Black Sea Journal of Health Science
doi: 10.19127/bshealthscience.1285024

Open Access Journal
e-ISSN: 2619 – 9041

Research Article
Volume 6 - Issue 4: 551-558 / October 2023

NURSING STUDENTS' OCCUPATIONAL MOTIVATION, OCCUPATIONAL COMMITMENT LEVELS AND RELATED FACTORS

Ali KAPLAN[1]*

[1]*University of Kayseri, İncesu Ayşe and Saffet Arslan Health Services Vocational School, Department of Medical Services and Techniques, 38280 Kayseri, Türkiye*

Abstract: Nursing students' occupational motivation and commitment levels are essential for their development and success. Therefore, this study aimed to determine nursing students' occupational motivation, commitment levels, and related factors. The descriptive and cross-sectional study data were collected between March and April 2023. The study sample consisted of 326 students studying at the Nursing Departments of the Faculty of Health Sciences of two universities in a province of Türkiye in the 2022-2023 academic year. The data were collected using the Personal Information Form, Four-Dimensional Occupational Commitment Scale, and Motivation's Resources and Problems Scale. It was determined that the occupational commitment levels, motivation levels, and academic achievements of the students differed according to the students' years, the high school they graduated from, the state of choosing the nursing department willingly, the state of being satisfied with school life, the reason for choosing the nursing profession, the willingness to do postgraduate education. In addition, there is a significant relationship between students' occupational commitment and occupational motivation. Educating students about occupational values is necessary to ensure occupational development. By developing strategies related to these factors affecting students, it is possible to train professional nurses with high occupational motivation and commitment to their profession.

Keywords: Nursing student, Motivation, Professional adherence, Nursing, Academic success

***Corresponding author:** University of Kayseri, İncesu Ayşe and Saffet Arslan Health Services Vocational School, Department of Medical Services and Techniques, 38280 Kayseri, Türkiye
E mail: alikaplan@kayseri.edu.tr (A. KAPLAN)
Ali KAPLAN https://orcid.org/0000-0001-8242-0110

Received: April 18, 2023
Accepted: July 16, 2023
Published: October 15, 2023

Cite as: Kaplan A. 2023. Nursing students' occupational motivation, occupational commitment levels and related factors. BSJ Health Sci, 6(4): 551-558.

1. Introduction

The nursing workforce in health institutions has a unique structure that cannot be ignored (Abu Yahya et al., 2019). Nurses are the group that gives the most care and spends the longest time with the patient in cases that require outpatient treatment or hospitalization (Choi et al., 2020). Due to rapid population growth, technological advances, common chronic diseases, and increased societal expectations, nursing demand worldwide is growing daily (Koornneef et al., 2017). The personnel needed for the nursing profession is expected to reach nearly three million by 2025 (US Department of Health and Human Services, 2014). Nursing staff shortages are considered one of the most significant challenges for any healthcare system worldwide (Koornneef et al., 2017). Therefore, nursing college student quotas have been increased to eliminate the numerical inadequacy of health personnel (Özkan and Uydacı, 2015).

In addition to the quantitatively increasing quotas, it is necessary to know the psycho-social characteristics of nursing students well, to understand the sources of problems by examining their issues, and to develop approaches that increase students' adaptation depending on the information obtained (Güngörmüş et al., 2015). One of the crucial criteria in bringing the nursing occupation to professional status is that nursing students are willing to provide services and see their occupation as a vital part of their lives (Nazik and Arslan, 2014). The foundations for adopting and practicing the occupation are laid during student years (Beydağ et al., 2008). The fact that students start to work equipped with the awareness of occupational motivation and commitment will enable this awareness to mature quickly, and the profession will be affected positively (Bernardino et al., 2018; Zhao et al., 2022).

Motivation is defined as a structure that includes internal and external factors that affect the initiation, maintenance, and control of behavior (Doğan and Yıldırım, 2019). Motivation is a prerequisite for students to adapt to the curriculum (Taş and Dalcalı, 2021). Some studies in the field of nursing emphasize the importance of occupational motivation for teaching strategies (Beadle et al., 2012; Taş and Dalcalı, 2021). Intrinsic motivation is essential for nursing students because it can transform them into professionals with more autonomy, reflection, and critical perspective. Students may face many problems during their education process

(Kürtüncü and Kurt, 2020). Such situations can negatively affect them and reduce their occupational motivation (Çelik, 2014). This situation is critical in solving the problems affecting society and the individual (Felton et al., 2013).

