

Self-efficacy, Professional Values and Related Factors: A Group of Senior Nursing Students

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ABSTRACT:

Purpose: The present study was conducted to determine senior nursing students' self-efficacy and professional values levels and related factors.

Material and Methods: In this descriptive type study, the data were collected using the Descriptive Information Form, Self-Efficacy Scale and Professional Values Scale.

Results: The Self-Efficacy Scale and Professional Values Scale mean scores of the students were 85.73±10.24 and 101.84±15.47 respectively. The comparison of the mean scores obtained from the Self-Efficacy Scale in terms of the variables such as sex, choosing nursing willingly, and their participation in scientific and social activities organized at the university demonstrated that there were statistically significant differences between the participants' mean scores ($p<.05$). There was no statistically significant difference between their mean scores obtained from the Professional Values Scale in terms of any of their descriptive characteristics ($p>.05$).

Conclusion: It was concluded that nursing students acquired self-efficacy and professional values in nursing education.

Keywords: Nursing Students, Self-Efficacy, Professional Values

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INTRODUCTION

Self-efficacy is a concept that defines how individuals determine their judgments, behaviors, thoughts and emotional reactions regarding their own abilities (Bandura, 1982). Self-efficacy in nursing is the individual's belief that he or she has the necessary knowledge, skills and abilities to provide safe and quality patient care (Grimm, 2018). Nursing education includes both the theoretical and practical training. In this training, new skills are learned. These skills are then put into practice. Therefore, students' having strong self-efficacy plays an important role in their being more confident and successful (Yua et al., 2021; Zhang et al., 2015). It is important for them to have self-efficacy skills and make decisions in line with professional values in order to produce

solutions when they are faced with complex and difficult cases during clinical practices, and in case they have dilemmas when they have to make decisions on ethical issues (Çöplü and Kartın, 2019; Dönmez and Özsoy, 2016; Kavradım et al., 2019). Health personnel's having strong self-efficacy and professional values ensures good healthcare outcomes (Dellafiore et al., 2021). Today, due to the complex structure of health systems and the increasing demand for health-related issues, nurses are expected to have high levels of self-efficacy and professional values (Çöplü and Kartın, 2019; Dellafiore et al., 2021). Weis and Schank (2009) define professional values as standards accepted by professional groups and individuals, and used to evaluate the integrity of an individual or

organization. They also state that professional values are necessary to reinforce the professional identity and performance of individuals (Weis and Schank, 2009). It is stated that professional values in nursing include important nursing principles such as human dignity, honesty, self-sacrifice and justice, which serve as a framework for standards, professional practices and evaluations (Schmidt and McArthur, 2018). Therefore, professional values enable the creation of care action, provision of qualified care to meet the health needs of individuals, and achievement of better care outcomes (Can and Acaroğlu, 2015; Dellafiore et al., 2021). If ethical dilemmas arise while an individual is given care, one should act with professional values beyond personal values (Göriş et al., 2014). The development of professional values begins during school years and continues after graduation (Can and Acaroğlu, 2015; Çöplü and Kartın, 2019; Kantek et al., 2017). Especially, senior nursing students should gain self-efficacy skills and professional values during their education and be ready for professional nursing (Jun and Lee, 2016). Therefore, determination of nursing students' self-efficacy and professional values in the education processes, and factors influencing these skills is of great importance.

MATERIAL and METHODS

Purpose and Type of the Study

The data of this descriptive type study were collected in the spring semester of the 2020-2021 academic year. Because the study was conducted during the Covid-19 pandemic, education was given through online or face-to-face training. Therefore, the study was carried out by sharing the online form over social media accounts.

Our research questions are as the follows:

What is the self-efficacy status of senior nursing students?

What is the professional values status of senior nursing students?

What are the factors affecting self-efficacy and professional values in senior nursing students?

Sampling and Participant

The study population consists of fourth-year nursing students chosen by the snowball sampling method.

After the study was completed, G Power 3.19.2 was used to calculate the appropriate sample size for a study with sufficient power. Post hoc and the effect size were determined with the t-test based on the mean scores the participants in the sample obtained from the scales, and the standard deviation. In line with the data obtained at the end of the study, it was determined that the power of the study was 99%, α was 0.05, and the effect size was 0.52, based on the mean score for the Self-Efficacy Scale. The study sample consisted of 138 nursing students who volunteered to participate in the study and met the inclusion criteria. Inclusion criteria were as follows: (a) being a 4th year student in the nursing department, (b) willing to participate in the study, (c) being able to read in Turkish, (d) being users of Facebook, WhatsApp, Instagram; and (e) completing the questionnaire. Exclusion criteria were as follows: (a) being a 1st, 2nd or 3rd year student in the nursing department (b) not answering the survey questions appropriately.

