ORIGINAL ARTICLE

CYPRUS
JOURNAL OF MEDICAL SCIENCES

DOI: 10.4274/cjms.2020.3037
Cyprus J Med Sci 2022;7(2):213-221

The Effects of Achievement-Focused Motivation on Lifelong Learning Tendencies of Nursing Students

Sibel Şentürk[1], Bircan Kara[2], Alev Yıldırım Keskin[3]

[1]Department of Nursing, Bucak Health School, Burdur Mehmet Akif Ersoy University, Burdur, Turkey
[2]Hatay Mustafa Kemal University, Health Practices and Research Hospital, Hatay, Turkey
[3]Department of Nursing, Akşehir Kadir Yallagöz Health School, Selçuk University, Konya, Turkey

ABSTRACT

BACKGROUND/AIMS: Nurses need to have lifelong learning to be able to follow up the most current information and practices in the area of healthcare, acquire the information, skills and qualifications required for the safe conduct of nursing practices, to continue to offer good-quality healthcare services and to improve health services. The aim of this study was to determine the effects of achievement-focused motivation on the lifelong learning tendencies of nursing students.

MATERIALS AND METHODS: This descriptive and cross-sectional study was performed with the participation of 264 nursing students. The data were collected using a Personal Information Form, the Achievement-Focused Motivation Scale and the Lifelong Learning Tendency Scale. Descriptive statistics, Independent-Samples t-test, One-Way ANOVA and Pearson's Correlation Analysis were utilized for the evaluation of the data collected.

RESULTS: The mean of scores obtained by the participants from the Achievement-Focused Motivation Scale and the Lifelong Learning Tendency Scale were respectively 143.24±24.99 and 70.28±11.94. Upon assessment of the correlation between the means of the scores obtained by the participants from the Achievement-Focused Motivation Scale and the Lifelong Learning Tendency Scale, it was found that there was a statistically significant relationship between the participants' scores in the Achievement-Focused Motivation Scale and its sub-scales and their scores in the Lifelong Learning Tendency Scale ($p<0.01$).

CONCLUSION: It was ascertained that the nursing students' lifelong learning tendencies developed as their achievement-focused motivation levels went up.

Keywords: Achievement-focused motivation, lifelong learning tendency, nursing student, education

INTRODUCTION

Motivation is defined as "the motive which urges individuals to take action for showing decisiveness in their behaviors and for fulfilling a goal", and it is a force which ensures the continuity of actions. One of the domains in which the concept of motivation is most commonly used is an educational institution. It is asserted that having high levels of motivation in the learning process starting in childhood at educational institutions and continuing throughout life affect individuals' learning efforts positively.[1,2] In the education and instruction process, motivation is a phenomenon which stimulates and mobilizes students and enables them to gain benefits from their activities by transforming their knowledge base, technical skills and conceptual skills.[3] Individuals who are able to have immediate access to information, add new information to their knowledge base and share information with other people are characterized as powerful, highly

To cite this article: Şentürk S, Kara B, Yıldırım Keskin A. The Effects of Achievement-Focused Motivation on Lifelong Learning Tendencies of Nursing Students. Cyprus J Med Sci 2022;7(2):213-221

ORCID iDs of the authors: S.Ş. 0000-0002-5634-174X; B.K. 0000-0001-8220-8929; A.Y.K. 0000-0003-0981-5364.

Address for Correspondence: Sibel Şentürk
E-mail: sibelsenturk@mehmetakif.edu.tr
ORCID ID: orcid.org/0000-0002-5634-174X

Received: 12.09.2020
Accepted: 23.10.2020

motivated and academically successful.[2,3] It is asserted that raising the level of education is also effective in boosting motivation. This is why individuals need to renew, develop, constantly upgrade and transform themselves. Fast developments in the domain of science and technology also accelerate this renewal process of information, and developments in the knowledge base and the renewal of existing information results in information obtained through educational institutions becoming obsolete.[4,5] In this sense, the need for those individuals who are capable of following up developments in the field of science and technology, who have access to rapidly changing information, who restructure information and who promote their self-development has increased.[5,6] The need for individuals to develop and renew themselves has brought the concept of lifelong learning to the forefront.[1]

