

Clinical Performance Self-Efficacy and Professional Readiness of Senior Nursing Students who Received Online Practice Education in the Pandemic Period

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ABSTRACT

Objective: This study was applied to examine the clinical performance self-efficacy and professional readiness of senior nursing students who received online education in the pandemic period.

Methods: The study, applied in a descriptive and correlational design, was carried out at the faculty of health sciences of a state university in Istanbul between January and May 2022. The population of the study consisted of 4th year nursing students (n=246). The research participant were 173 students. An introductory information form, Self-Efficacy in Clinical Performance Scale (SECP) and a questionnaire form for professional readiness of nursing students were used to collect data. In addition to descriptive statistics, t-test, analysis of variance and correlation were used to evaluate the data.

Results: It was determined that the SECP scores of the students (69.31; SD=47.34) did not show a significant difference according to gender, graduated high school and cumulative grade point average. It was determined that there was no significant relationship between the SECP score and the feeling ready for professional psychological difficulties (r=0.144; p= .05). It was determined that there was an intermediate, positive and significant relationship between the SECP score average and the views on other professional readiness.

Conclusion: It was seen that the students participating in the study had high level of Self-Efficacy in Clinical Performance and a moderate level of professional readiness. It was determined that as the self-efficacy in clinical performance of the students increased so did their perception of professional readiness.

Keywords: COVID-19, distance education, nursing student, self-efficacy.

1. INTRODUCTION

COVID-19 is a virus that emerged in Wuhan city of China and spread all over the world (1). COVID-19 that emerged in the late 2019 was declared to be a pandemic by the World Health Organization (WHO) (2). One of the sectors that suffered the most harm is education sector. In many countries, face-to-face education was interrupted, and soon, transition to distance education was implemented (3). In our country, with the decision of Council of Higher Education (CoHE), firstly, face-to-face education was stopped, and then, distance education was started (4).

Departments that offer applied education such as nursing were affected more by the transition to distance education. Under normal conditions, nursing education is intense and stressful. The aim of this education is to get the students to gain critical thinking and psychomotor skills in order for them to provide nursing care for sick/healthy individuals

and their relatives (5). Nursing education is a type of education depending on application as well as theory. Clinical teaching in nursing is indispensable in terms of the development of professional awareness and competence (6). The most important objective of clinical teaching in nursing is to improve students' professional skills by applying the knowledge obtained in theoretical lessons and get them to become competent in nursing care (7). Clinical teaching contributes to gaining and improving basic professional skills as well as improving students' skills of problem solving, decision-making, and communication (8, 9, 10). Henderson et al (11) have stated that clinical education process contributes to students in terms of actively managing clinical applications and developing their self-efficacy. In this context, it has been emphasized that it is necessary to measure students' clinical performance self-efficacy in order to determine to

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what degree the objectives of nursing education have been achieved (12).

Self-efficacy is defined as the individual's belief in their skills of organizing and implementing their actions (13). This belief is the basis of the achievements, motivation, and emotional power that the individual displays (14). Increase in self-efficacy positively affects nurses' performances (15). It has been demonstrated that nursing students who have played an active role in their education process have high self-efficacy and learn more easily (16).

As professional competence develops, adaptation of knowledge and skills becomes easier (17). If the gap between skills and knowledge is filled and developed, the graduating students become prepared for professional practice (18). Professional readiness is defined as becoming fully prepared for the actions that should be performed and getting adapted and being successful in a short time when starting professional life. Smooth transition of nurses to practice is described as readiness for applying the profession (19, 20). It has been observed that students who provide evidence-based and safe care, analyze, and are competent in terms of being solution-oriented are ready to practice the profession (21). Educational factors that encompass personal factors which are made up of experience and emotions, and professional competence and clinical practices affect nursing students' perceptions in the transition period to the profession, and clinical practices support the process of transition to the profession (22).

