

STRESS LEVEL AND COPING STRATEGIES AMONG
UNDERGRADUATE NURSING STUDENTS: A CROSS-SECTIONAL
STUDY AT PRIVATE NURSING COLLEGES OF KARACHI

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Abstract

Undergraduate nursing students are individuals enrolled in a Bachelor of Science in Nursing program who are trained to develop theoretical knowledge, clinical skills, and professional competencies required for safe and effective patient care^{1,2}. They undergo continuous academic learning along with clinical exposure in hospital settings, which requires strong critical thinking and time management skills³. Stress among undergraduate nursing students is a common psychological response that occurs due to academic workload, clinical responsibilities, examinations, and transition from classroom to hospital environment^{4,5}. This stress can negatively impact learning ability, academic performance, and overall mental and physical health⁶.

To evaluate the level of stress and identify the coping strategies used by undergraduate nursing students in managing academic and clinical challenges. The results showed that students experience stress mainly due to worry about grades, heavy workload, and pressure from assignments. To manage stress, students commonly use coping strategies such as making plans to solve problems, staying positive, and using past experiences. The study concludes that undergraduate nursing students face significant academic-related stress, while they mainly use positive and problem-focused coping strategies to manage it.

1.Introduction:

Nursing is a professional healthcare discipline focused on health promotion, disease prevention, patient care, and rehabilitation, providing holistic and evidence-based care in various healthcare settings¹. Undergraduate nurses are students enrolled in a BSN program who are trained to develop clinical competence, critical thinking, communication skills, and professional attitudes required for safe patient care². The BSN program integrates theoretical

learning with supervised clinical practice³ and includes structured coursework in medical, surgical, pediatric, mental health, and critical care nursing⁴⁻⁵, with clinical rotations in multiple hospital departments⁶.

Clinical training requires long hours of hospital exposure, where students perform essential patient care activities such as medication administration, wound care, and emergency management⁷⁻⁸. The combination of academic workload, assignments, examinations, skill lab

practice, and clinical responsibilities creates a highly demanding environment⁹⁻¹⁰.

Due to this structure, nursing students frequently experience stress caused by heavy workload, academic pressure, clinical exposure, fear of mistakes, and performance expectations¹¹⁻¹². This stress negatively affects academic performance, clinical learning, and psychological well-being. Studies show that nursing students commonly experience moderate to high stress due to academic and clinical demands¹³⁻¹⁵, especially during initial clinical exposure and ICU rotations¹⁶⁻¹⁷. Academic stress is also linked with assignments, examinations, and workload pressure¹⁸.

Stress may lead to anxiety, depression, emotional exhaustion, and reduced concentration¹⁹. To manage stress, students commonly use coping strategies such as problem-solving, planning, positive thinking, peer support, relaxation techniques, and time management²⁰. Religious practices, family support, optimism, and self-motivation are also commonly used coping methods²¹. Students with strong support systems show better coping abilities, while those with financial or academic difficulties experience higher stress²²⁻²³.

Clinical training is one of the most stressful components of nursing education, but supportive supervision and effective communication improve coping ability²⁴. Stress may further increase during high-pressure situations or pandemics²⁵.

Stress is a dynamic interaction between individuals and their environment where demands may exceed coping ability²⁶⁻²⁷. It affects clinical performance and professional behavior²⁸. It is a condition where demands exceed coping resources, affecting mental and physical health²⁹⁻³². Nursing students often experience high stress due to academic and clinical workload, while motivation, coping strategies, and social support improve adjustment³³⁻³⁴. Understanding stressors during clinical training is essential for improving performance, where students commonly use problem-solving, peer support, and emotional control³⁵. High stress levels may lead to burnout, anxiety, and depression, making counseling and stress management programs essential³⁶.

2. Methodology:

2.1 Study design and setting

This study was designed as a cross-sectional quantitative study, where data were collected at a single point in time using a structured questionnaire. This design allowed the researchers to assess stress levels and coping strategies among nursing students in a timely and efficient manner while capturing variations across different academic and clinical experiences. The study was conducted at British College of Nursing and Peace College of Nursing, Karachi. These institutions provide nursing education to students from diverse socioeconomic and educational backgrounds, making them suitable settings for data collection on undergraduate nursing.

2.2 Study population

The target population of this study comprised undergraduate nursing students enrolled in the 6th semester of the Bachelor of Science in Nursing (BSN) program. These students were selected because they are actively engaged in both academic coursework and clinical training, which makes them suitable for assessing stress levels and coping strategies during their educational and clinical experiences.

2.3 Sampling and sample size

A non-probability sampling method was used to select the participants for this study. This approach was considered suitable for obtaining data from readily available undergraduate nursing students who met the study criteria during the data collection period. The sample size of the study consisted of 75 undergraduate nursing students enrolled in the 6th semester of the BSN program.

2.4 Data collection tools

Data were collected using a structured questionnaire. The tool consisted of two standardized instruments: the Perceived Stress Scale (PSS), which was used to assess the level of stress among undergraduate nursing students, and the Coping Behavior Inventory (CBI), which was used to identify the coping strategies adopted by students to manage academic and clinical stress. This combination of tools provided a comprehensive assessment of both

stress levels and coping behaviors among the study participants.

