

A systematic review of the consequences of academic performance on mental health and well-being among students in Nigeria

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Abstract

Academic performance is increasingly recognized as an important determinant of students' mental health and well-being, yet evidence from Nigeria remains fragmented and insufficiently synthesized. This scoping review examined the consequences of academic performance on mental health and well-being among students in Nigeria.

A systematic review was conducted using the Joanna Briggs Institute methodological framework and reported in line with PRISMA-SR guidelines. Six electronic databases: PubMed, Scopus, African Journals Online, ScienceDirect, SpringerLink, and Semantic Scholar were searched for peer-reviewed studies published between January 2021 and April 2026. Eligible studies investigated academic performance as an exposure, correlate, or predictor of mental health outcomes among Nigerian students. Data were extracted using a standardized form and synthesized narratively and thematically.

A total of 28 studies met the inclusion criteria. Poor academic performance was consistently associated with elevated levels of depression, anxiety, stress, psychological distress, burnout, low self-esteem, and suicidal ideation. Examination pressure, fear of failure, excessive workload, financial hardship, institutional instability, and poor sleep quality emerged as recurrent contributors to adverse mental health outcomes. Several studies demonstrated significant negative correlations between psychological distress and academic performance, while resilience, emotional support, and adaptive coping strategies moderated these relationships. Religious coping and family support were commonly utilized protective mechanisms, although awareness and utilization of formal mental health services remained low.

Academic performance substantially influences students' mental health and well-being in Nigeria through interconnected psychosocial and structural pathways. Longitudinal and intervention-based studies are needed to strengthen causal understanding and inform contextually appropriate mental health policies and educational support strategies.

Key words: consequences, academic performance, mental health, well-being, students, Nigeria.

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Introduction

The mental health of young people has become an increasingly important global public health concern, with secondary school and university students representing particularly vulnerable populations.¹ Globally, approximately one in three students experiences clinically significant psychological distress during their academic journey, a prevalence substantially higher than that observed within the general population.² The transition into tertiary education frequently coincides with heightened academic demands, financial strain, social adjustment challenges, and uncertainty regarding future career prospects, thereby creating a convergence of psychosocial stressors that predispose students to adverse mental health outcomes.³ Evidence from high-income countries demonstrates a reciprocal relationship between academic performance and mental health, whereby poor academic outcomes contribute to psychological distress, which subse-

quently impairs academic functioning and educational attainment.⁴ Within sub-Saharan Africa, the burden of mental health disorders among young people is further exacerbated by weak mental health systems, limited service accessibility, pervasive stigma, and competing public health priorities.⁵ Treatment coverage for common mental disorders in many African countries remains critically low, often below 10%, thereby widening the mental health treatment gap among vulnerable populations such as students.⁶

Nigeria, Africa's most populous nation, represents a particularly important context to examine these issues. Although the Nigerian tertiary education sector has expanded considerably over the past two decades, with over 1.8 million students enrolled across more than 170 universities, mental health infrastructure and workforce capacity remain severely inadequate. Fewer than 300 psychiatrists currently serve a population exceeding 200 million people.⁷ Nigerian students experience a unique constellation of academic and structural stressors that may intensify the rela-

tionship between academic performance and mental health. These include recurrent university staff strikes, overcrowded classrooms, unstable academic calendars, inadequate learning infrastructure, erratic electricity supply, and limited institutional support systems.⁸ In particular, repeated industrial actions by the Academic Staff Union of Universities have significantly disrupted academic programs, delayed graduation timelines, and generated uncertainty regarding educational progression, thereby contributing to frustration, hopelessness, and reduced academic motivation among students.⁹ Simultaneously, worsening economic conditions characterized by inflation, unemployment, and declining household purchasing power have intensified financial hardship among students who must balance academic responsibilities with subsistence needs.¹⁰