The concept of lifelong learning is used as synonymously for adult education and constant learning and it covers all formal or informal education activities which increase personal, social or professional knowledge, skills and values likely to be gained in any phase of life.[7] It is discerned that the importance of lifelong learning progressively increases in professions where the human being is the essential component. Lifelong learning is also of importance to nursing professionals who are rapidly affected by scientific and technological developments and spend a long time with patients as part of the delivery of healthcare services.[1,8] Nurses need to have lifelong learning to be able to keep up to date with the most current information and practices in the field of healthcare in order to acquire the information, skills and qualifications required for the safe conduct of nursing practices, to continue to offer high-quality healthcare services and to improve health services.

The American Association of Colleges of Nursing, and also, the American Nurses Association and several accredited institutions refer to the lifelong learning responsibilities of nurses.[7] The profession of nursing should strengthen its professional infrastructure and produce and share knowledge with regards to its area of service. It is necessary to focus on this concept so that it will be internalized, especially during the university years and also to support motivational parameters which are likely to encourage student nurses to internalize this concept. Students of nursing colleges are prospective nurses who will play protective and constructive roles in the healthcare of individuals and/or society. In order to contribute to the development of the profession of nursing, institutions offering nursing education are expected to raise the quality of education, and nursing students are supposed to acquire lifelong learning attributes during their college education.[9]

Radi found a statistically significant relationship between Saudi nursing students' academic achievements and their levels of motivation to attend university.[1] Those nursing students with high motivation levels also had higher academic achievement levels. It was particularly emphasized that those individuals who had outstanding academic achievements and focused on having accomplishments had more effective learning activities and processes and continued in this manner throughout their lives.[1] Moreover, in the study by Osma et al.[10], it was asserted that the most significant factor affecting students' academic achievements during their university years was their level of motivation during their higher education, and ensuring pedagogical reinforcement was essential for the maintenance and enhancement of motivation in order to attain perfection. Furthermore, in the study performed by Odanga[11] in Kenya with the participation of 224 students, it was stated that those students who had self-discipline, had forward-looking future goals, were skilled in time-management and had instruction and learning settings which supported autonomy had higher self-motivation levels, as well as higher academic achievement levels. In addition, in their study, it was highlighted that, for students to be able to have high academic achievement levels, to have access to lifelong learning and to motivate themselves, they should be instructed and educated by means of strategies which would raise their motivation levels.[11] After a review of the relevant literature, it was observed that studies on nursing students were intended to identify only the lifelong learning qualities or motivation, but there were only a limited number of studies analyzing the correlations between motivation and lifelong learning tendencies.[1,2,8,12,13] It is clear that promoting the achievement-focused motivation of nursing students together with their lifelong learning qualities will likely assure the protection and development of the healthcare of both individuals and the society. Starting from this point, the aim of this study is to identify the effects of achievement-focused motivation on the lifelong learning tendencies of nursing students.

Research Questions:

In this study, answers are sought to the following fundamental questions:

1. What are the achievement-focused motivation and lifelong learning tendency levels of nursing students?

2. Which factors influence the level of achievement-focused motivation and lifelong learning trends in nursing students?

3. Does the achievement-focused motivation of nursing students have an impact on their lifelong learning trends?

MATERIALS AND METHODS

Study Design

A descriptive and cross-sectional design was used in this study.

Setting and Sample

The population of this study consisted of all nursing students who were first, second, third and fourth-year students at the Nursing Department of the School of Health Sciences, İstanbul Gelişim University in the spring semester of the academic year of 2018–2019 (n=300). Sample selection was not performed, and it was aimed to include the whole population in the study. The voluntary participation rate in this study was 88% (n=264). The inclusion criteria of the study comprised the following:

Being a nursing student in the spring semester of the academic year of 2018–2019,

Having no visual or auditory impairments,

Being open to communication and collaboration,

Having no history of psychiatric illness

Agreeing to participate in this study.

Data Collection Instruments

The data were collected by a Personal Information Form, the Achievement-Focused Motivation Scale and the Lifelong Learning Trends Scale for Turkish students.