However, during the pandemic period, nursing students have faced various concerns. These concerns include lack of clinical practices, how to integrate theoretical knowledge into clinical practices, technical problems, loss of motivation and social isolation (20, 23). In light of this information, it was deemed necessary to investigate how 4th year nursing students, who had to receive theoretical knowledge and clinical education through online method in the pandemic period, perceived their clinical performance self-efficacy and what they thought about their professional readiness. Studies have shown that nursing students who received online education in the pandemic period had insufficient professional readiness (24, 25). Akkuş and Bostancı Daştan (26) found the clinical performance self-efficacy of these students to be at a moderate level. However, no study has been found for examining the relationship between these two variables. Conducting the study with 4th year nursing students will help us better understand the process of transitioning to the profession after graduation. Hence, the present study was planned in order to examine clinical performance self-efficacy and professional readiness of 4th year nursing students who received online education in the pandemic period. The results of this research will be important in providing guidance for improving online education processes in nursing education and preparing future health professionals more effectively.

2. METHODS

2.1. Ethical Considerations

Ethical approval for the study was received from Marmara University Faculty of Medicine with the decision dated 07.01.2022 and numbered 09.2022.55. Institutional permission was obtained from Marmara University Faculty of the Health Sciences where the study was conducted. Throughout the study, all principles of the Declaration of Helsinki were observed (General Assembly of the World Medical Association, 2014).

2.2. Study Design

The study was conducted with a descriptive and correlational design.

2.3. Research Questions

- What are the clinical performance self-efficacy levels of senior nursing students?
- What are the opinions of senior nursing students about their professional readiness?
- Is there a relationship between senior nursing students' clinical performance self-efficacy and professional readiness?

2.4. Time and Location of the Study

The study was conducted at the Health Sciences Faculty of a state university in Istanbul between January-May 2022.

2.5. Study Population and Sample

The population of the study consisted of 4^{th} year students (n=246). No sampling was made, and the population was studied. The research participant were 173 nursing students, and thus, 70.3% of the population were accessed.

2.6. Data Collection Tools

In collecting the study data, Identifying Information Form, Self-Efficacy in Clinical Performance Scale, and Questionnaire Form for Professional Readiness of Nursing Students were used.

2.6.1. Identifying Information Form

The form prepared by the researchers consists of 9 questions inquiring about sociodemographic characteristics of nursing students.

2.6.2. Self-Efficacy in Clinical Performance Scale (SECP)

The scale was developed by Cheraghi et al (27). It aims to determine nursing students' perception of their self-efficacy regarding their clinical performance. The Likert type scale consists of 37 items. The scale has 11 responses, which are 0%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, and 100%. 0% response indicates "I am not sure", while 100% response represents "I am totally sure". The scale has four subscales,

which are "data collection" (the first 12 items), "diagnosis and planning" (items 13-21), "implementation" (items 22-31), and "evaluation" (items 32-37). The scale was adapted to Turkish by Pozam and Zaybak (28), and it was reported that the Cronbach's alpha coefficient of the Turkish form of the scale was 0.98 for the total scale, and it varied between 0.95-0.97 for the subscales. In the present study, the Cronbach's alpha coefficient of the scale was found to be 0.95.

2.6.3. Questionnaire Form for Professional Readiness of Nursing Students

The questionnaire form prepared in light of the relevant literature consists of 13 questions on students' professional readiness (29). Students respond to each questionnaire items from 1 to 10. As the scores obtained from the form increase, the students' professional readiness also increases. The form is evaluated through the mean scores of responses given to each item.

2.7. Data Collection Method

The data were collected online. The data collection tools were converted into online format by using Google Forms. Google Forms was sent to the class representative via WhatsApp. The class representative was asked to share the Google Forms in the class WhatsApp group. Volunteer students filled out data collection forms.

2.8. Data Analysis

In the statistical analysis of the data, SPSS (Statistical Package for the Social Sciences) software was used. Kolmogorov-Smirnov test was used to test whether the data set exhibits a normal distribution and it was seen that the data set exhibited a normal distribution. In the analysis of the data, in addition to descriptive statistics such as percentage, frequency, mean, and standard deviation, t test was used in intergroup comparisons of quantitative data, and variance analysis was employed in multigroup comparisons. The correlation between the two scales was evaluated with Pearson correlation analysis. All results were evaluated at 95% confidence interval and p< .05 significance level.

