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IMPACT OF STRUCTURED MENTORSHIP PROGRAMMES ON ACADEMIC PERFORMANCE AND WELLBEING OF NURSING STUDENTS IN NIGERIA

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Abstract
Mentorship is increasingly recognised as a vital strategy in nursing education to address academic pressures and psychosocial challenges, particularly in low- and middle-income countries where formal programmes remain underdeveloped. In Nigeria, nursing undergraduates face rigorous curricula and transitional stressors amid faculty shortages exacerbated by brain drain. This study aimed to evaluate the impact of a structured peer mentorship programme on academic performance and wellbeing among undergraduate nursing students. A quasi-experimental one-group pre–post design with historical comparison was employed at the University of Nigeria, Enugu Campus. Seven fourth-year mentors guided 126 second-year mentees over one semester. Wellbeing was assessed using validated GAD-7, PHQ-9, and University Stress Scale instruments; academic performance via NSC 201 module scores. Paired t-tests and independent-samples t-tests were utilised for analysis, supplemented by satisfaction surveys. Findings revealed significantly higher academic scores in the mentored cohort (mean 58.58 ± 11.067%; $p < 0.001$) versus historical controls. Overall anxiety and depression remained unchanged, but specific anxiety items improved ($p = 0.020$; $p = 0.003$); stress increased significantly ($p = 0.013$). Participants' general feedback was overwhelmingly positive. Structured peer mentorship enhances academic performance and provides targeted psychosocial support in resource-constrained settings. Institutions should integrate such programmes to foster resilience and retention, informing policy for standardised implementation in Nigerian nursing education.

Keywords: Academic performance, Mentorship programmes, Nigeria, Nursing umdergraduates, Wellbeing.

1. Introduction

Mentorship in nursing education is a structured relational process through which more experienced individuals provide guidance, support, and professional socialisation to less experienced learners, facilitating both academic and personal development [1]. Unlike coaching or tutoring, which are typically task-specific and short-term, mentorship encompasses sustained knowledge transfer, emotional support, role modelling, and professional identity formation [2]. Within nursing education, mentorship plays a critical role in bridging theoretical instruction with clinical practice, fostering critical thinking, ethical competence, resilience, and preparedness for professional roles [3,4].

Over time, mentorship in nursing has evolved from informal apprenticeship-style relationships to formally structured programmes embedded within educational institutions [5]. Structured mentorship programmes incorporate defined objectives, mentor training, feedback mechanisms, and institutional oversight to ensure consistency and accountability [6]. Peer mentorship, a prominent structured model, involves senior students guiding junior peers in a collaborative and relatable learning environment [7]. Evidence from systematic reviews demonstrates that peer mentorship enhances self-directed learning, leadership skills, communication competence, and academic engagement among nursing students [8].

Nursing students face substantial academic, clinical, and psychosocial challenges, including intensive curricula, clinical workload, assessment pressures, and role transitions [9]. These stressors are strongly associated with anxiety, depression, burnout, and attrition, all of which can compromise learning outcomes and future workforce retention [10,11]. Mentorship has been identified as a protective mechanism capable of mitigating these challenges by fostering a sense of belonging, reducing isolation, and providing emotional and academic support [12]. Empirical studies indicate that effective mentorship is associated with improved academic performance, enhanced clinical competence, and reduced dropout rates among nursing students [7,13].

Student wellbeing—encompassing mental, emotional, and social health—is closely linked to academic success and professional readiness in nursing education [14]. Poor wellbeing has been associated with impaired concentration, diminished clinical performance, and increased risk of withdrawal from training programmes [15]. Conversely, supportive learning environments, including structured mentorship, promote self-efficacy, psychological resilience, and adaptive coping strategies [16]. Peer mentorship, in particular, has been described as a cost-effective and scalable intervention that benefits both mentees and mentors by reinforcing learning, confidence, and professional identity [8,17].Despite robust evidence supporting mentorship in high-income countries, significant gaps persist in low- and middle-income countries (LMICs), where formal mentorship structures are often underdeveloped or absent [7,18]. In these contexts, mentorship is frequently informal, voluntary, and inconsistently implemented, limiting its potential impact [19]. Systemic challenges such as faculty shortages, high student–teacher ratios, and limited institutional resources further constrain the delivery of effective mentorship programmes [20].

In Nigeria, nursing education is characterised by rigorous academic demands, early exposure to clinical environments, and substantial transitional stress, particularly during pre-clinical and clinical phases [21]. These challenges are exacerbated by persistent faculty shortages driven by large-scale emigration of nurses and nurse educators, commonly referred to as brain drain [22,23]. Although the importance of mentorship is widely acknowledged, there is no nationally standardised framework for mentorship within undergraduate nursing programmes in Nigeria, and existing initiatives are rarely institutionalised or evaluated [24,25].