Personal Information Form

The Personal Information Form was prepared by the researchers based on the literature.[1,4,8,12-14] The form consists of 14 close-ended questions about the students' socio-demographic characteristics such as age, gender, the last school of graduation, mother's education level, mother's profession, father's education level, father's profession, family type, family income status, where they live, whether they chose nursing voluntarily, any membership of student associations and their grade point average (GPA).

Achievement-Focused Motivation Scale (AFMS)

The Achievement-Focused Motivation Scale which was developed by Semerci [15] to identify the achievement-focused motivation of students was utilized in this study. The Achievement-Focused Motivation Scale, which is scored on the basis of a 5-point Likert scale, comprises 35 items and has four sub-scales. These sub-scales are (a) external effects (12 items), (b) internal effects (9 items), (c) growth of aim (6 items) and (d) self-consciousness (7 items) (minimum score: 35, maximum score: 175). High scores obtained from the overall scale and its sub-scales indicate high levels of motivation. The Cronbach's Alpha Coefficient calculated for the overall scale was 0.89.[15] In this study, the Cronbach's Alpha Coefficient was found to be 0.91.

Lifelong Learning Tendency Scale (LLTS)

This scale, which was developed by Erdoğan and Arsal[16], has two sub-scales, namely, "willingness to learn" and "openness to development", and it comprises 17 items. It is a 5-point Likert-type scale (minimum score: 17, maximum score: 85). High scores obtained from this scale demonstrate that lifelong learning tendencies are high. The Cronbach's Alpha Coefficient calculated for the overall scale was 0.86.[16] In this study, the Cronbach's Alpha Coefficient was found to be 0.95.

Data Collection

The data were collected by the second author between April 15 and May 10, 2019. The Personal Information Form, AFMS and LLTS were applied to all students on different days. The researcher went to each classroom and informed the instructors of the classes about the study before the data collection process. In order to avoid any interruption in the classes where the questionnaire was applied, permission was obtained from the responsible instructor of the class. A questionnaire was applied at the end of a class. Before collecting the data, the purpose of the study was explained to the students, and the voluntary and confidential nature of the study was emphasized. After reading the contents of the consent form, the questionnaire forms were distributed to those who agreed to participate in the study. The participants voluntarily consented and were told they could withdraw from the study at any time without consequences. After the forms were completed, they were collected by the second author. Data collection lasted approximately 20–25 min.

Statistical Analysis

Data analysis was performed using SPSS 21.0 (Statistical Package for the Social Sciences, Chicago, IL, USA). Categorical variables are presented as frequencies and percentages. Continuous variables are expressed as mean and standard deviation (SD). To evaluate the normality of the data distribution, Shapiro–Wilk or Kolmogorov–Smirnov tests were used. Independent-samples t-tests were used for two groups which had continuous variables, and one-way analysis of variance (ANOVA) was used for more than two groups. The relationship between the scales was tested using Pearson's correlation analysis. A two-tailed p-value <0.05 was considered significant for all analyses.

Ethics Committee Approval

Before data collection, ethics committee approval was obtained from the Ethics Committee of Non-Interventional Clinical Studies of Burdur Mehmet Akif Ersoy University (decision number: GO 2019/36, date: 06.02.2019). Written permission was obtained from the Director's Office of the School of Health Sciences (decision number: 2019-13-2, meeting date: 08.04.2019). The written consents of the students who participated in the study were obtained after reading an informed consent text. This study was conducted in accordance with the Good Clinical Practices of the World Medical Association (WMA) and the Declaration of Helsinki (and/or the World Psychiatric Association HAWAII Declaration).

RESULTS

Upon the review of descriptive characteristics in association with the scores obtained by the nursing students from AFMS and LLTS, it was found that the mean score obtained from the "external effects" sub-scale of AFMS was 52.34±7.84, the mean score obtained from the "internal effects" sub-scale of AFMS was 27.95±6.02, the mean score obtained from the "growth of aim" sub-scale of AFMS was 27.95±6.02, and the mean score obtained from the "self-consciousness" sub-scale of AFMS was 27.76±6.07. It was ascertained that the mean score obtained from the overall AFMS was 143.24±24.99, and the mean score in the overall LLTS was 70.28±11.94 (Table 1).

