



ORIGINAL ARTICLE

Academic Self-Efficacy and Attitudes to Clinical Practices of Nursing Students

Hemşirelik Öğrencilerinin Akademik Öz Yeterlilik ile Klinik Uygulamalara İlişkin Tutumları Arasındaki İlişkinin İncelenmesi

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Abstract

Introduction: This study aimed to examine the relationship between nursing students' academic self-efficacy and their attitudes toward clinical practice and the effect of academic self-efficacy on attitudes toward clinical practice.

Methods: This descriptive and cross-sectional study was conducted face-to-face with 122 students between December 10, 2022, and January 05, 2023. Research data were collected with the Student Introductory Form, academic self-efficacy scale, and nursing students' attitude scale toward clinical practices, which were created by the researchers based on the literature.

Results: The academic self-efficacy total score average of the students participating in the study was 65.61 ± 16.55 ; the mean total score of attitude toward clinical practices was found to be 91.81 ± 14.92 . When the correlation analysis between the scores of the scales is examined; a positive weak ($p < 0.05$) correlation was found between the total attitude toward clinical practice and all sub-dimensions of the academic self-efficacy scale. In our study, the regression model developed for the effect of nursing students' academic self-efficacy on their attitudes toward clinical practices is significant ($p < 0.05$).

Discussion and Conclusion: As a result of the research, it was determined that the academic self-efficacy scores of the students and the attitude toward clinical practices score were interrelated, and the attitude toward clinical practices scores were affected by the students' academic efforts, academic planning, and their level of coping with academic problems. Therefore, academic nurses and clinician nurses can be recommended to plan and carry out practices that will increase students' academic success.

Keywords: Academic self-efficacy; Clinical practice; Nursing; Student

Nursing education is a dynamic and holistic process in which theoretical content is supported by psychomotor skills. The main purpose of this training process is; It aims to provide students with clinical skills through obser-

vation, demonstration, laboratory, and clinical practices. The goal of clinical practice in nursing education is to reveal students' cognitive, affective, and behavioral skills, critical thinking, and academic self-efficiency.^[1,2]

Cite this article as: Türker E, Bulut ÖÜ. Academic Self-Efficacy and Attitudes to Clinical Practices of Nursing Students. Lokman Hekim Health Sci 2023;3(3):201–210.

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“Self-efficacy,” which was first introduced by Bandura, is defined in its most general definition as the individual’s belief that he will initiate an effort to perform an action and continue this effort until he gets a result.^[3] Academic self-efficacy is, it is defined as students trusting their own performance and striving for it instead of relying on other people in their education life.^[4] In other words, academic self-efficacy is expressed as individuals’ beliefs and efforts that they can achieve an academic task or an academic goal at the desired level.^[5]

Increasing the academic self-efficacy of nursing students will make the entrepreneurial behavioral attitudes they need more widespread, thus making diagnosis, care and treatment methods in nursing more effective and efficient.^[6] Students with increased academic proficiency will feel more competent and self-confident in clinical practices, and thus their attitudes toward clinical practices will be positively affected.

The concept of attitude is defined as the beliefs, feelings, and reaction tendencies that an individual is expected to display against a situation or object.^[7] Determining the attitudes of nursing students toward clinical practice will make an important contribution to determining the factors that affect students’ performance and motivation in clinical practice, positively or negatively, and to researching solutions to the negativities.^[8]

This study aims to examine the relationship between nursing students’ academic self-efficacy and their attitudes toward clinical practice during undergraduate education.

Research Questions

1. What is the level of academic self-efficacy of nursing students?
2. What are the attitudes of nursing students toward clinical practices?
3. Is there a difference in academic self-efficacy levels and clinical practices toward nursing students according to their descriptive characteristics?
4. Is there a relationship between nursing students’ academic self-efficacy and their attitudes toward clinical practice?
5. Does nursing students’ academic self-efficacy affect their attitudes toward clinical practice?

Materials and Methods

Study Design

This descriptive and cross-sectional study was planned to determine the relationship between academic self-efficacy and attitudes toward clinical practices of nursing students.

Place of the Study and Participants

The research was conducted with nursing department 2nd, 3rd, and 4th grades students at a university in Ankara between December 10, 2022, and January 5, 2023.

