Health, Medicine and Therapeutics
ISSN Print: 3079-5079
ISSN Online: 3079-5087
https://doi.org/10.63313/hmt.9044

Professional Identity, Self-Efficacy and Psychological Stress Among Nursing Interns: A Narrative Review

Jiaxin Yang*. Minerva B. De Ala
School of Nursing, Philippine Women's University, Manila, Metro Manila, Philippines
Email: 2024T0755@pwu.edu.ph

How to cite this paper: Yang, J., & De Ala, M. B. (2026). Professional identity, self-efficacy and psychological stress among nursing interns: A narrative review. Health, Medicine and Therapeutics, 2(3), 1–9. ISSN Print: 3079-5079, ISSN Online: 3079-5087.
https://doi.org/10.63313/hmt.9044
Published: 2026-11-09

Copyright © 2026 by author(s) and Erytis Publishing Limited.
This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).
http://creativecommons.org/licenses/by/4.0/

Abstract

Clinical internship constitutes a critical transitional phase for nursing students, during which learners shift from classroom-centered theoretical knowledge to real-world patient-care environments. In this period, nursing interns continuously shape their professional identity, build clinical self-efficacy, and cope with various sources of psychological stress. This narrative review aims to summarize existing evidence regarding professional identity, self-efficacy, and perceived psychological stress among nursing interns, sort out their inter-relationships, and identify current research gaps for future educational intervention development. Literature was retrieved from PubMed, CINAHL and Scopus, focusing on peer-reviewed articles published between 2021 and 2025. Results showed that professional identity, self-efficacy and psychological stress are closely intertwined. Supportive clinical learning environments, high-quality preceptorship, and positive social-interpersonal resources can promote the formation of professional identity and self-efficacy while mitigating psychological stress. However, most existing studies adopt cross-sectional designs; longitudinal evidence tracking dynamic changes throughout internship remains limited. In conclusion, nursing educators and clinical managers should take a holistic perspective, integrating psychological support into clinical teaching, to facilitate adaptive role transition for nursing interns.

Keywords

Nursing Interns; Professional Identity; Self-Efficacy; Psychological Stress; Clinical Internship; Clinical Learning Environment

1. Introduction

Clinical internship is an indispensable segment of undergraduate nursing education, offering opportunities for students to translate theoretical knowledge into practical clinical competence. When entering hospital wards, nursing interns face multiple challenges: unfamiliar ward workflows, high-stakes patient-care responsibilities, complex interpersonal communication with medical staff and patients, as well as role transformation from student to future nursing practitioner. This transition

process is often accompanied by fluctuations in professional cognition, self-confidence, and psychological status.

Three core constructs have drawn growing attention in contemporary nursing education research: professional identity, self-efficacy, and psychological stress. Professional identity reflects how interns understand nursing roles, internalize professional values, and position themselves as members of the nursing workforce. Self-efficacy refers to interns' subjective beliefs about their capability to finish clinical tasks and handle unexpected clinical scenarios, which largely determines their learning engagement and coping patterns when facing difficulties. Psychological stress originates from the gap between clinical demands and individual perceived resources, which is prevalent throughout the internship journey of nursing students.

A large body of empirical studies has separately investigated these three variables. Nevertheless, fewer reviews systematically synthesize their interactive relationships and contextual influencing factors. This narrative review synthesizes recent literature to describe the status of these three constructs among nursing interns, analyze their mutual associations, summarize environmental and individual influencing factors, and point out research deficiencies, so as to provide reference for developing targeted support strategies for nursing interns.

2. Literature Search Methods

This narrative review was conducted following the SANRA checklist for narrative-review articles. Literature retrieval was performed across three electronic databases: PubMed, CINAHL, and Scopus. The search timeframe included peer-reviewed articles published from 2021 to 2025. Search terms covered nursing interns, professional identity, self-efficacy in clinical contexts, psychological stress (including perceived stress), clinical internship, clinical learning environment, preceptorship, and sense of belonging.