The descriptive characteristics of the nursing students are presented in Table 2. Upon the comparison of the descriptive characteristics with their scores from AFMS and LLTS, it was found that the class year of the nursing students had statistically significant relationships with the "internal effects" and "growth of aim" sub-scales of AFMS (p=0.024, p=0.035). It was discerned that the mean score of the first-year nursing students from the "internal effects" sub-scale (29.32±7.08) was higher than those obtained by the second-, third- and fourth-year nursing students. It was identified that the "external effects" sub-scale of AFMS had statistically significant relationships with the education level and profession of the participants' mothers (p=0.005). It was ascertained that those participants with mothers who were primary school graduates or had lower education levels had higher mean scores in the "external effects" sub-scale (53.02±8.23) than those whose mothers had higher levels of education, and those students whose mothers were housewives had higher mean scores in the "external effects" sub-scale (52.85±7.94) than those with mothers

Table 1. AFMS and sub-scales with LLTS scores

AFMS and sub-scales	Min-max/n	Mean ± SD	Cronbach Alpha
External effects	25–60/264	52.34±7.84	0.92
Internal effects	7–35/264	27.95±6.02	0.91
Growth of aim	7–35/264	27.95±6.02	0.88
Self-consciousness	11–35/264	27.76±6.07	0.90
AFMS total	67–175/264	143.24±24.99	0.91
LLTS total	29–85/264	70.28±11.94	0.95

AFMS: Achievement-Focused Motivation Scale; LLTS: Lifelong Learning Tendency Scale, min: minimum, max: maximum, SD: standard deviation, n: number.

Table 2. Comparison of the Achievement-Focused Motivation Scale (AFMS) and Lifelong Learning Tendency Scale (LLTS) with socio-demographic characteristics of the nursing students

Descriptive characteristics	Number	%	External effects sub-scale	Internal effects sub-scale	Growth of aim sub-scale	Self-consciousness sub-scale	AFMS Total	LLTS Total
Age*								
18–21 years	188	71.2	55.00±8.42	28.44±6.21	28.44±6.21	28.06±6.47	144.53±26.74	70.82±12.29
22–25 years	69	26.1	54.00±6.34	26.47±5.35	26.47±5.35	26.76±4.99	138.85±19.75	69.10±10.96
26 years and above	7	2.7	54.00±4.41	29.42±5.19	29.42±5.19	29.57±3.69	151.71±17.68	77.14±7.88
Test statistics			0.470	2.955	2.295	1.477	1.727	2.529
p-value			0.626	0.054	0.054	0.230	0.180	0.082
Gender**								
Female	198	75.0	52.85±7.90	28.28±6.26	28.28±6.26	28.03±6.33	144.95±26.05	70.64±12.54
Male	66	25.0	50.81±7.49	26.96±5.15	26.96±5.15	26.98±5.21	128.10±20.83	69.18±9.92
Test statistics			0.067	3.429	3.429	2.282	4.317	5.337
p-value			0.067	0.124	0.124	0.227	0.054	0.389
Class year*								
First year	85	32.2	52.91±9.94	29.32±7.08	29.32±7.08	29.70±7.42	149.32±31.93	70.22±15.32
Second year	48	18.2	52.64±6.38	27.77±4.90	27.77±4.90	26.43±5.09	141.14±19.78	71.79±9.94
Third year	107	40.5	51.78±6.60	27.45±5.38	27.45±5.38	26.99±4.91	140.00±20.23	69.63±9.96
Fourth year	24	9.1	52.25±7.42	25.70±5.93	25.70±5.93	27.04±6.01	138.33±22.74	70.33±10.35
Test statistics			1.695	1.167	2.910	2.377	4.273	1.532
p-value			0.761	**0.024**	**0.035**	0.110	0.118	0.974
				a>d; a>c	**a>d; a>c**			
Grade point average (GPA)			**2.64±0.46 (1.50-3.80)**					
Mothers' education level*								
Primary school or below	183	69.3	53.02±8.23	28.18±6.24	28.18±6.24	28.04±6.35	145.25±26.72	70.91±13.18
Secondary school	59	22.3	52.15±5.57	27.15±5.96	27.15±5.96	27.57±5.67	139.84±20.31	69.00±9.20
Tertiary education	22	8.4	42.27±8.10	28.27±4.01	28.27±4.01	26.00±4.42	135.63±19.08	68.47±5.81
Test statistics			5.481	0.681	0.681	1.149	2.174	0.852
p-value			**0.005**	0.507	0.507	0.319	0.116	0.428
			a>c; b>c					
Mothers' profession*								
Housewife	213	80.7	52.85±7.94	28.14±6.25	28.14±6.25	28.17±6.20	144.83±26.05	71.29±12.11
Worker	34	12.9	52.05±5.65	26.67±5.21	26.67±5.21	26.58±5.54	128.55±18.27	64.76±11.82
Civil servant	17	6.4	46.52±8.29	28.23±4.27	28.23±4.27	25.05±4.56	132.64±19.59	68.58±5.60
Test statistics			5.324	0.885	0.885	2.842	2.588	4.696
p-value			**0.005**	0.414	0.414	0.060	0.077	**0.010**
			a,b>c					**a,b>c**
Fathers' education level*								
Primary school or below	155	58.7	53.34±8.50	28.56±6.66	28.56±6.66	28.25±6.68	146.34±28.03	70.53±14.10
Secondary school	81	30.7	51.12±5.55	27.08±4.91	27.08±4.91	27.24±4.93	138.98±17.97	69.87±8.10
Tertiary education	28	10.6	50.39±9.00	27.14±4.85	27.14±4.85	26.60±5.45	138.35±22.58	70.03±7.67
Test statistics			3.153	1.896	1.896	1.301	2.949	0.087
p-value			**0.044**	0.152	0.152	0.274	0.054	0.917
			a>b					