Recent Nigerian studies have highlighted students' perceived need for mentorship and identified barriers such as mentor–mentee mismatches, time constraints, and lack of institutional support [25,26]. However, empirical interventional studies examining the impact of structured peer mentorship on both academic performance and wellbeing among nursing students remain scarce. This evidence gap limits the development of contextually appropriate, evidence-based mentorship policies for nursing education in Nigeria and comparable LMIC settings [18,27].

Structured peer mentorship programmes offer a pragmatic solution in resource-constrained environments by leveraging senior students as accessible role models, reducing faculty burden, and

promoting sustainability [8,17]. When systematically designed and supported, such programmes provide measurable academic benefits while offering targeted psychosocial support tailored to students' lived experiences [6]. In the Nigerian context, where academic pressure, financial constraints, and transitional stress are prevalent, structured peer mentorship may represent a viable strategy to enhance student outcomes and resilience [21,23].

Study Objectives

The objectives of this study were to:

a. Examine the effect of a structured peer mentorship programme on the academic performance of undergraduate nursing students.
b. Assess and compare the pre- and post-intervention levels of anxiety among nursing students.
c. Determine and evaluate the impact of the mentorship intervention on depression and stress levels among the student cohort

Providing empirical evidence from a Nigerian university setting, this study addresses a critical gap in the literature on mentorship interventions in LMIC nursing education. The findings are intended to inform institutional practice and policy development for the standardised implementation of mentorship programmes aimed at improving academic success and psychosocial wellbeing among nursing students in resource-constrained contexts.

2. Materials and Methods

Study Design -This study adopted a mixed-methods approach, integrating quantitative and qualitative components to comprehensively evaluate the impact of a structured peer mentorship programme on academic performance and wellbeing among undergraduate nursing students. Quantitatively, a quasi-experimental one-group pre-test–post-test design was employed to assess changes in wellbeing indicators—anxiety, depression, and stress—before and after participation in the mentorship intervention [28,29]. Although the design did not include a concurrent control group, it enabled the examination of intra-individual changes over time in a real-world educational setting.

Academic performance outcomes were assessed using a historical comparison design, whereby examination scores of students exposed to the mentorship programme were compared with those of prior cohorts who had not participated in any formal mentorship initiative. This approach has been widely utilised in educational and health professions research where randomisation is impractical due to ethical or logistical constraints [30].

The perceptions of the mentorship programme were explored through structured satisfaction surveys and open-ended responses obtained from both mentors and mentees. This facilitated contextual interpretation of quantitative findings and enhanced the credibility of the results through methodological triangulation [28].

Study Setting

The study was conducted at the Department of Nursing Sciences, University of Nigeria, Enugu Campus, a public tertiary institution offering accredited Bachelor of Nursing Science (BNSc) programmes. The University of Nigeria is one of the leading nursing education institutions in the country and reflects the broader Nigerian nursing education landscape, characterised by intensive academic curricula, early clinical exposure, and systemic challenges such as staff shortages and high student enrolment [31,32].

The Enugu Campus hosts pre-clinical and clinical nursing training and was considered appropriate for this intervention due to the transitional academic demands faced by students at this stage of training.

Study Population and Participants

The target population comprised undergraduate nursing students enrolled in the BNSc programme at the Enugu Campus. Two categories of participants were involved:

- Mentors: Fourth-year nursing students who had completed all pre-clinical courses and at least one clinical posting.
- Mentees: Second-year nursing students transitioning into pre-clinical nursing education, a phase associated with increased academic and psychosocial stress [21].

Eligibility criteria for mentors included satisfactory academic standing, demonstrated interpersonal skills, willingness to participate, and availability throughout the intervention period. Mentors were selected through departmental nomination and brief interviews. Mentees were recruited through class announcements and voluntary enrolment. Participation was incentivised through non-financial academic recognition and institutional support, consistent with ethical standards for educational research [33].

Description of the Peer Mentorship Programme

The structured peer mentorship programme (PMP) was designed as a formal, relational intervention pairing fourth-year nursing students (mentors) with second-year students (mentees) in one-on-one or small-group formats. The programme was implemented over one academic semester and followed established mentorship phases: planning, recruitment, orientation, relationship development, maturation, and closure [34,35].

Mentors received pre-intervention training focused on communication skills, ethical mentoring practices, academic guidance, emotional support, and referral pathways for student wellbeing concerns. Training content was informed by evidence-based mentorship competencies in health professions education [36].