Inclusion criteria: empirical quantitative cross-sectional studies, mixed-methods research, scoping reviews and qualitative studies investigating undergraduate nursing interns during clinical placement. Exclusion criteria: case reports, conference abstracts, editorials, papers irrelevant to nursing-student clinical internship. As a narrative review, this study adopted a concept-driven selective synthesis rather than exhaustive systematic screening. The included literature comprised empirical quantitative, qualitative, and mixed-methods studies, scoping reviews, and selected foundational or context-specific publications when they were essential for conceptual clarification.

3. Overview of Core Constructs among Nursing Interns

3.1. Professional Identity of Nursing Interns

Professional identity formation is a gradual socialization process that does not finish

before school graduation; clinical internship acts as the key developmental context for its advancement. During rotation practice, interns observe role models among clinical nurses, participate in real patient care, receive feedback from preceptors, and continuously revise their cognition toward the nursing profession. Several cross-sectional surveys report that Chinese nursing interns generally show moderate levels of professional identity, with considerable individual variation. Some interns hold firm recognition of nursing values; others experience ambivalence, even occupational turnover thoughts under the impact of heavy workload, negative workplace events, and poor clinical experience [1].

Clinical belongingness is tightly linked with identity construction: interns who feel accepted by ward teams tend to form more positive professional self-image. Conversely, negative experiences such as abusive supervision or workplace conflict may shake their professional identification and increase the risk of leaving the nursing industry. The mentoring mode in clinical training exerts significant influence on the development of interns' professional identity [2]. Student-centered, supportive preceptorship helps interns interpret the professional connotation behind daily nursing work, facilitating identity internalization, while mechanical task-oriented supervision only focuses on skill operation and cannot support deeper professional socialization [3].

3.2. Self-Efficacy in Clinical Internship

Based on Bandura's self-efficacy theory, four major sources shape interns' efficacy beliefs: mastery experience of completing clinical tasks, vicarious observation of competent nurses, social persuasion including feedback and encouragement, and individual emotional and physiological states in clinical situations [4]. In clinical settings, successful supervised practice is the most powerful source of self-efficacy. When interns can finish nursing operations independently under appropriate guidance, their confidence in clinical capability improves obviously; repeated setbacks without effective guidance will trigger self-doubt and avoidance behaviors in clinical learning.

Research among multi-center nursing interns indicated that clinical self-efficacy is not static; it fluctuates along with internship stages, clinical department characteristics and the quality of supervision resources. Interns with higher self-efficacy show more active learning attitudes: they are more willing to try new clinical tasks, take the initiative to consult preceptors when confused, and adopt positive coping strategies when encountering setbacks. In contrast, interns with low self-efficacy tend to avoid participating in clinical activities, fear making mistakes, and become passive observers in clinical placement, which further hinders the accumulation of practical experience [5].

3.3. Psychological Stress during Clinical Internship

Psychological stress is widespread among nursing interns. Common stressors include fear of making clinical errors, heavy internship workload, difficulty in applying theoretical knowledge to real cases, tense interpersonal interaction with staff or patients, and worries about future career and licensing examinations. Stress appraisal theory emphasizes that the stress level does not merely depend on objective external pressure; it depends more on how individuals evaluate demands versus available coping resources [6].

Moderate stress can promote learning motivation, but persistent excessive stress brings adverse outcomes: emotional exhaustion, sleep disturbance, decreased learning efficiency, and even weakened willingness to engage in the nursing career in the future [7]. It is worth noting that stress status presents dynamic changes across internship periods. Some interns report prominent stress in the early phase when adapting to hospital environments, while others continue to experience career-related stress in the later stage when facing employment pressure.

4. Inter-Relationships among Professional Identity, Self-Efficacy and Psychological Stress

4.1. Professional Identity and Self-Efficacy

Professional identity and self-efficacy present significant positive correlation among nursing interns, yet they represent different psychological dimensions. Professional identity answers “who am I as a nurse”, while self-efficacy answers “can I accomplish clinical work well”. Interns who recognize the value of the nursing profession tend to invest more energy in clinical practice; continuous clinical participation in turn brings successful experience, which enhances self-efficacy. On the contrary, if interns hold negative cognition toward nursing work, they lack internal motivation to engage in clinical learning, which limits opportunities to build self-efficacy.

