

Investigation and Analysis of Professional Identity and Research on Influencing Factors of Nursing Students before and after Clinical Practice

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Abstract: *Objective:* To analyze the related factors affecting the professional identity of nursing students before and after clinical practice, hoping to provide reference for the career development and education of nursing students. *Methods:* A total of 393 undergraduate nursing students of grade 2020 from the Department of Nursing of a university in Shanxi Province were selected. The professional choice motivation, educational attainment expectation, future career planning, professional practice, and employment prospect expectation of nursing students before clinical practice, and the willingness to upgrade educational attainment, professional experience, career development expectation, and employment planning of nursing students after clinical practice were investigated. Through statistical analysis of the survey data, the related influencing factors affecting the professional identity of nursing students before and after clinical practice were explored. *Results:* The observation of general data showed that the proportion of female students in the survey sample was higher than that of male students, and the proportion of those whose family residence was in rural areas was slightly higher than that in urban areas. The analysis of students' own situation showed that nursing students chose the nursing major because of the high expected employment rate, but they were generally anxious about the employment prospect before the internship, showing a contradictory mentality. The analysis of students' professional ability showed that nursing students believed that their professional ability was mainly reflected in the vocational adaptability. The analysis of the social environment showed that the educational attainment expectations of nursing students were mainly undergraduate and master's degrees, and they preferred to engage in clinical nursing work rather than nursing research. The analysis on the selection of internship hospitals shows that nursing students' choice of internship hospitals is mainly influenced by the duration of the internship, and they consider the correlation between the selection of internship hospitals and future employment decisions to be low. The analysis on the surrounding environment such as family and school shows that the professional identity of nursing students is mainly influenced by the opinions of school teachers and parents, but the occupations of most of the family members of nursing students are not related to medicine. *Conclusion:* Targeted intervention strategies should be formulated based on the relevant influencing factors that affect the professional identity of nursing students before and after clinical internship, to enhance the professional identity and employment confidence of nursing students, and promote the healthy and sustainable development of nursing education and the medical service industry.

Keywords: Nursing major; Clinical practice; Professional identity; Influencing factors

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1. Introduction

In the process of the gradual intensification of the aging population phenomenon in China and the gradual deepening of the “Healthy China” strategy, the demand for nursing staff shows an obvious growth trend, and the role of nursing professionals has become more prominent ^[1]. However, the shortage of nursing human resources and the crisis of nurses’ professional identity have become realities that cannot be ignored ^[2]. A survey of nursing students, especially undergraduate nursing interns, found that low professional identity among nursing students has become a relatively common problem. In the development of China’s nursing cause, nursing students are very important reserve human resources. Nursing students should not only have good professional qualities, but also have a firm professional belief, fully identify with the value of nursing work, and fully love the profession they will engage in. This is very crucial for building an efficient and stable nursing team ^[3]. This article mainly analyzes the professional identity of undergraduate students majoring in nursing before and after clinical practice and explores related influencing factors, thereby providing suggestions for the career development education and talent training optimization of undergraduate nursing students.

2. General information and methods

2.1. General information

According to the standard, a total of 393 undergraduate nursing students of grade 2020 from the School of Nursing of a certain university in Shanxi were selected in a random sampling manner to participate in this investigation and research project. All the research participants were informed of the purpose and specific contents of this investigation and research, and signed the written consent form.

2.2. Questionnaire survey

A questionnaire survey was conducted to explore various factors, including nursing students’ gender, reasons and motivations for choosing the nursing major, family residence, preferred type of internship hospital, anticipated future employment in medical and health institutions, expected academic qualifications, career planning, expected salary range, and the potential impact of the nursing professional internship period on the choice of internship hospital. The survey also investigated whether the choice of internship hospital is linked to future employment decisions, students’ attitudes towards their career prospects before the internship, the perceived advantages of internship or employment, the influence of suggestions from university professional course instructors on decisions regarding future internships or employment, and whether family members’ occupations are related to healthcare.

2.3. Statistical analysis

The data were analyzed by SPSS 22.00 software. Quantitative data that conformed to the normal distribution were expressed as ($\bar{x} \pm s$), and the t-test was used between groups; qualitative data were expressed as (n, %), and the χ^2 test was used between groups. Statistical significance was indicated by ($P < 0.05$).

3. Results

3.1. General data observation

Among all 393 nursing students, the proportion of females was higher than that of males, and the number of those whose family residence was in rural areas was slightly higher than that in urban areas (**Table 1**).

