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Academic Stress and Coping Strategies Among Newly Enrolled Full-Time Professional Master's Students in Nursing: A Qualitative Study

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Abstract

Objective

To explore the sources of academic stress, coping strategies, and psychological growth processes among newly enrolled full-time professional master's students in nursing, and to provide empirical evidence for nursing education administrators to develop targeted stress interventions.

Methods

Purposive sampling was used to recruit 13 newly enrolled full-time professional master's students in nursing from a university in Yunnan Province between September and December 2025. Data were collected through one-to-one semi-structured interviews and analyzed using thematic analysis, with NVivo 15.0 used for data management and coding.

Results

Newly enrolled full-time professional master's students in nursing experienced five dimensions of academic stress: employment and future development, research competence and tasks, coursework and academic tasks, time and role management, and interpersonal and environmental adaptation. Four categories of coping strategies were identified: psychological adjustment and emotional expression, behavioral relaxation and distraction, proactive academic problem-solving, and reliance on external support systems. During the coping process, participants experienced cognitive transformation, enhanced competence, temporary confusion, and the development of self-identity and future planning, demonstrating a dynamic adaptive pattern of “stress perception–multiple coping strategies–cognitive growth.” Based on the transactional model of stress and coping proposed by Lazarus and Folkman, these coping strategies reflected the core logic of coordinated adaptation between problem-focused and emotion-focused coping.

Conclusion

Academic stress among newly enrolled full-time professional master's students in nursing is multidimensional and interwoven. Their dynamic adaptation to stress constitutes an integrated process involving coping, psychological transformation, and competence development. Nursing education administrators should optimize training programs and build multidimensional support systems based on the characteristics of stress and the logic of coping, thereby helping new students successfully adapt to stress and complete their role transition.

Introduction

The Ministry of Education's Opinions on Further Advancing the Classified Development of Academic and Professional Degree Graduate Education (Jiaoyan [2023] No. 2) explicitly proposed increasing the proportion of professional degree graduate students in response to major national strategies and societal needs. By the end of the 14th Five-Year Plan period, enrollment in professional master's programs was expected to account for approximately two-thirds of total master's enrollment, with greater emphasis placed on practice-oriented education [1]. The National Health Commission's National Nursing Development Plan (2021–2025) (Guoweiyifa [2022] No. 15), together with the requirements of the Healthy China 2030 strategy, further calls for expanding the cultivation of high-level nursing professionals, advancing the nursing discipline, and providing human-resource support for high-quality development of healthcare services [2, 3].

Against this policy background, full-time professional master's students in nursing constitute a core group in the cultivation of high-level nursing professionals. The quality of their development is directly related to nursing discipline construction and the level of clinical services, and it also provides important support for implementing the strategy of strengthening nursing through talent and responding to population aging. Newly enrolled students must rapidly adapt to the threefold demands of theory, clinical practice, and research, making the transition period particularly stressful. Insufficient undergraduate research training may result in deficits in research competence, while time conflicts between clinical placements and coursework, difficulty adapting to self-directed learning, and uncertainty about career direction create a distinctive burden of academic adjustment [4].

Existing studies have primarily focused on academic stress among practicing nurses or undergraduate nursing students, while longitudinal research on the “stress–coping process” among newly enrolled full-time professional master's students in nursing remains insufficient. Guided by the transactional model of stress and coping proposed by Lazarus and Folkman (1984) [5], this qualitative study explores the sources of academic stress, coping strategies, and patterns of psychological growth in this population. The findings are intended to provide empirical evidence for developing targeted support systems, facilitating role transition and academic adaptation, promoting high-quality graduate nursing education, and strengthening the nursing workforce for the Healthy China initiative [6].

Participants and Methods

Participants

Purposive sampling was used to recruit newly enrolled full-time professional master's students in nursing from a university in Yunnan Province. Inclusion criteria were: (1) newly enrolled in September 2025 as a full-time professional master's student in nursing; and (2) voluntary participation with informed consent. Exclusion criteria were: (1) full-time clinical employment during the period of study; and (2) withdrawal from the study for any reason. Data saturation was reached after the 13th participant. Two additional interviews were subsequently conducted, and no new themes emerged, confirming data saturation.

