### Makara Journal of Health Research

| Vol | um   | e 29 |     |
|-----|------|------|-----|
| lss | ue 1 | Ap   | ril |

Article 8

4-30-2025

# The Effect of Nursing Students' Level of Readiness for Professional Practice on Self-Efficacy and Clinical Stress Perception: A Cross-sectional Study

Uğur Öner Department of Nursing, Faculty of Health Sciences, Batman University, Batman 72060, Türkiye, tuncay\_126@hotmail.com

Dilek Yılmaz Department of Nursing, Faculty of Health Sciences, Bursa Uludağ University, Bursa 16059, Türkiye, dilekk@uludag.edu.tr

Sinan Aslan Department of Nursing, Faculty of Health Sciences, Kahramanmaraş İstiklal University, Kahramanmaraş 46100, Türkiye, sinan44aslan@gmail.com

Ercan Çınar Department of Nursing, Faculty of Health Sciences, Batman University, Batman 72060, Türkiye, ercan.cinar@batman.edu.tr

Follow this and additional works at: https://scholarhub.ui.ac.id/mjhr

Part of the Nursing Commons

#### **Recommended Citation**

Öner U, Yılmaz D, Aslan S, Çınar E. The Effect of Nursing Students' Level of Readiness for Professional Practice on Self-Efficacy and Clinical Stress Perception: A Cross-sectional Study. Makara J Health Res. 2025;29.

## The Effect of Nursing Students' Level of Readiness for Professional Practice on Self-Efficacy and Clinical Stress Perception: A Cross-sectional Study

Uğur Öner<sup>1</sup><sup>(i)</sup>, Dilek Yılmaz<sup>2\*</sup><sup>(i)</sup>, Sinan Aslan<sup>3</sup><sup>(i)</sup>, Ercan Çınar<sup>1</sup><sup>(i)</sup>

<sup>1</sup>Department of Nursing, Faculty of Health Sciences, Batman University, Batman 72060, Türkiye <sup>2</sup>Department of Nursing, Faculty of Health Sciences, Bursa Uludağ University, Bursa 16059, Türkiye <sup>3</sup>Department of Nursing, Faculty of Health Sciences, Kahramanmaraş İstiklal University, Kahramanmaraş 46100, Türkiye

#### Abstract

**Background**: It is essential to evaluate students' readiness before graduation and support them with education accordingly. This study investigates the effect of the level of readiness for professional practice as a purpose on the self-efficacy and clinical stress perceptions of nursing students.

**Methods**: The data for this cross-sectional study were collected between May and July 2024. The study included 733 3rd and 4thyear students studying nursing departments at state universities in Turkey. The Student Identification Form, Casey-Fink Readiness for Practice Scale (CFRPS), Student Self-Efficacy Scale (SSS), and Nursing Students Perceptions of Clinical Stressors Scale (NSPCSS) were used.

**Results**: The mean total CFRPS score of the students participating in the study was  $43.85 \pm 8.58$ , the mean SSS total score was  $29.93 \pm 5.84$ , and the mean NSPCSS total score was  $95.36 \pm 19.99$ . A statistically significant difference was found between the students' age, gender, class level, and willingness to choose the nursing department and the CFRPS, SSS, and NSPCSS scale scores (p < 0.05). The results indicated a negative correlation between the NSPCSS and both the CFRPS (r = -0.99, p = 0.01) and the SSS (r = -0.11, p = 0.01). Additionally, a strong positive correlation was observed between the CFRPS and SSS (r = 0.77, p = 0.01). Readiness explains 2.1% of the variance in self-efficacy and perception of clinical stress ( $R^2 = 0.021$ , p = 0.001).

**Conclusion**: As a result of this study, it was determined that nursing students' readiness for professional practice, self-efficacy, and clinical stress perceptions were affected by various factors such as age, gender, grade level, and desire to choose the nursing department. In addition, it was concluded that there was a negative correlation between students' clinical stress perceptions and their readiness for professional practice and self-efficacy levels, and that as students' readiness and self-efficacy increased, their clinical stress perceptions tended to decrease.

Keywords: nursing, professional practice, self-efficacy, stress, students

#### INTRODUCTION

Nursing education includes practical application as well as theoretical explanation.<sup>1</sup> Undergraduate education aims to enable nursing students to achieve nursing competence before entering their profession.<sup>2</sup> Professional practice is undoubtedly an important component of education aimed at developing students' professional knowledge and skills and providing opportunities to put what they have learned into practice.<sup>3</sup> In addition, professional practice enhances the professional performance, reliance, and efficiency of nursing students and develops self-sufficiency and readiness for the practice of the profession.<sup>4</sup>

Dilek Yılmaz

Department of Nursing, Faculty of Health Sciences, Bursa Uludağ University, Bursa, Turkey E-mail: dilekk@uludag.edu.tr Readiness to practice typically expresses the degree to which one is perceived to have the knowledge and skills to implement.<sup>4,5</sup> Preparedness for professional practice is "the ability to assume the roles of the nursing profession and care implementer/manager/coordinator, care provider as a graduate nurse.<sup>16</sup> In another definition, readiness for the professional practice of nursing students is generally expressed as the perception of readiness and preparedness for the professional nursing profession, which is considered the ability to fulfill professional roles that include knowledge, behavior, skills, and attitudes.<sup>4</sup>

Conducted studies on the exhibition of nursing students' level of preparedness for professional practice, which is high or medium.<sup>6-8</sup> Students with a level of preparedness for vocational practice are able to identify and analyze problems and are keen to implement their professional capabilities in the work environment, and who have adequate capabilities to provide quality and proof.<sup>19</sup> In addition, some studies have reported nursing students with a high level of practice readiness generally experience

