

A Correlational Study of Career Self-Efficacy and Employment Anxiety Among Nursing Students

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Abstract

Objective This study investigates the status and correlation of self-efficacy and employment anxiety in nursing students, to provide evidence for improving their professional quality of life.

Methods This non-experimental cross-sectional study was conducted via the WeChat platform in January 2026, recruiting 242 nursing students of 2022-2025 cohorts from Y University in Jilin Province. Research instruments included the General Information Questionnaire, Nursing Students' Occupational Self-Efficacy Questionnaire and Employment Anxiety Questionnaire. Data were analyzed with SPSS 26.0, using descriptive statistics (frequency, mean, percentage), independent samples t-test, one-way ANOVA and Spearman correlation analysis.

Results In this study, nursing students' occupational self-efficacy was negatively correlated with employment anxiety. The average occupational self-efficacy score was at the upper-middle level, while the average employment anxiety score was at the lower-middle level. Significant differences in occupational self-efficacy scores were found across degree of major preference, nursing career prospect recognition, and association/extracurricular practice experience ($P < 0.05$). Gender and degree of major preference were associated with significant differences in employment anxiety scores ($P < 0.05$).

Conclusion Nursing students showed an upper-middle level of occupational self-efficacy and a lower-middle level of employment anxiety, with a significant negative correlation between the two: higher occupational self-efficacy was associated with lower employment anxiety. Multi-stakeholder efforts, including strengthened professional identity education from nursing colleges, improved career path transparency from the society, and emotional support from families, are needed to enhance nursing students' occupational self-efficacy and relieve their employment anxiety.

1 Introduction

As society's demand for high-quality nursing services increases, the training of nursing professionals has attracted widespread attention. As the future mainstay of the nursing workforce, nursing students' career self-efficacy and employment anxiety not only affect their own career development but also impact the stability and growth of the entire healthcare system. This study aims to clarify the current status of and the relationship between nursing students' career self-efficacy and employment anxiety, thereby providing a basis for nursing administrators to develop effective interventions and to enhance nursing students' professional competence. Self-efficacy refers to an individual's confidence and belief in their ability to perform the actions required to achieve a specific behavioral goal^[1]. Generally, nursing students who demonstrate a more positive attitude toward their profession and better practical skills tend to have stronger self-efficacy.^[2] Related studies have shown that nursing students' professional self-concept has a certain correlation with satisfaction^[3], research ability, and the influence of self-efficacy. In the relationship between professional identity and employability, students' academic self-efficacy plays a mediating role^[4]. In clinical settings, self-efficacy influences the career development of

nurses. Higher levels of self-efficacy enable nurses to adjust to the negative mindsets induced by work and to fully utilize their professional skills^[5]. College students' employment anxiety is primarily caused by unclear self-awareness and the current employment situation. Contributing factors include insufficient preparation of personal documentation for job applications, poor interview performance, and inadequate mastery of professional skills. Furthermore, students may experience negative emotional experiences such as tension and unease due to difficulties encountered in the job search process^[6]. If negative emotions are not released appropriately, they may lead to serious physical and mental problems. From a psychological perspective, high levels of employment anxiety among college students are primarily manifested as lack of self-confidence, unclear career orientation, biased self-perception, and excessively high employment expectations^[7]. Under increasingly severe employment pressure, a growing number of nursing students experience excessive psychological stress during the job-seeking process due to discrepancies between their educational qualifications and job requirements. Severe employment anxiety can lead to irritability, impair cognitive function, and disrupt daily behaviors^[8].

2 Research Methods

2.1 Study Subjects and Sampling Method

This study adopted a cross-sectional, non-experimental survey design. Using convenience sampling, a questionnaire survey was conducted from January to February 2026 among nursing students enrolled in grades 2022–2025 at Y University, Jilin Province. Inclusion criteria: (1) nationally enrolled nursing students in grades 2022–2025; (2) informed consent and voluntary participation. Exclusion criterion: nursing students on leave of absence. The sample size was estimated using Kendall's ^[9] method, 5–10 times the number of selected variables. Considering invalid questionnaires and loss during the survey, an additional 20% was added. The calculation: $(10+12) \times 10 = 220$; with a 20% attrition rate, the final sample size was determined to be 264.

2.2 Research Instruments

The General Information Questionnaire was designed by the researcher and included 12 items: gender, age, school type, motivation for choosing the major, degree of preference for the major, student leadership experience, place of origin, receipt of career-related education, family economic status, only-child status, outlook on nursing career development, and work experience. Nursing Student Career Self-Efficacy Questionnaire: Developed by Hao Yufang's team ^[10] and adapted for nursing students in 2010. It comprises 27 items across 6 dimensions: professional attitudes and beliefs, problem-solving ability, career information collection and planning ability, career perception, career value, and career choice. Each item is scored from 1 to 5; higher scores indicate stronger career self-efficacy. The Cronbach's α coefficient for this scale was 0.841 in the original study and 0.946 in the present study. Employment Anxiety Questionnaire: Developed by Zhang Yuzhu and Chen Zhongyong (2006) ^[11]. This self-report questionnaire consists of 26 items across 4 dimensions. Each item is scored from 1 to 5;

higher scores indicate higher levels of employment anxiety. The Cronbach's α coefficient was 0.71 in the original study and 0.932 in the present study.

