

SUPPLEMENTARY MATERIAL

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

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Supplementary Table 1. Risk of bias/quality assessment.

Authors (Year)	Risk of Bias Score	Quality Assessment Score
Nwikpo <i>et al.</i> (2025) ¹⁵	Low	High
Oladele <i>et al.</i> (2026) ¹⁶	Moderate	Moderate
Akpan <i>et al.</i> (2024) ²²	Moderate	Moderate
Anozie <i>et al.</i> (2024) ²³	Low	High
Awotidebe <i>et al.</i> (2022) ²⁴	Low	High
Ayodele <i>et al.</i> (2025) ²⁵	Low	High
Dauda and Abdulkadir (2025) ²⁶	Moderate	Moderate
Dipeolu and Oluwabusola (2026) ²⁷	Moderate	Moderate
Fadipe and Olakojo (2024) ²⁸	Moderate	Moderate
Fadeju <i>et al.</i> (2025) ²⁹	Moderate	Moderate
Joseph <i>et al.</i> (2025) ³⁰	Moderate	Moderate
Ojeleye <i>et al.</i> (2023) ³¹	Low	High
Olusina (2025) ³²	Low	High
Ogundele <i>et al.</i> (2025) ³³	Low	High
Okocha <i>et al.</i> (2025) ³⁴	Low	Moderate
Aweto <i>et al.</i> (2021) ³⁵	Low	High
Ajiboye <i>et al.</i> (2021) ³⁶	Low	High
Kabir <i>et al.</i> (2025) ³⁷	Moderate	Moderate
Udemba (2025) ³⁸	Moderate	Moderate
Unknown authors (2024) ³⁹	High	Low
Muza <i>et al.</i> (2023) ⁴⁰	Moderate	Moderate
Garba <i>et al.</i> (2023) ⁴¹	Moderate	Moderate
Agah <i>et al.</i> (2023) ⁴²	Low	High
Isiogugu <i>et al.</i> (2022) ⁴³	Moderate	Moderate
Ude <i>et al.</i> (2022) ⁴⁴	Low	High
Anosike <i>et al.</i> (2022) ⁴⁵	Moderate	Moderate
Babalola <i>et al.</i> (2026) ⁴⁶	Moderate	Moderate
Ituen (2025) ⁴⁷	Moderate	Moderate

Supplementary Table 2. Summary of the included studies.

Authors (year)	Objectives	Study design	Setting and sample size	Key findings	Conclusion
Nwiko <i>et al.</i> (2025)¹⁵	Comparative analysis of mental health and academic performance in low-intensity conflict vs non-conflict zones	Ex-post facto	Universities in South-East and South-South; n=800	Significant difference in academic performance between conflict and non-conflict zones; no significant mental health, and gender-based difference	Academic and mental health support programs needed for vulnerable students.
Oladele <i>et al.</i> (2026)¹⁶	Investigate relationship between depression and personality traits	Cross-sectional	University student, Oyo State; n=466	Agreeableness, conscientiousness, neuroticism were identified as factors for depression	University mental health services need strengthening.
Akpan <i>et al.</i> (2024)²²	Examine impact of academic progress on mental health of undergraduates	Cross-sectional	South-Western Nigeria; n=400	Academic pressure contribute to stress, and anxiety in life and occasionally expressed stress related to academic demands	Complex relationship between academic performance, well-being, and coping; need for integrated services.
Anozie <i>et al.</i> (2024)²³	Investigate mediating role of perceived academic stress between achievement motivation, resilience, and performance	Cross-sectional	Nigerian undergraduates; n=844	Perceived academic stress mediated relationship between motivation, resilience, and academic performance	Academic stress is a critical mechanism; stress management interventions recommended.
Awotidebe <i>et al.</i> (2022)²⁴	Determine prevalence and factors associated with psychological distress	Cross-sectional	Nigerian university allied health sciences; n=333	Poor academic performance associated with anxiety, and stress	Students with poor performance and family history of mental illness need targeted support.
Ayodele <i>et al.</i> (2025)²⁵	Investigate personality types as determinants of depression and suicidal ideation	Cross-sectional	Faith-based institution, Ogun State; n=371	There is prevalence of depression, and suicidal ideation; conscientiousness and neuroticism predicted both; adverse academic performance identified as consequence	Depression and suicidal ideation prevalent; university environment should be strengthened for mental health.
Dauda and Abdulkadir (2025)²⁶	Investigate mental health as determinant of academic performance	Cross-sectional	Emmanuel Alayande College of Education, Oyo; n=366	Academic stress, financial hardship, and excessive technology use are strongest predictors of depression	Academic, technological, and financial stressors are critical in Nigerian college context; mental health literacy needed.
Dipeolu and Oluwabusola (2026)²⁷	Influence of socioeconomic status, study habits/time management, and mental health on academic performance	Correlational	Polytechnic Ibadan, Oyo State; n=120	Mental health negatively correlated with performance; study habits/time management contributed most	Holistic approach targeting study skills, financial support, and mental health services needed.
Fadipe and Olakojo (2024)²⁸	Identify psychosocial risk factors for suicidal ideation	Descriptive survey	University of Ilorin; n=400	Low academic performance, low social support from friends, academic stress, cyberbullying, examination anxiety, rejection, death of loved ones, and emotional distress identified as psychosocial risk factors for suicidal ideation	Counselling and support services recommended to prevent suicidal ideation.