Population and Sample

The population of the research consisted of 146 students studying in the 2nd, 3rd, and 4th grades of the nursing department. First-year students who had not yet taken a clinical practice course were not included in the research. Students who agreed to participate in the research constituted the sample of the research. 24 students who did not agree to participate in the study and had incomplete data entry were not included in the study. The participation rate in the research is 82%. Criteria for inclusion in the study, Volunteering to participate in the research, having taken nursing-based courses and participating in clinical practice, being over 18 years of age, and being able to read and understand Turkish.

Data Collection Tools

Research data were collected face to face with the student introductory form, academic self-efficacy scale, and nursing students’ attitude scale toward clinical practices, which were created by the researchers based on the literature.

Student Introductory Form

In the first part of the data collection form, there are questions prepared by the researchers by scanning the literature and determining introductory information.^[9] In this section, the student’s gender, the class he/she studies in, whether he or she chooses the department voluntarily, the field of clinical practice, whether theoretical education is sufficient for communication, theoretical education, and its applications. It includes questions such as finding it compatible, being able to use it in practice with theoretical training, finding the training sufficient as a result of observations, patients’ trust in the student nurse, and health professionals’ trust in the student nurse.

Academic Self-efficacy Scale

The academic self-efficacy scale developed by Jerusalem and Schwarzer (1992) in 1981 was adapted into Turkish by Kandemir and Özbay (2010). The scale consists of 19 items. Reactions to the statements in this scale are rated on a Likert-type scale between “Strongly Disagree and Strongly Agree” with a value between 1 and 5. The highest score that can be obtained from the scale is 95. High scores ob-

tained from the scale indicate that academic self-efficacy belief is high. The subdimensions of the scale are "Coping with Academic Problems," "Academic Effort" and "Academic Planning" constitute the dimensions. The Cronbach alpha of the scale was found to be 0.91.^[10] In this study, the Cronbach alpha value of the Academic Self-Efficacy scale was found to be 0.96.

Attitude Scale Toward Clinical Practices in Nursing Students

The scale, developed by Akdeniz Uysal and Yeşil Bayülgen in 2022, was designed to measure the attitudes of nursing students toward clinical practices. Reactions to the statements in this scale are rated on a Likert-type scale between "Strongly Disagree and Strongly Agree" with a value between 1 and 5. The scale consists of 32 items and 10 items (11–14, 22, 24, 26, 28–30) are reverse coded. The highest score that can be obtained from the scale is 130. The Cronbach alpha reliability coefficient obtained from the entire scale is 0.93.^[11] In this study, the Cronbach alpha value of the attitude toward clinical practice scale was found to be 0.87.

Statistical Analysis

The data obtained in the study were evaluated on a computer using the SPSS 22.0 (IBM Statistical Package for the Social Sciences, Armonk, NY, USA) statistical program. Frequency and percentage analyses were used to determine the descriptive characteristics of the students participating in the research, and mean and standard deviation statistics were used to examine the scale. Kurtosis and Skewness values were examined to determine whether the research variables showed a normal distribution.^[12] These values between -1.5 and $+1.5$ are considered normal distribution. It was determined that the variables showed normal distribution. Parametric methods were used to analyze the data. The relationships between the dimensions that determine the students' scale levels were examined through Pearson correlation and linear regression analyses.^[13] T-test, one-way analysis of variance, and post hoc (Tukey, LSD) analyses were used to examine the differences in the scale levels according to the descriptive characteristics of the students. Cohen(d) and Eta squared (η^2) coefficients were used to calculate the effect size.^[14] The obtained data were evaluated at 95% confidence interval and 5% significance level.

Ethical Consideration

Before the study, permission was obtained from the Lokman Hekim University scientific research Ethics Committee granted approval for this study (date: 21.12.2022, committee de-

cision no: 2022/190, code no: 2022174). After the students participating in the study were informed about the study, their verbal and written consent was obtained. The study was conducted taking into account the Declaration of Helsinki.

Results

Findings regarding the descriptive characteristics of the students are included in the table below. According to this table, 88.5% of the students participating in the study were female and 41.8% were second-year students. 78.7% of the students participating in the study voluntarily chose the nursing department and 92.6% are currently doing clinical practice in an inpatient institution. 91% of the students find theoretical education sufficient to communicate and 80.3% find theoretical education and practices compatible. 67.2% of the students said that they were able to integrate the theoretical education they received into clinical practice. As a result of the observations, 84.4% stated that they found the training sufficient. 60.7% of the participants and 68.0% of the patients stated that nurses felt confident in clinical practices (Table 1).