Table 1. Observation of general information of nursing students (n = 393)

General information		Number	Percentage (%)
Gender	Male	51	12.98
	Female	342	87.02
Family residence	City	181	46.06
	Rural area	212	53.94

3.2. Analysis of students' own situations

From the analysis of the students' own situations, it was found that 266 students chose the nursing major because of the good career prospects. Most of the students expected to be employed in top-level general hospitals in the future, accounting for 81.93%; 92.88% of the students most wanted to do internships in general hospitals, and 66.92% of the students expected their future salary range to be above 6,000. Before the internship, the proportion of students who were anxious about the career prospects was 39.44%, while the proportion of students who were optimistic was only 13.49%, and 5.60% of the students were pessimistic about the career prospects (**Table 2**).

Table 2. Analysis of students' own reasons (n = 393)

Influencing factors		Number	Percentage (%)
Reasons for choosing the nursing major	Self-love	60	15.27
	Family expectation	157	39.95
	Good career prospects	266	67.68
	Affected by the epidemic	64	16.28
	Forced to be adjusted	96	24.43
Future expected medical institutions to be employed	Tertiary general hospital	322	81.93
	Hospitals of grade two and below	14	3.56
	Community health service center	17	4.33
	Private clinic	6	1.53
	Others	34	8.65
Most desired type of hospital for internship	General hospital	365	92.88
	Local specialized hospital	28	7.12
Expected future salary range	2000–3000	1	0.25
	3000–4000	12	3.05
	4000–5000	56	14.25
	5000–6000	61	15.52
	More than 6000	263	66.92
Attitude towards career prospects before internship	Optimistic	53	13.49
	General	163	41.48
	Relatively anxious	155	39.44
	Pessimistic	22	5.60

3.3. Analysis of professional ability reasons

The analysis of professional ability revealed that 85.24% of the students felt their strengths in internship or employment were most evident in adaptability. Additionally, 64.63% of the students believed their advantages were reflected in teamwork skills, while 50.13% identified nursing operation ability as a key strength. In contrast, only 29.26% of students felt their strengths in internship or employment were related to management skills (**Table 3**).

Table 3. Analysis of reasons for technical capability (n = 393)

In what aspects are the advantages of internship or employment reflected	Expressive and communication skills	240	61.07
	Teamwork ability	254	64.63
	Adaptability	335	85.24
	Management ability	115	29.26
	Appearance	188	47.84
	Nursing operation ability	197	50.13

3.4. Analysis of social environment reasons

From the analysis of the social environment, it was found that most students expected their educational attainment to be a master's degree, accounting for 53.69%, and 41.48% of the students chose clinical nursing work for their future career planning (**Table 4**).

Table 4. Analysis of social environmental causes (n = 393)

Influencing factors		Number	Percentage (%)
Expectation of one's own academic qualifications	Undergraduate	170	43.26
	Master	211	53.69
	Doctor	12	3.05
Direction of one's own future career planning	Nursing clinical	163	41.48
	Nursing research	17	4.33
	Postgraduate entrance examination	127	32.32
	Teacher	41	10.43
	Choose other industries	45	11.45

3.5 Analysis of the reasons for the internship

From the aspect of internship analysis, it was found that 56.74% of the students believed that the length of the internship period would affect the choice of the internship hospital, while 76.08% of the students thought that the choice of the internship hospital had no correlation with the choice of career intention (**Table 5**).

Table 5. Analysis of the reasons for internship (n = 393)

Influencing factors		Number	Percentage (%)
Whether the length of the internship period affects the choice of the internship hospital	Yes	223	56.74
	No	170	43.26
Whether there is a correlation between the choice of the internship hospital and the choice of the intention to work	Yes	94	23.92
	No	299	76.08

3.6 Analysis of reasons from school, classmates, and family

The analysis from the perspectives of school, classmates, and family revealed that 30.53% of students' career intentions are influenced by the opinions of their family members, while 3.82% are influenced by the views of friends and classmates. Additionally, 78.63% of students stated that suggestions from professional course teachers would impact their decisions regarding internships or careers. Furthermore, 81.93% of students reported that their parents' or family members' occupations are not related to the medical field (**Table 6**).

Table 6. Analysis of reasons from schools, classmates, and families (n = 393)

Influencing factors		Number	Percentage (%)
Which item mainly influences the career intention	Family members' opinions	120	30.53
	Teacher's opinions	8	2.04
	Friends and classmates' opinions	15	3.82
	Self-determination	237	60.31
	National and social demands	13	3.31
Whether the teacher's suggestions will affect the internship or career decision	Yes	309	78.63
	No	84	21.37
Whether the parents or family members' occupations are related to medical care	Yes	71	18.07
	No	322	81.93

4. Discussion

During the process of the gradual intensification of the aging population and the gradual improvement of the medical service level in our country, the demand for both the quantity and quality of nursing staff is increasing ^[4]. The nursing major not only has a relatively broad employment prospect, but also has a relatively stable career development path, and has become a "hot" major that attracts wide attention in society. However, in the process of employment, there are still certain individual differences in the professional identity of nursing students, and it is comprehensively affected by various factors. Professional identity will have a direct impact on the future employment willingness and career development of nursing students, and it will also affect the service level of nursing and even the entire medical industry in our country ^[5]. Therefore, it is very important to analyze the related factors that affect the professional identity of nursing students, guide them to build a correct employment concept and career development concept, and thus make rational career development decisions.