<sup>\*</sup>Corresponding author:

less anxiety. when transitioning into the profession and are more likely to adapt to the work environment.<sup>10,11</sup>

Among the essential qualities of being ready for professional practice are information, experience, clinical competencies, holistic patient care, the capability to implement theoretical information into practice, and selfefficacy.<sup>1</sup> In the literature, it is reported that the practice readiness levels of nursing students are affected by sociodemographic variables of students<sup>1,7,12,13</sup> and educational factors such as selecting the profession willingly, feeling qualified in the vocation,<sup>1,12</sup> self-efficacy, and stress factors arising from clinical practice.<sup>14</sup> In the literature, it is reported that nursing students' practice readiness levels are influenced by students' sociodemographic variables,<sup>1,7,12,13</sup> educational factors such as selecting voluntary participation in the profession, perceiving oneself as adequate for the vocation, selfefficacy,<sup>1,12</sup> and stress caused by clinical practice.<sup>14</sup> The concept of "self-efficacy" was first introduced by Bandura, who is an American psychologist, and is defined as a person's belief about whether he or she can organize the steps necessary to perform an activity and achieve success or the level of success.<sup>15,16</sup> Self-efficacy is part of the basic infrastructure of nursing students' competence.<sup>17</sup> Improving self-sufficiency is critical for nursing students' academic success.<sup>18</sup> It has been stated that motivation and clinical performance are closely related to self-efficacy.<sup>17</sup> In a study conducted, it was reported that the most important factor affecting the clinical competence of senior nursing students was selfefficacy after problem-solving skills.<sup>18</sup> In particular, low self-efficacy can cause avoidance practices with the possibility of failure in nursing students. On the contrary, nursing students with high self-efficacy may experience more job satisfaction and less risk of burnout in their professional lives by developing their skills through more active participation in practices. Besides all of this, selfefficacy is necessary to improve the quality of care and ensure patient safety.17,19

It is stated that situations in which experiences such as anxiety and stress are high in nursing students may negatively affect their academic self-efficacy<sup>14</sup> and clinical practice performance.<sup>10</sup> Students in nursing education experience higher levels of stress than students in nonhealthcare fields.<sup>3</sup> Studies have reported that almost all nursing students experience medium- or high-level stress while studying in the clinical environment.<sup>10,20-22</sup>

In this context, it has been determined that the causes of the distress experienced by nursing students during clinical practice are inadequate theoretical education, deficiency of information and capabilities in clinical practice, increased responsibility towards patients, unknown situations, lack of motivation, compliance problems, problems with educators, and a complex hospital environment.<sup>3,10,23-25</sup> Stress in the clinical setting can reduce students' ability to perform, decrease the overall quality of nursing care, affect physical and mental health, and even lead to job exhaustion.<sup>10</sup> Hence, it is crucial to effectively manage clinical stress factors.<sup>10</sup> When the literature is examined, there are studies examining the levels of vocational application preparation of nursing students,<sup>2,6,7</sup> self-efficacy levels,<sup>14,26,27</sup> clinical stress perception, 23, 28, 29 and their level of preparation for vocational training and self-efficacy levels.<sup>1,30</sup> However, no study was found that examined the effect of selfsufficiency in preparation for vocational application on self-sufficiency and clinical stress perception in nursing students and investigated whether there was a difference between independent groups. It is important to evaluate the readiness of students before graduation and support them with education accordingly in this regard. Therefore, investigating the factors that may affect vocational training preparation, sufficiency, and clinical stress perception during nursing teaching and identifying suitable strategies may be noteworthy in terms of providing quality and effective health services after the graduation of nursing students.

This study is expected to guide educators in planning interventions to increase nursing students' level of preparation for vocational training, their level of selfsufficiency, and their perception of clinical stress. It will also help students overcome their deficiencies before graduation, reduce the orientation processes in health institutions, and participate in the improvement of different training strategies. This study aimed to assess nursing students' readiness levels for professional practice, their self-efficacy, and their perceptions of clinical stress, to examine the simultaneous influence of socio-demographic characteristics on these variables, and to explore the interrelationships among readiness for professional practice, self-efficacy, and clinical stress perceptions.

#### METHODS

Ethics committee approval was obtained from the Batman University Non-Interventional Ethics Committee (Approval Date: 14.05.2024, Decision No. 2024/03-54). In the process of participating in the research, the necessary consents were obtained before the start of the survey on the web environment, in which they volunteered to participate in the research by acting in accordance with the Declaration of Helsinki. Information about the study and an informed consent form were added to the beginning of the online data collection form, and after the consent form was approved, the questions in the data collection form were allowed to be passed.

This study, which was planned as descriptive and crosssectional, was conducted with 3rd- and 4-year nursing students in Turkey between May and July 2024. Registered and attended classes in the 2023-2024 spring semester at state universities in Turkey to be a 3rd and 4th-year nursing department student, and students who volunteered to participate in the study were included. In calculating the sample size, the unknown population sampling method was requested to reach at least 385 people. In this study, which was conducted using the convenience sampling method, 773 nursing students were reached. It used the Student Identification Form, Casey-Fink Practice Readiness Scale, Student Self-Efficacy Scale, and the Nursing Students' Perceptions of Clinical Stressors Scale (NSPCSS) as data collection tools.

The Student Identification Form consists of seven questions, including age, gender, marital status, class, family income, family type, and the student's desire to study nursing.<sup>9,10</sup> The Casey-Fink Readiness for Practice Scale (CFRPS) was developed by Casey et al.<sup>31</sup> in 2011, and its Turkish validity and reliability were examined by Kuleyin and Acil in 2023.<sup>9</sup> It consists of a four-point Likert-type scale and 15 items. Scores between 15 and 60 are obtained from the scale, and as the scale score increases, the student's readiness level for the application increases. While Cronbach's alpha value was 0.69- 0.88 in the original study,<sup>9</sup> it was calculated as 0.92 in this study.