Data Collection Tools

The data were collected using the Descriptive Information Form, Self-Efficacy Scale and the Professional Values Scale.

Introductory Information Form: The items in the form question the participating nursing students' descriptive characteristics such as age, sex, economic status, place of residence, etc.

Self-Efficacy Scale: The scale developed by Sherer et al. (1982) and adapted into Turkish by Gözüm and Aksayan (1999) is used to assess students' perceptions of self-efficacy (Gözüm and Aksayan, 1999; Sherer et al., 1982). The scale consists of 23 items whose responses are rated on a five-point Likert type scale ranging from 1 to 5 (1- 'Does not describe me at all', 2- 'Describes me a little', 3- 'I am undecided', 4- 'Describes me well', 5- 'Describes me very well'). Items 2, 4, 5, 6, 7, 10, 11, 12, 14, 16, 17, 18, 20, 22 are reverse scored. The minimum and maximum possible scores to be obtained from the scale are 23 and 115 respectively. The scale has the following four sub-dimensions: starting the behavior (items 2, 11, 12, 14, 17, 18, 20, 22), maintaining the behavior (items 4, 5, 6, 7, 10, 16, 19), completing the

behavior (items 3, 8, 9, 15, 23) and dealing with obstacles (items 1, 13, 21). The higher the score obtained from the scale is the higher the level of general self-efficacy perception is. The Cronbach's Alpha internal consistency coefficient of the scale was 0.89 in Gözüm and Aksayan's (1999) study and 0.71 in the present study.

Professional Values Scale: The scale was developed by Weis and Schank (2009) (Weis and Schank, 2009). Acaroğlu (2014) performed the validity and reliability study of the Turkish version of the scale (Acaroğlu, 2014). The scale consists of 26 items whose responses are rated on a five-point Likert type scale ranging from 1 to 5 (1-not important, 2-somewhat important, 3-important, 4-very important, 5-most important). The scale consists of three dimensions: caring (items 10, 12 - 25), professionalism (items 4 - 9, 11, 26) and trust (items 1, 2, 3). The lowest and highest possible scores to be obtained from the scale are 26 and 130 respectively. The higher the mean score obtained from the scale is the higher the level of professional values is. The Cronbach's alpha coefficient of the scale was 0.92 in Weis and Schank's study, 0.96 in Acaroğlu's study (2014), and 0.75 in the present study.

Statistical Analysis

The SPSS package program was used to analyze the data. Numbers, percentages, arithmetic mean, and standard deviation were used in the analysis of the descriptive data. Kolmogorov Smirnov test was used to find out whether the variables were distributed normally. The independent samples t test was used to compare the normally distributed data in paired groups, and the Mann Whitney U test was used to compare the data without normal distribution in paired groups. One Way ANOVA test was used to compare the normally distributed data in three groups, and Kruskal Wallis test was used to compare the data without normal distribution in three groups. P-values less than 0.05 were considered statistically significant.

Ethical Approval

In order to conduct the study, ethics committee approval (March 17, 2021/20) was obtained from

University Ethics Committee. The students to participate in the study were asked to read the informed consent section of the online questionnaire and to give their consent indicating that they volunteered to participate in the study.

RESULTS

Of the nursing students who participated in the study, 65.9% were between the ages of 19 and 22, 73.2% were women, 30.4% were from the Eastern Anatolia region of Turkey, 49.3% stated that the place where they lived the longest was a district, 66.7% were students at universities in the Central Anatolia region of Turkey, 67.4% had face-to-face education, 74.6% had income lower than their expenses, 48.6% perceived their school success as good, 67.4% graduated from Anatolian High School (public high schools in Turkey, where some lessons are taught in English, German or French), and 63.8% and 63% participated in the scientific and social activities organized at the university respectively (Table 1). Of the nursing students, 81.2% chose nursing willingly, and 71.0% placed the nursing profession in the first place in the preference list at nationwide University Entrance Exam (In Turkey, students should take a nationwide University Entrance Exam to enter a university. Those who pass the exam make a list of schools in the order indicating their preferences), 55.1% stated that they preferred nursing because it was the profession they wanted to be in, 92.0% were satisfied with their nursing education, 52.9% thought that they were ready to do the nursing profession, 36.2% wanted to work in surgical clinics, and 87% were not a member of any professional association (Table 1).