The relationship between academic performance and mental health within Nigerian educational institutions has attracted growing scholarly attention in recent years. Existing studies have documented high prevalence rates of depression, anxiety, stress, and psychological distress among Nigerian students, with reported estimates ranging from 30% to over 70% depending on the study population and measurement instruments employed.¹¹ Nevertheless, the pathways linking academic performance to psychological outcomes remain insufficiently characterized. Although substantial literature has explored the effects of mental health on academic achievement, comparatively fewer studies have conceptualized academic performance itself as a psychosocial determinant capable of shaping emotional well-being, self-esteem, stress responses, and broader mental health outcomes.¹² This conceptual imbalance is important because academic performance functions not merely as an educational outcome but also as a socially meaningful determinant that shapes students' identities, aspirations, interpersonal relationships, and perceptions of future success.¹³ In the Nigerian sociocultural context, educational attainment is strongly associated with social mobility, family honor, and economic security. Consequently, academic underperformance may generate profound psychosocial consequences, including shame, diminished self-worth, social withdrawal, and familial disappointment.¹⁴ These culturally embedded meanings attached to educational success and failure may amplify the psychological consequences of academic performance in ways not fully captured within studies conducted in other settings.

Moreover, the Nigerian educational landscape is characterized by substantial regional, institutional, and socioeconomic inequalities that may shape students' academic experiences and mental health trajectories. Students in conflict-affected regions of northern Nigeria frequently contend with insecurity, displacement, and disrupted academic activities, all of which compound psychological vulnerability.¹⁵ Similarly, differences in institutional funding, infrastructure, and student support services between federal, state, and private institutions may influence how academic stress is experienced and managed. Gender norms, ethnic diversity, and religious influences further contribute to the complexity of the psychosocial environment within which academic performance is interpreted and negotiated.¹⁶ Existing reviews have largely focused on prevalence estimates of mental disorders or intervention strategies, leaving a significant gap regarding the mechanisms and pathways through which academic performance shapes psychological outcomes among Nigerian students.¹⁷ This systematic scoping review addresses this gap by systematically mapping the available evidence, synthesizing key thematic patterns, and identifying priorities for future research.^{18,19}

Objective of the study

The objective of this systematic review was to map the breadth of evidence on how academic performance influences mental health outcomes; to identify key thematic patterns; and to highlight gaps for future research. Specific objectives include the following: i) to map the existing evidence on the consequences of academic performance on mental health and well-being among students in Nigeria; ii) to identify the key thematic domains through which academic performance influences mental health outcomes; iii) to characterize the study designs, populations, settings, and measurement instruments employed in the extant literature; iv) to highlight gaps, limitations, and directions for future research.

Methods

Study design

This systematic review was conducted in accordance with the Joanna Briggs Institute (JBI) methodological framework for systematic reviews and reported following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Systematic Reviews (PRISMA-SR) guidelines.^{19,20}

Information sources

A comprehensive literature search was conducted across six electronic databases: PubMed, Scopus, African Journals Online (AJOL), ScienceDirect, SpringerLink, and Semantic Scholar. These databases were selected to ensure broad coverage of international and African-focused scholarly literature. Searches were conducted between January 2021 and April 2026. In addition to database searches, the reference lists of eligible studies were manually screened to identify additional relevant articles.

Search strategy

The search strategy combined controlled vocabulary terms and free-text keywords related to three principal concepts: academic performance, mental health, and Nigerian students. Boolean operators ("AND" and "OR") were used to combine search terms within and across conceptual domains. Search strings were adapted appropriately for each database. An exemplar PubMed search string was: ("academic performance" OR "academic achievement" OR "educational performance" OR "grade point average" OR "examination performance" OR "academic success") AND ("mental health" OR "psychological wellbeing" OR "depression" OR "anxiety" OR "stress" OR "psychological distress" OR "emotional wellbeing" OR "suicidal ideation") AND ("Nigeria" OR "Nigerian") AND ("student" OR "undergraduate" OR "secondary school" OR "tertiary").

Eligibility criteria

Inclusion criteria: peer-reviewed original research articles (i); published in English between January 2021 and April 2026 (ii); conducted among students in Nigerian educational institutions (secondary, tertiary, or vocational) (iii); examined academic performance as an exposure, correlate, or predictor of mental health or well-being outcomes (iv); employed quantitative, qualitative, or mixed-methods designs (v).

Exclusion criteria: systematic reviews, scoping reviews, meta-analyses, or narrative reviews (i); editorials, commentaries, conference abstracts, or dissertations (ii); studies conducted outside Nigeria or among Nigerian students in diaspora (iii); studies that

examined only the impact of mental health on academic performance without considering the reverse or reciprocal relationship (iv); studies not available in full text (v).

