

Research Progress on Empathic Ability of Student Nurses

Xue ZHAO^{1△}, Jingping LI^{1△}, Songhong XIE^{2*}, Danna LIU^{3*}, Shuting CHEN²

1. Affiliated Tumor Hospital of Chongqing University, Chongqing 400030, China; 2. Nursing Department of Neijiang Health Vocational College, Neijiang 641102, China; 3. Zizhong County People's Hospital, Neijiang 641299, China

Abstract This article first reviews the basic concepts and theoretical frameworks of empathic ability. Subsequently, it analyzes the characteristics of student nurses' empathic ability, its measurement methods, and influencing factors, and explores effective strategies for enhancing it. Finally, this paper summarizes the impact of student nurses' empathic ability on nursing practice, professional development, and emotional health, and proposes directions for future research. Through the integration and analysis of existing literature, this study provides nursing educators with a solid theoretical foundation and practical guidance for enhancing student nurses' empathic ability.

Key words Student nurses, Empathic ability, Emotional support, Nursing education, Healthcare, Psychology

1 Introduction

With the rapid changes in the global healthcare environment and the gradual professionalization of the nursing profession, the importance of student nurses' professional competence and psychological qualities in nursing education has become increasingly prominent^[1]. As one of the core skills in nursing work, empathic ability not only helps nurses establish good nurse-patient relationships but also significantly enhances patients' comfort, trust, and overall treatment outcomes^[2]. Cultivating empathic ability enables nursing personnel to better understand patients' needs and feelings, thereby providing more personalized and humanized nursing care^[3]. However, how student nurses maintain and effectively develop their own empathic ability when facing complex emotional conflicts and high-pressure work environments has become a critical issue urgently needing resolution in the field of nursing education. In recent years, researchers have gradually recognized that student nurses' empathic ability is not only a crucial reflection of their professional competence but also a significant factor in their mental health and preventing professional burnout. Therefore, exploring and optimizing the cultivation mechanisms for empathic ability in nursing education has become a hotspot and important topic in current nursing education research.

2 Concept of empathic ability

Empathy refers to the psychological ability of an individual to understand and perceive the emotional state of others and to make corresponding emotional responses^[4]. It is an important ability in interpersonal communication and emotional exchange, enabling individuals to establish profound emotional connections with others. Empathy is typically divided into two main dimensions: cognitive empathy and affective empathy. Cognitive empathy refers to an individual's ability to understand the emotions and psychological

states of others, that is, to perceive others' emotional conditions through thinking and reasoning; while affective empathy refers to an individual resonating or sympathizing emotionally with others, being able to emotionally experience the emotions that others are going through^[5]. These two dimensions of empathic ability are usually complementary, jointly promoting an individual's emotional responses and the quality of interaction in social interactions.

3 Theoretical foundations of empathic ability

Carl Rogers is a representative figure of humanistic psychology, and his empathy theory provides an important theoretical foundation for fields such as nursing and psychotherapy. Rogers believed that empathy is not only an ability of cognitive understanding but also an emotional response and resonance. He emphasized that in nursing practice, the core of empathy is to build trusting relationships through respect and unconditional positive regard. When interacting with patients, nurses use empathy to understand the patients' emotional states and inner needs, and through unconditional acceptance and understanding, help patients achieve self-expression^[6]. Rogers proposed that the practice of empathy requires nurses to set aside their own prejudices and accept the patient's emotional experiences with an attitude of unconditional care and support. Through this approach, patients can feel understood and accepted, thereby enhancing their self-efficacy and treatment motivation^[7]. The empathy model proposed by David Hopkins further expands the concept of empathy, emphasizing the integration of deep emotional experience and cognitive flexibility. Hopkins argued that an individual's empathic ability is not merely the perception of others' emotions but is based on the dual action of deep emotional experience and flexible cognitive processing^[8]. Specifically, in clinical settings, nurses need to flexibly apply the combination of emotional experience and cognitive reasoning to provide comprehensive emotional support to patients in complex clinical situations.

4 Research tools for empathic ability

4.1 Jefferson Scale of Physician Empathy-Health Professions (JSE-HP) The Jefferson Scale of Physician Empathy-

Received: April 13, 2025 Accepted: June 14, 2025

Supported by National Natural Science Foundation of China (71774049).

[△]These authors contributed equally to this work.