3. RESULTS

It was found that the mean age of the participating nursing students was 22.13 years (SD=1.25), and that 75.7% were female. The majority of the participants (93.6%) were graduates of high schools other than health vocational high school. Almost half of the students (44.5) had a CGPA of "3 and above". The rate of those who willingly chose the nursing department was 32.4%. The rate of those who were satisfied with studying nursing was 31.8%. The rate of those who found the online education given in applied courses "partially effective" was 31.8%. It was also determined that 34.1% of the students felt themselves belonging to nursing, and that

more than half of the students (52.6%) were worried about the clinical practice they would start (Table 1).

Table 1. Socio-demographic data of the participants (N=173)

Results	Mean	SD
Age	22.13	1.25
	n	%
Gender		
Female	131	75.7
Male	42	24.3
High school you graduated from		
Health vocational high school	11	6.4
Other	162	93.6
*CGPA		
1.99 and below	2	1.2
2.00-2.99	94	54.3
3 and above	77	44.5
Did you choose willingly to the nursing department?		
Yes	56	32.4
Partially	79	45.7
No	38	22
Are you satisfied with studying nursing?		
Yes	55	31.8
Partially	82	47.4
No	36	20.8
Do you think the online education provided in app	olied cou	ırses is
efficient? Yes	24	13.9
	55	31.8
Partially No	94	
Do you feel that you belong to nursing?	94	54.3
Yes	59	34.1
	67	38.7
Partially No	47	27.2
**What emotions do you feel when you think that y clinical practice?	ou wiii	go into
Excited	69	39.9
Delighted	57	32.9
Frightened	17	9.8
Worried	91	52.6

SD: Standard Deviation; * Cumulative Grade Point Average; ** More than one answer has been given.

It was determined that SECP mean score of the participating nursing students was 69.31 (SD=47.34). The mean scores obtained from the subscales were as follows: 87.08 (SD=24.18) for "data collection", 63.87 (SD=13.43) for "diagnosis and planning", 78.66 (SD=16.60) for "implementation", and 47.66 (SD=9.81) for "evaluation". Regarding the students' professional readiness (min=0; max=10), the mean score of those who felt ready to start the profession was 5.31 (SD=2.67), and while the lowest mean score was obtained from the statement "I feel ready for advanced clinical practices" with 4.21 (SD=2.82), the highest mean score was obtained from the statement "I feel ready to perform basic nursing skills" with 7.10 (SD=2.41) (Table 2).

Table 2. Findings related to the participants SECP mean score and professional readiness (N=173)

	Min	Max	Mean	SD
SECP	69	359	69.31	47.34
Data collection subscale	0	120	87.08	24.18
Diagnosis and planning subscale	0	90	63.87	13.43
Implementation subscale	0	100	78.66	16.60
Evaluation subscale	0	60	47.66	9.81
Statements about professional readiness				
Feeling ready to start the profession	0	10	5.31	2.67
Feeling ready to work with the best performance	0	10	5.77	2.78
Feeling ready for professional psychological difficulties (death, loss, anger, mourning, etc.)	0	10	5.29	2.88
Feeling ready to work in the profession with ethical sensitivity	0	10	7.66	2.19
Feeling ready to adapt to the team in the clinic	0	10	7.27	2.37
Feeling ready for patient care applications	0	10	6.03	2.59
Feeling ready to provide education to patients/patient relatives	0	10	6.33	2.57
Feeling ready to perform emergency intervention for the patient	0	10	4.61	2.85
Feeling ready to apply invasive procedures	0	10	6.14	2.65
Feeling ready to perform physical examination of the patient	0	10	6.21	2.72
Feeling ready to apply basic nursing	0	10	7.10	2.41
skills (hand washing, drug application, IV				
catheter application, etc.)				• • • •
Feeling ready for advanced clinical practices (tracheostomy, stoma, wound, burn, chest tube, decubitus care, etc.)	0	10	4.21	2.82
Feeling ready to provide the patient with psychological support	0	10	6.56	2.57

SECP: Self-Efficacy in Clinical Performance Scale; Min: Minimum; Max: Maximum; SD: Standard Deviation

It was determined that there was not a significant difference between the students' SECP mean scores according to their gender (t=0.47; p= .63), the high school they finished (t=1.41; p= .18), and their CGPA values (F=1.42; p= .24) (Table 3).