The concept of commitment, which is essential for members of every occupation, is more critical for the nursing profession, which must make vital and urgent decisions for those served (Cihangiroğlu, 2015). Commitment to the work is expressed as the strong identification of the individual with his profession (Ateş and Pelit, 2022). Students may choose to nurse for reasons such as the opportunity to find a job and the family's desire (Bölükbaş, 2018). This may cause students to have a weak commitment to their profession. Occupational commitment begins in the education process of individuals regarding their occupation and continues to strengthen throughout their profession life (Tak et al., 2009). Therefore, it is essential to address these issues in the education process so that nurses can exhibit attitudes such as institutional identification and resist their desire to leave the job.

The development of the nursing occupational takes place in the responsibilities of nursing colleges. Knowing the factors affecting occupational motivation and commitment levels for students to provide professional development and fulfill their duties best is imperative.

1.1. Research Questions

Within the framework of this general purpose, answers to the following questions were sought:

- What are the factors affecting students' occupational motivation levels?
- What are the factors affecting students' occupational commitment levels?
- Is there a relationship between students' occupational motivation and occupational commitment levels?

2. Materials and Methods

2.1. Study Aims and Design

This research was conducted as a descriptive and cross-sectional type to determine nursing students' occupational motivation, commitment levels, and related factors.

2.2. Population and Sample of the Research

The research comprised 1158 students in the Nursing Departments of the Faculty of Health Sciences of two universities in a province in the Central Anatolia Region of Türkiye in the 2022-2023 academic year. In selecting the sample, it was aimed to reach the entire student body, and feedback was received from 326 students. Individuals aged 18 and over, actively continuing their nursing education, and approving the informed consent form were included in the study. The Four-Dimensional Occupational Commitment Scale score average was used in the G*Power program to calculate the power of the research. The effect size was 0.84 as a result of the calculation. In this direction, due to the post-power analysis made by taking effect size: 0.84, n: 326, and alpha: 0.05, the working power was determined as 99%.

2.3. Data Collection Tools

The data were collected using the Personal Information Form, Four-Dimensional Occupational Commitment Scale, and Motivation's Resources and Problems Scale.

2.3.1. Personal information form

In this form, prepared by the researcher in line with the literature, there are 14 questions containing personal information and General Academic Grade Point Average (GAGPA) (Duruk et al., 2021; Taş and Dalcalı, 2021).

2.3.2. Four-dimensional occupational commitment scale (FDOCS)

The scale was developed by Blau (Blau, 2003). The Turkish validity and reliability of the scale was conducted by Utkan and Kırdök (2018). The scale consists of 22 items and consists of 5-point Likert-type degrees such as "I strongly disagree (1)", "I do not agree (2)", "I am undecided (3)", "I agree (4),", "I strongly agree (5)". The highest score that can be obtained from the scale is 110, and the lowest score is 22. It is accepted that as the total score of individuals increases, their level of occupational commitment increases. In the validity and reliability study of the scale, the Cronbach Alpha value, which is the internal consistency coefficient, was found to be 0.90 (Utkan and Kırdök, 2018). In the study, the Cronbach Alpha value of the scale was determined as 0.86.

2.3.3. Motivation's resources and problems scale (MRPS)

The scale was developed by Acat and Köşgeroğlu (2006). It is a scale used to determine the motivation levels that affect the occupational experiences of health school students. The scale consists of 24 items and consists of 5-point Likert-type degrees such as "I strongly disagree (1)", "I do not agree (2)", "I am undecided (3)", "I agree (4),", "I strongly agree (5)". The highest score that can be obtained from the scale is 120, and the lowest score is 24. The higher the score obtained, the higher the motivation level. In the validity and reliability study of the scale, the Cronbach Alpha value, which is the internal consistency coefficient, was found to be 0.82 (Acat and Kosgeroglu, 2006). The Cronbach Alpha value of the scale was determined as 0.87.