Only studies published in English were included because English is the official language of instruction and scientific publication in Nigeria, and the vast majority of Nigerian educational and health research is disseminated in English. Nevertheless, this restriction may have introduced language bias by excluding potentially relevant evidence published in other languages. Grey literature, including dissertations, conference proceedings, reports, and unpublished studies, was excluded to ensure methodological consistency and reliance on peer-reviewed evidence. However, the exclusion of grey literature may have contributed to publication bias, as studies reporting non-significant or contradictory findings are less likely to be published in peer-reviewed journals.

Risk of bias assessment

Methodological quality was appraised using an adapted version of the National Institutes of Health (NIH) Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies.²¹ Studies were evaluated according to clarity of objectives, appropriateness of study design, sampling procedures, measurement validity, control of confounding, statistical analysis, and reporting transparency. Studies meeting 75% or more of the assessment criteria were classified as good quality (low risk of bias), those meeting 50-74% were classified as fair quality (moderate risk of bias), and those meeting less than 50% were classified as poor quality (high risk of bias). *Supplementary Table 1* presents the risk of bias assessment and quality appraisal of the included studies.

Study selection

Two reviewers independently screened titles and abstracts against the predefined eligibility criteria. Full texts of potentially eligible studies were subsequently retrieved and assessed independently by both reviewers. Discrepancies were resolved through discussion and consensus.

Data extraction and synthesis approach

Data were extracted using a standardized form developed specifically for this review. Extracted information included: author(s) and year, study objectives, study design, setting and population, sample size, key findings, and conclusions. Extracted data were synthesized using thematic analysis, whereby findings were grouped into conceptual categories based on recurring patterns in the literature.

Study selection and screening procedure

Records identified through database searching (n=1265): PubMed (n=86), Scopus (n=52), AJOL (n=34), ScienceDirect (n=41), Google Scholar (n=97), Cochrane library (n=12); duplicate removed (n=373); records screened (n=892); records excluded (n=798); full-text articles assessed for eligibility (n=94); full-text articles excluded (n=66): not Nigerian population (n=12), review article (n=8), no academic performance measure (n=21), no mental health outcome (n=14), full text unavailable (n=7), duplicate data (n=4); included studies included in synthesis (n=28). The study selection process is illustrated in the PRISMA flow diagram Figure 1.