Meanwhile, higher self-efficacy helps interns obtain positive feedback in clinical practice, which further consolidates their professional identity. The two constructs promote each other in clinical internship, showing a reciprocal association rather than a simple one-way causal effect, which is consistent with the reciprocal determinism hypothesis of social cognitive theory [8].

4.2. Professional Identity and Psychological Stress

Existing studies generally report negative correlations between professional identity and perceived stress among nursing interns. When facing frustrating clinical events, interns with sound professional identity can interpret difficulties from the perspective of professional growth; they regard pressure as part of professional training rather than a pure negative blow, thus reducing subjective stress perception. Positive coping styles play a partial mediating role in this relationship [9].

Strong professional identity does not mean interns will not encounter pressure; instead, it supports them to select adaptive coping strategies to deal with challenges, lowering the harmful influence of stress on mental state. However, most existing evidence comes from cross-sectional surveys, and we cannot exclude the reverse possibility: long-term high stress may also erode interns' professional identity over time. Longitudinal research is needed to clarify the temporal sequences of these variables [10].

4.3. Self-Efficacy and Psychological Stress

Self-efficacy acts as an important psychological resource against clinical stress for nursing interns, and most studies identify negative correlations between the two variables. Interns with high self-efficacy tend to evaluate clinical challenges as manageable problems to be solved, instead of overwhelming threats. They are more likely to take active measures such as consulting preceptors, reviewing relevant knowledge, and cooperating with peers when meeting difficulties, which alleviates subjective stress feelings.

On the contrary, interns with low self-efficacy are prone to magnify the potential risks of clinical work. Even facing ordinary clinical tasks, they may generate excessive worry and anxiety. Nevertheless, self-efficacy cannot completely eliminate clinical stress. Even interns with high self-efficacy still experience pressure when confronting complex, high-risk clinical situations, which reflects the inherent hardship of clinical nursing work itself [11].

4.4. Integrated Interactive Perspective

The three constructs do not operate independently in internship practice. The clinical environment inputs various stimuli to interns. Under the joint function of individual psychological resources, professional identity and self-efficacy interact, jointly shaping interns' perception of stress; meanwhile, excessive stress will in turn damage the development of identity and self-efficacy. This forms a complex dynamic circulation system. Cross-sectional designs in current research can only test simultaneous correlations; we still know little about how they influence each other as time goes on throughout the whole internship period [10].

5. Major Influencing Factors

5.1. Clinical Learning Environment and Preceptorship

The clinical learning environment is the core external context shaping interns' psychological development. Supportive ward atmosphere, sufficient learning opportunities, psychological safety, and high-quality preceptorship can simultaneously foster professional identity, improve self-efficacy and reduce stress responses. Preceptors play irreplaceable roles. Good preceptorship includes skill demonstration, clinical reasoning explanation, constructive timely feedback,

emotional support and progressive task assignment for interns. Qualified role-model nurses let interns perceive the professional charm of nursing, promoting identity building; appropriate task arrangement provides mastery experience to cultivate self-efficacy; accessible support lowers interns' fear and pressure of making mistakes [4].

In contrast, heavy clinical workload, lack of learning opportunities, criticism-oriented feedback, and hostile ward interpersonal atmosphere will produce adverse effects on all three psychological outcomes. These findings highlight that the quality of the practice setting should be regarded as an essential component of internship management rather than an incidental condition [11].

5.2. Interpersonal Relationship and Sense of Belonging

Sense of clinical belonging means interns feel respected, accepted and regarded as legitimate learners within clinical teams, which is an important intermediate variable. When interns can integrate into ward teams and communicate smoothly with nurses and peers, they gain more positive social persuasion, which benefits identity and self-efficacy construction and buffers stress impacts. Isolation, exclusion or workplace incivility will aggravate stress and hinder the professional socialization process [12].

5.3. Individual Intern-Related Factors

Individual factors cover demographic background, previous educational experience, coping style, resilience and personality characteristics. Resilient interns are better at recovering from negative clinical events and maintaining relatively stable professional cognition and efficacy beliefs under pressure [13]. Coping style is also critical: positive problem-focused coping helps adjust psychological status, while avoidance coping will amplify the negative influence of clinical pressure. Besides, the initial professional attitude before entering internship also lays a foundation for subsequent psychological development in clinical rotation [14].