Student Self-Efficacy Scale (SSS) was developed by Rowbotham and Schmitz<sup>32</sup> in 2013, and its Turkish validity and reliability were carried out by Yurtçiçek-Eren and Başgöl<sup>16</sup> in 2023. It consists of a four-point Likert-type scale and 10 items. Scores between 10 and 40 are obtained from the scale. Increasing scores indicate a high level of self-efficacy. Cronbach's alpha internal consistency reliability coefficient of the scale was found to be 0.81.<sup>16</sup> In this study, Cronbach's  $\alpha$  value was found to be 0.90.

Nursing Students' Perceptions of Clinical Stressors Scale (NSPCSS) was developed by Rafati *et al.*<sup>3</sup> in 2021, and its Turkish validity and reliability were carried out by Çamlıbel and Uludağ<sup>10</sup> in 2023. It consists of a five-point Likert-type scale and 30 items. The scale consists of six subdimensions: limited clinical competence of instructors, inappropriate clinical environment, inadequate knowledge and skills, ineffective clinical practice planning, inappropriate behaviors of instructors, and concerns about the characteristics of nursing. Cronbach's alpha value of the scale was found to be 0.94.<sup>10</sup> In this study, Cronbach's alpha value was found to be 0.94.

All forms used to collect the data for the study were transferred to the online environment via Google Forms by the researcher. The link to the data collection tools transferred to the online environment was sent to the email addresses of the students. Before starting to fill out the data collection form, the students were informed that all of the data would be used for scientific study and that the answers would not affect their course grades in any way. The research data were collected online from the students who agreed to participate in the study and completed the forms completely.

The data obtained was analyzed with SPSS 22.0. Number, percentage, mean, standard deviation, minimum, and maximum were used in the descriptive statistics of the data. Normality assumption was evaluated by looking at the skewness and kurtosis values, and since the skewness and kurtosis values were within the recommended range, parametric tests were used. In the analysis of research data, an independent sample t-test, an ANOVA test, Pearson correlation, and logistic regression analysis were used. In statistical analyses, the significance level was accepted as p < 0.05.

#### RESULTS

Among the nursing students who participated in the survey, 62.8% were under the age of 22, 63.3% were female, and 97.8% were unmarried. Additionally, 53.6% were in their fourth year of study, 94.0% came from nuclear families, 87.6% reported that income is less than expenses, and 50.8% indicated that they chose the nursing profession willingly (Table 1). The mean age of the students is  $22.19 \pm 1.70$ , and the score on the NSPCSS total scale was  $95.36 \pm 19.99$ . Their mean score for the component dimension of limited clinical competence among trainers was  $27.71 \pm 6.72$ . Additionally, the mean score for the sub-dimension of inappropriate clinical environment was  $9.58 \pm 2.71$ , while the mean score for inadequate knowledge and skills was  $12.68 \pm 3.71$ .

| <b>TABLE 1.</b> Descriptive characteristics of nursing students |  |
|---|--|
| (N = 733)   |  |

| Characteristics                 | N (%)             |
|---------------------------------|-------------------|
| Age                             |                   |
| ≤22                             | 460 (62.8)        |
| ≥23                             | 273 (37.2)        |
| Gender                          |                   |
| Male                            | 269 (36.7)        |
| Female                          | 464 (63.3)        |
| Marital status                  |                   |
| Single                          | 717 (97.8)        |
| Married                         | 16 (2.2)          |
| Grade                           |                   |
| 3 <sup>rd</sup> grade           | 340 (46.4)        |
| 4 <sup>th</sup> grade           | 393 (53.6)        |
| Family type                     |                   |
| Nuclear                         | 689 (94.0)        |
| Extended                        | 26 (3.5)          |
| Fragmented                      | 18 (2.5)          |
| Income                          |                   |
| Less than expenses              | 642 (87.6)        |
| More than expenses              | 91 (12.4)         |
| State of choice the nursing pro | fession willingly |
| Yes                             | 372 (50.8)        |
| No                              | 361 (49.2)        |

| Variable                                     | Mean ± SD     | Min – Max |
|--|---------------|-----------|
| NSPCSS                                       | 95.36 ± 19.99 | 30 – 150  |
| CFRPS  | 43.85 ± 8.58  | 15 – 60   |
| SSS  | 29.93 ± 5.84  | 10 – 40   |
| NSPCSS Sub-Scales                            |               |           |
| Instructors' Limited Clinical Competence     | 17.87 ± 4.27  | 6 – 30    |
| Inappropriate Clinical Environment           | 27.71 ± 6.72  | 8 - 40    |
| Inadequate Knowledge and Skills              | 9.58 ± 2.71   | 3 – 15    |
| Inefficient Clinical Education Planning      | 12.68 ± 3.71  | 4 - 20    |
| Instructor's Inappropriate Conduct           | 18.12 ± 4.83  | 6 – 30    |
| Concerns over the Characteristics of Nursing | 9.37 ± 2.72   | 3 – 15    |

NSPCSS: Nursing Students' Perceptions of Clinical Stressors Scale, CFRPS: Casey-Fink Readiness for Practice Scale, SSS: Student Self-Efficacy Scale

Furthermore, the mean score for the ineffective clinical practice planning subscale was  $18.12 \pm 4.83$ , and the mean score for the final subscale was  $9.37 \pm 2.72$  (Table 2). The total mean score for the students participating in the study on the CFRPS was  $43.85 \pm 8.58$ , while the total mean score on the SSS was  $29.93 \pm 5.84$  (Table 2).