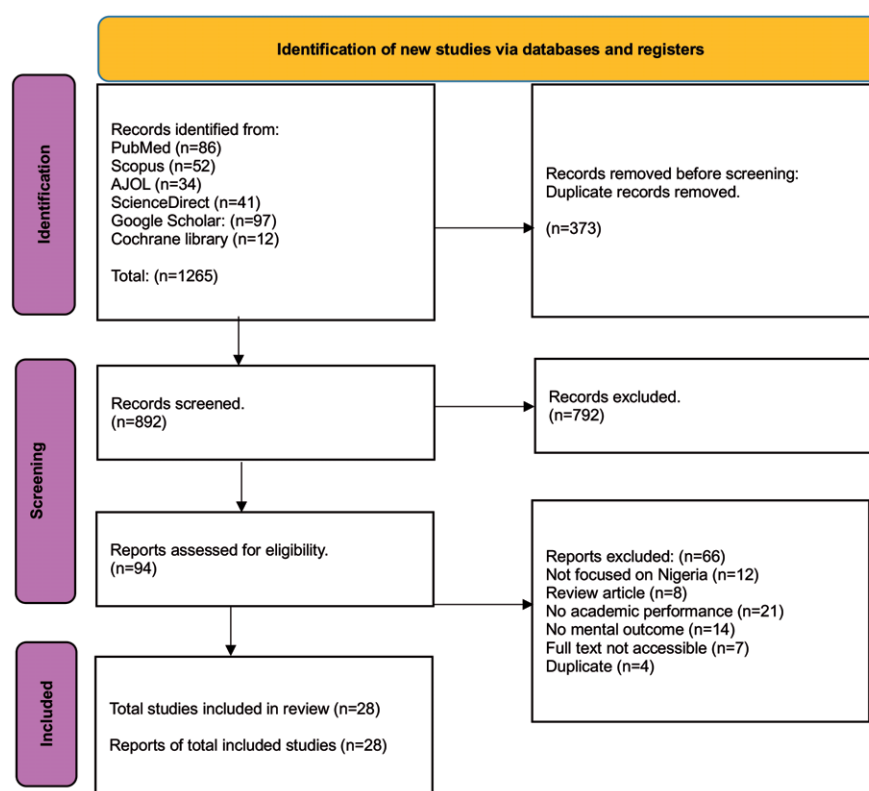


Figure 1. Diagram of the PRISMA 2020 Process for Systematic Reviews and Meta-Analyses.

Results

Characteristics of eligible included studies

The review included 28 empirical studies published between 2021 and 2026 examining the relationship between academic performance and mental health outcomes among students in Nigeria.^{15,16,22-47} The evidence base was predominantly quantitative, with cross-sectional designs constituting the majority of studies. Only a small number employed experimental, quasi-experimental, qualitative, or ex-post facto designs, indicating a strong reliance on observational approaches. Most studies adopted cross-sectional survey designs, reflecting a focus on prevalence estimation and correlational analysis of academic performance and mental health outcomes. A smaller proportion utilized correlational designs, descriptive surveys, and analytical cross-sectional approaches. Only one randomized or quasi-experimental study assessed intervention effectiveness on examination-related stress, while a single qualitative study explored lived experiences of financial stress and its academic implications, highlighting a significant methodological gap in interpretive research.

Studies were conducted across multiple Nigerian geopolitical zones, with a marked concentration in the southwest region. Institutions included federal and state universities, polytechnics, colleges of education, and specialized institutions such as pharmacy, dental, and engineering schools. The northeast region was substantially underrepresented, indicating geographical imbalance in the evidence base. Most studies focused on tertiary-level education, while secondary school populations were minimally represented. Sample sizes ranged from 70 to 1000 participants, with most studies recruiting between 300 and 600 students. Undergraduate students constituted the dominant population, particularly those in health sciences, engineering, and social sciences disciplines. Few studies disaggregated findings by socioeconomic status, gender, or institutional type in a way that allowed comparative inference across subgroups.

A wide range of validated psychometric tools and self-developed questionnaires were used across studies. Commonly used instruments included the General Health Questionnaire (GHQ-12), Beck Depression Inventory (BDI), Perceived Stress Scale (PSS), and self-esteem and resilience scales. Academic performance was operationalized variably as self-reported grades, cumulative grade point average, or perceived academic achievement. Mental health outcomes primarily included depression, anxiety, stress, psychological distress, burnout, and suicidal ideation. *Supplementary Table 2* presents the summary of the included studies.

Quality appraisal of included studies

Quality appraisal was conducted using an adapted NIH observational study assessment framework, focusing on clarity of objectives, appropriateness of design, sampling strategy, validity of measures, and analytical rigor. Overall, the methodological quality of the included studies was assessed as moderate, with notable variability across domains. Most studies demonstrated clear research objectives and appropriate alignment between study design and research questions. The use of validated psychometric instruments such as the GHQ-12, BDI, and PSS in several studies strengthened measurement validity and improved the reliability of mental health assessments. Larger studies with sample sizes exceeding 500 participants demonstrated stronger statistical power and more stable estimates of associations between academic performance and mental health outcomes.

Several studies also applied appropriate inferential statistical techniques, including regression analysis, correlation models, chi-square tests, and multivariate analysis of variance, enhancing the robustness of reported associations. A small number of studies incorporated experimental or quasi-experimental designs, providing stronger causal inference regarding the impact of examination stress and mental health interventions. Despite these strengths, several limitations were consistently observed across the evidence base. The predominant reliance on cross-sectional designs significantly limits causal interpretation and temporal inference between academic performance and mental health outcomes. The absence of longitudinal cohort studies restricts understanding of how psychological distress and academic performance evolve over time.