Table 2. Continued

Descriptive characteristics	Number	%	External effects sub-scale	Internal effects sub-scale	Growth of aim sub-scale	Self-consciousness sub-scale	AFMS Total	LLTS Total
Fathers' profession*								
Civil servant	25	9.5	48.68±8.78	32.64±6.86	26.28±5.26	26.40±5.40	134.00±22.87	69.08±8.24
Worker	153	53.0	51.68±8.34	35.35±7.77	27.64±6.09	27.22±6.28	141.91±25.96	69.26±13.66
Retired	67	25.4	55.91±4.70	37.04±8.05	30.13±5.73	30.19±5.38	153.28±20.28	74.22±8.24
Not working	19	7.1	49.94±7.18	30.31±8.12	25.05±5.16	25.36±5.31	130.68±23.49	66.10±8.90
Test statistics			7.976	5.443	5.443	5.651	6.926	3.776
p-value			**0.000**	**0.001**	**0.001**	**0.001**	**0.000**	**0.011**
			c>a,b,d	**c>a,b,d**	**c>a,b,d**	**c>a,b,d**	**c>a,b,d**	**c>a,b,d**
Family type*								
Nuclear family	199	75.4	51.94±8.20	34.88±7.87	27.96±6.15	27.63±6.23	142.44±25.86	69.14±12.66
Expanded family	4	1.5	53.00±8.86	40.50±3.10	31.00±35.91	27.75±5.50	152.25±19.27	80.00±3.82
Broken family	61	23.1	53.60±6.42	35.72±7.55	27.73±5.70	28.19±5.64	145.26±22.36	73.36±8.63
Test statistics			1.056	0.549	0.549	0.196	0.559	4.370
p-value			0.349	0.548	0.548	0.822	0.572	**0.014**
								c>a
Family income level*								
Income below expenditure	21	8.0	54.76±4.65	37.23±7.05	29.19±4.90	29.61±5.60	150.80±19.15	73.42±8.20
Income equal to expenditure	161	61.0	52.51±6.34	34.82±7.07	27.74±5.51	27.60±5.11	142.68±21.19	71.63±9.30
Income above expenditure	82	31.0	51.40±0.60	35.30±9.13	28.06±7.15	27.62±7.71	142.39±32.15	66.81±16.03
Test statistics			1.635	0.550	0.550	1.097	1.050	5.389
p-value			0.197	0.577	0.577	0.349	0.351	**0.005**
								b>c
Place of residence*								
At home with family	105	39.8	54.06±0.13	36.40±7.08	28.77±5.60	28.74±4.90	147.98±19.12	73.28±10.23
At home with roommate	46	17.4	49.45±7.01	31.95±7.29	26.50±4.66	25.67±5.34	133.58±20.27	69.91±8.11
In apartment/dormitory	113	42.8	51.92±9.68	35.32±8.25	27.79±6.76	27.71±7.09	142.76±30.01	68.04±14.03
Test statistics			6.031	5.455	5.455	4.181	5.524	5.8133
p-value			**0.003**	**0.005**	**0.005**	**0.016**	**0.004**	**0.003**
			a>b; a>c	**a>b**	**a>b**	**a>b**	**a>b**	**a>b ; a>c**
Voluntary selection of the profession**								
Yes	217	82.2	53.24±7.34	35.89±7.46	28.31±6.03	28.27±6.09	145.73±24.45	70.91±12.36
No	47	17.8	48.19±8.75	31.80±8.33	26.31±5.76	25.42±5.48	131.74±24.45	67.34±9.31
Test statistics			2.392	0.412	0.001	1.049	0.460	1.664
p-value			**0.000**	**0.001**	**0.039**	**0.003**	**0.000**	0.063
Membership to student clubs**								
Yes	35	13.3	48.40±12.82	33.22±10.46	24.74±8.66	25.51±9.03	131.88±39.66	65.48±21.21
No	229	86.7	52.95±6.60	35.46±7.25	28.44±5.36	23.11±5.43	144.97±21.51	71.01±9.66
Test statistics			47.516	20.119	33.349	33.178	46.648	56.086
p-value			**0.001**	0.113	**0.001**	**0.018**	**0.004**	**0.010**

