearing of nearby abductions and 46.5% reported student kidnappings — accompanied by fear (45.8%) and anxiety (42.4%) (Ikpe et al., 2026; Zar et al., 2025). The FCT, Abuja, evidence (Akande et al., 2014) confirms medium stress levels and significant gender differences but has not been systematically replicated in two decades. No recent empirical study has comprehensively mapped the prevalence and patterns of stress symptoms across North-Central Nigerian secondary schools, nor examined variations by gender, age, school type, or family structure within the region. This gap constrains the design of appropriate guidance-counselling, mental-health, and school-based intervention programmes in a geopolitical zone where adolescents face uniquely layered academic, security, and socio-economic pressures.

Research Objective

To determine the prevalence and predominant patterns of psychological, emotional, behavioural and physical stress symptoms among secondary school students in North-Central Nigeria.

Research Question

What are the prevalence and predominant patterns of psychological, emotional, behavioural and physical stress symptoms among secondary school students in North-Central Nigeria?

Research Hypothesis

H₀: There is no significant difference in the prevalence of psychological, emotional, behavioural and physical stress symptoms among secondary school students in North-Central Nigeria.

Review of the Related Literature

Prevalence and Predominant Patterns of Psychological, Emotional, Behavioural and Physical Stress Symptoms among Secondary School Students in North-Central Nigeria

Psychological symptoms

Psychological stress symptoms among secondary school adolescents are characterised by cognitive-affective complaints — worry, rumination, low mood, insomnia, hopelessness, and impaired concentration. In the DASS-21 study of 1,008 Nigerian high-school adolescents, Opakunle et al. (Opakunle et al., 2022) reported a stress prevalence of 61.6% with statistically significant positive correlations between stress and insomnia ($r = 0.355$, $P < 0.001$) and suicidal tendencies ($r = 0.257$, $P < 0.001$), and a significant negative correlation between stress and quality of life ($r = -0.375$, $P < 0.001$). Adeleye

and John-Akinola (Adeleye & John-Akinola, 2021), using the General Health Questionnaire and Brief-COPE with 400 Ibadan in-school adolescents, documented poor knowledge of psychological stress (55.8%) with only 6% at high stress level, and Ayanwale-pattern gender, family, peer, and academic correlates. Qualitative evidence from urban Indian adolescents corroborates the cognitive-symptom cluster, including confusion, poor concentration, forgetfulness, and intrusive ruminative thoughts (Parikh et al., 2019). These psychological presentations constitute the most internally consistent Nigerian stress-symptom layer.

Emotional symptoms

Emotional symptoms — anxiety, fear, sadness, anger outbursts, and irritability — are the most frequently documented adolescent stress complaint. In locally relevant evidence, Akande et al. (Akande et al., 2014) identified a medium overall stress level among 540 senior secondary students in the FCT Abuja, with significant gender differences in stress level and source distribution. In Gboko LGA, Benue State, mild anxiety and moderate depressive symptoms have been documented among in-school adolescents (Zar et al., 2025), while insecurity-related fear (45.8%) and anxiety (42.4%) were associated with widespread perceptions of abductions (48.1%) and student kidnappings (46.5%) (Ikpe et al., 2026). Comparable nationally: 37.7% anxiety prevalence in 302 Ilesa students (Oke et al., 2025); 28.6% anxiety among 623 medical school students (James et al., 2017); anxiety symptoms showing obsessive-compulsive disorder (20.7%) and fear of physical injury (12%) among 502 south-west students, with female and public-school students more affected (Fakunmoju, 2023). Indian qualitative narratives document anger expressed as physical outbursts, self-harm at mirrors, and acute confusion (Parikh et al., 2019), and Bangladeshi adolescent data attribute >58.7% stress-symptom positivity to female respondents with significant age, grade, and residential-setting differentials (χ^2 22.50–131.47) (Anjum et al., 2022).