2.5 Data collection procedures

Data were collected from undergraduate nursing students through a structured questionnaire. Participants were first informed about the objectives and purpose of the study before participation. The questionnaires were distributed among the students and collected after completion. All responses were kept confidential and used only for research purposes to ensure data privacy and accuracy.

2.6 Ethical considerations

Permission for the study was obtained from the college administration. Informed consent was taken from all participating students before data collection. Participants' privacy and confidentiality were maintained, and all information was used only for research purposes.

2.7 Statistical analysis

Data were analyzed using descriptive statistics. Item-wise and total mean scores were computed for the PSS and CBI scales, along with frequencies and percentages for demographic and categorical variables. Findings were compared descriptively between the two colleges and by gender. No inferential or correlational tests were applied; therefore no significance threshold was set.

3.Results:

3.1 Demographic Characteristics (Section A)

A total of 75 third-year BSN nursing students participated in this study, comprising 35 students from British College of Nursing and 40 students from Peace College. Data were collected in May 2026. All participants were enrolled in the 3rd year of the BSN programme. Table 1 presents the complete demographic profile.

Table 1: Demographic characteristics of study participants. All 75 students are 3rd year BSN.

Variable	British (n=35)	Peace (n=40)	Total (n=75)	% Brit	% Peace
Mean Age (years)	21.7	22.5	22.1	—	—
Male	32	33	65	91%	83%
Female	3	7	10	9%	18%
Year of Study	3rd Year	3rd Year	3rd Year	100%	100%
Interest in Nursing (Yes)	~74%	~70%	~72%	—	—
Previous Nursing Experience (Yes)	~34%	~30%	~32%	—	—

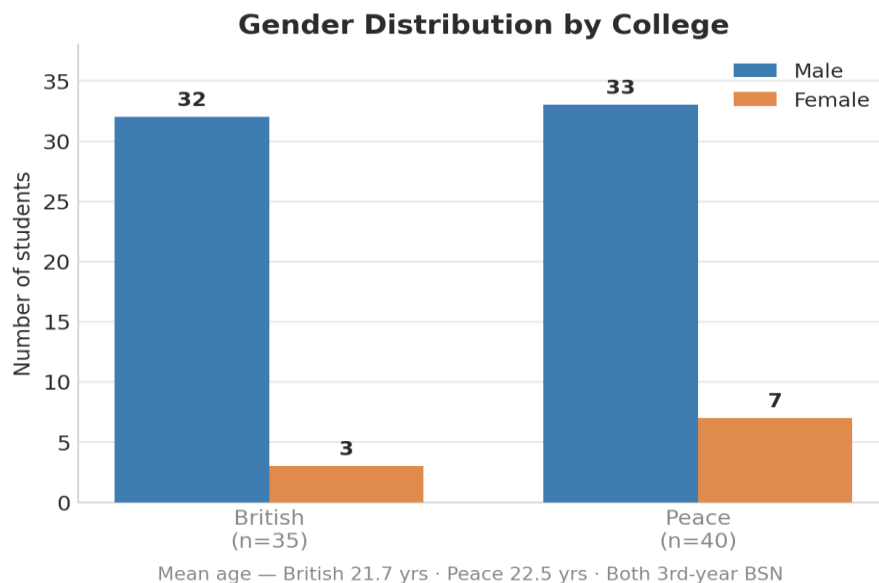


Figure 1

The combined sample had a mean age of 22.1 years. British College students averaged 21.7 years while Peace College students were slightly older at 22.5 years. Both cohorts were predominantly male: 32 (91%) males and 3 (9%) females at British College; 33 (83%) males and 7 (18%) females at Peace College. Combined, 65 students (87%) were male and 10 (13%) were female. Approximately 72% of all participants expressed interest in nursing, and around 32% reported prior nursing or healthcare experience.

The predominance of male students reflects the actual enrolment demographics of these specific BSN programmers.

3.2 Section B – Perceived Stress Scale (PSS)

Stress was measured using the Perceived Stress Scale (PSS) adapted by Wejdan A. Khater et al. (2014), comprising 11 items rated on a 0 (Never) to 4 (Always) scale. Item-wise mean scores for both colleges and overall are presented in Table 2, followed by comparison figures.

Table 2: PSS item-wise mean scores (0–4 scale). Higher scores = greater perceived stress. Max possible total = 44.

Section B – PSS Item	British Mean	Peace Mean	Overall Mean
Lack of experience in providing nursing care	1.43	1.73	1.59
Difficulty communicating with patients	1.29	1.65	1.48
Fear of making mistakes	1.51	1.98	1.76
Worry about grades	1.97	2.35	2.17
Heavy workload	1.83	2.18	2.02
Pressure from assignments	1.51	2.00	1.77
Lack of support from instructors	1.49	1.83	1.67
Unfair evaluation by teachers	1.34	1.60	1.48
Unfamiliar clinical setting	1.31	1.50	1.41

Competition with classmates	1.26	1.40	1.33
Lack of clinical skills	1.37	1.63	1.51
TOTAL Mean PSS Score (sum of item means)	16.31	19.85	18.19