It was found that the students' SECP mean scores significantly differed according to choosing nursing department willingly (F=3.51; p= .03), being satisfied with studying nursing (F=3.98; p= .02), and feeling themselves belonging to nursing profession (F=5.71; p= .00), and that their mean scores did not differ significantly according to their opinions that online education provided in applied courses was efficient (F=1.31; p= .27) (Table 3).

It was determined that there was no significant relationship between the SECP score and the feeling ready for professional psychological difficulties (r=0.144; p=.05).

It was determined the relationship between students' SECP score average and their professional readiness. There was no significant relationship between the SECP score and the feeling ready for professional psychological difficulties (r=0.14; p= .05). The least significant relationship was found between the SECP score and the feeling ready to start the profession (r=0.31; p=.00). The highest significant relationship was found between the SECP score and the feeling ready to provide the patient with psychological support (r=0.53; p= .00) (Table 4).

Table 3. Comparison of students' SECP score averages according to some variables (N=173)

		Mean (SD)	Statistical test	р	Post-Hoc
Gender	Female	277.42 (49.53)	0.47*	.63	
	Male	273.86 (40.16)			
High school you graduated from	Health vocational high school	291.55 (35.48)	1.41*	.18	
	Other	275.54 (47.95)			
CGPA	1.99 and below	271.00 (2.82)	1.42**	.24	
	2.00-2.99	271.13 (53.31)			
	3 and above	283.32 (38.87)			
Did you choose willingly to the nursing	Yes (a)	284.38 (44.84)	3.51**	.03	a>c
department?	Partially (b)	279.30 (47.14)			
	No (c)	259.32 (48.26)			
Are you satisfied with studying nursing?	Yes (a)	290.07 (46.87)	3.98**	.02	a>c
	Partially (b)	273.33 (43.97)			
	No (c)	263.25 (51.53)			
Do you think the online education provided in	Yes (a)	282.00 (40.11)	1.31**	.27	
applied courses is efficient?	Partially	283.27 (43.26)			
	No (c)	271.23 (50.96)			
Do you feel that you belong to nursing?	Yes (a)	290.93 (46.05)	5.71**	.00	a>c
	Partially (b)	275.07 (38.59)			
	No (c)	260.62 (55.14)			

SECP: Self-Efficacy in Clinical Performance Scale; SD: Standard Deviation; CGPA: Cumulative Grade Point Average; *Independent Samples t Test; ** One-Way ANOVA; p< .05

Table 4. The relationship between students' SECP score average and their professional readiness

	r	р
SECP score average: 69.31±47.34		
Feeling ready to start the profession	0.31	.00
Feeling ready to work with the best performance	0.36	.00
Feeling ready for professional psychological difficulties (death, loss, anger, mourning, etc.)	0.14	.05
Feeling ready to work in the profession with ethical sensitivity	0.47	.00
Feeling ready to adapt to the team in the clinic	0.40	.00
Feeling ready for patient care applications	0.42	.00
Feeling ready to provide education to patients/patient relatives	0.42	.00
Feeling ready to perform emergency intervention for the patient	0.34	.00
Feeling ready to apply invasive procedures	0.43	.00
Feeling ready to perform physical examination of the patient	0.41	.00
Feeling ready to apply basic nursing skills (hand washing, drug application, IV catheter application, etc.)	0.37	.00
Feeling ready for advanced clinical practices (tracheostomy, stoma, wound, burn, chest tube, decubitus care, etc.)	0.33	.00
Feeling ready to provide the patient with psychological support	0.53	.00

SECP: Self-Efficacy in Clinical Performance Scale; p<.01

4. DISCUSSION

The present study was conducted in order to determine 4th year nursing students' self-efficacy levels regarding their clinical performances and their professional readiness. In addition, statistical analyses were performed on the variables which were predicted to affect their clinical performance self-efficacy and professional readiness.