A total of 13 newly enrolled full-time professional master's students in nursing were included. Aggregate participant characteristics are presented in Table 1. The study was approved by the Medical Ethics Committee of Dali University, Dali University, China (approval No. MECDU-202511-15).

Table 1
Aggregate Characteristics of Participants (n = 13)

Characteristic	Summary
Sample size	13
Age group (years)	20–29
Study status	Newly enrolled full-time professional master's students in nursing
Note: Characteristics are reported only at the group level. Participant-level demographic and occupational information has been omitted to protect confidentiality.	

Methods

Development of the interview guide

After systematically studying qualitative research methods and interview techniques, the research team drafted an interview guide based on the study objectives, literature review, and team discussion. Two full-time professional master's students in nursing participated in pilot interviews to assess the comprehensibility and feasibility of the interview guide. Data from the pilot interviews were not included in the final analysis. The final version was developed after revision by two experts/professors and is presented in Table 2.

Table 2
Semi-structured interview guide

No.	Interview question
1	Please briefly describe your age, the time you spent preparing for the postgraduate entrance examination, and whether you have clinical work experience.
2	Why did you choose to pursue a full-time professional master's degree in nursing?
3	How have you felt since entering the full-time professional master's program in nursing?
4	What are the main sources or manifestations of stress during your full-time professional master's study in nursing?
5	What methods do you usually use to relieve academic stress?
6	What are your views on your current life as a full-time professional master's student in nursing?
7	Is there anything else you would like to add?

Data collection

Data were collected using semi-structured interviews. Interview times and locations were arranged for participants' convenience and scheduled when they had sufficient time to rest. Interviews were conducted in study rooms or meeting rooms within the participants' usual work/study areas. Before each interview, the researcher contacted the participant, explained the study's purpose and procedures in detail, and obtained written informed consent. During interviews, the order and wording of questions were adjusted flexibly, with probing questions used as appropriate to ensure completeness of information. Nonverbal communication was also observed and recorded. Each interview lasted approximately 20–40 minutes and was audio-recorded throughout, with simultaneous written notes.

Data analysis

Data were analyzed using the thematic analysis method proposed by Braun and Clarke [7]. Within 24 hours after each interview, the recording was transcribed verbatim and imported into NVivo 15.0 for data management and assisted analysis. Through repeated reading, coding, categorization, and refinement, three themes and 13 subtopics were ultimately identified.

Quality control

The research team comprised six members, all with master's-level education or above, including three master's students, one doctoral student, and two university lecturers. All had received training in qualitative research methods. During the interviews, a doctoral student and a university lecturer jointly supervised the process and supplemented or revised the interview content when necessary. After each interview, the interviewer and one team member jointly transcribed the recording and anonymized information relating to specific schools, hospitals, or other identifiable institutions to protect privacy. Another team member then compared the transcript with the audio recording to ensure accuracy and completeness. Transcripts were returned to participants for confirmation to ensure authenticity and reliability. The researchers also selected two sets of analytic findings for participant verification, and both were endorsed.

Results

Theme 1: Multidimensional Sources of Academic Stress

Academic stress among newly enrolled full-time professional master's students in nursing was not caused by a single factor; rather, it arose from the interaction of multiple dimensions, including research, coursework, time, employment, interpersonal relationships, and the environment. Together, these factors formed a complex and persistent stress system that reflected both the requirements of master's-level education and the distinctive overlap of the threefold demands of theory, clinical practice, and research [4, 8, 9].

Employment and future development stress

Severe employment competition and uncertainty about career direction jointly constituted the core stressors related to future development. Participants commonly expressed uncertainty about their career direction after graduation. N9: *“I don't want to work in a hospital, but so far I've heard that more than 90% of master's graduates end up working in hospitals, so I'm very confused right now.”* N7: *“I'm worried that a master's degree may not bring the employment advantages I expected, and competition for high-quality positions is intense.”*