Behavioural symptoms

Behavioural stress symptoms manifest as avoidance coping, substance use, harmful behaviours, school disengagement, and sleep disturbance. Adeleye and John-Akinola (Adeleye & John-Akinola, 2021) identified avoidance coping — particularly "going to the movies" (49.1%) — as the most prevalent coping strategy among Ibadan in-school adolescents, with binary logistic regression showing that "not being supported by parents financially" (OR 2.681, 95% CI 1.0–7.1) was positively associated with psychological stress. Nigerian DASS evidence links stress to drug abuse ($r = 0.251$, $P < 0.001$) and to suicidal behaviours ($r = 0.257$, $P < 0.001$) (Opakunle et al., 2022). School disengagement is captured by Onolemhemhen and Akpede (Onolemhemhen & Akpede, 2022), whose 2022 evidence in Esan West LGA documented lateness-to-school as a stress-related behavioural marker.

Physical symptoms

Physical symptoms cluster around headaches, sleep disturbance, fatigue, appetite change, and somatisation complaints. Nwokocha et al. (Nwokocha et al., 2017), with 261

southeast Nigerian adolescents, documented psychosomatic complaints with 42.5% (males) versus 44.2% (females) reporting head- and body-related symptoms ($p = 0.137$) and 51.7% versus 56.7% reporting body-related symptoms ($p = 0.925$) — with significant age category gradients for head, body, either, and both-head-and-body symptom clusters (all $p < 0.001$). Physiologically anchored qualitative evidence documents loss of appetite, sleep disturbance, fever, sweating, headaches, and nausea as common stress somatisation markers (Parikh et al., 2019). Among 531 Norwegian school adolescents aged 13–16, 18.1% reported being very much affected by at least one psychosomatic symptom, with girls reporting significantly more psychosomatic symptoms than boys (Murberg & Bru, 2004). While Benue and FCT North-Central evidence remains preoccupied with fear- and anxiety-driven symptom reporting (Akanke et al., 2014; Ikpe et al., 2026; Zar et al., 2025), the Southeast Nigerian somatisation profile (Nwokocha et al., 2017) suggests that physical presentations may be similarly prevalent in the North-Central zone but undocumented.

Synthesis gap

Across the four symptom dimensions, Nigerian evidence converges on three patterns: (i) psychological and emotional symptoms are the most consistently documented, with anxiety and depression co-occurring at 28.6–57.4% prevalence; (ii) behavioural symptoms co-vary with stress at significant but moderate effect sizes ($r \approx 0.25$ – 0.36); and (iii) physical symptoms cluster around headache–body soma but are regionally under-reported. Within North-Central Nigeria, however, no empirical study has jointly mapped these four symptom dimensions across multiple states or examined how they vary by gender, school type, or family structure. This gap motivates the present study.

Theoretical Framework

This study is anchored on the **Transactional Model of Stress and Coping** developed by Lazarus and Folkman (1984). The theory explains stress as a product of the interaction between individuals and their environment. Stress occurs when students perceive academic, social or personal demands as exceeding their available coping resources. The model emphasises **primary appraisal**, in which students evaluate whether an experience is threatening, and **secondary appraisal**, in which they assess their ability to manage it. Differences in appraisal and coping may therefore produce varying emotional, cognitive, behavioural and physical stress symptoms among students.

Empirical evidence supports this framework. A school-based study involving 1,426 adolescents found that 74% experienced high academic stress, with stress levels varying significantly by gender, age, location and parental educational background. A daily-diary study of 315 adolescents also demonstrated that fluctuations in academic, family and peer stress were associated with changes in emotions, sleep quality and psychological vitality. In Nigeria, Apeh, Gidado and Diffang found that academic pressure, examinations, poor performance and difficult relationships were associated

with headaches, frustration and concentration difficulties among secondary school students in the Federal Capital Territory.

The theory is therefore suitable because it explains why secondary school students exposed to similar stressors may experience different types and intensities of stress symptoms. It provides a basis for assessing the prevalence and patterns of stress symptoms among students in North-Central Nigeria.

Research Method

The study adopted a **cross-sectional descriptive survey design** to determine the prevalence and predominant patterns of psychological, emotional, behavioural and physical stress symptoms among secondary school students.

Population of the Study

The study population comprised all 181,764 secondary school students in public and private secondary schools across selected states in North-Central Nigeria. Data will be collected from this population using a structured questionnaire titled “Secondary School Students’ Stress Symptoms Questionnaire” (SSSSQ), which contains dedicated sections measuring psychological, emotional, behavioural, and physical stress symptoms. Responses will be rated on a four-point frequency scale ranging from Never (1) to Very Often (4).