Xue ZHAO, bachelor's degree, charge nurse; Jingping LI, bachelor's degree, charge nurse. * Corresponding author. Songhong XIE, master's degree, teaching assistant; Danna LIU, master's degree, registered nurse.

Health Professions (JSE-HP) was developed by Hojat *et al.*^[9] in 2001 to assess the empathic ability of healthcare professionals, particularly the emotional care and understanding demonstrated during patient care. This scale is specifically suitable for medical practitioners, such as physicians and nurses, to assess their empathic responses towards patients in clinical practice. Hojat *et al.* used this scale to explore the impact of medical empathy on patient satisfaction, treatment outcomes, and the physician-patient relationship.

4.2 Jefferson Scale of Physician Empathy-Nursing Student (JSPE-NS) This scale was developed by Dr. Hojat and his research team in the United States in 2001 and was translated and adapted into the Jefferson Scale of Physician Empathy-Nursing Student (JSPE-NS) by Qiu Zhijun^[10]. This version demonstrated good reliability and validity^[16], with a Cronbach's alpha coefficient of 0.836 and a KMO (Kaiser-Meyer-Olkin) value of 0.889. The scale consists of 20 items, primarily assessing nurses' perspective-taking (10 items), compassionate care (8 items), and standing in the patient's shoes (2 items). Each item is rated using a 7-point Likert scale, where "Strongly disagree" scores 1 point and "Strongly agree" scores 7 points. The total scale score ranges from 20 to 140 points, with higher scores indicating a higher level of empathic ability.

5 Factors influencing the empathic ability of student nurses

5.1 Individual factors Individual factors are significant intrinsic factors influencing the empathic ability of student nurses, primarily including personality traits, emotional intelligence, self-awareness, and interpersonal skills. The personality characteristics of student nurses directly affect their mode of interaction with patients. Research^[11] shows that extroverted student nurses usually find it easier to establish emotional connections with patients and demonstrate higher levels of empathic ability. In contrast, introverted student nurses may experience some difficulties in emotional expression and communication. The trait of empathy within one's personality also significantly impacts the empathic ability of student nurses; those with higher innate empathy can perceive patients' emotional needs more sensitively. Studies^[12] have found that student nurses with high emotional intelligence are better able to understand patients' emotional needs and make appropriate emotional responses when interacting with them. Emotional intelligence not only affects the communication effectiveness between student nurses and patients but also relates to the regulation and alleviation of emotional conflicts during the nursing process. The cultivation of self-awareness helps student nurses maintain emotional balance in high-pressure and high-emotional-load environments, ensuring the sustained exercise of their empathic ability. Good interpersonal skills enable student nurses to establish trusting relationships with patients more smoothly, facilitating emotional exchange and resonance. Through effective communication skills, student nurses can more accurately identify patients' emotional

needs and make positive responses.

5.2 Educational background In nursing education curricula, in addition to training in basic nursing skills, the content of emotional education should also be strengthened. Through forms such as emotional education courses, case analysis, and role-playing, student nurses can be helped to understand patients' emotional experiences and enhance their empathic ability^[13]. For example, through scenario simulation and emotional interaction training, student nurses can improve their emotional understanding and empathic skills in a virtual environment, thereby better addressing patients' emotional needs in actual clinical work. Student-centered teaching models, interactive teaching, and emotionally-oriented teaching methods contribute to the improvement in student nurses' emotional expression abilities. In the teaching process, teachers are not only knowledge transmitters but also guides for emotional expression and empathic ability. Combining emotional education with technical training can promote the development of student nurses' emotional intelligence^[14]. The guidance and feedback from clinical mentors are crucial for enhancing the emotional abilities of student nurses. Especially when facing emotionally tense situations or patients with significant psychological fluctuations, the mentor's guidance helps student nurses better handle patients' emotional appeals.

5.3 Social support system Support and encouragement from family can help student nurses establish a stable emotional foundation, reducing emotional stress and conflict. The understanding and support of family members can provide student nurses with emotional security and psychological support when facing emotional challenges in the nursing profession, thereby enhancing their empathic ability^[15]. Learning and growing together with peers can not only alleviate the stress of student nurses but also promote the enhancement of their empathic ability through sharing experiences and emotional dilemmas. Emotional support among peers enables student nurses to exhibit more positive emotional responses when interacting with patients. Emotional support and guidance from teachers can not only enhance the emotional intelligence of student nurses but also provide them with effective emotional regulation strategies^[16].