The mean scores the students obtained from the Self-Efficacy Scale and Professional Values Scale were 85.73 ± 10.24 and 101.84 ± 15.47 respectively (Table 2). The comparison of the mean scores obtained from the Self-Efficacy Scale in terms of the variables such as sex, choosing nursing willingly, and their participation in scientific and social activities organized at the university demonstrated that there were statistically significant differences between the participants' mean scores ($p < .05$) (Table 3).

The female students, those who chose the nursing

department willingly, and those who participated in scientific and social activities organized at the university obtained higher scores from the Self-Efficacy Scale (Table 3). The comparison of the mean scores obtained from the Self-Efficacy Scale in terms of the variables such as age, economic status, longest place of residence, region of study and residence, school success, type of high school graduated, type of education, the reason for choosing the nursing department, the place of nursing in the preference list, satisfaction with nursing education received,

feeling ready for professional nursing, the field intended to work in after graduation, and membership of a professional association demonstrated that there were not statistically significant differences between the participants' mean scores ($p > .05$) (Table 3). There was no statistically significant difference between the students' mean scores they obtained from the Professional Values Scale in terms of their descriptive characteristics ($p > .05$) (Table 3).

Table 1. Socio-demographic characteristics of nursing students (n=138)

Characteristics	Number	Percent
Age		
19-22	91	65.9
23-26	47	34.1
Gender		
Female	101	73.2
Male	37	26.8
Living place		
Province	42	30.4
District	68	49.3
Village	28	20.3
Region of residence		
Central Anatolia	21	15.2
Marmara	16	11.6
Black Sea	8	5.8
Aegean	20	14.5
Eastern Anatolia	42	30.4
Southeastern Anatolia	14	10.1
Mediterranean	17	12.3
Region of study		
Central Anatolia	92	66.7
Marmara	15	10.9
Eastern Anatolia	11	8.0
Black Sea	11	8.0
Southeastern Anatolia	9	6.5
Education type during the pandemic		
Online education	45	32.6
Face-to-face education	93	67.4
Income level		
Income is lower than expense	103	74.6
Income equals to expense	24	17.4
Income is more than expense	11	8.0
School success		
Very good	15	10.9
Good	67	48.6
Moderate	53	38.4
Bad	3	2.2
High school type		
Science high school	24	17.4
Anatolian high school	93	67.4
Normal high school	21	15.2
Participation in the scientific activities at the university		
Participated	88	63.8
Not participated	50	36.2
Participation in the social activities at the university		
Participated	87	63.0
Not participated	51	37.0
Preferring nursing willingly		
Yes	112	81.2
No	26	18.8

Table 1. (Continued) Socio-demographic characteristics of nursing students (n=138)

Characteristics	Number	Percent
Reason for choosing nursing department		
Easy entry job	44	31.9
Desired profession	76	55.1
According to exam score	6	4.3
Family preference	12	8.7
Nursing department order in the preference list		
1. order	98	71.0
2-18. order	40	29.0
Satisfaction with nursing education		
Satisfied	127	92.0
Unsatisfied	11	8.0
Feeling ready to do the nursing profession		
Ready	73	52.9
Unready	65	47.1
Desired clinic to work after graduation		
Internal medicine clinic	33	23.9
Surgical clinic	50	36.2
Obstetrics clinic	16	11.6
Child health clinic	3	2.2
Psychiatry clinic	17	12.3
Public health	19	13.8
Member of professional associations		
Yes	18	13.0
No	120	87.0

Table 2. Self-efficacy scale and professional values scale mean scores (n=138)

Scale	Scale Minimum-Maximum Score	Received Minimum-Maximum Score	$\bar{x} \pm SD$
Self-efficacy	23-115	63-106	85.73±10.24
Professional values	26-130	37-128	101.84±15.47

SD: standard deviation, \bar{X} :mean

Table 3. Self-efficacy scale and professional values scale mean scores according to the students' socio-demographic characteristics (n=138)