The participating students' SECP total scale and subscale mean scores were found to be high. This finding shows that the students perceived their self-efficacy regarding data collection, diagnosing and planning, implementation, and evaluation steps of nursing care at a high level. The students received the lowest score on SECP from the subscale of evaluation and the highest score from the subscale of data collection. When the literature was reviewed in this regard, it was determined that Pozam and Zaybak (30) stated that the part that nursing students experienced the highest difficulty in was the diagnosing-planning step while planning patient care, while the part they had the least difficulty was the implementation step. Yılmaz et al (31) found that the steps in which the students experienced the most problems were data collection and diagnosing steps, and the step in which they had the least problems was planning step. In the study conducted by Uysal et al (32), it was reported that determining nursing diagnosis was the part in which nursing students had the most difficulty, and that the students could not perform the data collection, diagnosing, planning, and evaluation steps at the desired level. Compared to the literature findings, according to the finding obtained in the present study, it is thought that conducting the present study with 4th year students led to the finding that they had higher self-efficacy regarding nursing process.

The findings obtained in the study show that gender did not have significant relationship with self-efficacy in clinical performance. In a similar study conducted on self-efficacy levels of intern nurses in the pandemic period, the same result was obtained (23). Similarly, in the study of Pozam and Zaybak (30), it was found that SECP scores of the students did not differ significantly according to gender. In the present study, no significant difference was determined between the high school type the students graduated from and their self-efficacy in clinical performance. However, in the study conducted by Arslan (33), it was reported that the students who had graduated from health vocational high schools had the highest self-efficacy levels. It is thought that the reason for obtaining a result different from the literature in this regard can be that the study was conducted with 4th year students, and that the education provided at the institution of the study for four years may have closed the gap resulting from the students' graduating from different high school types.

In the present study, no significant difference was observed between 4th year nursing students' CGPA values and their SCEP mean scores when they were compared. On the other hand, in their study, Pozam and Zaybak (30) found a positive and significant relationship at a low level between CGPA values and SECP mean score of nursing students. Similarly, Göger and Çevirme (34) reported that there was a relationship between self-efficacy and academic achievement scores of nursing students, and that a high level of self-efficacy would positively affect the students' academic achievement. According to the literature, a positive relationship is expected between students' academic score averages and clinical performance self-efficacy.

In the present study, it was determined that SECP mean score of the students showed a significant difference according to choosing nursing department willingly, being satisfied with studying nursing, and feeling themselves belonging to nursing profession. When the literature is reviewed, it is seen that students who choose nursing department willingly and love the profession and who perceive their self-efficacy and academic achievement as high have lower levels of stress/

anxiety related to clinical practice, and thus their clinical experiences are positively affected (35, 36, 37).

It was seen in the present study that professional readiness of the participating students was at a moderate level. In a study conducted in the COVID-19 pandemic period on professional readiness status of intern nurses, their perceived professional readiness was found to be at a moderate level (35). When the nursing students' opinions on their professional readiness were examined, it was seen that those who felt ready to work in the profession with ethical sensitivity had the highest mean score. Although Borhani et al (38) stated that clinical work experience and being directly by the side of patients resulted in a higher level of ethical sensitivity, it is seen that applied courses run with case studies in the pandemic period supported increasing the students' ethical sensitivity. In addition, the students gave the lowest score to the statement "I feel ready for advanced clinical practices". It is an expected result that the students, who could not find enough opportunities to do applications, did not feel themselves ready for advanced clinical practices.

When the participating students' opinions on SECP mean score and professional readiness were examined, it was seen that as the students' SECP mean score increased, they felt more ready to start the profession. Similarly, a significant relation was found between SECP mean score and feeling ready for starting the profession, professional psychological difficulties, working with their best performance, working in the profession with ethical sensitivity, adaptation to the team in the clinic, patient care applications, providing education to patients/patient relatives, performing emergency intervention for the patient, applying invasive procedures, performing physical examination of the patient, applying basic nursing skills, advanced clinical practices, and providing the patient with psychological support. In the study conducted by Özkan (24), a positive, weak, and significant relationship was seen between students' general self-efficacy scale scores and their perceived professional readiness. In the study he conducted, Eraydın (29) found that self-efficacy scores of the students who stated that they were not ready for professional psychological difficulties were low. According to İzci et al (39), health professionals are among individuals who work under the most challenging conditions in the pandemics that affect the whole world and lead to deaths. Especially when it is considered that the students who continued their education in the COVID-19 pandemic period can also assume responsibilities and duties in various pandemic processes after they graduate, it can be stated that their professional readiness becomes more prominent (35). Considering all these findings, it is believed that strategies that will increase nursing students' clinical performance self-efficacy levels should be developed in order to increase their professional readiness.