5.4 Work stress and emotional labor The high-pressure nature of the nursing profession and the characteristics of emotional labor also have a significant impact on the empathic ability of student nurses. In environments characterized by high emotional labor, student nurses need to cope with patients' negative emotions such as pain, anxiety, and fear, which greatly depletes their emotional resources^[17]. Therefore, the emotional regulation ability of student nurses when facing stress directly affects the exertion of their empathic ability. Excessive emotional labor and stress may lead to emotional exhaustion in student nurses, affecting their emotional connection with patients. Therefore, providing appropriate emotional support and psychological counseling to help student nurses relieve stress is key to enhancing their empathic ability.

6 Strategies for enhancing the empathic ability of student nurses

6.1 Emotional support in nursing education

6.1.1 Emotional communication courses. To effectively improve the empathic ability of student nurses, specialized emotional communication courses should be established in nursing education, aiming to help student nurses better identify, understand, and respond to patients' emotional needs^[18]. Through a combination of theoretical learning and case analysis, the courses will focus on emotional resonance, listening skills, and the use of non-verbal expression, cultivating student nurses' ability to fully demonstrate empathy during interactions with patients.

6.1.2 Emotional intelligence training. Emotional Intelligence (EI) refers to an individual's ability in emotional perception, understanding, expression, and management. In nursing education, emotional intelligence training can help student nurses learn to regulate their own emotions and handle the emotional burden of their work when facing the emotional challenges of nursing. Through the cultivation of emotional intelligence, student nurses can more effectively cope with stress during the nursing process, reduce emotional exhaustion, and improve the quality of nursing care.

6.2 Cultivating empathy in clinical practice

6.2.1 Scenario simulation. Scenario simulation, as an efficient teaching method, helps student nurses enhance their empathic ability in practice by constructing interactive scenarios similar to real clinical situations^[19]. During the simulation process, student nurses can practice how to correctly assess patients' emotional states and adopt appropriate communication strategies to enhance emotional resonance. This experiential learning approach can effectively promote student nurses' understanding of and response to patients' emotions.

6.2.2 Mentor guidance. In clinical practice, the role of mentors extends beyond merely imparting nursing skills; they should also pay attention to the emotional responses and emotional development of student nurses. Mentors should provide regular emotional support and feedback to student nurses, helping them identify potential emotional distress in nursing work and guiding them on how to regulate emotional responses to improve empathic ability during the nursing process. Through emotionally attuned guidance, student nurses can better understand patients' needs and establish genuine emotional connections in actual nursing practice.

6.3 Psychological interventions

6.3.1 Meditation and relaxation training. In nursing work, emotional burden and stress can lead to mood swings and anxiety in student nurses^[20]. Therefore, introducing meditation and relaxation training can help student nurses alleviate emotional stress and enhance their ability to regulate emotions. Regular practice of meditation and deep breathing exercises can help student nurses calm their emotions, maintain emotional stability, and prevent professional burnout or emotional numbness.

6.3.2 Psychological counseling and mental health support. To

better support the emotional needs and mental health of student nurses, nursing education institutions should provide professional psychological counseling services to help student nurses effectively cope with occupational stress. Through regular mental health assessments, emotional support, and personalized psychological guidance, student nurses can be helped to identify and address emotional barriers, reducing the occurrence of issues such as professional burnout and compassion fatigue.

6.4 Self-care and emotional regulation training

6.4.1 Self-care training. Nursing work often brings significant emotional pressure; therefore, student nurses need to learn to regularly engage in self-care activities such as meditation, exercise, and leisure entertainment to alleviate occupational stress. These self-care activities can not only relieve emotional fatigue but also enhance the psychological resilience of student nurses, enabling them to better face challenges at work.

6.4.2 Emotional regulation techniques. To avoid emotional over-involvement or emotional numbness, student nurses need to learn effective emotional regulation techniques. These techniques include emotional self-monitoring, emotional reappraisal, and methods of emotional expression. Through this training, student nurses can maintain appropriate emotional distance during interactions with patients, avoiding excessive emotional involvement, thereby improving their empathic ability and nursing efficiency^[21].

7 Conclusion

In conclusion, cultivating the empathic ability of student nurses is an important component of nursing education, with profound implications for improving nursing quality, reducing professional burnout, and promoting career development. Future research should continue to focus on differences in the empathic ability of student nurses across various cultural and regional contexts and explore more effective educational and intervention strategies to enhance the comprehensive quality of student nurses and the quality of nursing services.