Characteristics	Self-Efficacy $\bar{x} \pm SD$	z/p	Professional Values $\bar{x} \pm SD$	z/p
Age				
19-22	85.25±10.59	-0.726/0.468 ^a	103.75±14.33	-1.902/0.057 ^a
23-26	86.65±9.58		98.12±17.02	
Gender				
Female	87.07±10.35	2.605/0.010 ^b	103.0±14.63	-1.530/0.126 ^a
Male	82.05±9.09		98.64±17.39	
Income level				
Income is lower than expense	85.03±10.02	2.466/0.089 ^c	101.79±15.65	4.184/0.123 ^d
Income equals to expense	85.75±10.15		106.33±8.38	
Income is more than expense	92.18±11.17		92.45±21.79	
Living place				
Province	86.76±10.11	1.353/0.262 ^c	98.95±18.59	4.605/0.10 ^d
District	86.25±9.99		101.89±12.39	
Village	82.92±10.92		106.03±16.67	
Region of residence				
Central Anatolia	84.09±9.69	0.791/0.579 ^c	94.90±22.59	1.719/0.121 ^c
Marmara	87.50±10.91		106.12±6.05	
Black Sea	88.12±5.46		95.87±17.54	
Aegean	82.05±13.67		101.95±18.81	
Eastern Anatolia	86.92±7.96		101.23±12.84	
Southeastern Anatolia	86.85±14.55		104.78±15.73	
Mediterranean	85.41±8.30		108.11±7.03	

Table 3. (Continued) Self-efficacy scale and professional values scale mean scores according to the students' socio-demographic characteristics (n=138)

Characteristics	Self-Efficacy $\bar{X} \pm SD$	z/p	Professional Values $\bar{X} \pm SD$	z/p
Region of study				
Central Anatolia	86.25±10.17	0.390/0.815 ^c	101.56±15.94	1.330/0.262 ^c
Marmara	86.26±10.55		100.40±14.92	
Eastern Anatolia	82.81±9.53		99.54±12.06	
Black Sea	83.72±11.19		99.36±18.28	
Southeastern Anatolia	85.55±11.57		112.88±7.84	
School success				
Very good	87.13±9.17	0.189/0.903 ^c	105.66±9.99	2.722/0.436 ^d
Good	85.74±10.88		102.53±17.15	
Moderate	85.49±10.05		99.66±14.83	
Bad	82.66±6.02		105.66±2.08	
High school type				
Science high school	89.41±7.36	1.913/0.152 ^c	105.45±8.93	0.992/0.374 ^c
Anatolian high school	84.89±10.42		100.64±17.26	
Normal high school	85.23±11.70		103.0±12.41	
Education type during the pandemic				
Online education	84.46±11.61	-1.009/0.315 ^b	101.75±15.36	-0.032/0.975 ^a
Face-to-face education	86.34±9.52		101.88±15.61	
Preferring nursing willingly				
Yes	86.82±10.02	2.648/ 0.009 ^b	101.07±15.68	-0.986/0.324 ^a
No	81.03±10.06		105.15±14.37	
Reason for choosing nursing department				
Easy job entry	84.61±10.57	1.544/0.206 ^c	100.81±16.49	0.785/0.853 ^d
Desired profession	86.23±10.30		102.46±14.78	
According to exam score	79.66±7.20		102.83±21.46	
Family preference	89.66±8.92		101.16±14.57	
Nursing department order in the preference list				
1. order	86.06±10.50	0.589/0.557 ^b	102.65±14.46	-0.054/0.957 ^a
2-18. order	84.92±9.68		99.85±17.75	
Satisfaction with nursing education				
Satisfied	86.11±10.08	-1.306/0.192 ^a	101.62±16.07	-0.397/0.691 ^a
Unsatisfied	81.27±11.51		104.36±4.47	
Participation in the scientific activities at the university				
Participated	88.68±10.04	4.766/ 0.000 ^b	100.86±15.15	-1.099/0.272 ^a
Not participated	80.68±8.54		103.50±16.02	
Participation in the social activities at the university				
Participated	88.47±9.63	-4.348/ 0.000 ^a	102.22±14.60	-0.104/0.917 ^a
Not participated	80.90±9.55		101.16±17.03	
Feeling ready to do the nursing profession				
Ready	87.64±9.28	2.361/0.020 ^b	101.54±14.05	-0.521/0.602 ^a
Unready	83.58±10.91		102.16±17.04	
Desired clinic to work after graduation				
Internal medicine clinic	87.39±9.73	0.515/0.764 ^c	100.0±17.27	2.092/0.836 ^d
Surgical clinic	86.12±10.08		103.80±14.47	
Obstetrics clinic	84.81±9.46		101.75±19.67	
Child health clinic	88.33±8.73		102.66±5.03	
Psychiatry clinic	84.58±12.22		98.94±15.38	
Public health	83.21±11.07		102.31±12.73	
Member of professional associations				
Yes	83.83±11.46	-0.842/0.401 ^b	98.22±17.04	-0.775/0.438 ^a
No	86.01±10.07		102.38±15.23	

SD: standard deviation, \bar{X} :mean, a:Mann Whitney U test, b:Independent Samples t test, c:One Way ANOVA, d:Kruskal Wallis test