*Independent-Samples t-test was used in comparisons with two groups which had continuous variables, whilst **One-Way Analysis of Variance (ANOVA) was utilized in comparison of more than two groups.
Significant values are shown in bold.

employed in other professions. Furthermore, it was found that there was a statistically significant relationship between the profession of the participants' mothers and their mean scores obtained from LLTS (p=0.010). Table 2 shows that those students whose mothers were housewives had higher mean scores in LLTS than those with mothers employed in other professions. In addition, it was found that the mean scores of the participants from the "external effects" sub-scale of AFMS had statistically significant relationships with the education level and profession of the participants' fathers (p=0.044, p=0.000). It was ascertained that the mean score obtained from the "external effects" sub-scale from those students with fathers who were primary school graduates or had lower education levels (53.34±8.50) was higher than those with fathers who had higher levels of education. It was found that the mean score obtained from the "external effects" sub-scale from those participants who had retired fathers (55.91±4.70) was higher. It was identified that the residence place of the participants had statistically significant relationships with their mean scores in the "external effects", "internal effects", "growth of aim" and "self-consciousness" sub-scales of AFMS, the overall AFMS and the overall LLTS (respectively p=0.003, p=0.005, p=0.005, p=0.016, p=0.004, p=0.003), and the mean scores obtained from those participants living with their families in the "external effects", "internal effects", "growth of aim", "self-consciousness" sub-scales of AFMS, the overall AFMS and the overall LLTS (54.06±0.13) were higher than for those living in other places of residence. Likewise, it was found that the voluntary selection of the profession of nursing by the participants had statistically significant relationships with their mean scores in the "external effects", "internal effects", "growth of aim" and "self-consciousness" sub-scales of AFMS, the overall AFMS and the overall LLTS (respectively p=0.000, p=0.001, p=0.039, p=0.003, p=0.000, p=0.063). The mean scores obtained by the participants voluntarily selecting the profession of nursing in the "external effects", "internal effects", "growth of aim", "self-conscious" sub-scales of AFMS, the overall AFMS and the overall LLTS were higher than those obtained from those participants who entered the profession of nursing involuntarily. It was ascertained that student club membership had statistically significant relationships with the mean scores obtained from the participants in the "external effects", "growth of aim" and "self-consciousness" sub-scales of AFMS, the overall AFMS and the overall LLTS (p=0.001, p=0.001, p=0.018, p=0.004, p=0.010, respectively) (Table 2).