2.4. Data Collection

The data of the research were collected in March 2023. The 1st, 2nd, 3rd, and 4th-year students studying in the Nursing Department of the universities for which the institution's permission was obtained were informed by the researcher before the lesson. Then, the data collection form created via Google Forms was delivered to the students via WhatsApp to avoid paper waste. The "Informed Consent Form" checkbox is mandatory in Google Forms. While creating the form, standardization was ensured by limiting one answer per IP address so that students could reply only once.

2.5. Data Analysis

Data were analyzed in the statistical package program

IBM SPSS Statistics 23.0 (IBM Corp., Armonk, New York, USA). Descriptive data are given as numbers, percentages, mean and standard deviation. The normality of the data was evaluated with the Shapiro-Wilk test. An Independent Sample t-test or Mann Whitney-U test was used according to the normality of the data in the comparisons of two separate groups. In comparing three or more independent groups, the One-Way Analysis of Variance or Kruskal Wallis Test was used according to the normality of the data. A post hoc or Dunn's test was applied to the statistically significant data as a multiple comparison test. A Pearson Correlation analysis was performed to determine the relationship between FDOCS, MRPS, and GAGPA scores and the direction and severity of this relationship. $P<0.05$ was accepted as statistical significance (Önder, 2018).

3. Results

Table 1 includes the descriptive characteristics of the students included in the study: 30.4% are in the first year, 50.9% are 21 years old and over, 87.1% are female, 85.3% have a nuclear family, 12.3% are health vocational high school graduates, 64.4% have income equal to their expenses, and 49.1% of them stay with their families during their university education. In addition, 62.0% of the students are satisfied with their school life, 58.3% of them have their mother's education level of primary education, 41.7% of them have a middle education level of their father, 66.9% want to do graduate education, 73.0% prefer the department of nursing willingly, and 44.2% of them stated that they preferred the nursing profession because of job security.

The average score and alpha value of the scales used in the research and the average grade point averages of the students are given in Table 2. The Four-Dimensional Occupational Commitment Scale total score average is 75.83±11.65, the Motivation's Resources and Problems Scale total score average is 86.52±13.10, and the General Academic Grade Point Average score is 2.92±0.47.

Table 3 shows the comparison between the descriptive characteristics of the students and the scales and overall academic grade point average. According to the data obtained, it has been determined that there is a statistically significant relationship between the students' academic year, the school they graduated from, their satisfaction with school life, the situation of preferring the nursing department willfully, their reason for choosing the nursing profession, their willingness to pursue graduate education, and their willingness to do postgraduate education, and the FDOCS, MRPS, and GAGPA. In addition, it was found that the GAGPA of students aged 21 and over was higher than students younger than 21, and awareness was statistically significant.

Table 1. Descriptive characteristics of students (n=326)

Characteristics	n	%	Characteristics	n	%
Academic Year			Satisfaction from School Life		
First year	99	30.4	Yes	202	62.0
Second year	97	29.8	No	124	38.0
Third year	72	22.0	Mother Education Level		
Fourth year	58	17.8	Primary education	190	58.3
Age (year)			Middle education	103	31.6
18-20	160	49.1	Bachelor and up	33	10.1
≥21	166	50.9	Father Education Level		
Gender			Primary education	105	32.2
Female	284	87.1	Middle education	136	41.7
Male	42	12.9	Bachelor and up	85	26.1
Family Type			Doing Postgraduate Education		
Nuclear	278	85.3	I want	218	66.9
Extended	36	11.0	I don't want	108	33.1
Broken	12	3.7	The situation of Preferring the Nursing		
The School They Graduated From			Department Willfully		
Health vocational high school	40	12.3	Yes	238	73.0
Other	286	87.7	No	88	27.0
Financial Situation			Reason for Preferring Nursing Profession		
Income less than expenses	83	25.5	Like		
Income equals expense	210	64.4	Job guarantee	81	24.8
Income more than expenses	33	10.1	Family request	144	44.2
Place of Residence During University			All of them	23	7.1
Education				78	23.9
Dormitory	151	46.3			
House	15	4.6			
With family	160	49.1			

Table 2. Students' GAGPA and mean scores of the scales (n=326)

	Number of Items	X̄	SD	Alpha
FDOCS	18	75.83	11.65	0.86
MRPS	24	86.52	13.10	0.87
GAGPA		2.92	0.47	

FDOCS= four-dimensional occupational commitment scale, MRPS= motivation's resources and problems scale, GAGPA= general academic grade point average.