Sampling strategies were frequently based on convenience sampling, particularly within university populations, raising concerns about selection bias and limited generalizability. Additionally, a number of studies relied on self-reported academic performance rather than objective academic records, introducing potential reporting bias. Measurement heterogeneity was also a major limitation, with inconsistent operationalization of both academic performance and mental health constructs across studies. This variability reduces comparability and prevents quantitative synthesis. A further limitation was the limited reporting of ethical considerations in several studies, particularly regarding mental health disclosures and participant safeguarding in studies assessing sensitive outcomes such as depression and suicidal ideation.

A narrative sensitivity assessment was conducted by comparing findings across studies of varying methodological quality. The principal themes identified in this review, including academic stress, examination anxiety, depression, self-esteem, coping strategies, and suicidal ideation, were consistently reported across studies classified as good, fair, and poor quality. Although lower-quality studies occasionally reported stronger prevalence estimates and less detailed methodological reporting, they did not substantially alter the overall direction of evidence. Consequently, the main conclusions of this review were considered robust despite methodological heterogeneity. Overall, while the included studies provide valuable insights into the relationship between academic performance and mental health among Nigerian students, the evidence base is characterized by moderate methodological quality, high heterogeneity, and limited causal inference. Strengthening future research will require greater use of longitudinal designs, probabilistic sampling, standardized measurement tools, and improved reporting transparency. *Supplementary Table 1* presents the quality appraisal and risk of bias assessment scores of the included studies.

Thematic synthesis of included studies

The synthesis of 28 included studies identified six interrelated domains describing the consequences of academic performance on mental health and well-being among Nigerian students.^{15,16,22-47} These domains (academic stress, examination anxiety, depression and emotional well-being, self-esteem, coping strategies, and suicidal ideation) were conceptually distinct but empirically interconnected, reflecting a dynamic and cyclical relationship between academic experiences and psychological outcomes.

Academic stress and psychological distress

Academic stress was the most consistently reported theme across studies.^{22,23,26,27,29,33,38,39} High levels of stress were linked to academic workload, examination pressure, fear of failure, time con-

straints, and parental expectations.^{27,29,33,38} Prevalence estimates of moderate-to-severe stress exceeded 80% in some institutional settings.^{33,39} Poor academic performance was repeatedly associated with higher psychological distress, suggesting a bidirectional relationship in which stress both contributes to and results from academic underperformance.^{26-28,30,33,39} Structural factors such as financial hardship, institutional instability, and disrupted academic calendars intensified these effects.^{26,37}

Examination-related anxiety

Examination periods were consistently identified as acute stress points associated with heightened anxiety and emotional distress.^{33,35,36} Symptoms included worry, fear of failure, panic, and emotional instability, alongside physiological responses such as increased heart rate and blood pressure.^{35,36} While most studies highlighted adverse effects, some reported that examinations could enhance focus and motivation in certain students depending on coping capacity and support systems.³⁸ Evidence from intervention studies suggested that cognitive-behavioral approaches can significantly reduce examination-related anxiety.⁴²

Depression and emotional well-being

Depressive symptoms and emotional distress were strongly associated with poor academic performance across studies.^{16,24,25,28} Students experiencing academic difficulties reported hopelessness, low motivation, emotional exhaustion, and reduced self-worth.^{23,34,38} Prevalence estimates of depressive symptoms ranged from one-third to nearly half of student populations.^{25,48} Evidence suggested a reciprocal relationship whereby depression impairs academic functioning, while poor academic outcomes further exacerbate psychological distress.^{32,41,44}

Self-esteem and academic self-concept

Low academic performance was consistently linked to reduced self-esteem and negative academic self-concept.^{31,32,37} Students with higher self-esteem demonstrated better psychological adjustment and resilience, while low self-esteem was associated with anxiety and depressive symptoms.⁴⁸ Findings suggest a reinforcing cycle in which academic failure undermines self-worth, which in turn impairs motivation and academic engagement.^{37,49}

Coping strategies and resilience

Coping responses varied widely, with religious coping, family support, and social networks emerging as dominant strategies.^{29,32,39} Adaptive coping, including problem-focused strategies and active planning, was associated with better academic and psychological outcomes.⁴⁶ However, reliance on formal mental health services was low due to stigma, limited awareness, and accessibility barriers.³⁹ Gender differences in coping were reported, with females more likely to use emotional support and males more likely to adopt avoidant or problem-focused strategies.⁴⁰

Suicidal ideation

Several studies reported concerning levels of suicidal ideation among students, although prevalence varied widely.^{25,28} Academic stress, poor performance, social isolation, and emotional distress were key correlates.^{16,25,28} While less frequently studied, suicidal ideation appeared to represent the most severe endpoint of sustained academic and psychological strain.^{22,24,26,35,38} Overall, the

evidence indicates that academic performance operates as both an educational outcome and a psychosocial determinant embedded within broader structural and cultural contexts influencing student mental health in Nigeria.