Table 3 presents a comparison of the descriptive characteristics of nursing students along with the total mean scores for the NSPCSS and its sub-dimensions, CFRPS, and SSS. A statistically significant difference was observed between the mean scores of students' ages and the NSPCSS sub-dimension of concerns about the characteristics of nursing, as well as the CFRPS and SSS. Students over 23 years of age had significantly higher mean scores compared to their younger peers. A statistically significant difference was found between the gender of nursing students and the NSPCSS sub-dimension of limited clinical competence of instructors, as well as the total mean scores for the CFRPS and SSS. The analysis revealed that male students had significantly higher mean scores than female students.

Additionally, there was a statistically significant difference based on the students' class year concerning the NSPCSS sub-dimensions of limited clinical competence of instructors, inadequate knowledge and skills, ineffective clinical practice, and concerns about the characteristics of nursing, as well as the total mean scores for the CFRPS and SSS. Third-year students exhibited significantly higher scores in the NSPCSS sub-dimensions compared to fourth-year students. Conversely, the total mean scores for the CFRPS and SSS were significantly higher for fourthyear students compared to third-year students. A statistically significant difference was observed between the family type of nursing students and the mean scores for the NSPCSS sub-dimensions of limited clinical competence of instructors, inadequate knowledge and skills, ineffective clinical practice, inappropriate behaviors of instructors, and concerns about the characteristics of nursing. Students from broken families had significantly higher mean scores in these NSPCSS sub-dimensions compared to their peers.

Similarly, a statistically significant difference was found regarding the income status of the students and the mean scores for the NSPCSS sub-dimensions of limited clinical competence of instructors, inappropriate clinical environment, inadequate knowledge and skills, ineffective clinical practice, inappropriate behaviors of instructors, and concerns about the characteristics of nursing. Students whose income was less than their expenditure had significantly higher mean scores in these subdimensions compared to those whose income exceeded their expenditures. The analysis revealed a statistically significant difference in the mean scores of the NSPCSS sub-dimensions between students who willingly chose the nursing profession and those who did so reluctantly. Notably, the total mean scores for the NSPCSS subdimensions were significantly higher among students who chose nursing reluctantly compared to their willingly choosing counterparts.

The Pearson correlation analysis between the NSPCSS, CFRPS, and SSS indicated a negative correlation between the NSPCSS and both the CFRPS (r = -0.99, p = 0.01) and the SSS (r = -0.11, p = 0.01). Additionally, a strong positive correlation was observed between the CFRPS and SSS (r = 0.77, p = 0.01). The regression analysis investigating the influence of nursing students' readiness for practice on their self-efficacy and perception of clinical stress indicated that readiness significantly explained 2.1% of the variance in these outcomes ( $R^2 = 0.021$ , p = 0.001).

