



Investigation and Analysis of Transcultural Self-efficacy among Newly Recruited Nurses

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Abstract. Objective: To investigate the current status of transcultural self-efficacy among newly recruited nurses, in order to provide a foundation for transcultural nursing education and training in nursing colleges and hospitals. **Methods:** The study utilized the Chinese version of the Transcultural Self-Efficacy Tool to assess newly recruited nurses in general hospitals located in Nanning city, Guangxi Zhuang Autonomous Region. **Results:** The overall score for transcultural self-efficacy among new nurses was 7.01 ± 1.12 . Specifically, the average score for cognitive dimension was 7.36 ± 1.48 , practice dimension was 6.68 ± 1.59 , and emotional dimension was 7.03 ± 1.17 . **Conclusions:** Newly recruited nurses have a moderate level of transcultural self-efficacy. The main factors that affect their transcultural nursing competence are language barriers, differences in cultural perceptions, and insufficient transcultural programs.

Keywords: Transcultural; self-efficacy; education; newly recruited nurses

1 Introduction

The field of transcultural nursing has gained significant attention due to the rise of cultural pluralism and the growing communication between countries and ethnic regions. Due to the rise in population mobility worldwide, nursing staff encounter patients from diverse cultural backgrounds on a daily basis. As a result, it is essential for them to possess strong transcultural nursing competence, which involves the confidence and ability to effectively apply transcultural nursing knowledge and skills when caring for patients from different countries, regions, and races^[1].

Newly recruited nurses, who have just graduated from nursing school, are the emerging force of the nursing team. They are in the early stage of their nursing career

development and their transcultural self-efficacy (TSE) is still being shaped. This period is crucial for cultivating and enhancing TSE. The improvement of newly recruited nurses' TSE is closely related to their ability to quickly adapt to new nursing work environments, establish positive nurse-patient relationships, and provide high-quality nursing services. Mastering newly recruited nurses' TSE is significant for assessing nurses' overall transcultural nursing abilities, guiding transcultural nursing education and training in both academic institutions and hospitals, optimizing the quality of healthcare services provided by nurses, as well as promoting further research on transcultural nursing.

Transcultural nursing was pioneered by Leininger, a U.S. nurse practitioner who first created the Sunrise Model, which describes the impact of culture on health and suggests that caregivers should provide individualized cultural care measures for patients. The theoretical model is divided into four levels: assessing the patient's worldview and social structure; providing culturally relevant care and health content; identifying similarities and differences in cultural care; and developing culturally relevant care interventions. Leininger argues that nursing care should not be a set framework or model, but should be culturally appropriate for the patient's background^[2]. Jeffrey, an American expert in transcultural nursing, proposes the concept of TSE based on the American psychologist Bandura's theory of self-efficacy expectations, which refers to the degree of a nurse's self-confidence in delivering transcultural nursing care, and is an individual's judgment of his or her own confidence and competence in being able to effectively apply transcultural nursing knowledge and skills when dealing with patients from different cultural backgrounds^[3].

In recent years, there has been a gradual increase in the focus on TSE by many researchers. Literature shows that the factors affecting nurses' TSE are mainly the following. (1) Educational background. Studies have shown that nurses with higher education have a richer knowledge base and skills in cross-cultural nursing^[4]. (2) Training support. Hospitals and nursing organizations provide rich cross-cultural training and resources^[5]. (3) Peer support. Nursing teams with good teamwork^[6], as well as mutual learning and communication among nurses^[7-8]. (4) Personality traits. Personality traits such as openness, curiosity, and adaptability help nurses adapt more quickly to transcultural nursing environments^[5].

In addition, several studies have focused on the content and implementation of training courses to improve TSE. For example, James found that an entry-level nursing culture course (ELNCC), given to first-year nursing students during their first semester, helped to improve students' transcultural nursing competence^[9]. Alexander-Ruff and Ruff found that a cultural immersion service learning experience provided nursing students with an experiential learning environment conducive to the development of TSE^[10]. San's study found that through the implementation of a diverse and standardized patient simulation cultural education strategy in a surgical nursing course for nursing students, at the end of the course, nursing students' TSE increased^[11]. In China, transcultural nursing-related content is mainly briefly introduced in Introduction to Nursing, or Nursing Professional English. Some institutions organically integrate transcultural nursing theory and minority transcultural nursing education in the teaching content of the Ethnic Medicine Nursing course^[12]. There are also some institutions

that add practical teaching in the cultivation of transcultural nursing competence, such as situational practical activities in which students conduct interviews with foreign simulated patients^[13].