An analysis from the aspect of the students majoring in nursing found that 266 students chose the nursing major because of the expected good employment prospects. The majority of the students expected to be employed in Grade-A tertiary general hospitals in the future, accounting for 81.93%, while 92.88% of the students most wanted to do internships in general hospitals, and 66.92% of the students expected their future salary to be above 6,000 yuan. Before the internship, only 13.49% of the students were optimistic about the career prospects, and 5.60% were pessimistic. The analysis results revealed that society generally believes that the development prospects of the nursing major and the career prospects of nurses are relatively good. Therefore, most of the nursing students chose to study the undergraduate program of nursing based on the expected good employment prospects. Most of them hoped to engage in clinical nursing work in Grade-A tertiary general hospitals in the

future, and for the choice of internship hospitals, most students hoped to go to general hospitals. However, the choice of internship hospitals is also influenced by many factors, such as the length of the internship period, accommodation conditions, internship expenses, and whether it is conducive to future career development ^[6]. Most students have high expectations and requirements for their salary after entering the profession.

From the analysis of professional ability, it was found that 85.24% of the students believed that their advantages in internship or employment were reflected in the aspect of adaptability, 64.63% of the students thought that their advantages in internship or employment were reflected in the aspect of teamwork ability, while only 29.26% of the students considered that their advantages in internship or employment were reflected in the aspect of management ability. The results indicated that most students believed that nursing internship or employment required various abilities, such as teamwork, expression and communication, and environmental adaptability. The talent training program for the nursing major should strengthen the cultivation of students' nursing management ability. From the analysis of the social environment, it was found that the majority of students expected to have a master's degree for themselves, accounting for 53.69%. For future career planning, 41.48% of the students chose clinical nursing work. For current college students, the employment pressure they are facing is increasing, and the role of academic qualifications in employment competition is becoming more and more important. To better cope with the employment pressure, it is necessary to comprehensively improve their professional identity and comprehensive ability.

The process of pursuing academic qualifications is also a process of cultivating one's own professional identity and comprehensive ability ^[7]. At the same time, it is also necessary to actively change the concept of employment. On the basis of considering the hospital environment and salary, more attention can also be paid to grassroots medical institutions to have a comprehensive understanding of the nursing employment positions. Actively learn various knowledge and skills during the internship and continuously improve their practical operation skill level, thereby enhancing their employment competitiveness ^[8].

From the analysis of the surrounding environment such as schools, classmates, families, etc., it is found that the career intentions of 30.53% of students are influenced by the opinions of their families, and the career intentions of 3.82% of students are influenced by the opinions of their friends and classmates; for 78.63% of students, the suggestions of professional course teachers will affect their internship or career decisions; in 81.93% of students' families, the occupations of parents or family members are not related to healthcare. The results show that the opinions of family members, friends, and classmates will affect students' professional identity and employment decisions to a certain extent. The high cost of nursing internships and living costs will increase the burden on students' families, thereby affecting their internship choices and career intentions ^[9].

Therefore, efforts should be made to provide academic assistance and living subsidies during the internship period to effectively reduce their economic pressure and learning burden. When conditions permit in the school, it can help students solve the accommodation problem during the internship. In addition, the school should also do a good job in employment guidance, guiding nursing students to choose the appropriate internship hospital based on their own actual situation and make wise career decisions to avoid following the trend ^[10]. The suggestions of university professional course teachers will have a continuous impact on students' professional identity and future career development. Therefore, the teaching level of teachers during the school period and the coaching level of instructors during the internship period should be strictly controlled. Students should be guided to learn the professional knowledge and nursing skills of various departments, and have a deeper understanding of the nursing profession imperceptibly, improve professional identity and confidence in practice, so that nursing students can have a rational and specific plan for their own career development ^[11].

5. Conclusion

In conclusion, there are many factors influencing the professional identity of nursing students before and after clinical practice. Targeted intervention strategies should be formulated based on the relevant influencing factors to enhance the professional identity of nursing students, stimulate their enthusiasm for the profession, and enable the cultivation of nursing talents and medical and health services to achieve healthy and sustainable development.

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The authors declare no conflict of interest.

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