Research competence and task-related stress

The gap between insufficient research competence and high task demands was one of the core sources of stress. Most participants had lacked systematic research training during undergraduate study and, after entering the full-time professional master's program in nursing, faced multiple challenges involving literature reading, academic writing, and research tasks. N5: *“As for research, I didn't have many opportunities or much time to learn about research before. Now that I'm suddenly facing it, I often feel that I know nothing, and writing and publishing papers are completely unfamiliar to me.”* N6: *“There are many courses in the first year of graduate school, and the teachers assign a lot of work. I currently attend two research group meetings every week, so there is definitely some pressure.”*

Coursework and academic task stress

Poor continuity between graduate and undergraduate curricula, concentrated academic tasks that must be balanced with clinical practice, and adaptation challenges arising from course difficulty and scheduling constituted major academic stressors. N2: *“The graduate curriculum does not connect smoothly with the undergraduate curriculum. Some courses are difficult, and the schedule is very intensive.”* N11: *“I feel there are quite a lot of assignments and a lot of pressure. My professional competence is not that strong either, so I sometimes feel that the demands are beyond my capacity.”*

Time and role management stress

The interweaving of multiple responsibilities and role conflicts made time allocation difficult and easily led to physical and mental fatigue. Clinical placements, coursework, research tasks, and tasks assigned by supervisors competed for the same limited time. N2: *“I think clinical placements, coursework, research tasks, and tasks assigned by my supervisor all overlap, which makes it difficult to allocate my time.”* N6: *“When I first enrolled, I had many classes every day, and after class there was still a lot of homework to finish. I studied until around 11 p.m. every day and had very little time to rest.”* Prolonged exposure to a monotonous study routine and a high-intensity pace of study readily contributed to physical and mental exhaustion.

Interpersonal and environmental adaptation stress

Poor student–supervisor communication, interpersonal difficulties, and problems adapting to new learning patterns created stress at the interpersonal and environmental levels. Some participants

experienced insufficient supervisor guidance or limited communication: “I still haven't met my supervisor in person, so I have had very little communication with my supervisor.” Some participants were troubled by disharmonious dormitory relationships and environmental changes. N7: *“The relationships in our dormitory are not very harmonious.”* N11: *“Because I had long been accustomed to living at home, my living environment changed after enrollment. I haven't fully adapted to the new dormitory environment, such as the daily routine and living conditions, and this has led to sleep problems. The discomfort caused by this environmental transition has also become a source of stress outside academics.”* The graduate-level model of self-directed learning differed markedly from undergraduate study, creating further adaptation difficulties. N6: *“Graduate study places greater emphasis on autonomy. It is different from the undergraduate learning model, and I need to take the initiative to acquire knowledge myself, which makes it difficult for me to adapt.”*

Theme 2: Diverse Strategies for Coping With Stress

When faced with multiple forms of academic stress, participants developed diverse coping strategies involving psychological adjustment, behavioral relaxation, proactive academic problem-solving, and reliance on external support. Through the combined effects of self-adjustment and external assistance, these strategies helped reduce stress and sustain academic progress [8, 10, 11].

Psychological adjustment and emotional expression

Participants alleviated negative emotions through verbal expression, self-suggestion, and reflection. Talking and venting to family members, friends, or members of their research group were major ways of releasing emotion. N12: *“I talk to close friends about my worries, and we vent together to help release negative emotions.”* Some participants organized their thoughts and encouraged themselves through writing. N3: *“When I feel anxious, I write down the problems in my notes app or diary and encourage myself.”*

Behavioral relaxation and distraction

Participants redirected attention and relieved academic stress through exercise, fitness activities, and leisure entertainment. Diverse forms of entertainment were used to ease stress. N2: *“I relax physically and mentally by listening to music, watching short videos, running, and so on, which helps relieve my academic stress.”* N3: *“When the pressure is high, I watch entertainment-industry content. Its unconventional and amusing style can effectively distract me and relieve negative emotions.”*

Proactive academic problem-solving

Participants addressed academic difficulties by actively seeking help and making plans. When problems arose, they proactively consulted supervisors, senior students, or classmates. N2: *“I actively ask my supervisor and senior students about research methods, academic writing skills, and similar issues.”* N11: *“During holidays, I report my progress to my teacher, ask for guidance on my study direction, and make a scientific study plan to improve my academic skills.”*

Reliance on external support systems

Participants drew on support from family, peers, and the university to relieve stress and maintain motivation. Families provided both financial and emotional support. N2: *"My family has given me a great deal of support. When I was under heavy pressure while preparing for the postgraduate entrance examination and was physically and mentally exhausted, my family encouraged me to adjust flexibly according to how I was feeling. They told me, 'If you want to take the exam, prepare well; if you don't, take a break and adjust first.' That meant I didn't have to carry such a heavy psychological burden."*

Theme 3: Psychological Cognition and Growth Under Stress

In the process of coping with academic stress, participants experienced cognitive transformation, competence development, temporary confusion, and the establishment of self-identity, forming a developmental pathway of "stress–coping–growth."