The total academic self-efficacy score of the students participating in the study was 65.61 ± 16.55 , and the subdimension scores for academic efforts were 14.51 ± 3.87 , academic planning scores were 13.32 ± 3.68 , and coping with academic problems scores were 37.77 ± 9.80 . As shown in Table 1, no statistically significant difference was found between the students' gender and their academic self-efficacy total, academic efforts, academic planning, and coping with academic problems scores ($p > 0.05$). A statistically significant difference was found between the classes in which the students studied, according to their total academic self-efficacy scores ($p < 0.05$). The reason for the difference is that the academic self-efficacy total scores of the 4th graders, differ from the academic self-efficacy total scores of the 3rd grade and 2nd graders is high ($p < 0.05$). While there was no statistically significant difference between the total academic self-efficacy, academic efforts, and coping with academic problems scores of students choosing or not choosing the department voluntarily ($p > 0.05$), academic planning scores a statistically significant difference was found between ($p < 0.05$). There is a statistically significant difference between the academic self-efficacy total, academic efforts, academic planning and coping with academic problems scores of the students depending on their clinical practice place, finding theoretical education sufficient in communicating, finding theoretical education and practices compatible, finding the theoretical education received sufficient and being able to use it in practice.

Table 1. Variation of academic self-efficacy scores according to descriptive characteristics

Descriptive characteristics (n=122)	n	%	Academic self-efficacy total		Academic efforts		Academic planning		Coping with academic problems	
			Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD		
Gender										
Woman	108	88.5	65.04±17.02	t=-1.054	14.38±3.96	t=-1.009	13.25±3.74	t=-0.579	37.40±10.08	t=-1.164
Man	14	11.5	70.00±11.91	p=0.294	15.50±3.08	p=0.315	13.85±3.25	p=0.564	40.64±6.82	p=0.132
Class										
2. class	51	41.8	58.86±14.54	F=10.608	13.31±3.67	F=7.096	12.05±3.26	F=8.711	33.49±8.47	F=11.251
3. class	40	32.8	67.12±15.63	p=0.000	14.52±3.69	p=0.001	13.35±3.51	p=0.000	39.25±9.31	p=0.000
4. class	31	25.4	74.77±16.35		16.48±3.73		15.35±3.72		42.93±9.66	
Selecting the department willingly										
Yes	96	78.7	66.51±16.66	t=1.150	14.66±3.90	t=0.822	13.69±3.68	t=2.215	38.14±9.70	t=0.794
No	26	21.3	62.30±16.01	p=0.252	13.96±3.78	p=0.413	11.92±3.37	p=0.029	36.42±10.24	p=0.429
Clinical practice location										
Inpatient institution	113	92.6	66.04±16.27	t=1.016	14.67±3.77	t=1.587	13.38±3.65	t=0.740	37.98±9.71	t=0.812
Bedless institution	9	7.4	60.22±19.99	p=0.312	12.55±4.85	p=0.115	12.44±4.12	p=0.461	35.22±11.20	p=0.419
Considering theoretical education to be sufficient in communication										
Yes	111	91	65.67±16.88	t=0.129	14.54±3.93	t=0.218	13.29±3.74	t=-0.212	37.83±9.96	t=0.211
No	11	9	65.00±13.43	p=0.898	14.27±3.37	p=0.828	13.54±3.11	p=0.832	37.18±8.31	p=0.833
Finding compatibility with theoretical education and practices										
Yes	98	80.3	64.80±16.36	t=-1.091	14.26±3.77	t=-1.452	13.18±3.68	t=-0.823	37.35±9.70	t=-0.960
No	24	19.7	68.91±17.27	p=0.277	15.54±4.19	p=0.149	13.87±3.69	p=0.412	39.50±10.23	p=0.339
Ability to use in practice with theoretical education										
Yes	82	67.2	67.28±16.20	t=1.602	14.69±3.75	t=0.728	13.70±3.73	t=1.677	38.87±9.40	t=1.790
No	40	32.8	62.20±16.94	p=0.112	14.15±4.13	p=0.468	12.52±3.47	p=0.096	35.52±10.33	p=0.076
Considering education sufficient as a result of observations										
Yes	103	84.4	65.69±16.25	t=0.130	14.63±3.80	t=0.759	13.33±3.64	t=0.073	37.73±9.63	t=-0.107
No	19	15.6	65.15±18.58	p=0.896	13.89±4.28	p=0.449	13.26±3.98	p=0.942	38.00±10.96	p=0.915
Patients' trust in students										
Yes	74	60.7	68.23±16.87	t=2.201	14.81±3.93	t=1.042	14.02±3.77	t=2.702	39.39±9.88	t=2.296
No	48	39.3	61.58±15.36	p=0.030	14.06±3.78	p=0.300	12.22±3.27	p=0.008	35.29±9.22	p=0.023
health professionals' trust in students										
Yes	83	68.0	66.02±16.53	t=0.397	14.39±3.78	t=-0.492	13.57±3.71	t=1.133	38.04±9.78	t=0.442
No	39	32.0	64.74±16.78	p=0.692	14.76±4.11	p=0.623	12.76±3.60	p=0.259	37.20±9.94	p=0.660