In conclusion, the literature reviewed in this study indicates that existing studies have examined the influencing factors, contents and methods of cultivating TSE of in-service nurses and intern nurses, providing a theoretical and practical basis for relevant subsequent research. However, there is limited research on the current status of TSE among newly recruited nurses, and it remains unclear. Therefore, this study aims to investigate the current state of TSE among newly recruited nurses, comprehensively analyze the reasons for weaknesses, and put forward suggestions to improve TSE among new nurses, with a view to providing useful references for hospitals and nursing colleges to formulate corresponding humanistic nursing education and practice.

2 Method

2.1 Participants

Convenience sampling was used to select newly recruited nurses from five general hospitals in Nanning City, Guangxi Zhuang Autonomous Region, China, from November to December 2023. The inclusion criteria were registered nurses who had been employed for ≤ 24 months, had no previous or current mental illness or cognitive impairment, and provided informed consent and voluntary participation. Nurses on long-term sick leave and maternity leave were excluded. Nanning City is located at the intersection of the South China, Southwest China, and Southeast Asia economic circles, and serves as the hub of Guangxi's high-quality medical and health resources. The city is home to a diverse range of ethnic groups, including Zhuang, Han, Yao, Miao, and Mulao, which leads to a variety of multicultural exchanges and occasional conflicts.

2.2 Instruments

(1) This section contains a general information questionnaire. The questionnaire includes questions about gender, age, education, ethnicity, English proficiency, experience abroad, religious beliefs, and whether the nursing profession was chosen voluntarily.

(2) The Chinese Version of the Transcultural Self-Efficacy Tool (TSET) was used. The TSET developed by Jeffreys, an American expert in transcultural nursing and translated into Chinese by Chen Jing, was utilized^[14]. The scale comprises 83 items and is organized into three dimensions. The TSET uses a 10-point Likert scale, with scores of 1-2 indicating low, 3-8 indicating moderate, and 9-10 indicating high. The Chinese Version of the TSET had a Cronbach's alpha coefficient of 0.99, while the Cronbach's alpha coefficient for the overall scale was 0.84 to 0.99. The folded reliability coefficient was 0.866, retest reliability was 0.939, and the content validity index (CVI) was 0.95^[15].

(3) Open-ended questions. The research team formulated the open-ended questions after reviewing the relevant literature. Three nursing experts reviewed and modified them. The questions are: What factors do you think influence TSE? What are ways to improve transcultural nursing competence? Do you need training to improve your transcultural nursing competence? What transcultural knowledge are you interested in learning? The questions aim to elicit personal views, opinions, and experiences to help us understand the level of awareness, attitudes towards improving intercultural nursing competence, and learning needs of new nurses. By combining quantitative and qualitative research, this survey can bridge gaps and provide comprehensive and in-depth findings.

2.3 Data Collection

Questionnaires were utilized in this study. The surveys were selected to be distributed during nurses' professional knowledge training by requesting the head nurse to distribute them. Prior to distribution, a member of the research team provided a unified instruction to explain in detail to the research subjects the purpose and significance of the survey, as well as the method of completing the questionnaire. The participants completed the questionnaires anonymously within a completion time of 20-25 minutes.

2.4 Statistical Methods

The data was analyzed using SPSS 22.0 statistical software. Frequency and percentage were used to describe the count data, while mean and standard deviation were used to describe the normally distributed measure data, specifically the TSE scores of new nurses. The open-ended questions were analyzed using a thematic categorization method.

2.5 Quality Control

To prevent unnecessary bias, members of the research team provided uniform explanations for any queries raised by respondents. The questionnaires were distributed and retrieved on the spot. After eliminating invalid questionnaires, the valid ones were numbered and the data was double-checked and entered to ensure accuracy. The completion of the questionnaire was audited for quality, and any invalid questionnaires with highly consistent answers to adjacent questions or vacancies were eliminated.

2.6 Ethical Principles

The principle of informed consent was adhered to. The study purpose, methodology, and significance were explained to the participants, who voluntarily decided whether to participate or not after fully comprehending the study. Participants were also able to withdraw from the study at any time. Additionally, the principle of confidentiality was

maintained. The study subjects' identities were recorded anonymously, and their personal data was used solely for academic research purposes.