Cognitive transformation

Participants' understanding of graduate study and the nursing profession gradually became more rational and clear. Their view of graduate study shifted from "idealized" to "realistic." N2: *"My understanding of master's study changed from 'idealized' to 'realistic,' and I gradually realized the importance of self-directed learning and self-planning."* N13: *"Master's study places more emphasis on autonomy. There are fewer classes, but you need to expand your learning on your own, which is very different from undergraduate study."* Some participants shifted from rejecting clinical work to viewing it more rationally, or clarified goals for employment outside clinical nursing, such as civil service examinations, public-institution recruitment examinations, or university employment. N6: *"I don't want to work in clinical nursing. I hope to use the master's degree platform to pursue other areas, such as taking civil service or public-institution recruitment examinations, or becoming a teacher at a university."*

Improvement in competence and personal qualities

Through coping with stress, participants showed notable improvement in both academic competence and psychological capacity for independent functioning. Academic and research-related abilities gradually improved. N9: *"As my self-directed learning ability improved, I gradually learned time-management methods and became able to plan my daily tasks clearly so that study and other activities could proceed according to plan."* Psychological resilience and independent decision-making also strengthened. N11: *"Compared with the past, when I needed to ask my mother for her opinion about everything, I can now make decisions independently and make choices on my own."*

Temporary psychological confusion

During adaptation and development, participants commonly experienced periods of confusion and anxiety. Graduate study often involves uncertainty about research direction and difficulty adapting to new learning patterns. N5: *"When I first entered graduate school, I faced a completely new academic environment and higher competence requirements. I felt frightened and worried that I would not be able to*

adapt or keep up with the overall pace." Some participants developed self-doubt when academic progress was slow or outcomes did not meet expectations. N12: *"I still haven't found a direction that really interests me, and the proposal stage is approaching, so I'm a little anxious."* N5: *"At the beginning of the semester, I saw the students around me continuously making progress, while I had not made any obvious breakthrough. The gap between us caused anxiety inside me."*

Self-identity and planning for development

Through achieving stage-specific goals and improving their abilities, participants gradually established self-identity and clarified career plans. Self-identity developed progressively through competence enhancement and goal attainment. N5: *"I have set clear stage-specific development goals: in the first year, focus on coursework and passing English proficiency examinations to build a solid academic foundation; in the second year, balance clinical placements with research progress and improve comprehensive application ability; and in the third year, concentrate on completing the thesis while actively preparing for employment, so that academic study and career development connect in an orderly way."*

Discussion

Identification of Stressors: Multidimensional Characteristics and Formation Mechanisms of Academic Stress Among Newly Enrolled Full-Time Professional Master's Students in Nursing

This study found that newly enrolled full-time professional master's students in nursing experienced five major dimensions of academic stress: employment and future development, research competence and tasks, coursework and academic tasks, time and role management, and interpersonal and environmental adaptation, consistent with previous findings [12]. The distinctive overlap of nursing's threefold demands of "theory–clinical practice–research" exposes new students to intertwined pressures immediately after enrollment. This reflects not only the training requirements of graduate education but also the practical problem of insufficient continuity between undergraduate and graduate education [8]. Employment and future development were core sources of stress. Employment pathways for full-time professional master's students in nursing remain dominated by hospitals, and some students' reluctance to work clinically creates a mismatch between career expectations and labor-market realities. Combined with intense competition for desirable positions, this mismatch aggravates anxiety about future development, consistent with the findings of Gao et al. [6]. Research-related stress stems from the gap between inadequate undergraduate research training and the research demands of graduate study. Many students felt they "did not know where to start" when facing tasks such as literature reading and academic writing, consistent with Wang et al.'s [13] conclusion regarding weaknesses in research competence among nursing graduate students. Coursework stress was related to insufficient curricular continuity and the dual demands of theory and clinical practice. Graduate courses are difficult and tightly scheduled, and when combined with clinical placements, concentrated tasks create substantial adaptation difficulties. Time and role management stress resulted from competition among clinical, coursework, research, and supervisor-assigned tasks; sustained high-intensity study readily produced