SD: Standard deviation; F: One-way ANOVA; t: Student-t test.

Does not show ($p>0.05$). Among the student nurses participating in the study, the academic self-efficacy total, academic planning, and coping with academic problems scores of the student nurses who thought their patients were trusting were higher than those who did not think they were trusting a statistically significant difference was found between the groups ($p<0.05$). In the tests conducted on the trust of the participating students in the student nurse and the trust of the health professionals in the student nurse, the total academic self-efficacy, academic efforts, academic planning, and coping with academic problems scores of the participating students do not show a statistically significant difference ($p>0.05$) (Table 1). The total score of the students participating in the study on attitude toward clinical practices was 91.81 ± 14.92 ; belief and expectation subscale scores 34.03 ± 6.52 ; positive approach was found to be 19.53 ± 6.09 , negative approach was 16.50 ± 5.55 and personal development scores were 12.74 ± 2.98 . According to Table 2, when the total attitudes toward clinical practices, beliefs and expectations toward clinical practices, positive approach toward clinical practices, negative approach toward clinical practices, and personal development scores of the students participating in the study were examined according to their gender and the classes they studied, no statistically significant difference was detected ($p>0.05$; $p>0.05$). Among the students who participated in the study, the negative attitude scores toward clinical practices of those who voluntarily chose the nursing department were found to be lower than the scores of those who did not voluntarily choose the nursing department. There is a statistically significant difference between the two groups ($p<0.05$). There was no statistically significant difference in students' total attitude toward clinical practices, beliefs, and expectations toward clinical practices, positive approach toward clinical practices, and personal development scores depending on whether they chose the department willingly ($p>0.05$). Among the students who participated in the study, the total attitude scores toward clinical practices of those whose clinical practice place was an institution with beds were found to be higher than those whose clinical practice place was an institution without beds. There is a statistically significant difference between the two groups ($p<0.05$). Likewise, the belief and expectation scores for clinical practices of those whose clinical practice was an institution with beds were found to be higher ($p<0.05$) than the scores of those whose clinical practice was an institution without beds. There is a statistically significant difference between the two groups ($p<0.05$). The negative approach scores toward clinical

practices of those whose clinical practice was in an institution with beds were found to be lower ($p<0.05$) than the scores of those whose clinical practice was in an institution without beds. There is a statistically significant difference between the two groups ($p<0.05$). Students' positive approach toward clinical practices and personal development scores do not differ significantly depending on the clinical practice location ($p>0.05$). The negative attitude scores toward clinical practices of the students who considered the theoretical education they received sufficient to communicate were found to be lower than the scores of those who did not consider it sufficient and were found to be statistically significant ($p<0.05$). The personal development scores of those who considered theoretical education sufficient in communicating were found to be higher than the scores of those who did not consider theoretical education sufficient, and the difference between the groups was found to be statistically significant ($p<0.05$). Students' total attitude toward clinical practices, beliefs and expectations toward clinical practices, and positive approach scores toward clinical practices do not show a statistically significant difference depending on whether they consider theoretical education sufficient for communication ($p>0.05$). Among the students participating in the study, the negative approach scores toward clinical practices of those who found theoretical education and practices compatible were found to be lower than the negative approach scores toward clinical practices of those who did not find theoretical education and practices compatible, and this was statistically significant ($p<0.05$). Students' total attitude toward clinical practices, beliefs and expectations toward clinical practices, positive approach toward clinical practices, and personal development scores do not show a significant difference depending on whether they find theoretical education and practices compatible ($p>0.05$). Among the students participating in the study, the total attitude scores toward clinical practices of those who could use theoretical education in practice were found to be higher and statistically significant ($p<0.05$). The negative approach scores toward clinical practices of those who could use theoretical training in practice are lower than the negative approach scores toward clinical practices of those who could not use theoretical training in practice, and the difference between the two groups was found to be statistically significant ($p<0.05$). Students' beliefs and expectations about clinical practices, positive approach to clinical practices, and personal development scores do not show a significant difference according to theoretical education and ability to use them in practice ($p>0.05$). Among the students, who participated in the