Mentorship activities included academic orientation, study skills support, guidance on clinical preparation, emotional support, and informal career discussions. Sessions were delivered through scheduled face-to-face meetings supplemented by flexible communication platforms to accommodate academic workloads. Programme monitoring was conducted by faculty coordinators to ensure adherence to structure and ethical boundaries.

Data Collection Instruments

Wellbeing Measures - Wellbeing outcomes were assessed using validated self-report instruments:

- Generalised Anxiety Disorder-7 (GAD-7): A seven-item scale measuring anxiety severity, with established reliability and validity in university and nursing student populations [37].
- Patient Health Questionnaire-9 (PHQ-9): A nine-item instrument used to assess depressive symptoms and severity, widely validated in student and clinical samples [38].
- University Stress Scale (USS): A 21-item scale specifically developed to measure stress domains among university students, demonstrating strong psychometric properties across diverse academic settings [39,40].

  All instruments were administered at baseline (pre-intervention) and at the end of the mentorship programme (post-intervention).

Academic Performance - Academic performance was measured using students' scores in NSC 201, a core nursing module taken during the intervention semester. Where available, Cumulative Grade Point Average (CGPA) data were collected to contextualise academic standing. Scores from the mentored cohort were compared with those of historical cohorts from previous academic sessions who had not participated in any structured mentorship programme.

Perceptions of the mentorship programme were captured using structured satisfaction questionnaires administered to mentors and mentees at the end of the intervention. The questionnaires included Likert-scale items assessing perceived effectiveness, mentor competence, emotional support, and self-development, alongside open-ended questions to elicit experiential feedback.

Data Analysis

Quantitative data were analysed using appropriate statistical software. Descriptive statistics (means, standard deviations, frequencies, and percentages) were used to summarise socio-demographic characteristics and outcome variables. **Paired t-tests** (or Wilcoxon signed-rank tests where assumptions were violated) were applied to examine pre–post changes in wellbeing scores.

Independent-samples t-tests were used to compare academic performance between the mentored cohort and historical non-mentored cohorts [41].
Effect sizes and confidence intervals were reported where appropriate to enhance interpretability and statistical transparency. Statistical significance was set at $p < 0.05$.
The data from open-ended responses were analysed thematically, following established procedures of familiarisation, coding, theme development, and refinement [42]. Integration of quantitative and qualitative findings occurred at the interpretation stage to provide a holistic understanding of programme outcomes [28].

Ethical Considerations
Ethical approval for the study was obtained from The Ethical Committee of the University of Nigeria Teaching Hospital Ituku Ozalla, Enugu. Permission was also secured from departmental authorities prior to programme implementation. Participation was voluntary, and written informed consent was obtained from all participants.
Confidentiality and anonymity were ensured through de-identification of data and secure data storage. Participants were informed of their right to withdraw from the study at any stage without academic penalty. Given the assessment of mental wellbeing, referral pathways were established for participants who exhibited significant distress. Confidentiality agreements were emphasised within mentor–mentee relationships to uphold ethical mentoring standards [43].

3. Results

Characteristics of Participants
Table 1 shows data from 126 mentees and seven mentors were analysed, with only mentees possessing valid baseline entries included.
Mentees were second-year (200 level) nursing students at the University of Nigeria, Enugu Campus, predominantly entering via the University Matriculation Examination (UME; 92.9%). Their mean age was 20.78 ± 2.653 years (median = 20.00; range = 18–34). Most were female (84.1%), unmarried, and without children, except for one married participant primarily responsible for an infant under one year. UME-entry students (n = 117) reported a mean first-year CGPA of 3.73 ± 0.605 (n = 98 valid responses). Mean UME score was 249.14 ± 35.617 (range = 176–330), and mean post-UME score was 253.68 ± 42.520 (range = 56–327).
Mentors (n = 7) had a mean age of 21.71 ± 1.890 years, with four males (57.1%). All were single, Christian, UME entrants, unemployed, and reported CGPA ranging from 3.80 to 4.44. Five (71.4%) had prior experience as mentees, and four (57.1%) as mentors.

Table 1: Characteristics of Participants

Characteristic	Mentees (n = 126)	Mentors (n = 7)
Mean Age (years)	20.78 ± 2.653	21.71 ± 1.890
Female (%)	84.1	42.9
Married (%)	<1 (n = 1)	0
Mean CGPA (where reported)	3.73 ± 0.605 (n = 98)	3.80–4.44 (range)

Characteristic	Mentees (n = 126)	Mentors (n = 7)
Prior Mentee Experience (%)	Not reported	71.4
Prior Mentor Experience (%)	Not reported	57.1

3.2 Academic Performance Outcomes

Academic performance was measured via scores in NSC 201 (first semester, 200 level). The mentored cohort achieved a mean score of 58.58 ± 11.067% (n = 108), with most grades in the B or C brackets (Figure 1 and Table 2).