2.3 Data Collection

(1) Pilot study: To ensure clarity and unambiguity of the questionnaire items and to assess length and response time, a pilot survey was conducted among 40 nursing students at Y University, Jilin Province, from November to December 2025, in order to test the effectiveness of data collection methods and the feasibility of data analysis.

(2) Formal survey: Based on feedback from the pilot study, the questionnaire was revised and optimized. From January to February 2026, a formal survey was administered via the Wenjuanxing platform to 242 nursing students (undergraduate and graduate) from grades 2022–2025 at Y University, Jilin Province. With consent from relevant university staff and students, the questionnaire was distributed through the WeChat platform. Respondents were informed of the purpose, requirements, and instructions for completing the questionnaire. All questionnaires were completed anonymously and independently, with automatic retrieval upon completion. Subjects were strictly selected according to inclusion criteria. Returned questionnaires were checked for completeness.

2.4 Statistical Analysis

Data were collated and analyzed using SPSS 26.0 (Chinese version). Descriptive statistical analysis was performed first, followed by independent samples t-test, one-way ANOVA, and correlation analysis. A P-value <0.05 was considered statistically significant.

2.5 Ethics approval and consent to participate

This study was conducted in strict accordance with the principles outlined in the Declaration of Helsinki. And this study was approved by the Medical Ethics Committee of Yanbian University (20250319). Respondents' privacy and information security were protected; sensitive information was not disclosed, and participation was voluntary. Informed consent was obtained from all subjects involved in the study. Respondents' anonymity was maintained, and no identifiable information was recorded. All data were kept confidential, used solely for research purposes, and not shared with others or organizations. The use and application of the results were reasonable and ethical, ensuring no harm or unfair treatment to respondents.

3. Results

3.1 General Demographic Characteristics

A total of 242 questionnaires were distributed, and 220 valid responses were returned (effective response rate 90.9%). Mean age was 21 years; average monthly household income was 3400 ± 1.31 yuan. Among participants, 163 (74.1%) were female; 162 (73.6%) were Han Chinese; 111 (50.5%) were only

children; 117 (53.2%) were from urban areas; 148 (67.3%) were undergraduate students; 153 (69.5%) held student leadership positions; 114 (65.5%) were Communist Youth League members; 104 (47.3%) reported liking the nursing major; 90 (40.9%) chose nursing by personal preference; 203 (92.3%) had a positive outlook on nursing career development; 173 (78.6%) had relatives working in nursing; 125 (56.8%) had nursing internship experience; 212 (96.4%) had received career-related education; and 186 (84.5%) had participated in clubs or extracurricular activities during school. See Figure 1.

Figure 1 General characteristics of nursing students (n=220)

Note: n = number of subjects; (%) = percentage

3.2 Career Self-Efficacy Scores

Results are shown in Figure 2. The mean total self-efficacy score was 3.78 ± 0.59 (upper-middle level).

Figure 2 Career self-efficacy scores of nursing students (M $\pm$ SD)

3.3 Employment Anxiety Scores

Results are shown in Figure 3. The mean total employment anxiety score was 2.93 ± 0.80 (lower-middle level).

Figure 3 Employment anxiety scores of nursing students (M $\pm$ SD)

3.4 Differences in Self-Efficacy by Demographic Variables

Statistically significant differences in self-efficacy scores were found for degree of major preference, outlook on nursing career development, and participation in clubs/extracurricular activities ($P < 0.05$). See Figure 4.

Figure 4 Differences in self-efficacy by demographic variables (n=220, M $\pm$ SD)

3.5 Differences in Employment Anxiety by Demographic Variables

Statistically significant differences in employment anxiety scores were found for gender and degree of major preference ($P < 0.05$). See Figure 5.

Figure 5 Differences in employment anxiety by demographic variables (n=220, M $\pm$ SD)

3.6 Correlation Between Career Self-Efficacy and Employment Anxiety

Because the data were not normally distributed, Spearman correlation analysis was used. Results showed a significant negative correlation between total career self-efficacy and total employment anxiety ($P < 0.01$). See Figure 6.