6. Research Gaps

First, most relevant empirical studies adopt cross-sectional questionnaire surveys. We have abundant evidence of simultaneous correlation, but lack longitudinal cohort studies tracking the dynamic changes of professional identity, self-efficacy and stress across different internship stages, and we cannot fully clarify the causal directions and developmental trajectories among variables [10]. Second, there is insufficient exploration of contextual heterogeneity. Research results from one hospital or region may not be directly generalized to other settings, because differences in internship management mode, preceptor training system and hospital cultural background may change the strength of correlation among these psychological constructs.

Third, intervention research is relatively scarce. Lots of descriptive correlational studies exist, but few controlled intervention studies test whether educational or nurse-led support programs can effectively improve interns' professional identity and self-efficacy and reduce psychological stress; existing intervention projects are mostly small-scale and short-term, lacking long-term follow-up effect evaluation [8,15,16]. Fourth, qualitative evidence should be enriched. Quantitative scales can measure score levels, but cannot fully capture interns' real inner experience, subtle psychological conflict and the concrete process by which the environment shapes their professional cognition and self-confidence. Mixed-methods designs combining questionnaire survey and open-ended qualitative investigation deserve more attention [5].

7. Implications for Nursing Education and Clinical Practice

Firstly, clinical preceptor training should be strengthened. Preceptors should not only master clinical skills, but also receive training including role-modeling, constructive feedback, psychological support and student-centered supervision strategies, so they can pay attention to interns' psychological growth besides skill teaching [2,3]. Secondly, we should build a psychologically safe clinical learning atmosphere and enhance interns' sense of belonging. Clinical departments should treat interns as legitimate learners, create opportunities for them to participate in appropriate patient-care work, encourage them to raise questions, and reduce fear caused by excessive blame for mistakes [12,4,17].

Thirdly, psychological support should be integrated throughout the whole internship process, not only intervene after severe psychological problems appear. According to the characteristics of different internship phases, carry out regular group discussion, guided reflection and peer sharing activities, helping interns interpret clinical experiences, consolidate professional values, and master adaptive coping skills. Fourth, we should promote collaboration between nursing schools and clinical hospitals. Schools and clinical practice institutions should jointly formulate internship support schemes, realize continuity between pre-clinical psychological preparation and in-internship support, and jointly pay attention to interns' professional and psychological development [11].

8. Conclusion

Professional identity, self-efficacy and psychological stress are three interwoven core psychological outcomes during nursing interns' clinical placement. Supportive clinical environment, high-quality preceptorship and positive interpersonal resources contribute to the development of professional identity and self-efficacy, and buffer psychological stress. Current literature is dominated by cross-sectional studies; longitudinal tracking and controlled intervention studies are urgently needed in the future. Nursing educators and clinical administrators should adopt

holistic thinking, attach importance to both clinical competence cultivation and interns' psychological adaptation, so as to support nursing interns to complete role transition smoothly and grow into a competent nursing workforce.

Acknowledgements

The author would like to thank the supervisor for guidance on the framework construction of this review article. This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

References

[1] Liang, Y., Chen, L., Wang, J., & Su, D. (2026). Workplace violence, psychological capital, and professional identity among Chinese nursing interns: a latent profile and mediation analysis. Frontiers in public health, 14, 1791963. https://doi.org/10.3389/fpubh.2026.1791963

[2] Gusar, I., Tokić, A., & Lovrić, R. (2025). Development of nursing students' professional identity in different mentoring approaches during clinical training: A quasi-experimental study. Nurse education today, 144, 106459. https://doi.org/10.1016/j.nedt.2024.106459

[3] Baldwin, A., Mills, J., Birks, M., & Budden, L. (2017). Reconciling professional identity: A grounded theory of nurse academics' role modelling for undergraduate students. Nurse education today, 59, 1–5. https://doi.org/10.1016/j.nedt.2017.08.010

[4] Şen, Y., Şenyuva, E., Yalnız, N., & Görügen, Ü. (2026). How do clinical learning environments and nurse preceptor competencies affect nursing students' clinical performance self-efficacy? A mixed-methods study. Nurse education today, 164, 107147. https://doi.org/10.1016/j.nedt.2026.107147