Table 3. The comparison between the descriptive characteristics of the students and the scales and GAGPA (n=326)

Characteristics	FDOCS		MRPS		GAGPA	
	Mean±SD	Test	Mean±SD	Test	Mean±SD	Test
Academic Year						
First year	69.85±11.20[a]		83.17±13.68[a]		2.70±0.49[a]	
Second year	75.08±11.77[b]	F=20.333	84.93±13.61[b]	KW=16.889	2.82±0.47[a]	KW=10.313
Third year	80.05±8.76[c]	P<0.001	89.77±9.98[c]	P<0.001	3.18±0.38[b]	P<0.001
Fourth year	81.98±10.31[c]		90.81±12.89[c]		3.14±0.24[b]	
Age (year)						
18-20	76.10±11.51	t=0.408	87.13±12.23	t=0.824	2.86±0.48	t=-2.501
≥21	75.57±11.81	P=0.683	85.93±13.91	P=0.410	2.99±0.45	P=0.013
Gender						
Female	75.69±11.49	t=-0.593	86.51±13.01	t=0.014	2.94±0.46	t=1.824
Male	76.83±12.80	P=0.554	86.54±13.90	P=0.989	2.80±0.50	P=0.069
Family Type						
Nuclear	76.06±11.80	F=1.276	86.79±12.96	F=1.711	2.92±0.48	KW=2.679
Extended	75.80±9.83	P=0.281	86.72±13.99	P=0.182	2.98±0.32	P=0.262
Broken	70.58±12.82		79.66±13.04		2.69±0.47	
The School they Graduated From						
Health vocational high school	83.97±7.56	U=5.219	101.20±8.04	t=8.316	3.20±0.38	t=4.102
Other	74.69±11.68	P<0.001	84.46±12.35	P<0.001	2.88±0.47	P<0.001
Financial Situation						
Income less than expenses	74.29±10.92	F=1.334	85.67±12.46	F=0.288	2.85±0.46	F=1.617
Income equals expense	76.58±11.83	P=0.265	86.91±13.33	P=0.750	2.93±0.48	P=0.200
Income more than expenses	74.51±11.97		85.93±13.38		3.01±0.41	
Place of Residence During University Education						
Dormitory	76.90±11.41	F=1.192	86.17±12.94	KW=1.054	2.93±0.45	F=0.483
House	74.33±14.70	P=0.305	90.33±21.03	P=0.590	2.81±0.52	P=0.617
With family	74.97±11.56		86.48±12.35		2.92±0.48	
Satisfaction from School Life						
Yes	77.18±11.61	t=2.729	88.13±13.27	t=2.902	2.96±0.47	t=2.118
No	73.58±11.41	P=0.007	83.82±12.42	P=0.004	2.85±0.45	P=0.035
Mother Education Level						
Primary education	75.90±11.41	F=2.823	86.24±12.53	F=2.375	2.95±0.46	F=2.396
Middle education	77.07±12.23	P=0.061	88.26±14.28	P=0.095	2.92±0.49	P=0.093
Bachelor and up	71.57±10.47		82.69±11.90		2.76±0.41	
Father Education Level						
Primary education	77.80±11.09	F=2.838	86.48±12.64	F=0.520	2.92±0.47	F=2.602
Middle education	75.57±10.93	P=0.060	87.25±12.90	P=0.595	2.98±0.49	P=0.076
Bachelor and up	73.82±13.11		85.40±14.04		2.83±0.42	
Doing Postgraduate Education						
I want	76.88±10.98	t=2.332	88.28±12.40	t=3.519	3.00±0.46	t=4.118
I don't want	73.71±12.68	P=0.020	82.95±13.81	P<0.001	2.77±0.45	P<0.001
The situation of Preferring the Nursing Department Willfully						
Yes	77.67±11.49	t=4.844	88.84±13.24	t=5.482	2.98±0.47	t=3.490
No	70.86±10.93	P<0.001	80.25±10.45	P<0.001	2.77±0.42	P<0.001
Reason for Preferring Nursing Profession						
Like	78.37±12.27[a]		90.96±14.65[a]		3.03±0.44[a]	
Job guarantee	73.69±11.89[b]	F=4.936	81.88±12.06[b]	KW=46.919	2.83±0.47[b]	F=4.738
Family request	72.17±10.47[b]	P=0.002	83.26±10.18[b]	P<0.001	2.80±0.47[b]	P=0.003
All of them	78.24±9.88[a]		91.43±10.65[a]		3.01±0.46[a]	

U= Mann-Whitney U test, t= Independent sample t-test, KW= Kruskal Wallis test, F= One-Way ANOVA, The same letters indicate that there is not an in-group difference, and different letters indicate an in-group difference.