Discussion

Principal findings

This review synthesized evidence from 28 studies and demonstrates a consistent association between academic performance and mental health among Nigerian students.^{15,16,22-47} The relationship is multidimensional, involving interacting domains of academic stress, emotional distress, self-concept, coping mechanisms, and suicidality. Rather than a linear pathway, the evidence suggests a reciprocal system in which academic performance and mental health continuously influence each other through reinforcing feedback loops. Academic stress emerged as the central mechanism linking academic demands and psychological outcomes. This stress is intensified not only by academic workload and examinations but also by structural and socioeconomic conditions such as financial hardship, institutional instability, and disrupted academic calendars.^{26,29,32,33} These contextual stressors suggest that academic performance in Nigeria is embedded within broader social determinants that amplify psychological vulnerability.

Subgroup and contextual differences

Although subgroup analyses were inconsistently reported, available evidence suggests meaningful variation across gender, socioeconomic status, and institutional contexts. Female students were more likely to report internalizing symptoms such as anxiety and emotional distress, whereas male students more frequently reported stress linked to academic expectations and future economic responsibility.³⁹ Socioeconomic disadvantage consistently intensified psychological distress, particularly through financial insecurity and reduced access to academic resources.^{26,32}

Regional and institutional variation was less well documented, although available evidence suggests that students in resource-constrained or conflict-affected regions may experience compounded stress due to insecurity and disrupted schooling.¹⁵ However, the predominance of studies from southern Nigeria limits robust national comparison, highlighting a significant evidence gap. Similarly, limited representation of secondary school populations restricts understanding of early-stage academic and psychological development.

Comparison with existing literature

The findings align with global evidence demonstrating that academic pressure is a key determinant of student mental health.^{2,3} However, the Nigerian context introduces distinctive structural amplifiers. Financial hardship and institutional instability, particularly recurring academic strikes, appear to play a more pronounced role than in many high-income settings.^{8,9,26} These disruptions create prolonged uncertainty in academic progression, thereby exacerbating stress and emotional distress. Within sub-Saharan Africa, similar patterns of student psychological distress have been reported, but the scale of systemic educational disruptions appears more pronounced in Nigeria.⁵⁰⁻⁵³ Gender-related patterns also diverge from some global findings, where female students typically report higher distress levels. In contrast, several Nigerian studies suggest elevated stress

among male students, likely reflecting sociocultural expectations regarding financial responsibility and academic success.³⁹

Mechanisms linking academic performance and mental health

The findings suggest several interacting pathways. First, academic underperformance generates psychological distress through fear of failure, reduced self-efficacy, and social comparison. Second, psychological distress impairs cognitive functioning, concentration, and motivation, thereby reducing academic performance. Third, structural stressors such as financial insecurity and institutional instability amplify both pathways simultaneously. This creates a self-reinforcing cycle in which academic and psychological difficulties perpetuate each other over time.

Methodological considerations

The predominance of cross-sectional designs limits causal inference and prevents temporal sequencing between academic performance and mental health outcomes. Additionally, reliance on self-reported measures introduces potential bias, including recall and social desirability effects. Heterogeneity in measurement tools further limits comparability across studies and precludes meta-analysis. Sampling limitations, particularly the dominance of university-based studies in southern Nigeria, restrict generalizability. The limited inclusion of secondary school populations and underrepresentation of northern regions further constrain national representativeness.

Implications for research and practice

These findings underscore the need for longitudinal and intervention-based research to clarify causal mechanisms and evaluate effective strategies for improving student well-being. Mixed-methods approaches are particularly important for capturing contextual and cultural interpretations of academic stress. At the institutional level, integrating mental health services within educational settings and addressing structural stressors such as financial hardship and academic disruptions may significantly improve student outcomes.