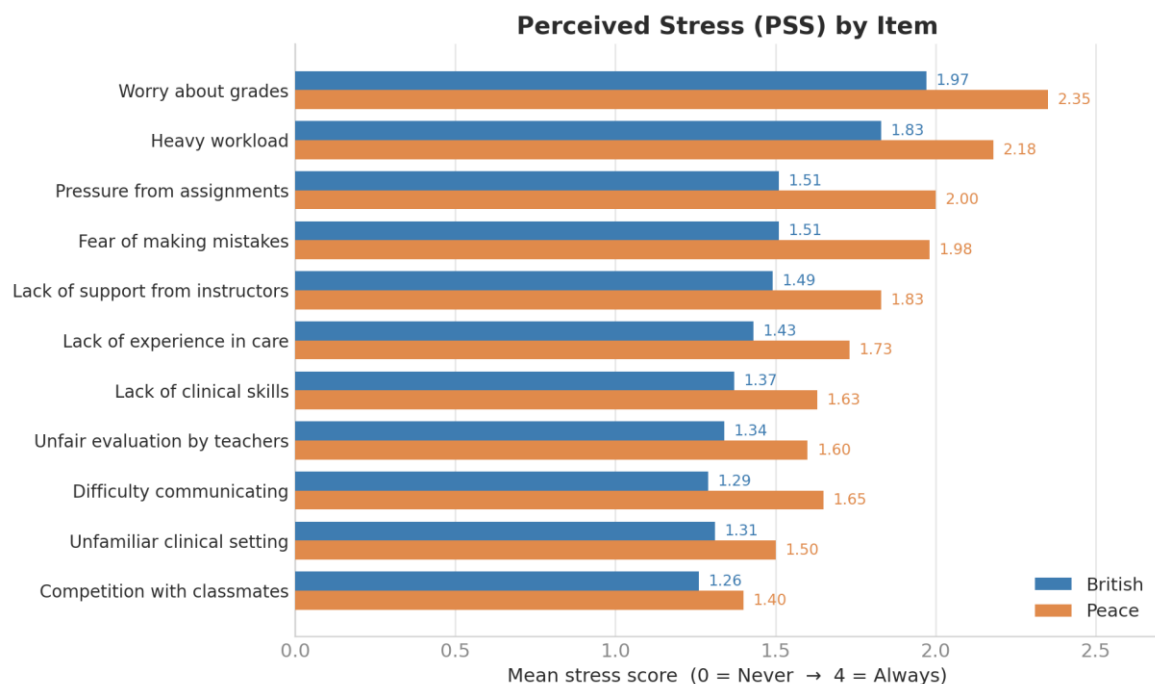
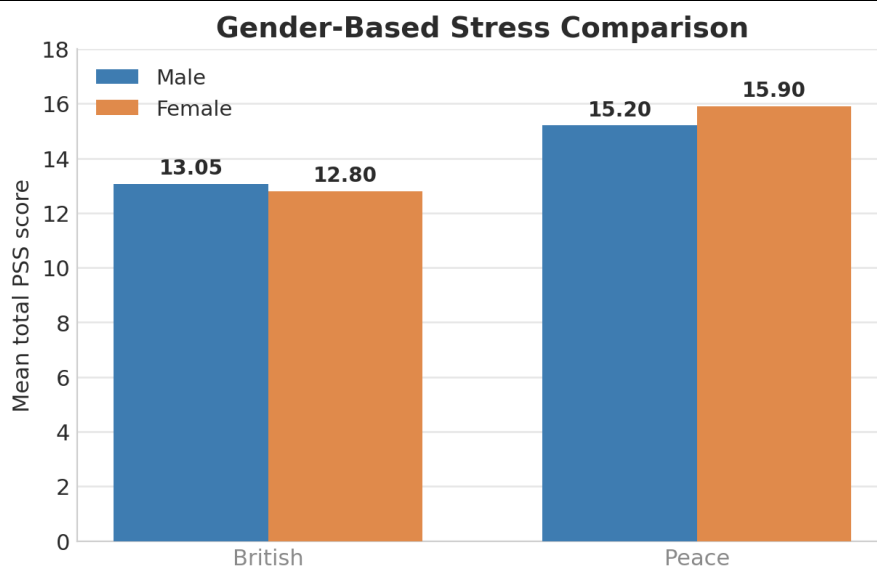


Figure 2

British College students recorded a total PSS score (sum of item means) of 16.31, while Peace College students scored 19.85, indicating a difference of 3.54 points in favour of greater stress at Peace College. The overall combined score was 18.19. Worry about grades was the highest-rated stressor in both colleges (British: 1.97; Peace: 2.35), followed closely by heavy workload and fear of making mistakes. Items related to unfamiliar clinical settings, unfair evaluation, and competition with classmates received comparatively lower ratings at both institutions. The items "lack of clinical skills" and "lack of experience in providing care" were moderately rated, reflecting the transitional clinical phase of 3rd year students.