Upon evaluation of the correlation between the mean scores obtained by the participants from AFMS and LLTS, it was found that the mean score obtained by the participants in the "external effects" sub-scale of the AFMS had statistically significant positive relationships with their mean scores in the "internal effects" sub-scale (p=0.000, r=0.716), "growth of aim" sub-scale (p=0.000, r=0.721), "self-consciousness" sub-scale (p=0.000, r=0.765) of AFMS, the overall AFMS (p=0.000, r=0.899) and the overall LLTS (p=0.000, r=0.700) at a level of 1%. It was determined that the mean score obtained by the participants in the "internal effects" sub-scale of AFMS had statistically significant positive relationships with their mean scores in the "growth of aim" sub-scale (p=0.000, r=0.786) and "self-consciousness" sub-scale (p=0.000, r=0.753) of AFMS, the overall AFMS (p=0.000, r=0.911) and the overall LLTS (p=0.000, r=0.689) at a level of 1%. Moreover, it was observed that the mean score obtained by the participants in the "growth of aim" sub-scale of AFMS had statistically significant positive relationships with their mean scores obtained from the "self-consciousness" sub-scale (p=0.000, r=0.758) of AFMS, the overall AFMS (p=0.000, r=0.896) and the overall LLTS (p=0.000, r=0.682). It was seen that the mean score of the participants in the "self-consciousness" sub-scale of AFMS had statistically significant positive relationships with their mean scores in the overall AFMS (p=0.000, r=0.900) and the overall LLTS (p=0.000, r=0.721). It was found that there was a statistically significant positive relationship between the mean scores obtained by the participants from the overall AFMS and the overall LLTS (p=0.000, r=0.774). The participants' GPAs had statistically significant positive relationships with their mean scores in the "internal effects" sub-scale (p=0.005, r=0.171), "growth of aim" sub-scale (p=0.000, r=0.252) and "self-consciousness" sub-scale (p=0.007, r=0.167) of AFMS, the overall AFMS (*p*=0.001, r=0.196) and the overall LLTS (p=0.004, r=0.178) (Table 3).

DISCUSSION

Motivation for learning has become a precondition for the fulfillment and sustainability of lifelong learning in the information society of the

Table 3. Correlation between AFMS-Subscales and LLTS with GPA

		External effects	Internal effects	Growth of aim	Self-conscious	AFMS total score	LLTS total score
External effects	r	1	0.716	0.721	0.765	0.899	0.700
	p	-	0.000	0.000	0.000	0.000	0.000
Internal effects	r	0.716	1	0.786	0.753	0.911	0.689
	p	0.000	-	0.000	0.000	0.000	0.000
Growth of aim	r	0.721	0.786	1	0.758	0.896	0.682
	p	0.000	0.000	-	0.000	0.000	0.000
Self-conscious	r	0.765	0.753	0.758	1	0.900	0.721
	p	0.000	0.000	0.000	-	0.000	0.000
AFMS total score	r	0.899	0.911	0.896	0.900	1	0.774
	p	0.000	0.000	0.000	0.000	-	0.000
LLTS total score	r	0.700	0.689	0.682	0.721	0.774	1
	p	0.000	0.000	0.000	0.000	0.000	-
GPA	r	0.132	0.171	0.252	0.167	0.196	0.178
	p	0.092	0.005	0.000	0.007	0.001	0.004

p<0.01; AFMS: Achievement-Focused Motivation Scale, LLTS: Lifelong Learning Tendency Scale, GPA: grade point average

21st century. In the context of this precondition, in order to adapt to changing technology and the information age and gain the necessary knowledge, skills, attitudes and qualifications, it is important to raise individuals who are able to self-learn, research, wonder, question, look from a critical perspective, solve problems, become highly motivated and perceive learning as a process continuing throughout their lives.[4,13] For this reason, this study was conducted to determine the effects of achievement-focused motivation on the lifelong learning tendencies of nursing students in light of the relevant literature.

In this study, the mean score of the participants in LLTS was 70.28±11.94. Upon a review of the relevant literature, it was seen that there are studies arguing that participants have lifelong learning tendencies.[6,17-20] As nursing students are highly inclined toward lifelong learning, it is thought that they are interested in lifelong learning and have sufficient motivation, and even if they are faced with difficulties in organizing and performing lifelong learning activities, they can overcome these difficulties as they have positive tendencies toward lifelong learning.