|  |                    |                  |                  |                                  |                           | JUCN                    | NSPCSS sub-scales                 |                               |   |
|--|--------------------|------------------|------------------|----------------------------------|---------------------------|-------------------------|-----------------------------------|-------------------------------|---|
| Variables  | NSPCSS             | CFRPS            | SSS              | Instructors'<br>Limited Clinical | Inappropriate<br>Clinical | Inadequate<br>Knowledge | Inefficient Clinical<br>Education | Instructor's<br>Inappropriate | Concerns Over the<br>Characteristics of |
| Age  |                    |                  |                  | Competence                       | Environment               | and Skills              | Planning                          | Conduct                       | Nursing                                 |
| ≤22  | 94.81 ± 19.79      | 42.77 ± 8.35     | 29.35 ± 5.77     | 17.74 ± 4.22                     | 27.57 ± 6.40              | 9.63 ± 2.67             | 12.61 ± 3.60                      | 18.05 ± 4.84                  | 9.18 ± 2.64                             |
| >23  | 96.28 ± 20.31      | $45.67 \pm 8.67$ | $30.90 \pm 5.85$ | $18.10 \pm 4.36$                 | $27.94 \pm 5.97$          | $9.50 \pm 2.77$         | $12.80 \pm 3.90$                  | 18.24 ± 4.81                  | $9.68 \pm 2.83$                         |
| d  | 0.33               | 0.01*            | 0.01*            | 0.26                             | 0.44                      | 0.50                    | 0.51                              | 0.60                          | 0.01*                                   |
| Gender   |                    |                  |                  |                                  |                           |                         |                                   |                               |   |
| Male   | 94.53 ± 19.67      | $46.54 \pm 8.07$ | $31.05 \pm 5.33$ | 18.33 ± 4.37                     | $27.26 \pm 5.62$          | 9.39 ± 2.67             | $12.55 \pm 3.78$                  | 17.79 ± 4.84                  | 9.18 ± 2.97                             |
| Female   | 95.84 ± 20.17      | 42.29 ± 8.49     |                  | $17.62 \pm 4.20$                 | 27.97 ± 6.57              | 9.69 ± 2.73             | 12.76 ± 3.67                      | 18.23 ± 4.80                  | 9.48 ± 2.56                             |
| d  | 0.39               | 0.01*            | 0.01*            | 0.02*                            | 0.13                      | 0.14                    | 0.46                              | 0.15                          | 0.15                                    |
| Marital status                                   |                    |                  |                  |                                  |                           |                         |                                   |                               |   |
| Single   | $86.56 \pm 22.10$  | $45.75 \pm 9.58$ | 29.25 ± 6.64     | $16.43 \pm 5.01$                 | $26.25 \pm 5.60$          | $8.12 \pm 3.11$         | 11.43 ± 4.50                      | $16.25 \pm 5.28$              | 8.06 ± 2.76                             |
| Married  | 95.56 ± 19.91      | $43.81 \pm 8.56$ | 29.29 ± 5.83     | $17.90 \pm 4.25$                 | $27.74 \pm 6.26$          | 9.62 ± 2.69             | 12.71 ± 3.69                      | 18.17± 4.81                   | 9.40 ± 2.71                             |
| d  | 0.17               | 0.39             | 0.63             | 0.02*                            | 0.13                      | 0.14                    | 0.46                              | 0.15                          | 0.15                                    |
| Grade  |                    |                  |                  |                                  |                           |                         |                                   |                               |   |
| 3 <sup>rd</sup> grade                            | 97.08 ± 19.15      | 42.57 ± 8.76     | 28.98 ± 6.18     | 18.23 ± 4.37                     | 27.76 ± 6.34              | $10.02 \pm 2.50$        | 12.99 ± 3.24                      | $18.40 \pm 4.55$              | 9.66 ± 2.46                             |
| 4 <sup>th</sup> grade                            | 93.87 ± 20.59      | 44.96 ± 8.27     | $30.75 \pm 5.41$ | $17.56 \pm 4.17$                 | 27.66 ± 6.16              | 9.21 ± 2.83             | 12.41 ± 4.06                      | $17.89 \pm 5.06$              | 9.12 ± 2.91                             |
| d  | 0.03*              | 0.01*            | 0.01*            | 0.03*                            | 0.83                      | 0.01*                   | 0.03*                             | 0.15                          | 0.03*                                   |
| Family type                                      |                    |                  |                  |                                  |                           |                         |                                   |                               |   |
| Nuclear  | 95.41 ± 19.70      | $43.85 \pm 8.52$ | 29.84 ± 5.82     | 17.85 ± 4.26                     | 27.70 ± 6.24              | 9.61 ± 2.69             | 12.71 ± 3.66                      | 18.11 ± 4.73                  | 9.40 ± 2.64                             |
| Extended   | 86.23 ± 24.98      | 44.26 ± 10.76    | 31.92 ± 6.18     | $16.61 \pm 4.41$                 | 26.30 ± 6.39              | $8.15 \pm 3.19$         | 10.57 ± 4.47                      | $16.42 \pm 5.84$              | $8.15 \pm 3.86$                         |
| Fragmented                                       | $106.72 \pm 17.57$ | $44.16 \pm 8.58$ | 30.33 ± 5.85     | 20.50 ± 3.77                     | $30.16 \pm 5.54$          | $10.50 \pm 1.97$        | $14.50 \pm 3.11$                  | 20.94 ± 5.93                  | 10.11 ± 3.56                            |
| d  | 0.01*              | 0.95             | 0.19             | 0.01*                            | 0.12                      | 0.01*                   | 0.01*                             | 0.01*                         | 0.01*                                   |
| Income   |                    |                  |                  |                                  |                           |                         |                                   |                               |   |
| Less than expenses                               | 96.11 ± 19.04      | $43.63 \pm 8.34$ | 29.83 ± 5.80     | $18.12 \pm 4.21$                 | 27.89 ± 6.28              | 9.73 ± 2.53             | 12.96 ± 3.44                      | $18.46 \pm 4.70$              | 9.62 ± 2.47                             |
| More than expenses                               | 85.15 ± 23.40      | 45.38 ± 10.05    | $30.64 \pm 6.10$ | $16.12 \pm 4.10$                 | $26.41 \pm 5.88$          | 8.52 ± 3.59             | $10.65 \pm 4.81$                  | $15.78 \pm 5.12$              | 7.62 ± 3.63                             |
| d  | 0.01*              | 0.06             | 0.11             | 0.01*                            | 0.01*                     | 0.01*                   | 0.01*                             | 0.01*                         | 0.01*                                   |
| State of choice the nursing profession willingly | rsing profession   | willingly        |                  |                                  |                           |                         |                                   |                               |   |
| Yes  | 93.31 ± 20.26      | $45.17 \pm 8.36$ | 30.33 ± 5.92     | 17.49 ± 4.40                     | $27.16 \pm 5.99$          | $9.30 \pm 2.82$         | 12.32 ± 4.02                      | $17.90 \pm 4.76$              | $9.12 \pm 2.89$                         |
| No   | 97.48 ± 19.50      | $42.57 \pm 8.61$ | 29.51 ± 5.74     | 18.27 ± 4.10                     | 28.27 ± 6.46              | 9.87 ± 2.56             | $13.05 \pm 3.33$                  | 18.36 ± 4.89                  | 9.64 ± 2.51                             |
| d  | 0.01*              | 0.01*            | 0.05*            | 0.01*                            | 0.01*                     | 0.01*                   | 0.03*                             | 0.19                          | 0.01*                                   |

#### DISCUSSION

It is crucial to adequately prepare nursing students for their vocational applications.<sup>2</sup> The clinical experiences they acquire can enhance their problem-solving skills, foster critical thinking, help them build a professional identity and professionalism, and promote professional commitment and self-confidence.<sup>3,5,33,34</sup> Conversely, negative clinical experiences can negatively affect nursing students' self-reliance, satisfaction with nursing, preparedness for application, and persistence in practice.<sup>23</sup>