Methodological and measurement considerations

The dominance of cross-sectional study designs limits causal interpretation, as temporal ordering between academic performance and mental health cannot be established. Consequently, it remains unclear whether poor academic performance leads to psychological distress, whether mental health challenges impair academic functioning, or whether both processes occur simultaneously within reinforcing feedback loops. Significant heterogeneity in measurement approaches further constrains synthesis. Academic performance is inconsistently operationalized across studies, ranging from self-reported achievement to objective grade point averages. Similarly, mental health outcomes are assessed using diverse psychometric instruments, limiting comparability and precluding meta-analytic integration. Sampling patterns also reveal notable bias, with disproportionate representation of university populations, particularly in health-related disciplines. Limited inclusion of secondary school students restricts understanding of early developmental stages where academic self-concept and psychological vulnerability are established. Geographic imbalance, particularly underrepresentation of northern regions, further limits national generalizability.

Evidence gaps and limitations

Several methodological limitations within the evidence base should be considered when interpreting the findings of this review. First, most included studies relied heavily on self-reported measures of both academic performance and mental health outcomes. Such measures are vulnerable to reporting bias, recall bias, and social desirability bias, potentially resulting in underestimation or overestimation of psychological symptoms and academic difficulties. The frequent use of self-reported academic achievement rather than objective academic records may have further introduced measurement error. Second, the predominance of cross-sectional study designs limits causal inference. Because exposure and outcome variables were measured simultaneously in most studies, it is not possible to determine whether poor academic performance contributed to mental health problems, whether mental health difficulties impaired academic performance, or whether both processes operated concurrently within reciprocal feedback systems. Third, substantial heterogeneity existed in the operationalization of academic performance and mental health outcomes. Variability in measurement instruments, outcome definitions, and analytical approaches reduced comparability across studies and precluded quantitative meta-analysis. Fourth, qualitative evidence was limited, restricting understanding of the lived experiences, cultural interpretations, and contextual meanings attached to academic success and failure. Finally, geographical disparities in research output, particularly the underrepresentation of northern Nigeria and secondary school populations, may limit the national generalizability of findings. The exclusion of grey literature and non-English publications may also have contributed to publication bias.

Strengths and limitations

Strengths

This review provides the first comprehensive synthesis of evidence on academic performance and mental health among Nigerian students. The methodological rigor, adherence to JBI and PRISMA-SR guidelines, and inclusion of diverse study designs enhance its robustness. The thematic synthesis provides an integrated conceptual framework for understanding complex psychosocial relationships.

Limitations

The review is limited by language and date restrictions, exclusion of grey literature, and reliance on published studies indexed in selected databases. These constraints may introduce publication bias. The heterogeneity of included studies also precludes quantitative synthesis and limits comparability across findings.

Research gaps

Future research should prioritize longitudinal cohort designs to establish causal pathways, as well as intervention studies evaluating institutional mental health strategies. Greater inclusion of secondary school populations, underrepresented regions, and diverse socioeconomic groups is necessary to improve generalizability. Mixed-methods and qualitative studies are particularly needed to deepen understanding of lived experiences and contextual meaning-making.

Conclusions

Academic performance is closely and bidirectionally linked to mental health among Nigerian students, mediated through psychological, behavioral, and structural pathways. The evidence demonstrates a consistent and multidimensional relationship between academic performance and mental health among Nigerian students, mediated through academic stress, emotional distress, self-concept, coping mechanisms, and suicidal ideation. This relationship is shaped by structural, economic, and cultural factors unique to the Nigerian educational context. Academic performance should therefore be understood not only as an academic outcome but also as a key determinant of psychological well-being. Addressing this relationship requires integrated educational and mental health interventions that consider both individual and systemic determinants of student well-being.

Recommendations

Based on the findings of this systematic review, the following recommendations are offered.