Table 4 shows the correlation analysis between the total scores of the students' FDOCS, MRPS, and GAGPA. Statistically, it has been determined that there is a positive and moderately significant relationship between the GAGPA and the total score of FDOCS and MRPS. In addition, it has been determined that there is a positive and highly significant relationship between the total score of the students' FDOCS and the total score of MRPS.

Table 4. Correlation analysis between students' FDOCS, MRPS, and GAGPA total scores (n=326)

	GAGPA	FDOCS	MRPS
GAGPA	1		
FDOCS	0.502*	1	
MRPS	0.422*	0.685*	1

(*)= P<0.01, r= Pearson correlation coefficient.

4. Discussion

The aim of nursing education is not only to improve the knowledge and skills of graduates but also to create an awareness of occupational commitment to strive against difficulties in nursing (Järvinen et al., 2018). It was emphasized that the students chose the nursing occupation without knowing about the job and that nurses' commitment was weak (Aktaş and Gürkan, 2015). Occupational commitment is shaped by basic education, continues at a certain level during graduation, and constantly changes after graduation (Sibandze and Scafide, 2018). Nursing students may tend to freeze registration, not continue education or delete registration even during their education. Strategies should be developed to improve the occupational commitment of students during basic education, that is, during university education, where professional commitment begins to take shape. It is known that occupational motivation also affects the level of occupational commitment in individuals (García-Moyano et al., 2019). Therefore, this study determined related factors influencing nursing students' occupational motivation and commitment levels, and the findings were discussed in light of the literature.

Motivation has an important function that affects the behavior of individuals in the education process (Özlü Kahraman et al., 2014). Variables related to the education-teaching process and personal variables are considered the most critical motivation source (Korkmaz and İpekçi, 2015). In the study, variables affecting the motivation levels of nursing students were investigated. It has been determined that the students who are in the third and fourth years, graduated from health vocational high school, are satisfied with school life, wish to pursue postgraduate education, willingly prefer the nursing department, have higher motivation levels for the profession. Similarly, it was found that students who love the nursing department and choose it willingly have higher motivation (Duruk et al., 2021). In addition, in the studies conducted, it is observed that the motivation levels of students who are close to graduation and satisfied with school life are higher (Korkmaz and İpekçi, 2015; Taş and Dalcalı, 2021). However, the study conducted by Çelik determined no relationship between the high school nursing students graduated from and their motivation (Çelik, 2014). On the other hand, there have been no studies in the literature related to graduate education. It has been suggested to take necessary precautions regarding these factors that affect students' occupational motivation and plan strategies to increase motivation.

It is necessary to take adequate measures to increase the occupational commitment levels of nursing students (Kong et al., 2016). Therefore, it is essential to know the risk factors related to the precautions to be taken (Hua et al., 2022). In the research, it has been determined that the factors affecting the professional commitment of students are the academic year, the high school they graduated from, their satisfaction with school life, the state of wanting to do graduate education, the situation of willingly choosing the nursing department and, the reason for choosing the nursing. The reason for choosing the nursing department reflects the social perception of nursing students (Goel et al., 2018). Therefore, it was thought that the level of occupational commitment of the students who loved the nursing department and chose it willingly was higher. The higher occupational commitment of the third and fourth-year students may be due to the greater emphasis on clinical courses and the fact that they know the occupational better. In a study, it has been determined that the occupational commitment of nursing students who do internships is higher (Ayaz-Alkaya et al., 2018). The high level of occupational commitment of the students who are satisfied with their school life and want to do postgraduate education may be due to their high level of occupational motivation.