References

- [1] ZHOU LH, ZHANG ZH, YAO YF, *et al.* Analysis on the status quo and influencing factors of team psychological capital in undergraduate nursing students' innovation and entrepreneurship projects[J]. *Military Nursing*, 2025, 42(3): 6–9. (in Chinese).
- [2] ZHU SL, ZHANG XY, ZHAI WR. Research on the relationship between nursing undergraduates' cognitive level of spiritual care, empathy ability, and professional dedication based on regression analysis[J]. *Health Vocational Education*, 2025, 43(5): 129–132. (in Chinese).
- [3] ZHANG WY, ZHANG N, ZHANG L. The mediating role of perceived social support between pain empathy and caring behavior among ICU nurses [J]. *Tianjin Journal of Nursing*, 2025, 33(1): 17–22. (in Chinese).
- [4] KHOSHGOFTAR Z, BARKHORDARI-SHARIFABAD M. Medical students' reflective capacity and its role in their critical thinking disposition[J]. *BMC Medical Education*, 2023, 23(1): 198.
- [5] TRAYNOR M. Empathy, caring and compassion: Toward a Freudian critique of nursing work[J]. *Nursing Philosophy*, 2023, 24(1): e12399.
- [6] LUCAS B. Using reflection in nursing practice to enhance patient care [J]. *Nursing Standard*, 2023, 38(6): 44–49.

- [7] KWAME A, PETRUCKA PM. A literature-based study of patient-centered care and communication in nurse-patient interactions: barriers, facilitators, and the way forward[J]. *BMC Nursing*, 2021, 20(1): 158.
- [8] KARLSSON M, PENNBRANT S. Ideas of caring in nursing practice[J]. *Nursing Philosophy*, 2020, 21(4): e12325.
- [9] FIELDS SK, MAHAN P, TILLMAN P, *et al.* Measuring empathy in healthcare profession students using the Jefferson Scale of Physician Empathy: Health provider-student version[J]. *Journal of Interprofessional Care*, 2011, 25(4): 287–293.
- [10] QIU ZJ, JIANG N, LI GP. Application of transtheoretical model in empathy training of higher vocational nursing students[J]. *Chinese Nursing Research*, 2014, 28(12): 1516–1518. (in Chinese).
- [11] LI PY, YIN XH. Study of mediating effect of empathy ability between nurses' professional identity and nurses' reflective ability[J]. *China Medical Herald*, 2025, 22(1): 104–109. (in Chinese).
- [12] LI P, WENG L, DONG L. Empathy ability and influencing factors among pediatric residents in China: A mixed-methods study[J]. *BMC Medical Education*, 2024, 24(1): 955.
- [13] DENG X, CHEN S, LI X, *et al.* Gender differences in empathy, emotional intelligence and problem-solving ability among nursing students: A cross-sectional study[J]. *Nurse Education Today*, 2023, 120: 105649.
- [14] LI J, LI X, GU L, *et al.* Effects of simulation-based deliberate practice on nursing students' communication, empathy, and self-efficacy[J]. *Journal of Nursing Education*, 2019, 58(12): 681–689.
- [15] YU Y, WAN X, SUN C, *et al.* Medical narrative ability and humanistic care ability of Chinese clinical nurses: The mediating role of empathy ability[J]. *Journal of Evaluation in Clinical Practice*, 2025, 31(1): e14046.
- [16] SHAW M, BILOG A, REYES D, *et al.* Emotion recognition and clinical empathy: An observational study of nurses[J]. *Applied Nursing Research*, 2024, 80: 151855.
- [17] REN XH, WANG XC, HUANG QJ, *et al.* The mediating role of resilience and professional identity between perceived organizational support and empathy fatigue in male nurses[J]. *Journal of Nurses Training*: 1–11. (in Chinese).
- [18] ZHU Y, YANG C, ZHANG J, *et al.* Developing an empathy educational model (EEM) for undergraduate nursing students: A Delphi Technique[J]. *Nurse Education in Practice*, 2021, 50: 102922.
- [19] DU J, HUANG S, LU Q, *et al.* Influence of empathy and professional values on ethical decision-making of emergency nurses: A cross sectional study[J]. *International Emergency Nursing*, 2022, 63: 101186.
- [20] REYNOLDS W, SCOTT PA, AUSTIN W. Nursing, empathy and perception of the moral[J]. *Journal of Advanced Nursing*, 2000, 32(1): 235–242.
- [21] EDOHO SAMSON-AKPAN P, LEE Y, BAQER AL-JUBOURI M, *et al.* Compassion competence among nursing students from different cultures: A multinational study[J]. *Journal of Nursing Education*, 2022, 61(6): 289–295.