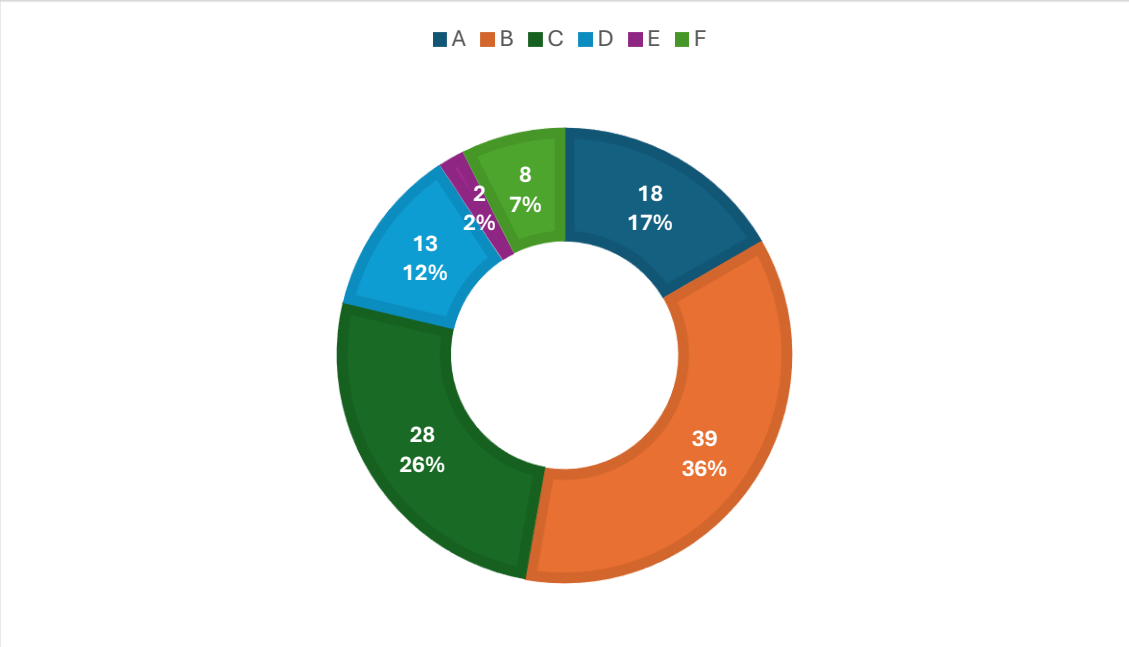


Figure 1: Grades of the Mentees

Table 2: Comparison of Academic Performance with Historical Non-mentored cohorts

Group	Mean NSC 201 Score (%)	Standard Deviation	Comparison p-value
Mentored Cohort (Intervention)	58.58	11.067	<0.001 (highly significant)
Historical Non-Mentored Cohorts	54.30		-

This indicates a substantial positive association between participation in the structured peer mentorship programme and enhanced academic performance (Andersen & Watkins, 2018; Harrison et al., 2022).

Wellbeing Outcomes of Participants (Presented in Figures 2 & 3; Table 3)

Anxiety (GAD-7): Baseline mean score was 8.08 ± 5.840 (n = 126), with most participants exhibiting none or mild anxiety, though 16% reported severe anxiety. Post-intervention mean was 7.34 ± 6.000 (n = 93). Paired analysis (n = 93) showed no significant overall difference (mean difference = 0.602; p = 0.215). However, two items improved significantly: "feeling nervous, anxious, or on edge" (p = 0.020) and "not being able to stop or control worrying" (p = 0.003).

Depression (PHQ-9): Baseline mean score was 8.63 ± 6.891 (n = 126), predominantly none or mild, with 11.9% severe. Post-intervention mean was 8.67 ± 6.966 (n = 93). Paired analysis (n = 93) revealed no significant overall difference (mean difference = 0.247; p = 0.694), nor significant item-level changes.

Stress (University Stress Scale): Baseline mean score was 15.94 ± 9.450 (n = 126), with 57.1% reaching levels predictive of significant psychological distress. Post-intervention mean was 18.00 ± 9.961 (n = 93), with 66.7% at distress-predictive levels. Paired analysis (n = 93) indicated a significant increase (baseline mean = 15.538; p = 0.013). Five items worsened significantly (e.g., academic demands, p = 0.002; finances, p = 0.013).