physical and mental fatigue. Interpersonal and environmental adaptation stress arose from the role transition of new students: from passive undergraduate learning to self-directed graduate learning, from the family home to shared dormitory living, and from familiar social networks to new relationships with supervisors, teachers, and peers. These multiple transitions collectively create adaptation challenges [8, 14].

Coping Logic: Analysis of Strategy Adaptation Based on the transactional model of stress and coping

Stress is a continuous process of interaction between the individual and the environment. Individuals first conduct a primary appraisal of the pressure source (judging it as a threat, challenge, or irrelevant event), then use secondary appraisal to assess their coping resources and abilities, and subsequently adopt either problem-focused coping (changing the pressure source or the person–environment relationship) or emotion-focused coping (regulating negative emotions) [5]. The four categories of coping strategies identified among new students in this study were highly consistent with this theory and demonstrated the characteristic of “coordinated adaptation between problem-focused and emotion-focused coping,” supporting the applicability of the model to nursing graduate students.

Practical Manifestations and Effectiveness of Problem-Focused Coping Strategies

Proactive academic problem-solving and reliance on external support systems are typical forms of problem-focused coping. In response to stressors such as insufficient research competence and poor curricular continuity, students actively sought guidance from supervisors and senior students and developed structured study plans to directly address academic difficulties. These strategies not only reduced immediate stress but also promoted long-term competence development, forming a positive cycle of “stress coping–competence growth” [15, 16]. Reliance on external support systems integrated resources from family (financial and emotional support), the university (experience sharing and guidance), and peers (mutual assistance and communication), thereby reducing the intensity of stressors and enhancing coping capacity. This is consistent with the model's core proposition of interaction between the individual and the environment.

In addition, establishing clear stage-specific learning goals and individualized learning plans can help graduate students allocate learning tasks reasonably, obtain timely feedback, and increase their sense of control over the learning process, thereby enhancing academic adaptation [17].

Practical Manifestations and Adaptive Value of Emotion-Focused Coping Strategies

“Psychological adjustment and emotional expression” and “behavioral relaxation and distraction” are forms of emotion-focused coping. When faced with negative emotions such as employment uncertainty

and research anxiety, students released emotions by talking with others or encouraging themselves through writing and redirected attention through activities such as listening to music and exercising. Although these approaches did not change the pressure source itself, they effectively reduced the perceived intensity of stress and created a psychological foundation for problem solving, reflecting the “buffering role of emotion regulation” described by the theory. Notably, new students often used both categories of strategies together. For example, when facing research stress they both actively sought guidance (problem-focused coping) and expressed emotions (emotion-focused coping); when facing interpersonal stress they both communicated proactively (problem-focused coping) and used positive self-suggestion (emotion-focused coping). This dynamic coordinated pattern balances “problem solving” and “emotion regulation” and can substantially improve coping effectiveness [13, 18, 19].

Adaptive Value: Pathways and Developmental Significance of Psychological and Cognitive Growth During Stress Coping

During the coping process, newly enrolled full-time professional master's students in nursing experienced cognitive transformation, competence enhancement, temporary confusion, and the development of self-identity and future planning, highlighting the developmental value of coping with stress. Cognitive transformation was reflected in a shift in perceptions of graduate study and the nursing profession from “idealized” to “realistic,” which is essentially a process of continuous refinement of primary and secondary appraisal within the theoretical model and helps establish reasonable academic expectations and career plans [12]. Competence enhancement was reflected in improvements in self-directed learning, time management, problem solving, psychological resilience, and independent functioning. This is consistent with the theoretical proposition that coping promotes the accumulation of individual resources, enabling a transition from “passive coping” to “active adaptation.” Temporary confusion reflects a “cognitive imbalance” in the appraisal of stressors: new students may experience anxiety when progress falls short of expectations or when direction is unclear, but self-reflection and external support can help them reappraise the situation and clarify their direction. Self-identity and planning for development constitute the core of psychological growth. By achieving stage-specific goals and improving competence, students gradually build self-identity and develop phased development plans, thereby achieving “dynamic adaptation between the individual and the environment” [20].