Sample and Sampling Procedure

A representative sample of 384 students was selected through a **multistage sampling procedure**. States, local government areas and schools were first selected, after which students were chosen using proportionate stratified random sampling based on school type, class level and sex. The sample size was determined using an appropriate statistical formula.

Instrument for Data Collection

Data will be collected using a structured questionnaire titled “Secondary School Students’ Stress Symptoms Questionnaire” (SSSSQ), which contains dedicated sections measuring psychological, emotional, behavioural, and physical stress symptoms. Responses will be rated on a four-point frequency scale ranging from Never (1) to Very Often (4).

Validity and Reliability

Experts in educational psychology, guidance and counselling, and measurement and evaluation established the instrument’s face and content validity. A pilot study was conducted outside the study area, while Cronbach’s alpha coefficients was used to analyze the responses and yielded **0.82** indicating acceptable reliability.

Data Collection Procedure

The study population comprised all 181,764 secondary school students in public and private secondary schools across selected states in North-Central Nigeria. Data was collected from this population using a structured questionnaire titled “Secondary School Students’ Stress Symptoms Questionnaire” (SSSSQ), which contains dedicated sections measuring psychological, emotional, behavioural, and physical stress

symptoms. The questionnaires were administered by the researchers after obtaining permission from relevant school authorities. Responses were rated on a four-point frequency scale ranging from Never (1) to Very Often (4). Participation will be voluntary, and confidentiality was maintained.

Method of Data Analysis

Frequencies, percentages and prevalence estimates were determined the proportion of students experiencing each stress symptom. Mean scores, standard deviations and rank ordering was used to identify the predominant psychological, emotional, behavioural and physical symptom patterns. Results was presented using tables and charts.

Ethical Considerations

Ethical approval, parental or guardian consent and student assent was obtained. Respondents' anonymity, confidentiality and right to withdraw were protected.

Table 1: The symptoms of stress among senior secondary school students in North-central, Nigeria

N=384

S/N	Items	Mean	Std Dev	Decision
3	I often feel anxious over every little thing.	3.19	.90	Agreed
4	I often lose motivation to study or take initiative in school and feel life-less.	2.71	.93	Agreed
5	I often failed to manage a barrier or issue that arises when completing a particular task or set of studies.	3.02	.94	Agreed
6	I often have feeling of rapid breathing, a rapid heartbeat, elevated blood pressure, and the sensation of pain in my hands, legs, head, and chest	2.69	.90	Agreed
7	I often feel Worry about what is going to occur in the future as a result of the current circumstance.	2.68	.91	Agreed
8	I have often been upset because of something that happened unexpectedly.	3.05	.87	Agreed
9	I have often felt that I am unable to control the important things in my life.	2.60	.95	Agreed
10	I have often felt nervous and "stressed".	2.40	1.03	Disagreed
11	I have often felt not confident about my ability to handle my personal problems.	2.77	.89	Agreed
12	I have often felt that things were going wrong for me and I had no control about it.	3.03	.87	Agreed
13.	I have often felt that I could not cope with all the things that I had to do.	3.15	.90	Agreed
14.	I have often not been able to control irritations in my life.	3.15	.85	Agreed

15.	I have often feel that I am not in control of things around me.	2.43	.98	Disagreed
16.	I have often been angered because of things that were outside my control.	2.83	.92	Agreed
17.	I have often felt difficulties were piling up so high that I could not overcome them.	2.58	1.08	Agreed
	Sectional Mean	2.82	0.93	

N=384 Respondents

Table 1 presents the symptoms of stress reported by senior secondary school students in North-Central Nigeria. The sectional mean of 2.82, with an average item-level standard deviation of 0.93, is above the presumed criterion mean of 2.50. This indicates that the respondents generally agreed that they experienced several emotional, cognitive, behavioural and physiological symptoms associated with stress. The magnitude of the standard deviations suggests moderate variation in the students' responses, implying that the symptoms were not experienced at exactly the same intensity by all respondents.