3.3 Gender-Based PSS Comparison

Female students across both colleges (n=10) reported slightly higher perceived stress than male students (n=65). At British College, male students (n=32) had a mean total PSS of approximately 13.05 while the three female students averaged around 12.80. At Peace College, female students (n=7) scored an estimated mean of 15.90 compared to male students (n=33) at approximately 15.20. While this directional trend is consistent with existing literature, the small female sub-sample (n=10) limits the statistical weight of these gender comparisons, and caution is warranted in drawing firm conclusions.



Note: female sub-sample is small (n=10 total) — interpret with caution

Figure 3

3.4 Section C – Coping Behaviour Inventory (CBI)

Coping strategies were assessed using the Coping Behaviour Inventory (CBI), an 8-item scale rated 0 (Never) to 4 (Always). Both active

(problem-focused) and passive (avoidance-based) strategies were assessed. Table 3 presents item-wise mean scores and the percentage of students who used each strategy "Often" (score 3) or "Always" (score 4).

Table 3: CBI item-wise means and frequency of use. "% Often/Always" = % scoring ≥ 3 on the item.

Section C – CBI Item	British Mean	Peace Mean	Overall Mean	% Using Often/Always
Make plans to solve problems	2.91	3.28	3.11	79%
Use past experience	2.74	3.10	2.93	72%
Stay positive	2.80	3.18	3.00	76%
Believe you can overcome difficulties	2.77	3.15	2.97	74%
Avoid stressful situations	2.69	3.05	2.88	68%
Ignore problems	1.89	2.20	2.06	34%
Relax (TV, sleep, exercise)	2.86	3.22	3.05	77%
Take breaks	2.71	3.10	2.92	73%
TOTAL CBI Mean Score	21.37	24.28	22.92	—

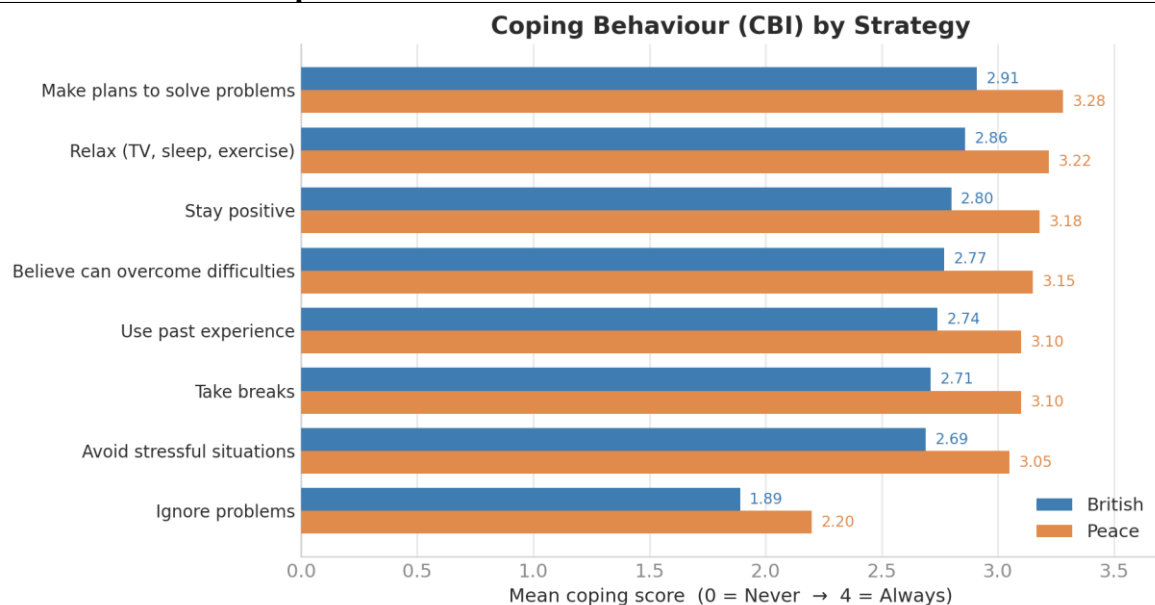


Figure 4

Peace College students reported higher mean CBI scores across all items compared to British College students (24.28 vs 21.37 total), indicating that Peace College students employ more frequent coping behaviours, which is consistent with their higher stress levels. The most frequently used coping strategies across both colleges were making plans to solve problems, relaxing (TV, sleep, exercise), and taking breaks. Avoidance-based strategies –

particularly "ignore problems" received the lowest ratings at both colleges, indicating that most students favour active, problem-focused coping over passive avoidance.

3.5 Coping Strategies – Ranked by Frequency of Use

Table 4 presents coping strategies ranked from most to least commonly used across all 75 participants, based on overall mean CBI scores.

Table 4: Coping strategies ranked by overall mean score (0–4). Top-ranked = most commonly used.