Table 2. Differentiation of nursing students' attitude scale towards clinical practice scores according to descriptive characteristics

Descriptive characteristics (n=122)	n	%	Attitude towards clinical practices total		Beliefs and expectations for clinical practices		Positive approach toward clinical practices		Negative approach toward clinical practices		Personal improvement	
			Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD		
Gender												
Woman	108	88.5	91.12±14.62	t=-1.426	33.92±6.74	t=-0.501	19.37±5.85	t=-0.817	16.79±5.65	t=1.649	12.62±2.89	t=-1.296
Man	14	11.5	97.14±16.73	p=0.156	34.85±4.67	p=0.618	20.78±7.81	p=0.416	14.21±4.15	p=0.102	13.71±3.53	p=0.198
Class												
2. class	51	41.8	90.56±12.84	F=0.407	34.25±6.82	F=0.161	18.56±4.64	F=1.277	16.58±5.06	F=0.111	12.33±2.47	F=1.717
3. class	40	32.8	93.42±18.04	p=0.667	33.55±6.77	p=0.852	20.60±7.66	p=0.283	16.17±5.35	p=0.895	13.45±3.49	p=0.184
4. class	31	25.4	91.77±13.94		34.29±5.86		19.74±5.83		16.77±6.64		12.51±2.95	
Selecting the department willingly												
Yes	96	78.7	92.75±15.18	t=1.339	34.07±6.62	t=0.130	19.60±6.02	t=0.248	15.80±4.95	t=-2.738	12.87±3.07	t=0.919
No	26	21.3	88.34±13.65	p=0.183	33.88±6.28	p=0.897	19.26±6.46	p=0.805	19.07±6.85	p=0.007	12.26±2.60	p=0.360
Clinical practice location												
Inpatient institution	113	92.6	92.74±14.75	t=2.496	34.54±6.10	t=3.149	19.54±6.25	t=0.045	16.18±5.31	t=-2.251	12.85±3.04	t=1.366
Bedless institution	9	7.4	80.11±12.47	p=0.014	27.66±8.54	p=0.002	19.44±3.67	p=0.964	20.44±7.24	p=0.026	11.44±1.50	p=0.175
Considering theoretical education to be sufficient in communication												
Yes	111	91	92.64±15.11	t=1.970	33.87±6.69	t=-0.853	19.83±6.14	t=1.772	16.01±5.15	t=-3.156	12.94±2.95	t=2.401
No	11	9	83.45±9.94	p=0.051	35.63±4.50	p=0.395	16.45±4.65	p=0.079	21.36±7.25	p=0.002	10.72±2.61	p=0.018
Finding compatibility with theoretical education and practices												
Yes	98	80.3	92.75±15.64	t=1.417	33.75±6.84	t=-0.949	19.90±6.30	t=1.380	15.80±5.01	t=-2.871	12.89±3.05	t=1.140
No	24	19.7	87.95±11.00	p=0.159	35.16±4.98	p=0.345	18.00±4.96	p=0.170	19.33±6.77	p=0.005	12.12±2.64	p=0.257
Ability to use in practice with theoretical education												
Yes	82	67.2	93.97±16.09	t=2.335	34.40±6.86	t=0.895	20.03±6.61	t=1.312	15.46±5.19	t=-3.052	13.00±3.06	t=1.353
No	40	32.8	87.37±11.10	p=0.021	33.27±5.77	p=0.373	18.50±4.76	p=0.146	18.62±5.71	p=0.003	12.22±2.75	p=0.179
Considering education sufficient as a result of observations												
Yes	103	84.4	92.68±15.55	t=1.503	34.08±6.59	t=0.214	19.89±6.41	t=1.530	16.17±5.39	t=-1.514	12.87±2.99	t=1.104
No	19	15.6	87.10±9.96	p=0.135	33.73±6.34	p=0.831	17.57±3.42	p=0.026	18.26±6.20	p=0.133	12.05±2.87	p=0.272
Patients' trust in students												
Yes	74	60.7	92.71±13.92	t=0.830	33.56±6.76	t=-0.977	19.96±5.89	t=0.960	15.71±4.90	t=-1.958	12.90±3.00	t=0.732
No	48	39.3	90.41±16.40	p=0.408	34.75±6.15	p=0.331	18.87±6.38	p=0.339	17.70±6.28	p=0.052	12.50±2.95	p=0.465
Health professionals' trust in students												
Yes	83	68	92.13±13.23	t=0.345	33.92±6.54	t=-0.258	19.09±5.49	t=-1.156	15.63±4.35	t=-2.556	12.74±2.72	t=0.006
No	39	32	91.12±18.19	p=0.730	34.25±6.56	p=0.797	20.46±7.19	p=0.298	18.33±7.22	p=0.036	12.74±3.50	p=0.995