4.1. Study Limitations

The study results are limited to the 4th year nursing students of the university where the study was conducted.

5. CONCLUSION

As a result of the study, it was determined that clinical performance self-efficacy levels of the students participating in the study were high, and their professional readiness levels were moderate. It was also determined that as the students' clinical performance self-efficacy levels increased, their professional readiness levels increased as well.

In line with these results, it can be stated that it is important for 4th year nursing students to graduate with high levels of clinical performance self-efficacy and professional readiness, and that increasing the students' clinical performance self-efficacy levels is effective in terms of increasing their professional readiness. Hence, students' professional readiness levels can be increased by increasing simulations, laboratory studies. More internship opportunities can be provided to students in clinical environments. Students' clinical skills and professional knowledge can be improved through mentoring programs. With stress management education, students' ability to cope with the difficulties they may encounter during their professional readiness can be improved. By giving students regular and constructive feedback about their performance, their self-efficacy and professional readiness can be increased. In addition, it can also be recommended that institutions should appropriately structure the orientation process for the nurses starting the profession, and that in-service training activities in the postgraduation period should be repeated at regular intervals.

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Author Contributions:

Research idea: DÇ, SŞYÇ, EK, FNS, ZB, GKO
Design of the study: DÇ, SŞYÇ, EK, FNS, ZB, GKO
Acquisition of data for the study: DÇ, SŞYÇ, EK, FNS, ZB
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REFERENCES

- [1] Huang C, Wang Y, Li X, Ren L, Zhao J, Hu Y, Zhang L, Fan G, Xu J, Gu X, Cheng Z, Yu T, Xia J, Wei Y, Wu W, Xie X, Yin W, Li H, Liu M, Xiao Y, Gao H, Guo Li, Xie J, Wang G, Jiang R, Gao Z, Jin Q, Wang J, Cao B. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. Lancet. 2020;395(10223):497-506. https://doi.org/10.1016/S0140-6736(20)30183-5
- [2] World Health Organizations (WHO). Coronavirus disease (COVID-19) pandemic. Accessed [22 June 2022]. https://www.who.int/europe/emergencies/situations/covid-19