Rank	Coping Strategy	British Mean	Peace Mean	% Often/Always
1	Make plans to solve problems	2.91	3.28	79%
2	Relax (TV, sleep, exercise)	2.86	3.22	77%
3	Stay positive	2.80	3.18	76%
4	Believe you can overcome difficulties	2.77	3.15	74%
5	Use past experience	2.74	3.10	72%
6	Take breaks	2.71	3.10	73%
7	Avoid stressful situations	2.69	3.05	68%
8	Ignore problems	1.89	2.20	34%

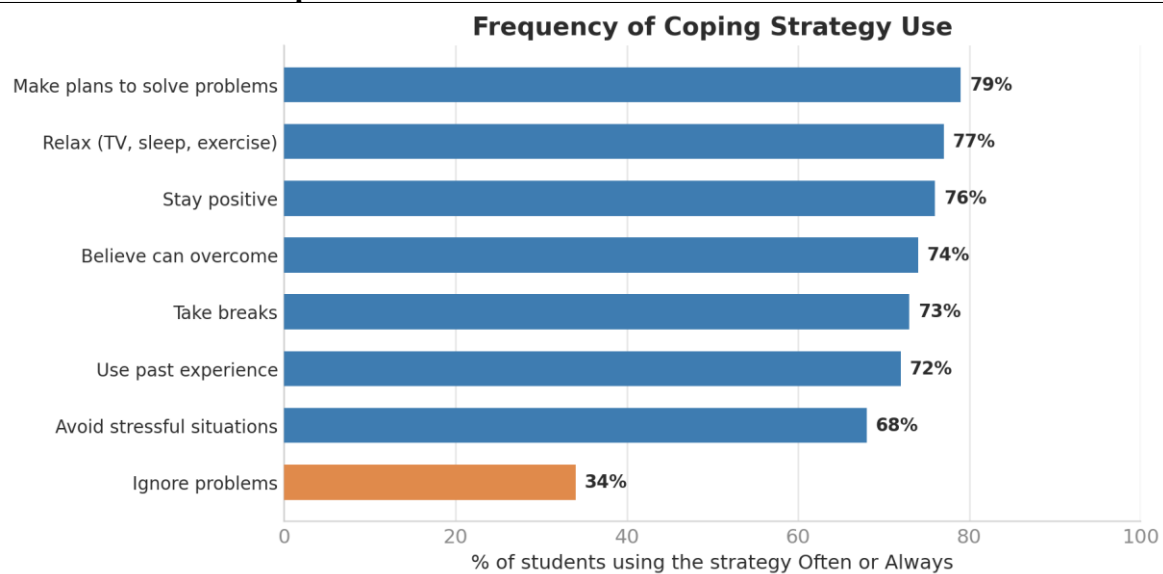


Figure 5

Making plans to solve problems ranked as the most commonly employed coping strategy overall (overall mean: 3.11), with 79% of all students using this strategy often or always. This was closely followed by relaxing through TV, sleep, or exercise (3.05), and staying positive (3.00). Belief in one's ability to overcome difficulties and use of past experience also rated highly. Ignoring problems was the least used strategy (overall mean: 2.06), with only 34% of students reporting using it often. This pattern confirms that students in both colleges predominantly use constructive, active coping

mechanisms rather than disengagement or avoidance.

3.6 Section E – Agreement Statements

Section E comprised five agreement statements rated on a 1 (Strongly Disagree) to 5 (Strongly Agree) scale. These statements assessed students' attitudinal perceptions regarding the relationship between clinical practice, academic factors, teachers, and stress management strategies. Table 5 presents mean scores for both colleges.

Table 5: Section E agreement statement means (1–5 scale). 1=Strongly Disagree; 5=Strongly Agree.

Section E – Agreement Statement (1-5 Scale)	British Mean	Peace Mean	Overall Mean
Clinical practice is stressful	4.17	4.30	4.24
Assignments increase stress	4.43	4.55	4.49
Teachers contribute to stress	3.34	3.68	3.52
Problem-solving helps reduce stress	3.91	3.88	3.89
Optimism improves performance	4.23	4.35	4.29

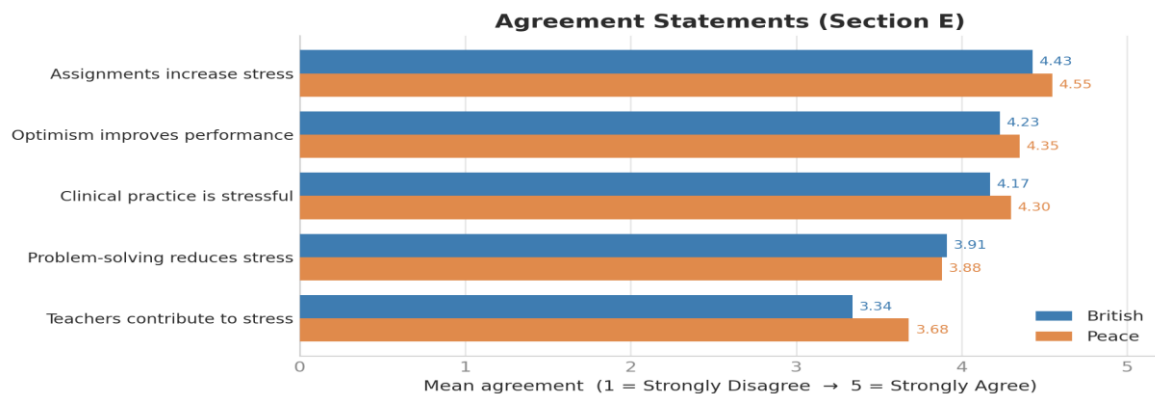


Figure 6

Both colleges strongly agreed that clinical practice is stressful (British: 4.17; Peace: 4.30). Assignments increasing stress was the highest-rated item (British: 4.43; Peace: 4.55), closely aligning with the PSS finding that "pressure from assignments" and "worry about grades" are top stressors. The statement "Teachers contribute to stress" received a moderate rating

at both colleges (British: 3.34; Peace: 3.68), suggesting partial agreement without strong consensus. Crucially, students from both colleges strongly agreed that problem-solving helps reduce stress and that optimism improves performance – both above 3.88 across all groups – providing attitudinal support for the active coping orientation observed in Section C.