DISCUSSION

All knowledge, skills and behaviors related to nursing are acquired during the education process. Self-efficacy and professional values are among those gained in this process. Self-efficacy helps senior nursing students to feel competent enough, and ready for transition to professional nursing (Alavi, 2014). In the present study, the nursing students'

self-efficacy level was good (85.73±10.24). In other studies in which nursing students' self-efficacy status was investigated, similar results were obtained (Dikmen et al., 2016; Ibrahim et al., 2019; Kızılcı et al., 2015; Mohamadirizi et al., 2015). That the nursing students' self-efficacy status was good indicates that they acquired the competencies required for the profession during the education

process. The most important finding in the present study in terms of self-efficacy was that the female students, those who chose the nursing department willingly, and those who participated in scientific and social activities organized at the university obtained significantly higher scores from the Self-Efficacy Scale. For many years, the nursing profession in our country was performed by women. In recent years, male students started to choose nursing; however, the number of male students is still not many (Kızılcı et al., 2015). The reason why the self-efficacy level was higher in female students in the present study may have stemmed from the fact that the majority of the participants were female students. Students' choosing the nursing department of their own free will affects their self-efficacy levels positively (Dikmen et al., 2016). In our country, the score obtained in the university entrance exam greatly affects students' preference (Alkaya et al., 2018). The results of our study revealed the importance of the students' placement in a department suitable for them in line with their wishes and expectations. After students make their preference, the educational and didactic activities organized by the university prepare them for the profession before graduation. Another important finding of our study is that the variables such as age, economic status, longest place of residence, region of study and residence, school success, type of high school graduated, type of education, the reason for choosing the nursing department, the place of nursing in the preference list, satisfaction with receiving nursing education, feeling ready for the nursing, the field intended to work in after graduation, and membership of a professional association did not affect the mean scores obtained from the Self-Efficacy Scale. In the literature, age, educational status (Zhang et al., 2015) and academic achievement have been determined to affect self-efficacy (Khan et al., 2015). Most of the students in the present study were in the same age group and all of them were senior students. The difference between studies in terms of academic success may have stemmed from such factors as intelligence, interest and participation in lessons, and study activities in addition to self-efficacy. As in our study, in several other studies, such factors as the place of

residence (Özpulat and Özvarış, 2019), reason for choosing the nursing department, satisfaction with receiving nursing education (Açıksöz et al., 2016) and the economic status (Dikmen et al., 2016) did not affect self-efficacy. Since the concept of self-efficacy includes the individual's belief and effort in performing an activity, the way training is given, thoughts about the nursing department (preference, feeling ready, field intended to work in and membership) may not affect self-efficacy.

Professional values are a guide in nursing practices (Dellafiore et al., 2021). The students participating in our study had strong professional values (101.84 ± 15.47). In other studies in which the professional values of nursing students in Turkey were investigated (Alkaya et al., 2018: 101.6 ± 17.0 , Ayla et al., 2018: 103.25 ± 16.96 , Dönmez and Özsoy, 2016: 99.45 ± 1.96 , Paşalak et al., 2021: 113.5 ± 12.8), their levels of professional values were determined as good. All these results suggest that the professional values levels of nursing students studying at different universities in our country are similar and high. This result is very important because it indicates that nursing students gain professional values before they start professional nursing. Another important finding of our study regarding professional values is that the students' descriptive characteristics did not affect their levels of professional values ($p > .05$). Similarly, there are several studies indicating that demographic variables such as students' age, sex, marital status, general academic grade point average, ethnicity, work experience, and participation in professional ethics training courses do not significantly affect students' levels of professional values (Nelwati et al., 2019; Poorchangizi et al., 2019). In another study, it was determined that personal and environmental factors played a significant role in the development of professional values in nursing students (Shafakhah et al., 2018). Nursing education positively contributes to the development of professional values of its members (Kantek et al., 2017; Kavradım et al., 2019). However, students start their education with the personal values they have gained from their families and continue by integrating their own values with the professional values during their education process. Therefore, not only demographic

characteristics but also many other factors may affect professional values, which suggests that more and more in-depth studies should be conducted on the issue.

CONCLUSION

In this multi-centered study, that the students had good professional values and self-efficacy levels indicates that they acquired the necessary competencies for nursing and that nursing education was carried out in a similar way in different schools. However, the reflection of these skills on effective nursing care is very important. While they give care to the patient, nurses should have strong self-efficacy and manage the nursing process within the framework of professional values. In the future, a larger number of studies should be conducted to reveal other factors likely to affect students' levels of self-efficacy and professional values.

Conflict of Interest

The authors declare no conflict of interest.

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