SD: Standard deviation; F: One-way ANOVA; t: Student-t test.

Table 3. Correlation analysis between academic self-efficacy and attitude towards clinical practice scores

	Academic self-efficacy total	Academic efforts	Academic planning	Coping with academic problems
Attitude towards clinical practices total				
r	0.378**	0.359**	0.367**	0.358**
p	0.000	0.000	0.000	0.000
Beliefs and expectations for clinical practices				
r	0.373**	0.407**	0.329**	0.345**
p	0.000	0.000	0.000	0.000
Positive approach towards clinical applications				
r	0.153	0.109	0.165	0.153
p	0.093	0.231	0.069	0.093
Negative approach toward clinical practices				
r	-0.275**	-0.229*	-0.289**	-0.265**
p	0.002	0.011	0.001	0.003
Personal improvement				
r	0.249**	0.256**	0.243**	0.227*
p	0.006	0.004	0.007	0.012

*: <0.05; **: <0.01; Pearson correlation analysis.

Table 4. The effect of academic self-efficacy on total attitude towards clinical practices

Independent variable	Unstandardized coefficients		Standardized coefficients	t	p	%95 CI	
	B	SE	β			Lower	Upper
Stationary	69.475	5.157		13.472	0.000	59.264	79.685
Academic self-efficacy total	0.340	0.076	0.378	4.466	0.000	0.190	0.491

*: Dependent variable=attitude towards clinical practices total; CI: Confidence interval; R=0.378; R²=0.135; F=19.947; p=0.000; Durbin watson value=1.896.

Table 5. The effect of academic self-efficacy sub-dimensions on the total attitude towards clinical practices

Independent variable	Unstandardized coefficients		Standardized coefficients	t	p	%95 CI	
	B	SE	β			Lower	Upper
Stationary	69.297	5.217		13.284	0.000	58.966	79.627
Academic efforts	0.638	0.590	0.166	1.081	0.282	-0.530	1.805
Academic planning	1.489	0.344	0.367	4.327	0.000	0.808	2.171
Coping with academic problems	0.085	0.313	0.056	0.271	0.787	-0.534	0.704

*: Dependent variable=Attitude towards clinical practices total; CI: Confidence interval; R=0.384; R²=0.126; F=6.822; p=0.000; Durbin watson value=1.888.

study, the positive approach scores toward clinical practices of those who considered the education sufficient as a result of the observations were found to be higher than the positive approach scores toward clinical practices of those who did not consider the education sufficient as a result of the observations, and this was statistically significant (p<0.05). Students' total attitudes toward clinical practices, beliefs, and expectations toward clinical practices, negative approach toward clinical practices, and personal develop-

ment scores do not show a statistically significant difference depending on whether they consider the education sufficient as a result of the observations (p>0.05). Total attitudes toward clinical practices, beliefs, and expectations toward clinical practices, positive approach toward clinical practices, negative approach toward clinical practices, and personal development scores of the students participating in the study do not show a significant difference according to the patients' trust in the student nurse (p>0.05).