In this study, students' preparedness for vocational application and levels of self-sufficiency were assessed, revealing a moderate perception of clinical stress. Analysis of existing research on nursing students indicated that readiness for professional practice varied from moderate<sup>1,7,9,30</sup> to high levels.<sup>8</sup> Additionally, some studies reported students' self-efficacy as moderate<sup>14,35</sup> or high,<sup>36,37</sup> while clinical stress perceptions ranged from moderate<sup>1,14,38</sup> to high.<sup>36,39</sup> Some findings from these studies aligned with ours, while others did not. The discrepancies are likely due to factors such as the demographic characteristics of the students, the school curriculum, changes in clinical application programs, and the educators' attributes. Furthermore, the moderate levels of readiness and self-sufficiency observed in our participants, alongside their perceptions of clinical stress, can be attributed to the challenges posed by the COVID-19 pandemic, which necessitated remote enrollment in numerous theoretical and clinical courses, as well as the impact of the Kahramanmaraş earthquake on February 6, 2023. To ensure effective professional practice after graduation and to boost self-confidence, it is vital to enhance students' readiness and self-sufficiency for vocational practice during their undergraduate education while also addressing their perceptions of clinical stress. Additionally, this study found that students aged 23 and older demonstrated higher levels of readiness for vocational practice, self-efficacy, and perceptions of clinical stress compared to younger students. Similarly, male students exhibited higher levels of preparedness for vocational practice, self-efficacy, and clinical stress perception than female students. In a study by Ersoy and Ayaz-Alkaya<sup>1</sup>, it was noted that male students exhibited higher levels of academic self-efficacy and preparedness for vocational practice. While some research indicates that males generally have greater self-efficacy,<sup>40,41</sup> other studies suggest that female students may demonstrate higher academic self-efficacy.<sup>13,14,36</sup> Fangonil-Gagalang's research found no significant impact of age or gender on nursing students' readiness for professional practice or self-efficacy levels.<sup>30</sup> Similarly, Takmak and Karaçar<sup>14</sup> reported that age did not influence nursing students' self-efficacy or perceptions of stress. In studies by Suarez-Garcia et al.<sup>39</sup> and Akkaya et al.,<sup>42</sup> it was revealed that female students perceived higher levels of clinical

stress compared to their male counterparts, while age did not significantly affect clinical stress perception. These discrepancies among studies may stem from variations in the curricula of the institutions, the clinical environment, and the characteristics of both students and faculty. The observation that male and older students tend to have higher readiness and self-efficacy levels compared to female and younger students may relate to greater encouragement for responsibility and self-trust that often comes with age, which may, in turn, contribute to stress. Investigating the reasons behind these phenomena could yield valuable insights for future research.

The study identified that one factor influencing nursing students' readiness for professional practice, self-efficacy, and perceptions of clinical stress is their motivation for choosing the nursing department. Students who voluntarily selected this path displayed higher levels of readiness and self-efficacy, along with lower clinical stress perceptions compared to others. It can be inferred that students who are satisfied with their chosen profession are better prepared and adapt more easily, leading to a decrease in perceived stress. Well-prepared nursing students are characterized by their eagerness to practice their competencies, problem-solving abilities, and capability to ensure quality care.<sup>9</sup> Indeed, existing research supports the notion that students who willingly choose nursing demonstrate greater readiness for professional practice,<sup>1,7</sup> higher self-efficacy,<sup>1,36,43</sup> and lower clinical stress perceptions.<sup>36,42</sup> Our findings align with these studies.

Additionally, it was found that senior students exhibited higher readiness for professional practice and selfefficacy levels while experiencing lower clinical stress compared to those in lower grades. Previous research indicates that senior nursing students typically show elevated self-efficacy,<sup>1,43,44</sup> increased readiness for professional practice,<sup>1</sup> and reduced clinical stress perceptions<sup>39</sup> compared to their peers in earlier years. Our study corroborates these findings: as nursing students advance through their program, their academic knowledge and clinical experience grow, resulting in improved readiness for professional practice and heightened self-efficacy,<sup>1,43</sup> as well as reduced clinical stress perceptions.<sup>39</sup> Thus, it can be inferred that academic knowledge and skills enhance students' readiness and self-efficacy while mitigating stress related to professional practice.

Family background and economic status also influenced nursing students' perceptions of clinical stress. Those from fragmented family structures and lower income levels reported higher clinical stress compared to their peers. Nursing students, often studying in different cities based on their choices and academic performance, may experience stress stemming from environmental changes, financial challenges, and family dynamics.<sup>42</sup> Furthermore, while clinical education is a vital aspect of nursing training, many students find it inherently stressful.<sup>3,23</sup> This stress can be exacerbated by financial and family-related factors. To support nursing students, initiatives such as university scholarships and psychological guidance services should be implemented. Moreover, it is important to investigate individual factors that influence nursing students' perceptions of clinical stress in greater depth.

Self-efficacy beliefs can vary based on environmental conditions, task difficulty, and the individual's mastery level.<sup>14</sup> Successful experiences are the primary drivers of self-efficacy; when students complete tasks successfully, their confidence in their abilities increases.<sup>19</sup> Readiness for nursing practice encompasses a blend of cognitive, professional, and clinical skills, which collectively enhance students' self-efficacy in fulfilling their nursing roles.<sup>1</sup> Our study established a significant relationship between nursing students' readiness for professional practice and their self-efficacy; as students' readiness levels increased, so did their self-efficacy. Previous research has shown that self-efficacy among nursing students contributes positively to their readiness for professional practice.<sup>1,30</sup> Therefore, our findings align with existing literature. It is crucial for nursing educators to adopt strategies that boost students' readiness for professional practice by enhancing their self-efficacy, ideally through robust faculty support.