Figure 6 Correlation between career self-efficacy and employment anxiety (n=220, $P < 0.01$)

4. Discussion

4.1 Analysis of the current status of career self-efficacy

The results show that nursing students' overall career self-efficacy is at an upper-middle level, which is similar to the findings of Sun & Li ^[12] on the correlation between professional self-efficacy and professional identity among intern nursing students. The dimension of goal selection scored the highest, while career information collection and planning scored the lowest, consistent with Liu et al. ^[13]. This indicates that nursing students have a clear understanding of their desired career achievements, and this clear goal orientation helps enhance their self-efficacy. Specifically, students may have clear goals of becoming professional nurses or achieving specific accomplishments in nursing or other fields. However, they lack skills in obtaining relevant career information and planning their careers. This may be because the education system or society fails to provide sufficient resources and guidance, making it difficult for students to effectively search, evaluate, and use career information to plan their career paths. This requires universities to strengthen career guidance services and provide more career planning tools and resources. Good social capital helps individuals access various resources ^[14]; therefore, society also needs to increase career path transparency and flexibility. Meanwhile, debate activities can improve nursing students' communication and interpersonal skills ^[15].

4.2 Analysis of the current status of employment anxiety

The results show that nursing students' overall employment anxiety is at a lower-middle level, which is similar to the findings of Hou & Zheng ^[16] but inconsistent with those of Hua ^[17] and Li ^[18]. Social support plays a crucial role in college students' job search ^[19]. In this study, the dimension of lack of employment support scored the highest, while employment competition pressure scored the lowest, consistent with Hao ^[20]. This may be because nursing students lack professional career planning guidance and sufficient high-quality internship opportunities, which limits their chances to gain practical work experience and demonstrate their abilities. Students may not have access to adequate career-related information. Psychological and emotional support for graduates facing employment pressure from schools and society is insufficient. Therefore, universities should broaden and deepen career planning training for nursing students and provide relevant psychological counseling to build their self-confidence ^[21]. When children encounter difficulties in job hunting, parents should also offer encouragement and comfort to alleviate their employment pressure ^[22].

4.3 Analysis of factors influencing career self-efficacy

Independent samples *t*-test and one-way ANOVA were used to analyze the relationship between demographic variables and mean self-efficacy scores. Results showed significant differences in self-efficacy scores for degree of major preference, outlook on nursing career development, and participation in clubs or extracurricular activities ($P < 0.05$). Nursing students who liked their major had significantly higher self-efficacy than those with neutral or negative attitudes, consistent with Zhao et al.

[23]. This may be because students interested in nursing have stronger intrinsic motivation, which promotes active exploration and learning, thereby enhancing self-efficacy. Educators can design more engaging, interactive learning activities using clinically oriented teaching [24] to increase professional preference, helping students experience achievement and enjoyment. Emphasizing the contributions of nursing to society and individuals can stimulate intrinsic motivation and help students identify their potential interests and strengths, thereby boosting self-efficacy. Students with a positive outlook on nursing career development also had higher self-efficacy; positive expectations motivate harder work and persistence, as students understand that current efforts serve long-term career goals. Universities can present actual career trends and opportunities, invite successful nursing professionals to share experiences, providing role models and fostering positive career views. Students who participated in clubs or extracurricular activities had significantly higher self-efficacy than those who did not, which is inconsistent with Hao [20].

4.4 Univariate analysis of employment anxiety

Independent samples *t*-test and one-way ANOVA were used to analyze the relationship between demographic variables and mean employment anxiety scores. Results showed significant differences in employment anxiety for gender and degree of major preference ($P < 0.05$). Female nursing students had slightly higher employment anxiety than males, consistent with Xiao [25], Xiong et al. [26], and Li [27]. Nursing students who liked their major had lower employment anxiety than those with neutral or negative attitudes. Therefore, universities should strengthen professional identity education to cultivate students' preference for nursing. A study on Turkish nursing candidates [28] also indicated that higher job satisfaction is associated with lower unemployment anxiety.

4.5 Correlation analysis between career self-efficacy and employment anxiety

The results showed a significant negative correlation between nursing students' career self-efficacy and employment anxiety ($P < 0.01$), consistent with Zhao [29], Zhang [30], and a domestic study [31]. This indicates that higher career self-efficacy is associated with lower employment anxiety. Therefore, to help nursing students alleviate employment anxiety and improve mental health, universities should focus on the influence of self-efficacy on employability and enhance academic self-efficacy, thereby strengthening employability [32].

5. Conclusion

This study shows that nursing students have a moderately high level of career self-efficacy and a moderately low level of employment anxiety, with a significant negative correlation between the two. Higher career self-efficacy is associated with lower employment anxiety. The core weakness in career self-efficacy is the ability to collect career information and plan careers; the primary trigger of employment anxiety is insufficient employment support. Key influencing factors include major preference, perception of career prospects, and extracurricular practice experience. Therefore,

universities should continuously offer specialized career planning courses, establish information-sharing platforms for the nursing profession, expand clinical and extracurricular practice channels, and strengthen professional identity education. Society should increase career path transparency, and families should provide emotional support. Multi-party collaboration is needed to enhance nursing students' career self-efficacy and alleviate employment anxiety.

Declarations

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Tables

Tables 1 to 6 are available in the Supplementary Files section.

Supplementary Files

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