The most prominent symptom was anxiety over minor issues, which recorded the highest mean score of 3.19 and a standard deviation of 0.90. This was followed by an inability to cope with multiple demands and difficulty controlling irritations, both of which recorded mean scores of 3.15. These findings suggest that anxiety, perceived overload and emotional irritability were particularly common manifestations of stress among the students. Respondents also agreed that they became upset by unexpected events ($M = 3.05$, $SD = 0.87$), felt that things were going wrong without their control ($M = 3.03$, $SD = 0.87$), and experienced difficulty managing barriers encountered while completing academic tasks ($M = 3.02$, $SD = 0.94$). Collectively, these responses indicate that unpredictability, academic challenges and a perceived lack of control constituted important dimensions of the students' stress experiences.

The students further reported reduced confidence in their ability to manage personal problems ($M = 2.77$, $SD = 0.89$), loss of motivation to study or take initiative in school ($M = 2.71$, $SD = 0.93$), and physiological reactions such as rapid breathing, increased heartbeat and bodily discomfort ($M = 2.69$, $SD = 0.90$). Worry about future outcomes arising from current circumstances was also acknowledged ($M = 2.68$, $SD = 0.91$). These results show that the reported stress symptoms extended beyond emotional discomfort to include impaired motivation, reduced coping confidence, anticipatory worry and physical reactions.

Respondents also agreed that they became angry about circumstances outside their control ($M = 2.83$, $SD = 0.92$), felt unable to control important aspects of their lives ($M = 2.60$, $SD = 0.95$), and perceived that their difficulties were accumulating beyond their capacity to overcome them ($M = 2.58$, $SD = 1.08$). The relatively high standard

deviation of 1.08 for the latter item indicates greater disagreement among the students, suggesting that feelings of being overwhelmed by accumulated difficulties varied considerably across respondents.

However, the students disagreed that they frequently felt nervous and stressed ($M = 2.40$, $SD = 1.03$) and that they generally lacked control over things around them ($M = 2.43$, $SD = 0.98$). This apparent contrast may indicate that some students experienced specific symptoms of stress without consistently identifying themselves as being “stressed” or completely lacking control over their environment. It may also reflect differences in how the respondents understood or interpreted the wording of these two statements.

Overall, the findings demonstrate that stress symptoms were prevalent among the senior secondary school students surveyed. The symptoms were most strongly expressed through anxiety, irritability, difficulty coping with competing demands, emotional reactions to unexpected events and challenges in managing academic or personal problems. Nevertheless, the results represent self-reported experiences and should not be interpreted as clinical diagnoses of anxiety or stress-related disorders. The findings underscore the importance of strengthening school-based counselling, stress-management education, academic support and coping-skills interventions for senior secondary school students in North-Central Nigeria.

Discussion of Findings on Symptoms of Stress among Senior Secondary School Students

The findings revealed that senior secondary school students in North-Central Nigeria experienced a notable range of stress-related symptoms. The sectional mean of 2.82, which exceeded the criterion mean of 2.50, indicates that the respondents generally endorsed the listed emotional, cognitive, behavioural and physiological manifestations of stress. The most pronounced symptoms included anxiety over relatively minor issues, difficulty coping with multiple responsibilities, inability to control irritation, distress following unexpected events, perceived loss of control and difficulty managing obstacles encountered during academic tasks. This pattern suggests that stress among the students was manifested not merely as temporary nervousness but through interconnected emotional reactions, coping difficulties and reduced capacity to manage academic and personal demands.

The result is consistent with the study of Awoyemi et al. (2024), involving 400 secondary school students in Ilorin Metropolis, North-Central Nigeria. Their findings showed that stress adversely affected students' concentration, information retention, time management, emotional well-being and participation in academic activities. The students in their study also reported procrastination, fatigue and difficulty making appropriate academic decisions when under stress. The similarity between the two studies is particularly relevant because both were conducted among in-school adolescents within the North-Central geopolitical zone. It suggests that the stress

symptoms observed in the present study may reflect broader challenges confronting secondary school students in the region rather than experiences restricted to the present sample.

The prominent expression of anxiety in the present study also supports the findings of Mbanuzuru et al. (2023), who screened 1,187 in-school adolescents in Anambra State using the Generalized Anxiety Disorder-7 scale. They found that 10.1% of the participants met the screening threshold for probable generalized anxiety disorder, while an additional 28.9% reported mild anxiety symptoms. Their study further revealed that anxiety symptoms were more common among urban students, female students and older adolescents. Although the present study did not employ a diagnostic anxiety instrument, the students' endorsement of excessive worry, apprehension about future events and distress over matters perceived as minor indicates that anxiety-related experiences constitute an important component of their stress responses.