(From page 74)

- [15] LUO D, JIANG CL, SHI FY, *et al.* Observation on the efficacy of balanced secret massage in treatment of idiopathic early-onset scoliosis[J]. *Chinese Journal of Traditional Medical Science and Technology*, 2024, 31(3): 457–459. (in Chinese).
- [16] JIANG WH, LI HQ, TANG XH, *et al.* Clinical observation of traction combined with "Long's Orthopedic Manipulation Technique" for early adolescent idiopathic scoliosis[J]. *Asia-Pacific Traditional Medicine*, 2023, 19(8): 85–89. (in Chinese).
- [17] LU YL, LUO GG, XIE HF, *et al.* Rehabilitative effects of schroth therapy with bonesetting massage for adolescent idiopathic scoliosis[J]. *Chinese General Practice*, 2022, 25(32): 4059–4064. (in Chinese).
- [18] WANG SC. Treatment of 45 cases of adolescent idiopathic scoliosis with governor vessel regulating spine massage combined with Schroth spinal correction therapy[J]. *Zhejiang Journal of Traditional Chinese Medicine*, 2025, 60(6): 545–546. (in Chinese).
- [19] LI GY, ZHANG SQ, *et al.* Observation on the efficacy of massage combined with four-dimensional traction for lumbar disc herniation with scoliosis[J]. *Journal of Practical Traditional Chinese Medicine*, 2019, 35(2): 218–220. (in Chinese).
- [20] JIA K, LI HT, LYU ZL, *et al.* Exercise therapy combined with massage therapy for idiopathic scoliosis[J]. *Jilin Journal of Traditional Chinese Medicine*, 2020, 40(8): 1093–1095. (in Chinese).
- [21] TANG YY, LIN YF, LI C, *et al.* Efficacy of acupuncture combined with spinal massage for idiopathic scoliosis and its effects on spinal function and pulmonary function[J]. *Global Traditional Chinese Medicine*, 2024, 17(11): 2351–2354. (in Chinese).
- [22] WANG S. Clinical observation of bone-setting massage combined with traction in treating adolescent idiopathic scoliosis[J]. *China's Naturopathy*, 2019, 27(11): 26–28. (in Chinese).
- [23] CAI QR, LIN YF, LIU GK, *et al.* Effects of traditional Chinese medicine spinal manipulation combined with acupoint deep needling on hemorheological indicators in patients with cervical spondylotic radiculopathy[J]. *Inner Mongolia Journal of Traditional Chinese Medicine*, 2021, 40(1): 99–101. (in Chinese).
- [24] YAN HL, LIU CP, QIN J, *et al.* Efficacy of Chinese medicine orthopedic massage and fire dragon pot combined with Schroth therapy on adolescent idiopathic scoliosis[J]. *Modern Journal of Integrated Traditional Chinese and Western Medicine*, 2024, 33(12): 1648–1654. (in Chinese).
- [25] LI JH, ZHAO MY, YU HL, *et al.* Efficacy of traditional Chinese medicine bone-setting massage combined with core muscle strength training for adolescent idiopathic scoliosis and its effects on Cobb angle and spinal rotation angle[J]. *Clinical Medicine*, 2025, 45(2): 120–122. (in Chinese).
- [26] ZHU B, LI M, REN J, *et al.* Traditional Chinese medicine manual therapy for adolescent idiopathic scoliosis: A case report[J]. *Frontiers in Pediatrics*, 2024, 12:1500373.
- [27] SUN Y, ZHANG Y, MA H, *et al.* Spinal manual therapy for adolescent idiopathic scoliosis: A systematic review and meta-analysis of randomized controlled trials[J]. *BioMed Research International*, 2023, 2023: 7928429.
- [28] KÜÇÜK E, ÖTEN E, COSKUN G. Effects of spinal mobilisation in adolescent idiopathic scoliosis: A randomised controlled trial[J]. *Journal of Paediatrics and Child Health*, 2024, 60(11): 660–668.
- [29] SUN W, GAO J, ZHU L, *et al.* Effect of spinal manipulation on degenerative scoliosis[J]. *Journal of Traditional Chinese Medicine*, 2020, 40(6): 1033–1040.