Moreover, our study revealed a negative correlation between nursing students' perceptions of clinical stress and their readiness for professional practice and selfefficacy levels. As students' readiness and self-efficacy increased, their clinical stress perceptions tended to decrease. This aligns with findings in the literature indicating that heightened self-efficacy among nursing students correlates with reduced anxiety related to clinical practice.<sup>14,36</sup> The results of our study are consistent with these observations. Clinical practice is often a stressful period for students that can disrupt the learning experience and undermine self-efficacy.<sup>17,36</sup> High levels of anxiety and stress among nursing students can adversely affect their self-efficacy beliefs.<sup>14</sup> Additionally, nursing students who possess a high level of readiness for professional practice typically experience less anxiety during their transition into the workforce, allowing for a smoother adaptation to their working environments.<sup>11</sup>

The study's primary strength lies in its simultaneous examination of nursing students' readiness for professional practice, self-efficacy, and perceptions of clinical stress. However, the study does have some limitations. It focuses solely on nursing students from specific universities in Turkey, and students who were absent, declined to participate, or took leaves of absence during data collection were not included. Consequently, the findings can only be generalized to the study population. Another limitation is that, despite informing the students about the study's topic and significance beforehand, their questionnaire responses were solely based on self-reports. This reliance on quantitative data may restrict the depth of insight into the students' attitudes and the underlying reasons for those attitudes. Self-assessment methods may introduce social desirability biases. Therefore, we suggest conducting qualitative research with nursing students or experimental studies to assess the effectiveness of educational programs implemented in this field. The final limitation of the study is that the senior students who participated in the study went into clinical practice during the COVID-19 pandemic period while they were in their first year, which may have affected their readiness for professional practice for the following periods, their selfefficacy, and their perception of clinical stress. We recommend addressing the factor of going into clinical practice during the COVID-19 pandemic in future studies.

#### CONCLUSIONS

It is recommended to develop and implement supportive education programs to increase nursing students' readiness for professional practice, their self- efficacy, and their perceptions of clinical stress. In addition, nurse educators can inform students more about clinical practice education, explain their expectations, support their self-efficacy, and reduce their clinical stress by giving feedback to increase their motivation. Nurse managers, on the other hand, can disseminate practices that will facilitate the adaptation process of nursing students to the clinic and facilitate the preparation of programs that support the practice.

#### CONFLICT OF INTEREST

None declared.

#### FUNDING

None.

Received: March 3, 2025 | Accepted: April 27, 2025

#### REFERENCES

- 1. Ersoy E, Ayaz-Alkaya S. Academic self-efficacy, personal responsibility, and readiness for professional practice in nursing students: A descriptive and correlational design. *Nurs Educ Today*. 2024;132:106007.
- 2. Alquwez N, Cruz JP, Balay-Odao E. Assessing the psychometric properties of the Arabic version of the Nursing Practice Readiness Scale among Saudi nursing students. *PLoS One*. 2023;18:1–13.
- 3. Rafati F, Sharif Nia H, Khoshnood Z, Allen KA. Development and psychometric testing of nursing students' perceptions of clinical stressors scale: An instrument design study. *BMC Psychiatry*. 2021;21:1.

- 4. Dai Z, Wang J, Ma W. Adaptation and Validation of the Readiness for Practice Instrument for Senior Undergraduate Nursing Students in China. *J Nurs Manag.* 2023;2023:8345744.
- 5. Labrague LJ. Examining the influence of social support and resilience on academic self-efficacy and learning outcomes in pre-licensure student nurses. *J Prof Nurs*. 2024;55:119–24.
- 6. Jamieson I, Sims D, Basu A, Pugh K. Readiness for practice: The views of New Zealand senior nursing students. *Nurse Educ Pract*. 2019;38:27–33.
- Gök Uğur H, Sevcan Orak O, Tekgül AT. Readiness of final year nursing students for the profession and the affecting factors: Eastern Black Sea Region Sample. J Samsun Health Sci. 2020;5:143–51.
- 8. Nweke CI, Abazie OH, Adetunji AJ, Okwuikpo MI. Readiness for clinical practice amidst coronavirus among nursing students in southwest Nigeria. *Int J Afr Nurs Sci.* 2021;15:100328.
- 9. Kuleyin B, Basaran-Acil S. The Turkish version of the Casey-Fink Readiness for Practice Scale: A validity and reliability study. *Nurse Educ Pract.* 2023;70:103667.
- 10. Çamlıbel M, Uludağ E. Investigating the psychometric characteristics of the nursing students' perceptions of clinical stressors scale. *J Nurs Eff.* 2023;16:473–86.
- 11. Dudley M, Khaw D, Botti M, Hutchinson AF. The relationship between the undergraduate clinical learning environment and work readiness in new graduate nurses: A pre-post survey study. *Nurs Educ Today*. 2020;94:104587.
- Järvinen T, Eklöf N, Salminen L. Factors related to nursing students' readiness to enter working life–A scoping literature review. *Nurse Educ Pract*. 2018;29:191–9.
- 13. Warshawski S. Academic self-efficacy, resilience and social support among first-year Israeli nursing students learning in online environments during COVID-19 pandemic. *Nurs Educ Today*. 2022;110:105267.
- 14. Takmak Ş, Karaçar Y. The relationship between clinical practice anxiety and self-efficacy beliefs of nursing students receiving hybrid education during the pandemic process: A cross-sectional study. *Ordu Univ J Nurs Stud.* 2024;7:226–35.
- 15. Bandura A. Self-efficacy: toward a unifying theory of behavioral change. *Psychol Rev.* 1977;84:191–215.
- Yurtçiçek Eren S, Başgöl Ş. Validity and reliability study of student self-efficacy scale on undergraduate nursing students. *Istanbul Gelisim University J Health Sci.* 2023;19:33–45.
- 17. Shorey S, Lopez V. Self-Efficacy in a Nursing Context. In Haugan G, Eriksson M, editors. *Health Promotion in Health Care Vital Theories and Research*. Cham: Springer; 2021. p. 145–58.
- Kang H, Kim Y, Lee H. Predictive factors influencing clinical competence in nursing students. *J Korean Acad*. 2018;19:389–98.
- 19. Chami-Malaeb R. Relationship of perceived supervisor support, self-efficacy and turnover intention, the mediating role of burnout. *Pers Rev.* 2022;51:1003–19.
- 20. John B, Al-Sawad M. Perceived stress in clinical areas and emotional intelligence among baccalaureate

nursing students. *J Indian Acad Appl Psychol*. 2015;41:75–84.