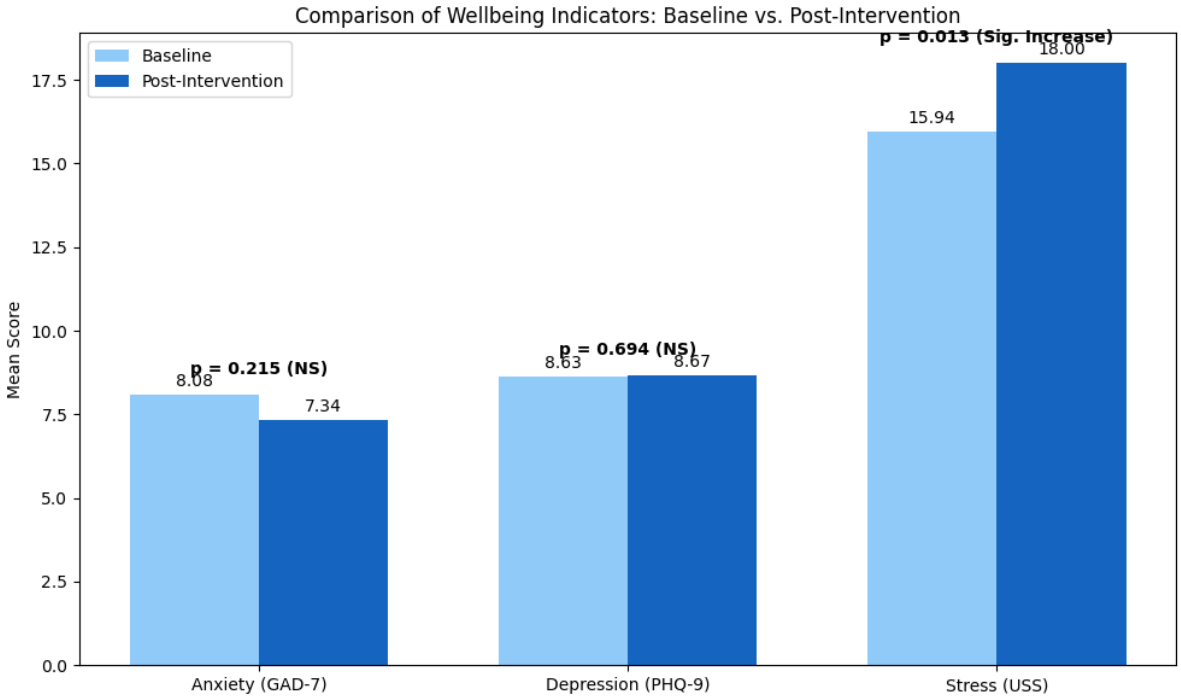


Figure 2: Comparison of wellbeing Indicators

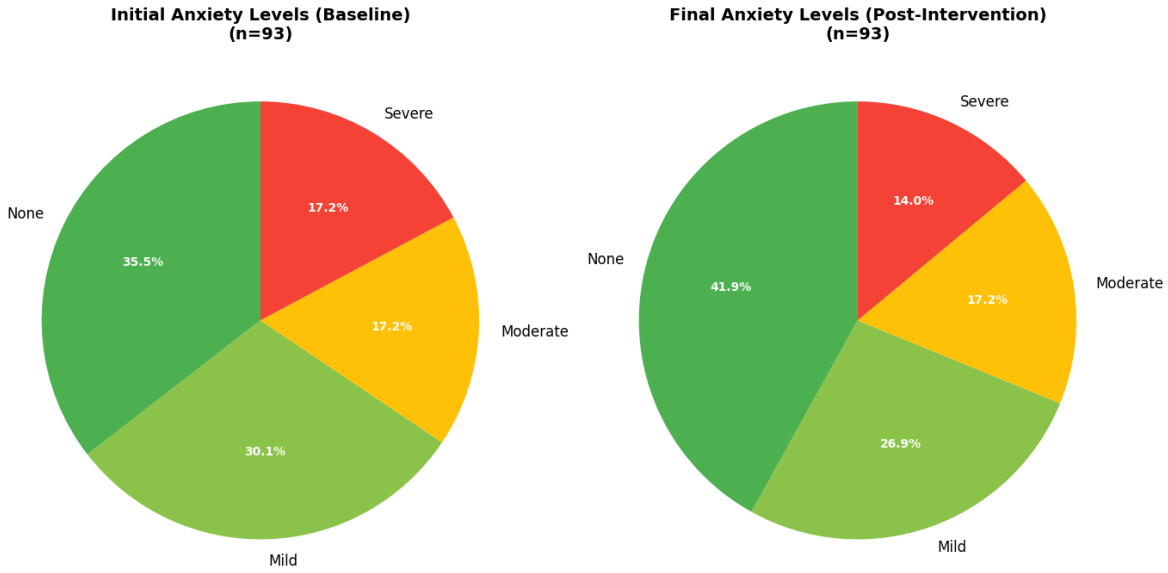


Figure 3: Anxiety Initial and Post

Table 3: Comparisons of pre and post interventions wellbeing indicators

Measure	Baseline Mean ± SD (n)	Post-Intervention Mean ± SD (n)	Paired Difference (n = 93)	p-value
Anxiety (GAD-7 Total)	8.08 ± 5.840 (126)	7.34 ± 6.000 (93)	0.215	
Depression (PHQ-9 Total)	8.63 ± 6.891 (126)	8.67 ± 6.966 (93)	0.694	
Stress (USS Total)	15.94 ± 9.450 (126)	18.00 ± 9.961 (93)	0.013 (significant increase)	

Figure 4 shows the proportion of mentees who responded. Feedback from mentees (n = 85) and mentors (n = 7) was overwhelmingly positive, with weighted means >4.00 on most Likert items concerning mentor capabilities, programme structure, self-improvement, emotional support, and confidence enhancement.

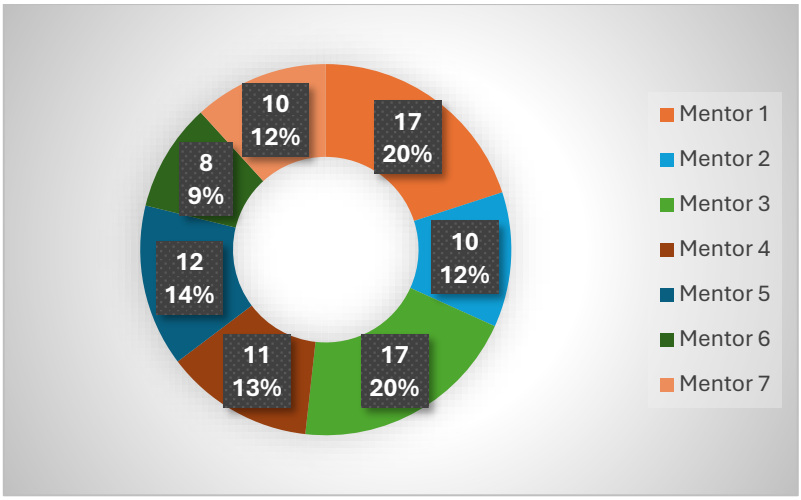


Figure 4: Proportion of mentees from each mentor who responded to the feedback and satisfaction questionnaire

The structured peer mentorship programme was associated with a statistically significant improvement in academic performance among second-year nursing students. Participants in the mentored cohort achieved significantly higher mean scores in the NSC 201 module compared with historical non-mentored cohorts ($p < 0.001$), indicating a strong positive association between structured peer mentorship and academic achievement [44,45]. This finding supports existing evidence that mentorship enhances academic engagement, learning efficiency, and performance outcomes in nursing education.