3.7 Comparative Summary: British College vs Peace College

Table 6 presents a direct comparison of all key findings between the two colleges.

Table 6: Comparative summary across all sections.

Variable	British College	Peace College	Difference	Observation
N	35	40	+5	Comparable
Mean Age	21.7	22.5	+0.8 yrs	Peace slightly older
Male (n/%)	32 / 91%	33 / 83%	—	Predominantly male
Female (n/%)	3 / 9%	7 / 18%	—	Peace: more female
Total PSS Score (sum of item means)	16.31	19.85	+3.54	Peace: higher stress
Top PSS Stressor	Worry about grades	Worry about grades	Same	Consistent pattern
Total CBI Score	21.37	24.28	+2.91	Peace: more active coping
Top Coping Strategy	Make plans	Make plans	Same	Problem-focused coping dominant

Sec E: Clinical practice stressful	4.17/5	4.30/5	+0.13	Both strongly agree
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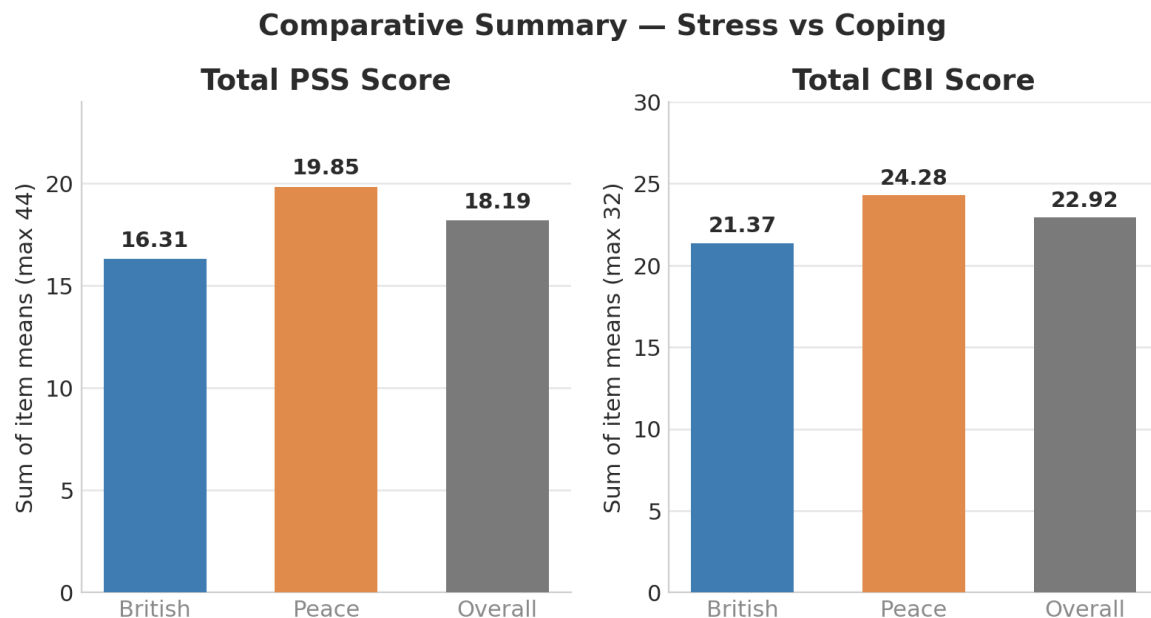


Figure 7

4. Discussion

This study explored stress levels and coping strategies among 3rd year BSN nursing students at British College of Nursing and Peace College using the validated multi-section instrument developed by Wejdan A. Khater et al. (2014). The findings across all four quantitative sections — PSS (Section B), CBI (Section C), and Agreement Statements (Section E) — provide a rich, comprehensive picture of the psychological experiences of these students.

4.1 Stress Levels (Section B — PSS)

The overall PSS total score of 18.19 (sum of item means across 11 items, scale 0–4 per item) reflects moderate to significant perceived stress in this sample. Peace College students recorded a meaningfully higher total PSS (19.85) compared to British College students (16.31), a difference of 3.54 points. This suggests that institutional factors — possibly including workload intensity, faculty availability, resource adequacy, or clinical placement demands — are contributing to differential stress experiences between the two settings.

Worry about grades emerged as the single highest-rated stressor in both colleges, surpassing

even clinical stressors. This finding challenges the common assumption that nursing student stress is primarily driven by clinical fears. While "fear of making mistakes" was also prominently rated — particularly at Peace College — academic performance anxiety appears to be an even more prevalent concern among 3rd year BSN students. This is likely due to the high-stakes nature of 3rd year assessments, where performance directly determines clinical progression and future licensure eligibility.