1. For educational institutions: integrate mental health screening and support services within academic programs; establish accessible counselling centers; train academic staff in mental health literacy; implement stress management and coping skills workshops; and develop policies that recognize the interaction between academic demands and student well-being.
2. For policymakers: increase funding for student mental health services; mandate mental health curricula in teacher training programs; develop national guidelines for student mental health in educational institutions; address structural stressors, including university funding to reduce strike frequency; and establish financial aid schemes to alleviate economic pressures on students.
3. For researchers: conduct longitudinal cohort studies to establish causal pathways; design and evaluate culturally adapted interventions; employ mixed-methods approaches to capture lived experiences; ensure representative sampling across regions, institution types, and student populations; and investigate protective factors including resilience, social support, and coping.
4. For mental health practitioners: develop culturally sensitive assessment tools; integrate faith-based and family-oriented approaches into therapeutic interventions; and establish outreach programs to reduce stigma and increase service utilization.
5. For students and families: Promote awareness of available mental health resources; encourage adaptive coping strategies; foster open communication about academic pressures; and reduce stigmatising attitudes toward mental health help-seeking.

Implications of the study

Public health implications

The high prevalence of psychological distress, depression, and suicidal ideation among Nigerian students constitutes a significant public health concern. The association between poor academic performance and adverse mental health outcomes suggests that educational institutions are critical sites for public mental health intervention. Integrating mental health services into educational settings could reach a large, vulnerable population during a formative developmental period, potentially preventing the progression of mild distress to severe disorder.

Practice implications

Educational practitioners, including lecturers, counselors, and administrators, must be equipped with skills to recognize early warning signs of psychological distress and to respond appropriately. Pedagogical practices that balance academic rigor with psychological safety, including formative feedback, manageable assessment schedules, and supportive teacher-student relationships, may mitigate the negative mental health impacts of academic performance pressures.

Policy implications

Findings underscore the need for national policies that recognize student mental health as integral to educational quality and outcomes. Policies should mandate mental health services in tertiary institutions, regulate academic workload and assessment practices, provide financial support for economically disadvantaged students, and address the structural factors, including inadequate educational funding that contribute to academic disruption and student distress.

Research implications

This review highlights the need for methodologically rigorous research that moves beyond cross-sectional association studies. Priority areas include longitudinal investigations of the temporal dynamics between academic performance and mental health; intervention trials testing the effectiveness of institutional mental health programs; and qualitative research exploring the meaning-making processes through which Nigerian students interpret academic success and failure.

Global health implications

The findings from Nigeria contribute to the global discourse on student mental health, particularly in low- and middle-income country contexts. The prominence of financial stress and structural instability as determinants of the academic performance-mental health relationship highlights the importance of addressing social determinants of health within educational settings. Nigerian evidence can inform mental health strategies in other sub-Saharan African nations facing similar challenges.

Educational implications

Academic performance and mental health are not separate domains but are fundamentally intertwined in students' educational experiences. Educational systems that prioritize academic outcomes at the expense of student well-being may ultimately undermine both. A paradigm shift toward holistic education that values psychological flourishing alongside academic achievement is necessary to prepare students for both academic success and lifelong well-being.

Future directions

Future research should prioritize prospective longitudinal cohort studies that follow students across multiple academic years to clarify temporal and causal pathways between academic performance and mental health outcomes. Such studies should incorporate repeated measures of psychological well-being and objective academic indicators, including cumulative grade point averages and institutional academic records. Intervention studies are also urgently needed. Randomized controlled trials and quasi-experimental evaluations could assess the effectiveness of integrated mental health programs, resilience training, peer-support interventions, stress-management workshops, and institution-based counseling services in improving both academic and psychological outcomes.

Mixed-methods research combining quantitative surveys with

in-depth interviews or focus group discussions would provide a richer understanding of students' lived experiences and coping processes. Qualitative and ethnographic approaches may be particularly valuable for exploring cultural meanings attached to academic success, failure, and help-seeking behavior. Future studies should also employ standardized and validated instruments to improve comparability across settings. Greater attention should be given to subgroup analyses involving gender, socioeconomic status, geopolitical zone, institutional type, and disciplinary field. Multi-center studies involving universities, polytechnics, colleges of education, vocational institutions, and secondary schools across all geopolitical zones would substantially improve representativeness and generalizability.

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Online supplementary material:

Supplementary Table 1. Risk of bias/quality assessment.

Supplementary Table 2. Summary of the included studies.

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