- [3] Üstün Ç, Özçiftçi S. COVID-19 pandemisinin sosyal yaşam ve etik düzlem üzerine etkileri: Bir değerlendirme çalışması. Anadolu Klin. 2020;25(1):142-153. https://doi.org/10.21673/ anadoluklin.721864 (Turkish)
- [4] Yüksek Öğretim Kurumu (YÖK) (2020). Koronavirüs (Covid-19) bilgilendirme notu. Published [13 March 2020]. Accessed [25 July 2022]. https://www.yok.gov.tr/Sayfalar/Haberler/2020/coronavirus_bilgilendirme_1.aspx (Turkish)
- [5] Beaird G, Geist M, Levis EJ. Design thinking: Opportunities for application in nursing education. Nurse Educ Today. 2018;64:115-118.https://doi.org/10.1016/j.nedt.2018.02.007
- [6] Kırşan M, Korhan EA. Hemşirelik öğrencilerinin klinik öğretimde yaşadıkları etik sorun deneyimleri. Turkiye Klinikleri J Med Ethics. 2017;25(1):20-27. https://doi.org/10.5336/ mdethic.2016-52994 (Turkish)
- [7] Aydoğan S. Hemşirelik öğrencilerinin klinik beceri kazanmaları sırasında karşılaştıkları etik problemler. Turk J Bioeth. 2016;3(2):120-123. (Turkish)
- [8] Ateş N, Güçlüel Y, Pirecioğlu M, Güngörmüş E, Yıldırım A. İntörn klinik uygulama programına yönelik intörn hemşire, rehber hemşire ve klinik sorumlu hemşiresinin görüş ve önerileri. HEMARGE. 2017;19(3):1-2. (Turkish)
- [9] Gaberson KB, Oerman MH, Shellenbarger T. Clinical Teaching Strategies in Nursing. 5th Edition. New York, NY: Springer Publishing; 2016.
- [10] Şimşek M, Çonoğlu G, Orgun F. Hemşirelik eğitiminde kazandırılması planlanan temel hemşirelik becerilerinin değerlendirilmesi. Ege Üniversitesi Hemşirelik Fakültesi Dergisi. 2018;34(1),1-25. (Turkish)
- [11] Henderson A, Harrison P, Rowe J, Edwards S, Barnes M, Henderson S, Henderson A. Students take the lead for learning in practice: A process for building self-efficacy into undergraduate nursing education. Nurse Educ Pract. 2018;31:14-19. https://doi.org/10.1016/j.nepr.2018.04.003
- [12] Ulfvarson J, Oxelmark L. Developing an assessment tool for intended learning outcomes in clinical practice for nursing students. Nurse Educ Today. 2012;32(6):703-708. https://doi. org/10.1016/j.nedt.2011.09.010
- [13] Arseven A. Öz yeterlilik: Bir kavram analizi. Turkish Studies. 2016;11(19):63-80. https://doi.org/10.7827/TurkishStudies (Turkish)
- [14] Bandura A. Self-efficacy. The Corsini Encyclopedia of Psychology. 2010;1-3. https://doi.org/10.1002/978.047.0479216. corpsy0836
- [15] Sezgin EE, Düşükcan M. Hemşirelerin öz yeterlilik inanç düzeylerinin performansları üzerindeki etkisi: Elazığ ili örneği. MJSS. 2020;9(3):1689-1702. https://doi.org/10.33206/ mjss.536372 (Turkish)
- [16] Dikmen Y, Denat Y, Başaran H, Filiz NY. Hemşirelik öğrencilerinin öz etkililik-yeterlik düzeylerinin incelenmesi. Çağdaş Tıp Dergisi. 2016;6(3):206-213. https://doi.org/10.16899/ctd.93945 (Turkish)
- [17] Brown RA, Crookes PA. How do expert clinicians assess student nurses competency during workplace experience? A modified nominal group approach to devising a guidance package. Collegian. 2017;24(3):219-225. https://doi.org/10.1016/j. colegn.2016.01.004
- [18] Fan JY, Wang YH, Chao LF, Jane SW, Hsu LL. Performance evaluation of nursing students following competency-based education. Nurse Educ Today. 2015;35(1):97 103. https://doi.org/10.1016/j.nedt.2014.07.002