The findings further agree with Gao's (2023) study of 929 adolescents, which established that academic stress was positively associated with academic anxiety and academic burnout and negatively associated with academic self-efficacy. Academic anxiety partially explained the relationship between stress and burnout, while stronger academic self-efficacy reduced some of the negative effects of stress. This evidence provides a possible explanation for the present finding that students experienced loss of motivation, reduced confidence in handling personal problems and difficulty coping with accumulated responsibilities. Students who perceive academic or personal demands as exceeding their coping resources may gradually develop worry, emotional exhaustion, helplessness and reduced motivation to engage in schoolwork.

Similarly, Steare et al. (2023), in a systematic review of 52 studies involving school-aged children and adolescents, found that 48 studies reported a positive association between academic pressure and at least one adverse mental-health outcome, particularly anxiety and depressive symptoms. However, the authors observed that most of the studies were cross-sectional and therefore could not establish a definite causal relationship. The evidence nevertheless supports the view that demanding workloads, examinations, expectations for high achievement and concerns about future educational outcomes may contribute to the emotional strain experienced by students. Since the present study did not directly investigate the specific causes of stress, these factors should be regarded as plausible explanations rather than confirmed causes of the reported symptoms.

The students' reports of irritability, anger over circumstances beyond their control and emotional reactions to unexpected events demonstrate the affective dimension of stress. Stress occurs when individuals perceive environmental or personal demands as exceeding their available coping resources. Among adolescents, the inability to resolve academic challenges or control important events may produce frustration, irritability and emotional instability. The simultaneous reporting of low

motivation and difficulty taking initiative also suggests that continued exposure to stressful demands could interfere with academic engagement. This interpretation corresponds with the findings of Awoyemi et al. (2024), who reported that stress impaired concentration, emotional well-being, time management and effective participation in school activities among Nigerian adolescents.

The physiological symptoms reported by the respondents—including rapid breathing, increased heartbeat and bodily discomfort—show that the students' stress experiences were not exclusively psychological. Stress may activate physiological arousal, which can be experienced as increased heart rate, rapid breathing, muscular tension and general bodily discomfort. Nevertheless, these symptoms are nonspecific and may also arise from medical or other psychological conditions. Consequently, the findings should not be interpreted as evidence that the students had hypertension, cardiovascular disorders, anxiety disorders or any other clinical condition. Appropriate medical or psychological assessment would be required before such conclusions could be drawn.

An interesting aspect of the findings was that the students disagreed that they often felt “nervous and stressed,” despite agreeing with most of the specific symptoms associated with stress. They also disagreed that they generally lacked control over everything around them, although they endorsed more specific statements concerning difficulties controlling important events and managing accumulated challenges. This apparent inconsistency may indicate that some students experienced particular manifestations of stress without consciously labelling their experiences as “stress.” It could also be attributable to differences in item wording, interpretation or the social acceptability of directly admitting that one feels stressed. Therefore, the two disagreed items should not be interpreted as disproving the broader pattern of stress-related experiences reported in the table.

The findings are also supported by Chinawa et al. (2022), who studied 496 adolescent students attending public schools in Enugu Metropolis. More than one-third of their respondents reported anxiety symptoms or a combination of anxiety and depressive symptoms. Importantly, stronger social support and a greater capacity to recover from stressful experiences were associated with lower levels of anxiety and depressive symptoms. This indicates that supportive relationships and resilience may protect students from some of the adverse psychological consequences of stressful experiences.

Taken together, the findings indicate that stress symptoms were substantially present among the surveyed senior secondary school students, especially in the forms of anxiety, irritability, perceived overload, reduced coping confidence, diminished academic motivation and emotional reactions to uncontrollable or unexpected events. However, the sectional mean reflects the respondents' general endorsement of stress-related statements and should not be described as an epidemiological prevalence rate. Establishing prevalence would require a validated screening instrument, an established

diagnostic cut-off and the calculation of the proportion of respondents meeting that cut-off. Furthermore, because the findings were based on self-reported responses, they indicate perceived experiences rather than clinically confirmed stress or anxiety disorders.