Building Support: Targeted Training Strategies and Support Systems to Facilitate Dynamic Adaptation to Stress

Based on the study findings and the transactional model of stress and coping, the following recommendations are proposed. (1) Optimize curricula and training programs. Add bridging courses between undergraduate and graduate education to reduce abrupt increases in difficulty; offer foundational research courses and strengthen research training through “supervisor group meetings + peer support,” thereby improving secondary appraisal in the stress transaction; and balance time

allocated to clinical practice, coursework, and research, consistent with Liu's [21] emphasis on "relevance" and "confidence" in the ARCS motivational model. (2) Build an emotional support system. Establish routine psychological counseling mechanisms, provide training in stress appraisal and emotion regulation, and teach methods such as mindfulness meditation and cognitive restructuring. Create an inclusive campus climate, provide emotional-expression channels such as psychological counseling and peer support groups, and strengthen emotional communication within families [9, 22, 23]. (3) Guide students to use coping strategies synergistically. Explain the logic of stress appraisal and coping strategies to new students, clarify the contexts in which the two categories of strategies are applicable, and use case analysis and scenario simulation to train the sequence of "primary appraisal–secondary appraisal–strategy selection," thereby cultivating dynamically adaptive coping patterns [24]. At the same time, supervisors are important sources of support for graduate students' academic and research development, and the quality of supervision and student–supervisor interaction influences students' learning experiences and growth. Therefore, universities and supervisors should provide targeted guidance and feedback based on new students' academic foundations and research competence, helping them clarify learning goals, reduce research anxiety, and enhance academic adaptation [25]. (4) Strengthen coordination between clinical practice and teaching. Optimize clinical placement arrangements, balance time across tasks, and train clinical preceptors in both teaching and psychological support so that they can assist students with stress appraisal and strategy selection. This can promote the integrated development of "clinical practice–research–theory," in line with the clinical teaching optimization recommendations of Munangatire et al. [26].

Conclusion

Academic stress among newly enrolled full-time professional master's students in nursing is multidimensional and interwoven. Coping is primarily characterized by coordination between problem-focused and emotion-focused approaches and, overall, demonstrates dynamic adaptation and growth. Education administrators should therefore optimize training programs and build support systems to help new students successfully adapt to stress and complete their role transition. This study used qualitative interviews to explore academic stress, coping strategies, and psychological growth among newly enrolled nursing graduate students and analyzed the findings in relation to the Lazarus and Folkman transactional model of stress and coping, yielding preliminary findings. The study has several limitations: the sample was small and geographically concentrated, the long-term adaptation process was not followed, and the generalization of the findings is therefore limited.

Future research may be expanded in four directions: increasing the geographic and institutional scope of sampling to improve generalization; using longitudinal designs to reveal the dynamic patterns of stress transactions; conducting group comparisons to identify differences in stress coping among graduate students at different stages; and adopting mixed-methods designs that combine quantitative approaches to test the effectiveness of coping strategies. In addition, stress-intervention programs based on this theoretical model could be developed and validated to provide direct guidance for practice.

Declarations

Ethics approval and consent to participate

The study was approved by the Medical Ethics Committee of Dali University, Dali University, China (approval No. MECDU-202511-15). The study was conducted in accordance with the Declaration of Helsinki and relevant guidelines and regulations. Written informed consent to participate was obtained from all participants before the interviews.

Consent for publication

Not Applicable.

Competing interests

The authors declare that they have no competing interests.

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Availability of data and materials

Due to the nature of this study, participants were assured raw data would remain confidential and would only be shared in an aggregated format. The interview data are not publicly available because they are confidential.

Declaration of competing interests:

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Declaration of generative AI and AI-assisted technologies in the manuscript preparation process

During the preparation of this work, the authors used DeepSeek in order to improve language clarity and check grammatical errors. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

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