[5] Marriott, P. H. M., Weller-Newton, J. M., & Reid, K. J. (2024). Preparedness for a first clinical placement in nursing: a descriptive qualitative study. BMC nursing, 23(1), 345. https://doi.org/10.1186/s12912-024-01916-x

[6] Wang R. Analysis of the current situation and influencing factors of stress among nursing students in the later stage of internship. Journal of Bengbu Medical College, 2023, 48(10): 1421-1425. https://doi.org/10.13898/j.cnki.issn.1000-2200.2023.10.024

[7] Araújo, A. A. C., Godoy, S., Maia, N. M. F. E. S., Oliveira, R. M., Vedana, K. G. G., Sousa, Á. F. L., Wong, T. K. S., & Mendes, I. A. C. (2023). Positive and negative aspects of psychological stress in clinical education in nursing: A scoping review. Nurse education today, 126, 105821. https://doi.org/10.1016/j.nedt.2023.105821

[8] Wille, E., Opheim, H. M. S., Princeton, D. M., Kisa, S., & Hjerpaasen, K. J. (2025). Building Resilience and Competence in Bachelor Nursing Students: A Narrative Review Based on Social Cognitive Theory. Nursing reports (Pavia, Italy), 15(7), 253. https://doi.org/10.3390/nursrep15070253

[9] Tu, H., Liu, J., Li, F., Lin, T., Jin, P., Li, P., & Li, J. (2024). The mediating effect of coping on perceived stress and professional identity among nursing interns: a cross-sectional study conducted in a medical university in China. BMC psychology, 12(1), 682. https://doi.org/10.1186/s40359-024-02208-4

[10] Ho P. (2025). Professional identity among nursing students: A longitudinal analysis of student experiences and developmental pathways. Journal of professional nursing : official journal of the American Association of Colleges of Nursing, 58, 104–111. https://doi.org/10.1016/j.profnurs.2025.03.009

[11] Gong, B., Chen, X., Wang, N., Zhan, Y., Zhong, H., Zhang, R., Luo, Y., Zhang, Z., & Li, L. (2025). The relationship between psychological capital, stress, micro-learning environment, and professional identity in nursing interns: a structural equation modeling study. Frontiers in psychology, 16, 1458384.

https://doi.org/10.3389/fpsyg.2025.1458384

[12] Squire, D., Gonzalez, L., & Shayan, C. (2024). Enhancing sense of belonging in nursing student clinical placements to advance learning and identity development. Journal of professional nursing : official journal of the American Association of Colleges of Nursing, 51, 109–114. https://doi.org/10.1016/j.profnurs.2024.01.007

[13] Ye, X., Yang, G., Zhang, W., Toussaint, L., & Zhao, F. (2025). Relationship of negative life events with depression and anxiety in nursing students: a moderated mediation model of resilience and gender. BMC nursing, 24(1), 58. https://doi.org/10.1186/s12912-024-02661-x

[14] Wei, L. Z., Zhou, S. S., Hu, S., Zhou, Z., & Chen, J. (2021). Influences of nursing students' career planning, internship experience, and other factors on professional identity. Nurse education today, 99, 104781. https://doi.org/10.1016/j.nedt.2021.104781

[15] Gheisari, F., Farzi, S., Tarrahi, M. J., Momeni-Ghaleghasemi, T., Farzi, S., Nazari, F., & Riahi, R. T. (2025). The effect of an ISBAR-based clinical supervision model during handover on clinical decision-making and self-efficacy of nursing internship students: a quasi-experimental study. BMC medical education, 25(1), 815. https://doi.org/10.1186/s12909-025-07426-x

[16] Huang, X., Li, N., Zhang, G., Lai, P., Yu, R., & Ji, C. (2025). A Study on The Intervention of PM+ Combined with Narrative Group Counseling for the Maladjustment of Clinical Internship of Nursing Students. International Journal of Clinical and Experimental Medicine Research, 9(4). http://dx.doi.org/10.26855/ijcemr.2025.07.015

[17] Hardie, P., O'Donovan, R., Jarvis, S., & Redmond, C. (2022). Key tips to providing a psychologically safe learning environment in the clinical setting. BMC medical education, 22(1), 816. https://doi.org/10.1186/s12909-022-03892-9