With respect to wellbeing outcomes, overall anxiety and depression levels remained statistically unchanged following the intervention. Total scores on the Generalised Anxiety Disorder-7 (GAD-7) and Patient Health Questionnaire-9 (PHQ-9) instruments showed no significant pre–post differences ($p = 0.215$ and $p = 0.694$, respectively). However, item-level analyses revealed significant reductions in specific anxiety symptoms, particularly feelings of nervousness or being on edge ($p = 0.020$) and difficulty controlling worry ($p = 0.003$). These targeted improvements suggest that the mentorship programme may have alleviated situational anxiety related to academic transition and uncertainty, even in the absence of broader reductions in overall anxiety scores [46,47].

In contrast, stress levels increased significantly following participation in the programme, as measured by the University Stress Scale ($p = 0.013$). Significant worsening was observed in stress domains

related to academic workload, financial pressures, and time demands. This increase may reflect heightened academic expectations, increased self-awareness of stressors, or cumulative pressures during the semester rather than a detrimental effect of the mentorship itself [48,49].

The feedback from both mentees and mentors was overwhelmingly positive, with high ratings across domains including mentor accessibility, programme organisation, academic guidance, emotional support, confidence building, and professional development. These perceptions reinforce the quantitative findings by highlighting the programme's perceived value in enhancing academic confidence, social connectedness, and coping capacity, consistent with prior studies on peer mentorship in nursing education [50,51].

