

Research on the Relationship between Nursing Students' Self-directed Learning Ability and Self-directed Critical Thinking Ability

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Abstract: Guiding nursing students to form the concept and relevant abilities of self-directed learning is a decisive factor affecting the quality of nursing discipline construction and an important guarantee for cultivating high-level nursing talents. At the same time, with the in-depth development of the modern medical field, in the face of the increasingly complex healthcare needs of the public and the expansion of the role of medical services, contemporary nursing students are required to possess self-directed learning ability and self-directed critical thinking ability. Therefore, studying the correlation between nursing students' self-directed learning ability and self-directed critical thinking ability can, by stimulating their internal driving force, improve their comprehensive ability to adapt to diversified working and learning environments, and thus make practical preparations for cultivating a reserve force of high-quality nursing talents.

Keywords: Nursing students; Self-directed learning ability; Self-directed critical thinking ability; Correlation analysis

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1. Introduction

With the deepening of comprehensive reforms in the field of higher education in the new era, more and more attention is being paid to improving students' learning status. Therefore, self-directed learning ability has become a popular research topic in the field of education. Self-directed learning, that is, autonomous learning, emphasizes that nursing students can actively and consciously acquire professional knowledge in the process of using objective resources and form core competencies. Self-directed critical thinking emphasizes making reasonable decisions or seeking the best solutions to problems on the basis of dialectical analysis of problems. A comprehensive exploration of the relationship between nursing students' self-directed learning ability and self-directed critical thinking ability can provide useful help for improving the quality of nursing education and the cultivation of nursing talents.

2. Current situation of nursing students' self-directed learning ability and self-directed critical thinking ability

2.1. Current situation of nursing students' self-directed learning ability

Currently, the academic and educational circles mainly evaluate the development of nursing students' self-directed learning ability from four dimensions: learning motivation, learning plan and implementation, learning inspection, and interpersonal communication. With the full implementation of the "Healthy China" strategy and the continuous improvement of the Chinese people's health awareness, there has been a great change in the public opinion of the nursing industry, and its social status has been significantly improved. This external change has had a positive impact on nursing students' learning motivation, making them show strong enthusiasm for nursing work during internships and training, and also increasing their expectations for future employment. The desire to obtain good job opportunities further activates the internal motivation of nursing students, enabling them to gradually implement their learning plans and carry out learning inspections in professional studies, internships and training around the expected goals. At the same time, internal motivation allows nursing students to actively provide high-quality nursing services to patients. However, due to the existence of the problem of "emphasizing theory and neglecting practice", some nursing students are immersed in theoretical learning and skill improvement, while ignoring the cultivation of their own interpersonal communication ability. This makes it difficult for nursing students to conduct in-depth communication about the patient's condition and discussion of treatment plans with patients and other colleagues in their positions. On the whole, the development of nursing students' self-directed learning ability is relatively optimistic. Most nursing students show strong self-confidence and are able to carry out extracurricular expansion learning in a planned and purposeful manner. In addition, with the "medicalization" development in the current nursing field, there have been profound changes in the roles and job contents of nursing students. Nursing staff not only need to do a good job in basic nursing work but also need to assist doctors in formulating treatment plans and provide high-quality educational guidance and health management to patients. This puts forward new requirements for the cultivation of nursing students' self-directed learning ability in colleges and universities. They need to actively and proactively respond to the new changes brought about by industry changes and further improve their self-management ability and self-learning ability.

2.2. Current situation of nursing students' self-directed critical thinking ability

The formation of self-directed critical thinking can improve nursing students' clinical adaptability, allowing them to effectively judge, reflect, and reason about complex clinical nursing problems through meaningful and purposeful self-regulation, and thus make scientific and reasonable decisions on this basis. Nursing students' self-directed critical thinking ability is manifested as critical thinking self-confidence, cognitive maturity, curiosity, analytical ability, systematic ability, truth-seeking ability, and openness. Relevant research shows that at this stage, three dimensions of undergraduate nursing students' self-directed critical thinking ability have a positive tendency, namely curiosity, analytical ability, and critical thinking self-confidence, but the overall level still needs to be improved. This is closely related to the current education mode and talent cultivation mode adopted in the undergraduate nursing major. With the continuous deepening of education reform in China, undergraduate nursing majors have successively launched teaching innovations. By introducing teaching methods such as PBL case-guided teaching method and project-based teaching method, the traditional single teaching mode centered on textbooks and classrooms has been reformed, and nursing students have been given sufficient space for independent exploration. The innovative construction of the student-centered teaching mode has fundamentally promoted the development of nursing students' thinking and liberated them from the traditional education framework. The innovation of the teaching mode has promoted the independent practice and cooperative exploration of nursing students, enabling them to continuously improve their critical thinking self-confidence in the process of constructing a knowledge system. It should be noted that some nursing students show negative characteristics in the dimension of "truth-seeking". This indicates that nursing educators still need to continuously cultivate the perseverance of nursing students in education and teaching and encourage them to actively

explore the truth.

In general, currently, nursing students' self-directed learning ability and self-directed critical thinking ability are still at a medium level, and there is still a lot of room for improvement. Therefore, nursing educators should comprehensively grasp the development of nursing students' self-directed learning ability and self-directed critical thinking ability, and then, in combination with the objective laws of their growth and development, gradually improve their learning ability and thinking ability in education and teaching.