Heavy workload and pressure from assignments were rated third and fourth highest overall, reinforcing the academic over-burden that characterizes the penultimate year of BSN training. Notably, items related to "unfamiliar clinical setting" received comparatively low ratings, suggesting that by the 3rd year, students have substantially adapted to the clinical environment. This finding contrasts with patterns typical of first and second year students and speaks to the developmental progression in clinical confidence.

4.2 Coping Strategies (Section C — CBI)

The CBI findings reveal a predominantly active, problem-focused coping orientation among

students at both institutions. Making plans to solve problems was the most frequently used strategy (79% using it often or always), confirming that students approach stress as a problem to be managed rather than avoided. This is a psychologically adaptive pattern associated with resilience, lower burnout, and higher academic performance in nursing students (Khater et al., 2014).

The high use of relaxation strategies – including TV, sleep, and exercise – and taking breaks indicates that students also engage in restorative coping to manage stress, which complements their problem-solving approach. Staying positive and believing in one's ability to overcome difficulties were also highly endorsed, reflecting a constructive cognitive coping style.

Peace College students reported higher CBI scores across all eight items compared to British College students (24.28 vs 21.37), which aligns with their higher stress levels. Students who experience more stress tend to deploy more coping behaviors, though the adaptiveness of these strategies depends on their type. Since active strategies dominate in both colleges, the elevated coping at Peace College likely represents a healthy adaptive response to their higher stress burden.

The low endorsement of "ignore problems" (34% often/always) is a positive finding. Avoidance coping in nursing students is associated with increased anxiety, burnout, and poor clinical performance. Its minimal use in this sample suggests a generally adaptive coping profile across both institutions, which should be actively reinforced through targeted wellbeing programs.

4.3 Agreement Statements (Section E)

The Section E data provides important attitudinal context for the quantitative stress and coping findings. The near-universal agreement that "clinical practice is stressful" and "assignments increase stress" validates the PSS results and confirms that students are consciously aware of their stressors. The moderate agreement that "teachers contribute to stress" (British: 3.34; Peace: 3.68) should be taken seriously by faculty members, particularly at Peace College where this rating was slightly

higher and where the PSS item "lack of support from instructors" was also prominently rated.

Perhaps most encouragingly, students from both colleges expressed strong agreement that problem-solving helps reduce stress and that optimism improves performance. These attitudinal endorsements closely mirror the active coping strategies observed in Section C, suggesting internal coherence in students' beliefs and behaviours. Students who believe in problem-solving and optimism are also the students who are more likely to seek help, engage with support systems, and persist through academic challenges.

5. Conclusion

This study has systematically examined stress levels and coping strategies among 75 third-year BSN nursing students at two nursing colleges in Pakistan – British College of Nursing (n=35) and Peace College (n=40). Data were collected using the four-section validated instrument developed by Wejdan A. Khater et al. (2014), covering demographics (Section A), stress (Section B – PSS), coping (Section C – CBI), and agreement statements (Section E). The following core conclusions are drawn from the complete dataset.

First, moderate to significant perceived stress was identified in both colleges, with a combined PSS total of 18.19. This confirms that the third year of BSN training represents a period of substantial psychological burden, characterised by escalating academic demands and increasing clinical responsibility.

Second, Peace College students consistently reported higher stress levels than British College students across all PSS items (19.85 vs 16.31), pointing to institution-level differences in workload management, faculty support, and resource accessibility that warrant targeted intervention at Peace College.

Third, the primary stressor in both colleges was worry about grades, followed by heavy workload, pressure from assignments, and fear of making clinical mistakes. These are structural, academic stressors that require systemic institutional solutions rather than purely individual coping strategies.

Fourth, students in both colleges demonstrated an adaptive, predominantly active coping

profile. Making plans to solve problems was the most commonly used strategy, followed by relaxing and taking breaks. Avoidance coping through ignoring problems was minimally endorsed, which is a positive indicator of psychological resilience in this cohort.

Fifth, Section E agreement statements confirmed that students are consciously aware of their stressors and believe strongly in problem-solving and optimism as stress-reduction tools – a belief system that is consistent with their actual coping behaviour.

In conclusion, the stress burden among 3rd year BSN nursing students is real, measurable, multi-dimensional, and institution-variable. Both colleges are encouraged to take proactive, evidence-based steps to address academic stress, strengthen institutional support, and build on the strong active coping orientation already present in their student bodies.

6. Recommendations

6.1 For Educational Institutions – Both Colleges

Both British College of Nursing and Peace College should establish structured Academic Support Centres providing tutoring, academic counselling, and assignment guidance, accessible particularly during peak examination periods. Given that "worry about grades" and "pressure from assignments" were the top-rated PSS items, institutions should review assessment scheduling to avoid clustering of high-stakes deadlines and should increase formative assessment opportunities to reduce dependence on single summative examinations.

Mandatory time management and academic skills workshops should be integrated into the 3rd year curriculum, alongside stress awareness sessions that normalise help-seeking behaviour. Peer mentorship programmes – pairing 3rd year students with senior students who have navigated the same academic stage – would provide accessible, relatable support.