It has been determined that students in the third and fourth academic years, aged 21 and over, who graduated from health vocational high school, want to do graduate education, are satisfied with school life, and willingly prefer the nursing department, have higher academic success grades. In the literature review conducted, it is also seen that there are studies that support the research findings (Ayyıldız et al., 2014; Alshammari et al., 2017; Küçükkaya et al., 2022). It has been assumed that the academic achievements of students who have just started university are negatively affected due to the adaptation process to the new system. However, it was suggested that as the students' ages got older and there was acceptance about the profession in the advancing grades, and their adaptation problems decreased, and therefore their academic achievements increased. Since the educational content of the students who graduated from health vocational high school was similar to the nursing education curriculum, the students adapted faster. It was thought that this situation positively impacted academic achievement. In addition, positive thinking and high

motivation are directly related to academic success (Duran et al., 2017). For this reason, it is predicted that students who are satisfied with school life, choose nursing because they want and love it, have positive thinking and high motivation, and their academic achievements are higher.

The retention rate of newly graduated nurses is low, and it is thought that the reason for this is the reality shock. Therefore, it has been reported that there should be a specially prepared and motivating nursing curriculum to increase the occupational commitment of students (Gambino, 2010). This study examined the relationship between nursing students' motivation and occupational commitment levels. According to the data obtained, it has been determined that a positive and significant relationship exists between students' motivation levels and their occupational commitment levels. This result can be interpreted as the occupational commitment of students with high motivation is better. There are minimal studies on this subject in the literature. No studies were conducted on nursing and/or nursing students to support the study findings. However, a study conducted on accounting students supports our research (Ahmad et al., 2012). Another survey of nursing students found that motivation does not affect job commitment (Nesje, 2015). In addition, it has been determined that there is a positive and significant relationship between occupational motivation and commitment and students' academic achievement levels. Therefore, activities that increase motivation and occupational commitment during education can be recommended to increase students' occupational success.

5. Conclusion

Students who are in the third or fourth academic year graduated from health vocational high school, who are satisfied with school life, who want to pursue graduate education, who willingly prefer the nursing department and the nursing profession because they love it, have higher occupational commitment, occupational motivation, and academic success grades. Students aged 21 and older have higher academic achievement grades than younger ones. In addition, there is a significant relationship between the occupational commitment levels of students and their occupational motivation levels. There is also a meaningful relationship between the level of occupational motivation and occupational commitment and the overall academic grade point average.

The necessity of this work was considered significant. Educating students aware of occupational values is necessary to ensure occupational development. In this context, it is recommended to develop strategies to increase motivation and occupational commitment in the teaching processes of educators, organize adaptation programs, and provide academic counseling related to graduate education in undergraduate education to train professional nurses with a high level of occupational motivation and commitment to their profession. In addition, information activities related to the promotion of the nursing occupational should be carried out for prospective students considering choosing a nursing program.

Limitations

The research was conducted with nursing students at two universities in one province. Therefore, generalization cannot be made.

Author Contributions

The percentage of the author(s) contributions is present below. All authors reviewed and approved final version of the manuscript.

	A.K.
C	100
D	100
S	100
DCP	100
DAI	100
L	100
W	100
CR	100
SR	100
PM	100
FA	100

C=Concept, D= design, S= supervision, DCP= data collection and/or processing, DAI= data analysis and/or interpretation, L= literature search, W= writing, CR= critical review, SR= submission and revision, PM= project management, FA= funding acquisition.

Conflict of Interest

The author declared that there is no conflict of interest.

Ethical Approval/Informed Consent

Ethics committee approval was obtained from the local ethics committee to conduct the research (approval date: October 17, 2022 and protocol code: 2022/62). In addition, institutional permissions were obtained from the Faculties of Health Sciences of the universities where the study was conducted. Permission was obtained via e-mail from the researchers who conducted the Turkish validity and reliability of the scales used in the study. Before starting the research, the purpose of the research was explained to all students participating in the study. It was also stated that the data obtained from the investigation would be kept confidential and used only for scientific purposes.

References

Abu Yahya O, Ismaile S, Allari RS, Hammoudi BM. 2019. Correlates of nurses' motivation and their demographic characteristics. Nurs For, 54(1): 7-15. DOI: 10.1111/nuf.12291.

Acat B, Köşgeroğlu N. 2006. Motivation's resources and problems scale. Anatolian J Psychiatry, 7: 204-210.