Fadeju <i>et al.</i> (2025)²⁹	Determine perceived stress, stressors, and coping strategies among dental students	Cross-sectional	Obafemi Awolowo University, Ile-Ife; n=123	Workload, and performance pressure are top stressors; religious coping strategy most reported	Stress high among dental students; religion, active coping, and planning used as coping strategies.
Joseph <i>et al.</i> (2025)³⁰	Examine prevalence and impact of academic stress on mental health of engineering students	Cross-sectional	12 Nigerian universities, South-West and North-Central; n=500	Transport, course understanding, financial concerns are key stressors	Targeted interventions needed to address root causes of stress among engineering students.
Ojeleye <i>et al.</i> (2023)³¹	Explore self-esteem and academic resilience as determinants of academic performance	Cross-sectional	Federal Polytechnic Kaura-Namoda, Zamfara State; n=682	Self-esteem, and academic resilience positively predicted academic performance	Self-esteem and resilience are critical determinants; institutional support needed.
Olusina (2025)³²	Explore influence of financial stress on academic performance and mental health	Qualitative	Selected university, Lagos; n=14	Financial stress disrupts academic work; causes anxiety, depression, low self-esteem, social withdrawal; spiritual coping and family support key	Economic stress is complex; policies for financial aid and mental health support needed.
Ogundele <i>et al.</i> (2025)³³	Assess academic stress and recreational involvement	Descriptive survey	Obafemi Awolowo University, Ile-Ife; n=1,000	High academic stress prevalence driven by fear of failure, job prospects, workload, examination times, parental expectations, and competition for grades; low recreational participation	Stress management workshops and recreational promotion recommended.
Okocha <i>et al.</i> (2025)³⁴	Investigate effects of resilience, emotional support, and self-regulation on academic success	Non-experimental correlation study	South-West Nigerian universities; n=594	Emotional support, self-regulation, resilience, positively moderated and mediated academic success	Resilience and emotional support enhance academic success; targeted interventions warranted.
Aweto <i>et al.</i> (2021)³⁵	Investigate effects of examination-related stress on cardiopulmonary and psychological parameters	Cross-sectional analytical	University of Lagos; n=412	Significant changes in cardiopulmonary parameters during examinations; increased high or moderate anxiety; examination stress negatively affected psychological parameters	Examination stress significantly impairs physiological and psychological functioning.
Ajiboye <i>et al.</i> (2021)³⁶	Investigate sources of examination anxiety among final-year students	Descriptive survey	University of Ilorin; n=600	Emotion identified as major source of examination anxiety; gender differences observed	Guidance counsellors and educational administrators should be involved in student affairs.
Kabir <i>et al.</i> (2025)³⁷	Examine relationship between depression, anxiety, and working memory	Cross sectional	Ahmadu Bello University, Zaria; n=323	Prevalence of depressive and anxiety symptoms among students	Mental health screening and support services within the university environment is strongly recommended.
Udemba (2025)³⁸	Evaluate psychological effects of testing on undergraduates	Descriptive survey	Federal University Oye-Ekiti; n=200	Testing had positive effects on (motivation, focus) and negative effects on (anxiety, stress, self-doubt, fear of failure)	Balanced assessment practices and stress management strategies needed.

Unknown authors (2024)³⁹	Investigate academic stress, causes, gender distribution, mental health correlates, coping strategies	Cross-sectional online survey	Nigerian universities; n=70	High to very high academic stress; male students reported higher stress; spirituality and entertainment are primary coping strategies; academic support services underutilised.	Stigma and lack of awareness limit service utilisation; need for larger longitudinal studies.
Muza et al. (2023)⁴⁰	Investigate relationships among stress, coping strategies, and academic performance	Correlational	Federal University Birnin-Kebbi; n=337	Negative relationship between stress and academic performance; significant gender differences in coping strategies	Conducive university environment and improved amenities recommended.
Garba et al. (2023)⁴¹	Investigate stress, anxiety, depression as predictors of academic performance	Cross-sectional	North-Western Nigerian universities; n=300	Stress, anxiety, and depression significantly predicted poor academic performance	Mental health screening and intervention programmes needed.
Agah et al. (2023)⁴²	Explore managing examination-induced stress using FEAR-model of CBT	Randomised pre-test/post-test Nigerian	university students; n=159	FEAR-Model of CBT efficacious in reducing examination-induced stress	CBT interventions should be integrated into university counselling services.
Isiogugu et al. (2022)⁴³	Investigate pharmacy students' perceptions of mental disorders' impact on pharmacy education	Cross-sectional	6 Nigerian universities; n=496	Depression, anxiety, and substance abuse affects academic performance	Perception of mental health impacts on academic performance is high among pharmacy students.
Ude et al. (2022)⁴⁴	Investigate effects of anxiety and depression on academic performance	Experimental	Ebonyi State University; n=80	High anxiety and depressed undergraduates performed significantly worse	Anxiety and depression directly impair academic functioning.
Anosike et al. (2022)⁴⁵	Determine correlates of sleep quality with mental health and academic performance	Cross-sectional	University in Enugu; n=274	Poor sleep quality associated with worse mental health and lower academic performance; prevalence of anxiety, and depression	Sleep interventions may improve both mental health and academic outcomes
Babalola et al. (2026)⁴⁶	Examine predictive roles of academic stress and coping style on academic engagement	Cross-sectional University of Ibadan; n=341		Academic stress jointly predicted engagement variance with worrying about grades emerging as significant predictors; active problem coping positively predicted engagement	Interventions reducing academic worry and promoting coping strategies recommended.
Ituen (2025)⁴⁷	Investigate impact of financial stress on academic achievement	Cross-sectional	University of Benin; n=150	Finance is crucial for academic success; financial stress significantly impacted performance leading to missed classes, poor concentration;	Financial support schemes and mental health services needed

CBT, cognitive behavioral therapy; Feeling Expectation Action Result – Model.