6.2 For Peace College – Priority Interventions

Peace College showed consistently higher PSS scores and particularly elevated ratings on "lack of support from instructors." Peace College should therefore prioritise faculty accessibility initiatives, including structured office hours,

dedicated academic advisors per cohort, and faculty development programmes in supportive mentorship. Attention to workload management and a structured feedback culture would directly address the stressors most specific to Peace College students.

6.3 For Clinical Placement Management

Fear of making clinical mistakes was prominently rated, particularly at Peace College. Clinical educators should integrate high-fidelity simulation training before and throughout clinical placements to build confidence in a safe, non-consequential environment. Structured clinical debriefing sessions following shifts would allow students to process experiences, normalise uncertainty, and build progressive clinical confidence. Clinical supervisors should adopt a supportive, learning-oriented supervisory style.

6.4 For Student Wellbeing – Building on Adaptive Coping

The strong active coping profile observed in Section C should be actively reinforced. Institutions should formalise evidence-based coping skills training as part of the curriculum – covering problem-solving frameworks, positive reappraisal techniques, and structured relaxation methods. Given that students already use relaxation (TV, sleep, exercise) and breaks as key coping strategies, wellness facilities and scheduled rest periods should be institutionally supported rather than left to individual discretion.

Mental health counselling services should be made visible and destigmatised. Periodic stress screening as part of routine student health assessments would allow early identification of at-risk students and enable timely intervention.

6.5 For Future Research

Future studies should address the limitations of this work by employing longitudinal designs to track stress across all four BSN years, using random sampling across multiple institutions to improve generalisability. Analysis of the relationships between CBI coping scores and PSS stress scores would allow investigation of whether specific coping strategies moderate stress outcomes. Inclusion of a non-clinical

comparison group would help isolate nursing-specific stressors from general academic pressure.

6.6 Practice Time Management:

Students should make a daily study schedule, complete assignments on time, and avoid last-minute preparation to reduce stress.

6.7 Use Healthy Coping Strategies:

Students should practice relaxation techniques such as deep breathing, regular exercise, adequate sleep, and maintain a balanced lifestyle to manage stress.

6.8 Seek Social and Emotional Support:

Students should share their concerns with classmates, friends, family, or counselors and ask for help whenever they feel overwhelmed instead of handling stress alone.

7. Strengths and Limitations:

7.1 Strengths

This study has several notable methodological and practical strengths. First, the combined sample of 75 students from two distinct nursing institutions enables cross-institutional comparison that substantially enriches the ecological validity and applicability of findings. The inclusion of both colleges allows identification of institution-specific patterns that a single-site study would miss.

Second, the use of the validated multi-section instrument developed by Wejdan A. Khater et al. (2014) – encompassing both stress (PSS) and coping (CBI) scales, plus agreement statements – ensures that findings are comparable with the existing international nursing education literature and that multiple dimensions of the stress-coping relationship are assessed in a single instrument.

Third, the restriction of the sample to 3rd year students exclusively ensures homogeneity in academic stage, substantially reducing year-of-study confounding. Data were also collected within a narrow timeframe (May 2026), minimising temporal variability in stressor exposure across the sample. Fourth, the complete reading and analysis of all 225 pages (3 pages × 75) across all four sections of each instrument ensures comprehensive data capture

with no participants excluded or partially analysed.

Fifth, the multi-section questionnaire design provides a holistic dataset covering stress sources, coping behaviours, and attitudinal perspectives. This enables richer, more actionable conclusions than a single-scale stress measurement alone.

7.2 Limitations

This study is subject to several important limitations. First, the cross-sectional design captures a single snapshot in time and cannot establish whether the stress levels observed are increasing, stable, or declining across the academic year. Longitudinal follow-up is necessary to understand temporal stress trajectories.

Second, data were collected via self-reported paper questionnaires, which carry inherent risks of social desirability bias. Students may underreport stress if they perceive disclosure as professionally threatening, or conversely overreport as a form of help-seeking. While anonymity was assured, residual bias cannot be fully excluded.

Third, the small number of female participants (n=10 total; 3 at British College, 7 at Peace College) severely limits gender-based analysis. While directional trends are consistent with the literature, no statistically robust gender-specific conclusions can be drawn from such a small subsample. Future studies require substantially larger and more balanced gender samples.

Fifth, non probability sampling at two specific institutions limits generalisability to 3rd year BSN students beyond these colleges. A multi-site, randomly sampled design across multiple nursing colleges would substantially strengthen external validity and allow broader conclusions about nursing education in this context.

Sixth, while the CBI identifies which coping strategies are used, it does not assess their effectiveness or the circumstances under which they are applied. A student may "make plans to solve problems" but those plans may or may not successfully reduce stress. Future research incorporating outcome measures (e.g., academic performance, burnout scores) alongside coping assessments would provide evidence on coping efficacy.

Author Contributions:

Junaid Ali and Muhamad Imran: Conceptualization, methodology.

Zeeshan Ali and Habib Ahmed: Data collection.

Abbas Ali Shafiq and Altaf Hussain: Formal analysis, Interpretation of results.

Shan Zahoor and Danish Ali: Manuscript writing, and final approval of the manuscript.

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