Ahmad Z, Anantharaman RN, Ismail H. 2012. Students' motivation, perceived environment and professional commitment: An application of Astin's college impact model. Account Educ, 21(2): 187-208. DOI: 10.1080/09639284.2011.603472.

Aktaş H, Gürkan GÇ. 2015. Mediating role of occupational commitment in the interactions of work-family & family-work conflict with individual performance: a research on nurses. Dogus Univ J, 16(2): 139-154. DOI: 10.31671/dogus.2018.66.

Alshammari F, Saguban R, Pasayan E, Altheban A, AlShammari L. 2017. Factors affecting the academic performance of student nurses: A cross-sectional study. J Nurs Educ Pract, 8(1): 60-68. DOI: 10.5430/jnep.v8n1p60.

Ateş M, Pelit E. 2022. The effect of tourist guides' professional vitality on professional commitment. J Contemp Tourism Res, 6(1): 9-27. DOI: 10.32572/guntad.912655.

Ayaz-Alkaya S, Yaman-Sözbir Ş, Bayrak-Kahraman B. 2018. The effect of nursing internship program on burnout and professional commitment. Nurse Educ Today, 68: 19-22. DOI: 10.1016/j.nedt.2018.05.020.

Ayyıldız T, Konuk Şener D, Veren F, Kulakçı H, Akkan F, Ada A, Aldoğan A, Yeral K, Emek A, Tetik D, Dinç G. 2014. Factors İnfluencing the academic achievement of nursing students. Acıbadem Univ Health Sci J, 2(5): 222-228.

Beadle M, Needham Y, Dearing M. 2012. Collaboration with service users to develop reusable learning objects: The ROOT to success. Nurse Educ Pract, 12(6): 352-555. DOI: 10.1016/j.nepr.2012.04.005.

Bernardino ADO, Coriolano-Marinus MWDL, Santos AHDS, Linhares FMP, Cavalcanti AMTDS, Lima LSD. 2018. Motivation of nursing students and their influence in the teaching-learning process. Texto Contexto-Enfermagem, 27(1): e1900016.

Beydağ D, Gündüz A, Özer F. 2008. The view of health college students about their educations and their professional expectations. Pamukkale Medic J, 1(3): 137-142.

Blau G. 2003. Testing for a four-dimensional structure of occupational commitment. j Occupat Organizat Psychol, 76: 469-488.

Bölükbaş N. 2018. Occupational selection of nursing students and the effecting factors. Ordu Univ J Nurs Stud, 1(1): 10-17.

Çelik S. 2014. Nursing students' level of vocational motivation and affecting factors. J Health Sci Prof, 1(2): 43-56. DOI: 10.17681/hsp.16373.

Cihangiroğlu N, Şahin B, Teke A, Uzuntarla Y. 2015. Examining factors affecting nurses' conflict and professional commitment levels. Ataturk Univ J Econ Administ Sci, 29(4): 599-610.

Doğan S, Yıldırım D. 2019. The relationship between vocational motivation and sources of stress among ınterns at a faculty of nursing. J Contin Medic Educ, 28(6): 418-429. DOI: 10.17942/sted.442065.

Duran S, Karadaş A, Kaynak S. 2017. The relationship between automatic thoughts and academic achievement of nursing students. Kocaeli Medic J, 6(2): 30-37.

Duruk N, Kalaycı F, Aydın EC. 2021. Determination of vocational motivation levels of nursing and midwifery final year undergraduate students. J Nurs Sci, 4(1): 26-33.

Felton A, Holliday L, Ritchie D, Langmack G, Conquer A. 2013. Simulation: A shared learning experience for child and mental health pre-registration nursing students. Nurse Educ Pract, 13(6): 536-540. DOI: 10.1016/j.nepr.2013.04.003.

Gambino KM. 2010. Motivation for entry, occupational commitment and intent to remain: a survey regarding Registered Nurse retention. J Adv Nurs, 66(11): 2532-2541.

García-Moyano L, Altisent R, Pellicer-García B, Guerrero-Portillo S, Arrazola-Alberdi O, Delgado-Marroquín MT. 2019. A concept analysis of professional commitment in nursing. Nurs Ethics, 26(3): 778-797. DOI: 10.1177/0969733017720847.