3 Results

3.1 General Information Characteristics

A total of 293 questionnaires were distributed in this study, and 274 were recovered, with a recovery rate of 93.52%. The majority of the survey respondents were female; their ages were 21-25 years old, with an average of 23.63±1.66 years old. The specific status is detailed in Table 1.

Table 1. General Information Characteristics (n=274)

Characteristics	Categories	n	%
Sex	Male	73	26.64
	Female	201	73.36
Education background	Master's degree or above	14	5.10
	bachelor degree	235	85.78
	Junior college	25	9.12
Ethnicity	Han ethnicity	196	71.53
	ethnic minorities	78	28.47
English proficiency	No	75	27.37
	CET Band 3 (B-level)	116	42.34
	CET Band 4	58	21.17
	CET Band 6	25	9.12
international experience	Yes	95	28.10
	No	179	71.90
Religious belief	Yes	42	15.33
	No	232	84.67
Whether to voluntarily choose a nursing program	Yes	203	74.09
	No	71	25.91

Note: CET= Chinese College English Test

3.2 Transcultural Self-Efficacy Level

The total mean score of TSE for new nurses was 7.01±1.12, and the mean scores for each dimension are shown in Table 2. New nurses with moderate TSE dominated the cognitive, practical, and affective scales. See Table 3.

Table 2. Transcultural Self-efficacy Score

Subscale	Possible Scores	Minimum	Maximum	Average Score ($\bar{x}\pm s$)
Cognitive	1-10	1	10	7.36±1.48

Practical	1-10	1	10	6.68±1.59
Affective	1-10	1	10	7.03±1.17
Total				
TSET scale score	1-10	1.70	9.19	7.01±1.12

Table 3. Transcultural self-efficacy Grading(n=274)

Subscale	SEL	n	%
Cognitive	Low	0	0.0
	Moderate	171	62.4
	High	103	37.60
Practical	Low	0	0.0
	Moderate	199	72.63
	High	75	27.37
Affective	Low	0	0.0
	Moderate	208	75.91
	High	66	24.09
Total SEL	Low	0	0.0
	Moderate	218	79.56
	High	56	20.44

Note: SEL= self-efficacy level.

3.3 Results of Open-Ended Questions

3.3.1 Intercultural Influencing Factors

(1) Language barriers: Some newly recruited nurses had difficulty communicating effectively with patients from different cultural backgrounds due to limited language skills. Participant 67 wrote, "Once I took the temperature of a British patient and I forgot how to say 'take the temperature' in English." Participant 52 stated, "When I was in the emergency department, a Yao patient spoke to me and I couldn't understand him."

(2) Differences in cultural perceptions: new nurses may encounter differences between the cultural perceptions of patients and their families and their own perceptions in cross-cultural communication. Participant 132 wrote, "I gave medication to a 65-year-old grandmother, and that grandmother said she would not take it because she could not take medication on the 15th day of the lunar calendar." Participant 79 stated, "A woman in labor said her hair was itchy and she wanted to wash her hair, but her mother said she would not wash her hair until after one month postpartum."

3.3.2 Transcultural Competence Improvement Methods

Newly recruited nurses suggested ways to establish a comprehensive intercultural communication training system and create a multicultural learning environment. Participant 263 wrote, "The hospital can improve the cross-cultural curriculum, teacher

training, and practice sessions." Participant 207 wrote, "The hospital can give us more opportunities for international communication learning, such as inviting experts to carry out lectures and presentations, and exchanging cross-cultural nursing experiences with nurses from Chinese-foreign joint venture hospitals, and other ways."

3.3.3 Transcultural Learning Expectations

The survey showed that 81% of the participants felt that their transcultural nursing skills still needed training to improve. Newly recruited nurses raised the expectation that language training, transcultural communication skills, and other course content would be strengthened. Participant 96 wrote, "It is recommended that English speaking training be given in the training before and after nurses' entry." Participant 191 wrote, "It is hoped that learning about different cultures of various ethnic groups and cross-cultural communication methods will be provided."

4 Discussion

Our research study examined the current status of TSE among newly recruited nurses. We found that most newly recruited nurses had moderate levels of TSE on cognitive, practical, and affective scales. This is consistent with the multicultural society in Nanning City, Guangxi Zhuang Autonomous Region, China, and indicates that newly recruited nurses have basic competence in intercultural nursing. However, 81% of the newly recruited nurses still believe that their competence in transcultural nursing needs improvement.