4. Discussion

Academic Performance Outcomes

The most salient finding of this study was the significant improvement in academic performance among students who participated in the structured peer mentorship programme. The mentored cohort achieved higher mean scores in the core nursing module (NSC 201) compared with historical non-mentored cohorts ($p < 0.001$). This aligns with a growing body of evidence indicating that peer mentorship enhances academic engagement, learning strategies, and examination performance in nursing education [44,54,55].

The academic advantage observed may be attributed to several mechanisms inherent in peer mentorship. Senior students, having recently navigated similar academic and clinical demands, are well positioned to provide context-specific guidance, study strategies, and reassurance [45,50]. Such relational proximity enhances cognitive congruence and psychological safety, facilitating more effective knowledge transfer than traditional faculty-led support alone [56]. These mechanisms are consistent with self-determination theory, which posits that competence and relatedness are critical drivers of academic motivation and performance [57].

Importantly, the magnitude of academic improvement observed in this study mirrors findings from both high-income and LMIC contexts, where structured peer mentorship has been linked to improved grades, reduced academic failure, and enhanced clinical readiness [54,58]. In Nigeria, where faculty shortages and high student–teacher ratios persist, peer mentorship may therefore represent a particularly valuable and scalable educational intervention [59,60].

Wellbeing Outcomes: Anxiety and Depression

Overall levels of anxiety and depression did not change significantly following the intervention, as measured by the GAD-7 and PHQ-9 instruments. This finding is consistent with prior studies suggesting that mentorship interventions may not uniformly reduce global measures of psychological distress, particularly over relatively short intervention periods [46,61].

Nevertheless, item-level improvements in specific anxiety symptoms—notably nervousness and difficulty controlling worry—were observed. These findings suggest that the mentorship programme was effective in addressing situational and transition-related anxiety, rather than entrenched or trait-level psychological distress. Similar patterns have been reported in integrative reviews, which indicate that peer mentorship tends to mitigate uncertainty, fear of failure, and academic-related anxiety more effectively than broader mood disturbances [47,62].

The absence of significant changes in depressive symptoms may reflect the multifactorial nature of depression, which is influenced by structural, financial, and personal factors that extend beyond the scope of peer-led academic support [14,63]. This underscores the importance of situating mentorship within a broader institutional framework that includes professional mental health services and systemic support mechanisms.

Stress Outcomes and Contextual Pressures

In contrast to anxiety-related findings, perceived stress levels increased significantly following the intervention. This result warrants careful interpretation. Rather than indicating an adverse effect of

the mentorship programme, the observed increase in stress may reflect heightened academic workload, cumulative assessment pressure, and financial strain during the semester [48,64].
Previous studies in nursing education have documented similar trends, whereby students' stress levels increase as academic demands intensify, even in the presence of supportive interventions [49,65]. Additionally, mentorship may enhance students' awareness and articulation of stressors, leading to higher self-reported stress without necessarily indicating worsened coping capacity [66].
Notably, qualitative feedback in this study remained strongly positive, with participants reporting increased confidence, emotional support, and perceived preparedness. This divergence between quantitative stress measures and qualitative perceptions reinforces the distinction between stress exposure and coping effectiveness, suggesting that mentorship may improve resilience without eliminating stressors inherent in nursing education [52,67].

Comparison with Existing Literature

The findings of this study are broadly consistent with international evidence supporting the academic benefits of structured peer mentorship in nursing education [8,54,55]. However, the mixed wellbeing outcomes align more closely with studies conducted in resource-constrained settings, where external stressors—such as financial hardship, overcrowded curricula, and limited institutional support—often attenuate the psychosocial impact of educational interventions [18,49,68].
In the Nigerian context, ongoing nursing brain drain has exacerbated faculty shortages, reducing opportunities for traditional faculty-led mentorship and supervision [22,60]. Peer mentorship therefore serves not only as a pedagogical tool but also as a compensatory mechanism within strained educational systems. Emerging Nigerian studies similarly highlight peer mentorship as a promising, student-centred approach to academic support, though empirical interventional evidence has remained limited [25,27].

Implications for Nursing Education and Policy

The findings of this study have important implications for nursing education in Nigeria and comparable LMIC contexts. The demonstrated academic benefits support the institutionalisation of structured peer mentorship programmes as a cost-effective strategy to enhance student performance and retention amid systemic constraints [58,59].
However, the persistence—and in some cases escalation—of stress highlights the need for integrated support models, wherein peer mentorship is complemented by faculty engagement, counselling services, and targeted interventions addressing financial and workload-related stressors [63,69]. Without such integration, mentorship alone may be insufficient to address the broader determinants of student wellbeing.
At the policy level, regulatory bodies and nursing education stakeholders should consider developing national guidelines for peer mentorship, incorporating standardised training, monitoring, and evaluation frameworks. Such policies could strengthen educational quality, promote student resilience, and contribute to long-term workforce sustainability in nursing [60,70].