Goel S, Angeli F, Dhirar N, Singla N, Ruwaard D. 2018. What motivates medical students to select medical studies: a systematic literature review. BMC Medic Educ, 18(1): 16. DOI: 10.1186/s12909-018-1123-4.

Güngörmüş K, Okanlı A, Kocabeyoğlu T. 2015. Factors Influencing Resilience in Nursing Students. J Psychiatric Nurs, 6(1): 9-14. DOI: 10.5505/phd.2015.80299.

Hua W, Fang Q, Lin W, Liu Z, Lu W, Zhu D, Wu Y. 2022. The level and influencing factors of graduating nursing students' professional commitment from the perspective of ecological systems theory: A cross-sectional study. Nurse Educ Today, 119: 105567. DOI: 10.1016/j.nedt.2022.105567.

Järvinen T, Eklöf N, Salminen L. 2018. Factors related to nursing students' readiness to enter working life - A scoping literature review. Nurse Educ Pract, 29: 191-199. DOI: 10.1016/j.nepr.2018.01.010.

Kong L, Chen X, Shen S, Li G, Gao Q, Zhu N, Lou F, Li P. 2016. Professional commitment and attributional style of medical-college nursing students in China: A cross-sectional study. Nurse Educ Today, 40: 154-160.

Koornneef E, Robben P, Blair I. 2017. Progress and outcomes of health systems reform in the United Arab Emirates: a systematic review. BMC Health Serv Res, 17: 1-13. DOI: 10.1186/s12913-017-2597-1.

Korkmaz AÇ, İpekçi NN. 2015. Motivation in nursing education: intrinsic and extrinsic motivation resources of students. J Health Nurs Manag, 3(2): 121-131.

Küçükkaya B, Özdemir B, Süt HK. 2022. The relationship between the use of social media and academic achievement and academic self-efficacy in nursing students. J Health Acad, 9(1): 31-41. DOI: 10.52880/sagakaderg.945297.

Kürtüncü M, Kurt A. 2020. Problems of nursing students in distance education in the Covid-19 pandemia period. Eurasian J Res Soc Econ, 7(5): 66-77.

Nazik E, Arslan S. 2014. The future of nursing: The hopes of students. Bozok Medic J, 4(1): 33-40.

Nesje K. 2015. Nursing students' prosocial motivation: does it predict professional commitment and involvement in the job?. J Adv Nurs, 71(1): 115-125. DOI: 10.1111/jan.12456.

Önder H. 2018. Nonparametric statistical methods used in biological experiments. BSJ Eng Sci, 1(1): 1-6.

Özkan Ş, Uydacı M. 2015. Analysis of human resources system in health sector in Turkey. Öneri J, 11(44): 221-238. DOI: 10.14783/od.v11i44.5000080012.

Özlü Kahraman Z, Gümüş K, Güngörmüş K, Avşar G, Özer N. 2014. An examination of the sources of mptivation problems among nursing students in a health sciences faculty. J Educ Res Nurs, 11(1): 47-53.

Sibandze BT, Scafide KN. 2018. Among nurses, how does education level impact professional values? A systematic review. Int Nurs Rev, 65(1): 65-77. DOI: 10.1111/inr.12390.

Tak B, Özçakır A, Çiftçioğlu A, Divleli A. 2009. Investigating occupational commitment effects on emplyees' attitudes toward their occupation and organization. J Indust Relat Human Resour, 11(3): 89-102.

Taş AS, Dalcalı BK. 2021. Motivation of nursing students during the Covid-19 pandemic. Acıbadem Univ Health Sci J, 12(2): 418-424. DOI: 10.31067/acusaglik.851946.

US Department of Health and Human Services. 2014. The future

of the nursing workforce: national- and state-level projections, 2012-2025. Rockville, US.

Utkan Ç, Kırdök O. 2018. The adaptation study of four-dimensional occupational commitment scale. Int J Soc Sci Educ Res, 4(2): 230-244.

Zhao L, Su Y, Jiang N, Zhou F, Liao L, Liu Y. 2022. Changes in professional commitment of undergraduate nurse students before and after internship: a longitudinal study. BMC Medic Educ, 22(1): 282. DOI: 10.1186/s12909-022-03364-0.