Among the students participating in the study, the negative approach scores toward clinical practices of those who thought that health professionals trusted the student nurse were found to be lower than the negative approach scores toward clinical practices of those who did not think that health professionals trusted the student nurse, and this was statistically significant. ($p < 0.05$). Students' total attitude toward clinical practices, beliefs and expectations toward clinical practices, positive approach toward clinical practices, and personal development scores do not show a significant difference according to the trust of health professionals in student nurses ($p > 0.05$) (Table 2). When the correlation analysis between the scores of the scales used in the study is examined; A weak positive correlation ($r = 0.378$, $r = 0.359$, $r = 0.367$, $r = 0.358$; $p < 0.05$) was found between the total attitude toward clinical practices and all sub-dimensions of the academic self-efficacy scale. A weak positive correlation ($r = 0.373$, $r = 0.407$, $r = 0.329$, $r = 0.345$; $p < 0.05$) was found between beliefs and expectations about clinical practices and all sub-dimensions of the academic self-efficacy scale. A weak negative correlation ($r = -0.275$, $r = -0.229$, $r = -0.289$, $r = -0.265$; $p < 0.05$) was found between the negative approach toward clinical practices and all sub-dimensions of the academic self-efficacy scale. A weak positive correlation ($r = 0.249$, $r = 0.256$, $r = 0.243$, $r = 0.227$; $p < 0.05$) was found between personal development and all sub-dimensions of the academic self-efficacy scale. Correlation relationships between other variables are not statistically significant ($p > 0.05$) (Table 3). The regression analysis performed to determine the cause-and-effect relationship between academic self-efficacy and attitudes toward clinical practices was found to be significant ($p = 0.000 < 0.05$). The total change in the level of attitude toward clinical practices is explained by academic self-efficacy at a rate of 13.5% ($R^2 = 0.135$). Academic self-efficacy increases the level of attitude toward clinical practices (Table 4).

The regression analysis performed to determine the cause-and-effect relationship between academic efforts, academic planning, coping with academic problems, and attitudes toward clinical practices was found to be significant ($p = 0.000 < 0.05$). The total change in attitude toward clinical practices level is explained by 12.6% of academic efforts, academic planning, and coping with academic problems ($R^2 = 0.126$). Academic efforts do not affect the total level of attitude toward clinical practices ($p = 0.282 > 0.05$). Academic planning increases the total level of attitude toward clinical practices. Coping with academic problems does not affect the total level of attitude toward clinical practices ($p = 0.787 > 0.05$) (Table 5).

Discussion

Nursing is an applied profession that enables the meaningful integration of theoretical knowledge with skills. The goal of nursing education is to enable the individual to become a nurse in accordance with the qualifications of the profession and to acquire the skills of nursing. In this context, the education process should contribute to students internalizing the knowledge, skills, professional values, and ethical standards related to nursing and reflecting these on their behavior.^[1,8,15] Clinical practice in nursing education is a practice and process that allows the transfer of knowledge into practice, provides experience, and enables the transition from student to profession.^[16] The purpose of this study is to examine the relationship between nursing students' academic self-efficacy and their attitudes toward clinical practice during their undergraduate education.

In the study, 80.3% of the students found theoretical education and practices compatible, and 67.2% said that they were able to integrate the theoretical education they received into clinical practice. As a result of the observations, 84.4% stated that they found the training sufficient. In the studies conducted by Titrek et al.^[15] and Aktaş and Karabulut,^[17] it was determined that the information given to students at school was sufficient for practical applications and this increased the academic motivation of students.

The total change in the attitude level of the students participating in the research toward clinical practices is explained by academic self-efficacy at a rate of 13.5%. Academic self-efficacy increases the level of attitude towards clinical practices. In a study, it was determined that there was a positive relationship between the academic success and academic self-efficacy of nursing students and their clinical performance self-efficacy.^[18] Tery and Peck^[19] stated in their study that students with high self-efficacy also had high clinical performance.