3. Analysis of influencing factors of nursing students' self-directed learning ability

3.1. Personal factors

Professional identity is an important factor in improving nursing students' self-directed learning ability. Professional identity represents nursing students' emotional recognition of the nursing profession and is an important cornerstone for laying the foundation for future career development. It can help them form relatively stable interests and motivations in professional learning. This enables nursing students to firmly believe that they can achieve self-worth in their future careers, making them more actively and proactively invest more time and energy in professional learning, thus leading them to form good behavior habits and professional cognitions. However, in many cases, nursing students' choice of the nursing major is not due to their own subjective emotional needs but is affected and interfered by many external factors, such as major adjustment, parental wishes, etc. Therefore, teachers, classrooms, and textbooks are the main channels for nursing students to understand the nursing profession and the industry. They lack the initiative to understand professional development and employment prospects and it is difficult for them to form a sense of identity and love for the nursing profession. Therefore, strengthening professional emotional education and ideological and political education for nursing students can lead them to form stable professional attitudes and positive career ideals. Furthermore, by improving their professional identity, their self-directed learning ability can be continuously enhanced. Specifically, colleges and universities can increase internship and probation opportunities and create a curriculum education system with the characteristics of the nursing major, allowing nursing students to deeply feel the social value of nursing work in clinical scenario experiences, helping them change their learning attitudes, and further clarifying their professional learning interests.

3.2. Environmental factors

External environmental factors such as teaching resources, teaching staff, and learning atmosphere play an important role in cultivating nursing students' self-directed learning ability. With the introduction of the blended teaching mode, nursing educators have gradually broken the restrictions on students' subjectivity imposed by traditional cramming and indoctrinating teaching methods, creating diversified opportunities for cooperative exploration for them. At the same time, the diverse development of club activities and social practice activities has further expanded the space for teamwork, mutual assistance, and communication among nursing students. Teamwork effectively promotes the circulation and sharing of resources and information, which has a significant impact on improving nursing students' interpersonal skills. Therefore, nursing educators can establish a cooperative and interactive learning model, and create a good teaching ecology by using scenario simulation teaching, virtual simulation teaching, etc., to optimize the interaction environment for nursing students. However, due to the influence of the previous passive teaching system and academic pressure, there are certain problems in nursing students' self-supervision and management, as well as in the formulation and implementation of their learning plans, which in turn affects the improvement of their self-directed learning ability. In response to this, nursing educators can optimize the professional curriculum setup and reasonably arrange teaching tasks to help nursing students get rid of the stressful environment and provide them with sufficient space for autonomous learning.

4. Correlation analysis between nursing students' self-directed learning ability and self-directed critical thinking ability

4.1. The self-directed learning ability of nursing students is positively correlated with their self-directed critical thinking ability

Strengthening emotional education and ideological and political education in the nursing major can help nursing students better pay attention to the actual needs of patients in terms of psychology, physiology, etc. in future clinical work, and then form good self-directed critical thinking ability on the basis of reasoning, evaluating, and judging this demand information. Strengthening emotional education and ideological and political education is also a key way to cultivate nursing students' self-directed learning ability. Therefore, in the practice of deepening the teaching reform of the nursing major, with the empowerment of teaching innovation, there is a positive growth relationship between nursing students' self-directed learning ability and self-directed critical thinking ability. That is, the stronger the self-directed learning ability of nursing students, the better their self-directed critical thinking ability. At the same time, by improving nursing students' self-directed learning ability through optimizing classroom teaching, carrying out cooperative learning, etc., they can make clear and definite career development plans in their daily study and professional practice. When facing important life decisions, they can use critical thinking to analyze and solve problems, and then make choices that fit their career development plans. In addition, psychologists believe that an unhealthy psychological state will reduce the individual cognitive ability of nursing students and affect the development and improvement of their logical thinking abilities such as deductive reasoning and inductive reasoning and critical analysis ability. Therefore, strengthening the mental health education of nursing students can, by improving their psychological adjustment ability, make up for their cognitive deficiencies and promote the synchronous positive growth of their self-directed learning ability and self-directed critical thinking. Therefore, nursing educators can positively intervene in nursing students' self-directed learning ability and critical thinking ability by creating a strong humanistic education atmosphere. Furthermore, guided by the concept of teaching students in accordance with their aptitude, with the help of effective teaching innovation, encourage nursing students to actively seek the truth and be brave in pioneering and innovation in professional learning and career development.

4.2. Nursing students' self-directed learning ability has a mediating effect between critical thinking and psychological resilience

The mediating effect, that is, the indirect effect, lies in revealing how critical thinking improves nursing students' psychological resilience level by improving their self-directed learning ability, which can effectively show that there is a positive correlation between self-directed learning ability and critical thinking. When facing complex problems, nursing students with strong critical thinking can actively think, reasonably infer, and effectively reflect according to their current situation. Thus, generally speaking, nursing students with strong critical thinking ability also have strong self-directed learning ability, and they are more confident in facing complex learning and working environments. At the same time, with the introduction of the blended teaching mode in the teaching of the nursing major, nursing students can actively explore various ways to solve real problems with the assistance of information technology. Then, in the process of actively learning new knowledge and using new technologies, they can view and respond to the changes in the profession and future clinical work in the information age with a good attitude. In this regard, nursing educators can implement differential teaching and hierarchical teaching, use clinical cases to implement structured assessments, and thereby promote students to continuously improve their self-directed learning ability and critical thinking in the process of integrating knowledge and skills and in the practice of actively thinking and exploring clinical problems.

5. Conclusion

Currently, nursing students whose self-directed learning ability and self-directed critical thinking ability are at a medium

level still have great room for improvement, and there is a positive correlation between the two. Therefore, in future nursing major teaching, educators should actively implement the people-oriented and student-centered education concept, and then create a good environment for cultivating nursing students' self-directed learning ability and critical thinking ability through innovative teaching construction.

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