- 21. Sanad HM. Stress and anxiety among junior nursing students during the initial clinical training: A descriptive study at college of health sciences, University of Bahrain. *Am J Nurs Res.* 2019;7:995–9.
- 22. Savitsky B, Findling Y, Ereli A, Hendel T. Anxiety and coping strategies among nursing students during the COVID-19 pandemic. *Nurse Educ Pract*. 2020;46:102809.
- 23. Aydın M, Erdöl H, Görgöz M, Aksu EF. Turkish validity and reliability study of "nursing students" perceptions of clinical stressors scale. *Nurse Educ Pract*. 2022;64:103440.
- 24. Rezaei B, Falahati J, Beheshtizadeh R. Stress, stressors and related factors in clinical learning of midwifery students in Iran: A cross sectional study. *BMC Med Educ*. 2020;20:1–10.
- 25. Senturk S, Dogan N, Assistant R. Determination of the Stress Experienced by Nursing Students' During Nursing Education. *Int J Caring Sci.* 2018;11:896–904.
- 26. Hwang Y, Oh J. The relationship between self-directed learning and problem-solving ability: The mediating role of academic self-efficacy and self-regulated learning among nursing students. *Int J Environ Res Public Health*. 2021;18):1738.
- 27. Nordhus GEM, NaNongkhai P, Hofseth Almås S. Selfefficacy beliefs among baccalaureate nursing students -A cross-sectional, comparative study. *Int J Nurs Educ Scholarsh*. 2022;19.
- 28. Demiray A, Keskin Kiziltepe S, Acil A, Ilaslan N. Determining the stress sources of nursing students. *J Educ Res Nurs*. 2021;18:10–7.
- Schneider-Matyka D, Świątoniowska-Lonc N, Polański J, Szkup M, Grochans E, Jankowska-Polańska B. Assessment of the effect of stress, sociodemographic variables and work-related factors on rationing of nursing care. *Int J Environ Res Public Health*. 2023;20:2414.
- Fangonil-Gagalang E. Association of self-efficacy and faculty support on students' readiness for practice. J Prof Nurs. 2024;52:30–9.
- 31. Casey K, Fink R, Jaynes C, Campbell L, Cook P, Wilson V. Readiness for practice: The senior practicum experience. *J Nurs Educ*. 2011;50:646–52.
- 32. Rowbotham M, S Schmitz G. Development and validation of a student self-efficacy scale. *J Nurs Care*. 2013;2:1–6.
- 33. Norouzi N, Imani B. Clinical education stressors in operating room students: A qualitative study. *Invest Educ Enferm.* 2021;39:e08.
- 34. Sharifipour F, Heydarpour S, Salari N. Nursing and midwifery students' viewpoints of clinical learning environment: A cross-sectional study. *Adv Med Educ Pract*. 2020;11:447–54.
- 35. Mohamed M, Mousa M, Abd-Elhamid E. Academic motivation, academic self-efficacy and perceived social support among undergraduate nursing students, Alexandria University, Egypt. *Assiut Sci Nurs J.* 2021;9:76–86.
- 36. Açiksöz S, Uzun Ş, Arslan F. Assessment of relationship between nursing students' self-efficacy and levels of

their anxiety and stress about clinical practice. *Gulhane Med J.* 2016;58:129–35.

- 37. Priesack A, Alcock J. Well-being and self-efficacy in a sample of undergraduate nurse students: A small survey study. *Nurse Educ Today*. 2015;35:e16–20.
- 38. Liu J, Yang Y, Chen J, Zhang Y, Zeng Y, Li J. Stress and coping styles among nursing students during the initial period of the clinical practicum: A cross-section study. *Int J Nurs Sci.* 2022;9:222–9.
- 39. Suarez-Garcia JM, Maestro-Gonzalez A, Zuazua-Rico D, Sánchez-Zaballos M, Mosteiro-Diaz MP. Stressors for Spanish nursing students in clinical practice. *Nurs Educ Today*. 2018;64:16–20.
- 40. Özvurmaz S, Mandıracıoğlu A. Evaluation of students' perceptions of clinical education environment and

academic self-sufficiency: A cross-sectional study. *Tıp Eğitimi Dünya*sı. 2018;17:51–9.

- 41. Abdel-Khalek AM, Lester D. The association between religiosity, generalized self-efficacy, mental health, and happiness in Arab college students. *Pers Individ Dif.* 2017;109:12–6.
- 42. Akkaya G, Babacan Gümüş A, Akkuş Y. Determining the factors affecting the education stress of nursing students. *J Educ Res Nurs*. 2018;15:202–8.
- 43. Turgut Atak N, Meriç M. The determination of the psychological resilience, academic achievement and academic self-efficacy of nursing students. *Cyprus J Med Sci*. 2022;7:767–73.
- 44. Cengiz Z, Gürdap Z, Karaca E, Acun M. The relationship between nursing students' self-efficiency and vocational motivation. *J Heal Nurs Manag.* 2021;8:12–20.