It was determined that the academic self-efficacy of the students participating in the study increased as their grade level increased. This can be explained by the fact that as the duration of clinical experience increases, students interact with more patients, and therefore, their academic self-efficacy increases. In a study, it was stated that students with more clinical experience had higher self-efficacy perceptions regarding their clinical performance than students with less clinical experience.^[18]

Among the students who participated in the study, the scores for clinical practice and academic planning of those who voluntarily chose the nursing department were higher than those who did not voluntarily choose the department. Similar results

were obtained in another study when the literature was examined.^[20] In another study, it was determined that there was no statistically significant difference between students who chose the department voluntarily and those who did not.^[21]

A statistically significant difference was found between the academic self-efficacy total, academic planning and coping with academic problems scores of the student nurses who participated in the study and thought that their patients trusted them. In other studies similar to our study, it has been concluded that students' ability to establish a trust-based relationship with patients and their relatives positively affects their experiences in the clinic. In other studies examined, it has been determined that the student's thought of harming the patient in clinical practice and the fear of incorrectly transferring their clinical skills to the patient cause anxiety.^[20,22,23]

Among the students who participated in the study, the clinical practice attitudes and belief and expectation scores toward clinical practices were statistically significant compared to those whose clinical practice place was an institution with beds, compared to those whose clinical practice place was an institution without beds. It is known that clinical practice is important in developing the knowledge and skills necessary for students to learn the profession. In the study by Gezer and Temel,^[24] where they examined the clinical performance self-efficacy of students taking the surgical nursing course, they found that 64.3% of the students were satisfied with the education in the nursing department and their clinical self-efficacy was high.

Among the students participating in the study; It was determined that those who considered the theoretical education they received sufficient to communicate had low negative attitude scores toward clinical practices and high personal development scores. In a study examining the relationship between professional practice and theoretical education, it was stated that the theoretical knowledge of nursing students was not sufficient for the relevant internship.^[25]

It was determined that among the students participating in the study, those who found theoretical education compatible and those who could use theoretical education in practice had higher attitude scores than those who could not. In addition, as a result of the observations of the students, the difference between the positive approach scores toward clinical practices between those who considered the education sufficient and those who did not is statistically significant. This situation shows the importance of practice time in nursing professional courses. In a study similar to our study, the majority of participants stated that they turned theoretical knowledge

into practice, that they turned their knowledge into practice through clinical practice, and that the practices helped them learn new information, and take responsibility and self-confidence.^[1] In other studies, it was stated that 62.5% of the students found the theoretical content not sufficient and the theoretical and skill training provided (62.6%) insufficient.^[24,26]

Total attitudes toward clinical practices, beliefs and expectations toward clinical practices, positive approach toward clinical practices, negative approach toward clinical practices, and personal development scores of the students participating in the study do not differ significantly depending on the patients' trust in the student nurse. Other studies have shown that the majority of students can establish relationships based on trust, love, and respect with patients and their families, and this positively affects their attitudes toward clinical practices.^[27,28]

Among the students who participated in the study, the negative approach scores toward clinical practices of those who thought that health professionals trusted student nurses were found to be lower than the scores of those who did not think that they did. Chesser-Smyth^[29] reported in his study that the warm welcome of the clinical staff on the 1st day had a positive effect on the students' self-esteem and sense of well-being. Adaptation to the clinical environment is important in developing supportive and positive relationships in clinical practice.^[30] In a study, it was concluded that nursing students thought that the employees at the practice site had confidence in them and that the general self-efficacy scores of these students were higher than the other group.^[10]

Research Limitations

The findings of this study can only be generalized to the population to which it was applied.

Conclusion

As a result of the research; It was determined that the academic self-efficacy scores of the students and the attitude toward clinical practices scores were interrelated, and the attitude toward clinical practices scores were affected by the students' academic efforts, academic planning, and their level of coping with academic problems.

Therefore, academic nurses and clinician nurses can be recommended to plan and carry out practices that will increase students' academic success. It may be recommended that theoretical education, especially in the field of nursing, be supported by professional practices and that professional practical courses be given in clinics or units that give students the chance to practice theoretical education subjects one-on-one.

Peer-review: Externally peer-reviewed.

Ethics Committee Approval: The Lokman Hekim University Scientific Research Ethics Committee granted approval for this study (date: 21.12.2022, committee decision no: 2022/190, code no: 2022174).

Authorship Contributions: Concept: ET, ÖÜB; Design: ET, ÖÜB; Supervision: ET; Fundings: ET, ÖÜB; Data Collection or Processing: ET, ÖÜB; Analysis or Interpretation: ET; Literature Search: ET, ÖÜB; Writing: ET, ÖÜB; Critical Review: ET, ÖÜB.

Conflict of Interest: None declared.

Financial Disclosure: The authors declared that this study received no financial support.

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