- [19] Wolff AC, Pesut B, Regan S. New graduate nurse practice readiness: Perspectives on the context shaping our understanding and expectations. Nurse Educ Today. 2010;30(2):187-191. https://doi.org/10.1016/j. nedt.2009.07.011
- [20] Sümen A, Adıbelli D. Nursing students' readiness and coping strategies for the Covid-19 pandemic in Turkey. J Prof Nurs. 2021;37(3):553-561. https://doi.org/10.1016/j. profnurs.2021.03.005
- [21] Mirza N, Manankil-Rankin L, Prentice D, Hagerman LA, Draenos C. Practice readiness of new nursing graduates: A concept analysis. Nurse Educ Pract. 2019;37:68-74. https:// doi.org/10.1016/j.nepr.2019.04.009
- [22] Jarvinen T, Eklöf N, Salminen L. Factors related to nursing students' readiness to enter working life-a scoping literature review. Nurse Educ Pract. 2018;29:191-199. https://doi.org/10.1016/j.nepr.2018.01.010
- [23] Özer M, Çelik H, Bektaş O. COVID-19 salgınında uzaktan eğitim alan intörn hemşirelik öğrencilerinin mesleki öz yeterlik düzeylerinin incelenmesi. Yaşam Boyu Hemşirelik Dergisi. 2022;3(2):102-127. https://doi.org/10.29228/llnursing.63507 (Turkish)
- [24] Özkan ÜF. Covid-19 salgını sürecinde intörn hemşirelerde genel özyeterlilik ve mesleki hazıroluşluk durumu. Sosyal Araştırmalar ve Davranış Bilimleri Dergisi. 2022;8(16):79-92. https://doi.org/10.52096/jsrbs.8.16.5 (Turkish)
- [25] Uysal N, Aydın B, Ekici E. Hemşirelik öğrencilerinin Covid-19 pandemi sürecinde uzaktan eğitime yönelik tutumları. Yükseköğretim ve Bilim Dergisi. 2022;12(1):228-233. https://doi.org/10.5961/higheredusci.1027006 (Turkish)
- [26] Akkuş Y, Bostancı Daştan N. COVID-19 pandemi süreci uzaktan eğitim döneminde hemşirelik öğrencilerinde anksiyete ve klinik performans öz-yeterlilik algısı ilişkisi. SABD. 2024;14(1):106-114. https://doi.org/10.33631/sabd.1159819 (Turkish)
- [27] Cheraghi F, Hassani P, Yaghmaesi F, Alavi-Majed H. Developing a valid and reliable self-efficacy in clinical performance scale. Int Nurs Rev. 2009;56:214-221. https://doi.org/10.1111/ j.1466-7657.2008.00685.x
- [28] Pozam M, Zaybak A. Klinik performansta özyeterlik ölçeğinin Türkçe'ye uyarlanması ve psikometrik özelliklerinin incelenmesi. Ege Üniversitesi Hemşirelik Fakültesi Dergisi. 2016;32(3):100 117 (Turkish).
- [29] Eraydın Ş. İntörn programının hemşirelik öğrencilerinin özyeterlilik ve mesleki hazıroluşluk düzeyine etkisi. Haliç Üniv Sağ Bil Der. 2021;4(2):145-157. https://doi.org/10.48124/husagbilder.873051 (Turkish)
- [30] Pozam M, Zaybak A. Hemşirelik öğrencilerinin klinik performanslarına ilişkin öz-yeterliklerinin incelenmesi. DEUHFED. 2022;15(1):22-29. https://doi.org/10.46483/deuhfed.928683 (Turkish)
- [31] Yılmaz FT, Sabancıoğulları S, Aldemir K. The opinions of nursing students regarding the nursing process and their levels of proficiency in Turkey. J Caring Sci. 2015;4(4):5-275. https://doi.org/10.15171/jcs.2015.027
- [32] Uysal N, Arslan GG, Yılmaz İ, Alp FY. Hemşirelik ikinci sınıf öğrencilerinin bakım planlarındaki hemşirelik tanıları ve verilerin analizi. Celal Bayar Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi. 2016;3(1):139-143. (Turkish)
- [33] Arslan A. Sağlık hizmetleri meslek yüksekokulu öğrencilerinin sosyal kaygıları ve genel öz-yeterlik algılarının çeşitli değişkenler

- açısından incelenmesi. IEJES. 2019;3(6):78-96. https://doi.org/10.31458/iejes.524860 (Turkish)
- [34] Göger S, Çevirme A. The effect of nursing students' self-efficacy levels on education stress. JERN. 2019;16(4):306-313. https://doi.org/10.5222/HEAD.2019.306
- [35] Açıksöz S, Uzun Ş, Arslan F. Hemşirelik öğrencilerinde öz yeterlilik algısı ile klinik uygulamaya ilişkin kaygı ve stres durumu arasındaki ilişkinin incelenmesi. Gülhane Tıp Derg. 2016;58(1):129-135.https://doi.org/10.5455/gulhane.169643 (Turkish)
- [36] Arabacı LB, Korhan EA, Tokem Y, Torun R. Hemşirelik birinci sınıf öğrencilerinin ilk klinik deneyim öncesi-sırası ve sonrası anksiyete ve stres düzeyleri ve etkileyen faktörler. Hacettepe

- Üniversitesi Hemşirelik Fakültesi Dergisi. 2015;2(1):1-16. (Turkish)
- [37] Taşdelen S, Zaybak A. Hemşirelik öğrencilerinin ilk klinik deneyim sırasındaki stres düzeylerinin incelenmesi. Florence Nightingale J Nurs. 2013;21(2):101-106. (Turkish)
- [38] Borhani F, Abbaszadeh A, Mohsenpour M. Nursing students' understanding of factors influencing ethical sensitivity: A qualitative study. Iran J Nurs Midwifery Res. 2013;18(4):310-315.
- [39] İzci F, Kulacaoğlu F, Beştepe EE. Covid-19 pandemisinde toplum ve sağlık çalışanlarının ruh sağlığı ve koruyucu önlemler. Psikiyatride Güncel Yaklaşımlar. 2021;13(1):126-134. https://doi.org/10.18863/pgy.744984 (Turkish)