According to Jeffreys, nurses with low TSE lack cognitive, practical, and affective confidence and may not be able to provide patients with care that is congruent with their cultural background; nurses with high TSE are overconfident and susceptible to complacency; and nurses with moderate TSE are sufficiently confident that they are able to address a wide range of cultural nursing issues^[16]. The study found that the newly recruited nurses had an overall mean score of TSE of 7.01 ± 1.12 , indicating their ability to provide culturally appropriate care to their patients. This is consistent with previous research by Berhanu^[7], Wu^[5], and others. However, there were variations in the total mean scores of TSE among nurses in different regions and countries. Our study found higher total mean scores compared to Wang study in a nursing program at a university in Guangxi, China, which reported a mean score of 6.90 ± 1.35 ^[17]. This difference may be attributed to the fact that our study participants had one to two years of work experience and more nursing and cross-cultural experience than nursing interns. However, it was lower than the overall mean score in the study by San and colleagues at an urban public university in the northeastern United States^[11]. This difference may be due to the increased emphasis on cross-cultural nursing education at U.S. institutions, which has been included in the American Association of Colleges of Nursing's (AACN) core education for undergraduate nursing students, which places greater emphasis on cultural nursing competency as an essential part of nursing education at the university level.

The study's results indicate that newly recruited nurses struggle with transcultural nursing issues, particularly in the practice dimension. This may be due to insufficient work experience and inadequate training in intercultural nursing skills. The qualitative study supports this finding. Hospitals should establish continuous transcultural training programs to meet the needs of newly hired nurses and ensure the maintenance of their transcultural nursing skills throughout their careers.

Moreover, the practice dimension's entry for 'language preference' received the lowest score, with a mean score of 6.13. This suggests that new nurses lack confidence in communicating with patients who speak different dialects or languages from different regions. The qualitative study's results support this finding. Language skills are crucial for effective communication and understanding of patients. Studies have shown that nurses face difficulties in communicating with patients from different cultural backgrounds due to language barriers, which prevent them from understanding cultural norms or behaviors associated with the disease^[18]. This suggests that future hospital training may focus on improving cross-cultural linguistic communication.

In addition, the percentage of moderate efficacy for the cognitive dimension was low compared to the other dimensions (Table 3). The open-ended questions also showed that some newly recruited nurses felt inadequate in the need for transcultural nursing knowledge. This may indicate that new nurses are deficient in the cognitive dimension of transcultural knowledge. The reason may be that most of the current nursing education in China has focused on basic medicine, nursing professional knowledge, and nursing operational skills. While the curriculum of transcultural nursing education is inadequate, cross-cultural nursing education is mostly based on English or bilingual courses in nursing specialties, with less emphasis on religious concepts, moral habits and values in a multicultural context. Besides, the weak multicultural awareness of nurse educators also leads to the lack of transcultural cognitive dimension of new nurses. Previous research suggests that nurses who do not understand the concept of transcultural nursing may not be able to apply transcultural nursing theory to clinical care^[19]. This finding reminds us that there is an urgent need to enhance the learning of transcultural nursing theories among newly recruited nurses in order to improve their self-awareness.

The survey results showed a moderately effective affective dimension, likely due to Nanning City's status as a major destination for ethnic minority mobile populations and medical care. In this multicultural communication and integration context, newly recruited nurses may be exposed to the cultural nursing needs of patients, leading them to think differently and provide more humanistic care. Once formed, correct beliefs and emotions are not easily changed. This finding suggests that healthcare organizations should encourage nurses to interact with colleagues and patients from different cultural backgrounds.

5 Conclusion

In summary, this study indicates that newly recruited nurses have a moderate level of TSE, and there is still room for improvement in their transcultural nursing competence.

The analysis revealed that new nurses' transcultural nursing competence was mainly affected by language barriers, differences in cultural perceptions, insufficient transcultural curricula, inadequate training in transcultural nursing skills, and weak multicultural awareness among nursing faculty. These findings provide an empirical basis for further research on strategies to enhance TSE of newly recruited nurses. In future studies, nursing educators should review the content and approach of transcultural nursing education to assist new nurses in developing accurate transcultural attitudes and concepts to better meet nursing needs in a multicultural context.

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