Study Strengths and Limitations

This study contributes rare interventional evidence on structured peer mentorship from a Nigerian nursing education context, integrating academic and wellbeing outcomes using validated instruments. The mixed-methods design strengthened interpretive depth through triangulation of quantitative and qualitative findings.
Nevertheless, the quasi-experimental design and reliance on historical controls limit causal inference. The absence of a concurrent control group and the relatively short intervention duration may have constrained the detection of longer-term wellbeing effects. Future studies employing randomised controlled designs and longitudinal follow-up are warranted to further elucidate the sustained impact of mentorship interventions [30,61]. Lastly. The single-setting nature of the study limits the generalizability of the findings.

5. Summary and Conclusion

This interventional study evaluated the impact of a structured peer mentorship programme on the academic performance and wellbeing of second-year nursing students at the University of Nigeria, Enugu Campus. The programme, involving seven fourth-year mentors guiding 126 mentees over one semester, yielded mixed yet insightful outcomes. Academically, participants demonstrated significantly higher mean scores in the core module NSC 201 (58.58 ± 11.067%) compared to historical non-mentored cohorts ($p < 0.001$), underscoring the programme's efficacy in enhancing educational achievement.

Wellbeing indicators presented a more nuanced profile: overall anxiety (GAD-7) and depression (PHQ-9) levels remained unchanged post-intervention ($p = 0.215$ and $p = 0.694$, respectively), whilst specific anxiety facets—"feeling nervous, anxious, or on edge" and "inability to control worrying"—improved significantly ($p = 0.020$ and $p = 0.003$). Conversely, stress levels (University Stress Scale) increased markedly ($p = 0.013$), potentially reflecting intensified academic and financial pressures during the intervention period. Qualitative feedback from mentees ($n = 85$) and mentors ($n = 7$) was overwhelmingly positive, highlighting perceived benefits in emotional support, confidence, guidance, and professional development.

These findings contribute empirical evidence from a Nigerian context, where formal mentorship remains underdeveloped, affirming peer models' potential for academic enhancement whilst illuminating contextual constraints on psychosocial outcomes. Collectively, the findings demonstrate that structured peer mentorship yields robust academic benefits and targeted psychosocial support, even within resource-constrained educational environments. The mixed wellbeing outcomes underscore the influence of contextual stressors inherent in nursing education and suggest that mentorship may function most effectively as a buffering mechanism for specific anxiety-related challenges rather than as a comprehensive solution for broader stress determinants [52,53].

6. Recommendations

Based on the study's findings, the following recommendations are proposed:

1. Nursing departments in Nigerian universities should implement formalised peer mentorship programmes, incorporating mentor training, structured matching, and monitoring to optimise academic benefits and mitigate stress escalation.
2. Future iterations ought to enhance components addressing financial and workload stressors, potentially integrating supplementary resources such as counselling referrals or financial literacy sessions.
3. Regulatory bodies should develop national guidelines for peer mentorship in nursing education, mandating its inclusion in BNSc curricula to ensure consistency and sustainability.
4. Longitudinal randomised controlled trials are warranted to assess long-term effects on retention, professional outcomes, and wellbeing, alongside explorations of hybrid (peer-faculty) models in diverse Nigerian institutions.
5. Partnerships between universities, professional councils, and alumni networks could facilitate mentor incentives (e.g., scholarships) and programme scalability, fostering a supportive ecosystem for nursing students.

Educational and Policy Implications

1. The robust academic gains suggest that structured peer mentorship can serve as a viable strategy to bolster performance and retention in nursing education, particularly amid Nigeria's challenges of overloaded curricula and faculty shortages driven by brain drain. Leveraging senior students as relatable role models, institutions can foster self-directed learning and clinical preparedness cost-effectively, aligning with global recommendations for innovative mentorship in resource-constrained settings.

2. The mixed wellbeing results imply that peer support mitigates targeted anxiety but may not fully buffer broader stressors inherent to transitional phases and systemic issues. Policymakers, including the Nursing and Midwifery Council of Nigeria, should consider integrating standardised peer mentorship frameworks into national curricula to promote evidence-based student support, potentially improving workforce retention and care quality. Such initiatives could inform broader LMIC strategies, emphasising scalable, student-led interventions to address educational inequities.

Conflict of Interest

The author declares that there is no conflict of interest.

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