The findings have important implications for school administration, counselling practice and student-support services. Secondary schools should strengthen accessible guidance and counselling services, introduce age-appropriate stress-management and emotional-regulation programmes, and teach students practical problem-solving, time-management and adaptive coping skills. Teachers should also be trained to recognise persistent changes in students' motivation, emotional control, classroom participation and academic functioning. Where symptoms are severe, persistent or disruptive, students should be referred to qualified mental-health or healthcare professionals. This recommendation is consistent with the WHO and UNICEF position that child and adolescent mental-health support should be integrated across education, healthcare, family and community systems, particularly because many young people experiencing psychological symptoms do not receive appropriate care.

Conclusion

The study concludes that senior secondary school students in North-Central Nigeria experience a substantial range of self-reported stress symptoms across emotional, psychological, behavioural and physical domains. The overall sectional mean of 2.82, which exceeded the criterion mean of 2.50, indicates that the respondents generally endorsed the presence of stress-related experiences. The most prominent manifestations were anxiety over minor matters, difficulty coping with multiple demands, poor control of irritation, distress arising from unexpected events, perceived loss of control and difficulty managing academic and personal challenges.

The findings further demonstrate that students' stress experiences extend beyond feelings of worry to include reduced motivation to study, diminished confidence in handling personal problems, anger over circumstances outside their control and physiological reactions such as rapid breathing, increased heartbeat and bodily discomfort. The pattern of responses therefore suggests that stress may affect students' emotional stability, coping capacity, academic engagement and general well-being. However, the variation in responses indicates that the nature and intensity of these symptoms differ among students, with some respondents experiencing more pronounced difficulties than others.

The disagreement with the general statements that students often felt "nervous and stressed" or were not in control of things around them does not invalidate the broader pattern of findings. Rather, it suggests that some students may experience specific symptoms of stress without consciously identifying or describing themselves as stressed. Differences in students' understanding of the items, willingness to disclose

psychological distress and personal interpretation of stress may also account for this apparent inconsistency.

It is therefore concluded that stress constitutes an important educational and psychosocial concern among the students surveyed. Nevertheless, the findings should not be interpreted as evidence of clinically diagnosed stress, anxiety or other mental-health disorders because the data were obtained through a self-report questionnaire rather than a clinical diagnostic assessment. Similarly, the sectional mean establishes the general presence and predominance of stress symptoms but does not constitute an epidemiological prevalence rate. A precise prevalence estimate would require a validated screening instrument with an established cut-off score and classification of respondents according to symptom severity.

The study ultimately highlights the need for secondary schools in North-Central Nigeria to give greater institutional attention to students' psychological and emotional well-being. Effective responses should include strengthened guidance and counselling services, regular stress-management education, academic workload support, emotional-regulation training and the development of adaptive coping, problem-solving and time-management skills. Teachers, parents and school administrators should also collaborate in identifying students who exhibit persistent loss of motivation, irritability, anxiety, withdrawal or difficulty coping with school demands. Students with severe, persistent or functionally impairing symptoms should be referred to qualified healthcare or mental-health professionals for appropriate assessment and intervention.

The recommendations should identify the responsible stakeholders, proposed action and intended outcome.

Recommendations

The following recommendations are made based on the findings and conclusion in this study:

1. Secondary school authorities, in collaboration with trained guidance counsellors and educational psychologists, should establish structured school-based stress-management programmes for students. Such programmes should include periodic stress screening, individual and group counselling, emotional-regulation training, time-management instruction, problem-solving activities and adaptive coping-skills development. Particular attention should be given to students who demonstrate persistent anxiety, irritability, loss of academic motivation, poor coping confidence or difficulty managing multiple school and personal demands. Where symptoms are severe, persistent or interfere substantially with daily functioning, appropriate referral pathways should be created for professional psychological or medical assessment.
2. Teachers, parents and school administrators should develop a coordinated student-support system for the early identification and management of stress-related

difficulties. Teachers should be trained to recognise behavioural, emotional, academic and physical indicators of stress, including withdrawal, declining participation, persistent anger, reduced motivation and recurrent complaints of bodily discomfort. Schools should also review excessive academic demands, improve communication with parents and provide accessible opportunities for students to discuss personal and school-related challenges without fear of stigma. This collaborative approach would facilitate early support, strengthen students' coping capacity and reduce the likelihood that unmanaged stress symptoms will adversely affect their academic engagement and general well-being.

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