In this study, the mean score of the participants in the overall AFMS and their mean sub-scale scores were seen to be at a high level. This result was in a similar vein to the findings in the relevant literature,[1-3,6,21,22] and high scores obtained from the overall AFMS and its sub-scales indicate that the college department in which students are enrolled has an effect on their achievement-focused motivation levels and lifelong learning tendencies, and students have positive feelings toward their college and instructors.

It was found that the place of residence of the participants had effects on their scores in LLTS and AFMS. It was determined that the mean scores obtained in LLTS and AFMS from those participants living with their families were significantly higher than those obtained from those participants living in a home with roommates, in dormitories or in apartments. In the light of these results, it may be argued that living together with family promotes the students' confidence which emanates from a family setting leads students to assume positive roles, enhances their knowledge, skills, attitudes, achievements, motivation and lifelong learning tendencies and has positive effects on these students.

It was found that the mean scores of the participants in LLTS were in general high on the basis of their class year. However, there was no statistically significant difference in the mean LLTS scores in this respect ($p>0.05$). It was discerned that, in the relevant literature, on the one hand, there are studies with analogous results,[19] while on the other hand, certain studies contradicted this finding of this study.[18,20,23,24] Additionally, the class year of the participants had statistically significant relationships with their mean scores in the "internal effects" sub-scale and "growth of aim" sub-scale of AFMS ($p<0.05$). The mean score obtained by the first-year nursing students in the "internal effects" sub-scale of AFMS (29.32±7.08) was found to be higher than those obtained by the second-, third- and fourth-year students. As the class years advanced, the mean scores obtained from the "internal effects" sub-scale decreased. It is thought that the differences in research findings are likely to have arisen from differences in schools, areas of practical application, the students' expectations and whether these expectations were met or not.

It was ascertained that the profession of the participants' fathers had statistically significant associations with their mean scores in LLTS and AFMS and its sub-scales, whilst the profession and education level of the participants' mothers had statistically significant associations only with their mean scores in LLTS and the "external effects" sub-scale of AFMS. The study performed in 2016 by Denat et al.[13] stated that the education level of parents had no effect on lifelong learning tendencies. The study conducted in 2017 by Karaduman and Tarhan[19] identified that, on the basis of the education level of fathers, there was a statistically significant difference in lifelong learning tendencies, whereas the education level of mothers had no statistically significant effect on lifelong learning tendencies. In light of these results, it may be inferred that gender roles have effects on the scores obtained from AFMS and LLTS. In addition, in view of the fact that the students' fathers had better professions and higher education levels than their mothers did, and most mothers were housewives (80.7%) according to an examination of the sociodemographic data of this study, it is thought that the fathers supported their children in terms of lifelong learning in addition to the patriarchal family structure of the Turkish society.

It was found that those participants who voluntarily selected nursing as a profession had significantly higher AFMS and LLTS scores. Ünal and Akay[25] identified a moderately positive relationship between students' lifelong learning tendencies and their attitudes toward the profession. Çelik and Karaca[22] suggested that nurses who willingly performed their profession had higher motivation scores. In view of these results, it is thought that the voluntary selection of the profession of nursing by the participants has positive effects on their studies, achievements and lifelong learning motivation.

In this study, those participants who were members of student clubs had significantly higher AFMS and LLTS scores. Even if there is no study performed on the effect of student club membership on motivation and lifelong learning tendencies in the relevant literature, it is considered that those participants who are involved in different extracurricular activities such as training courses, seminars, the internet and library had higher lifelong learning and motivation scores.[14,26] In light of these results, it is considered that participation of students in activities such as joining student clubs and following up club events encourages them to assume more responsibilities, raises their motivation and contributes positively to their lifelong learning processes.

In this study, according to the review of the participants' AFMS and LLTS scores on the basis of their GPAs, the participants with higher GPAs had significantly higher mean scores in AFMS and LLTS. This result of the study was in parallel with findings in the relevant literature,[1,27-30] and it is thought that students with higher GPAs have higher levels of achievement-focused motivation and lifelong learning tendencies as they manage their self-orientation better, successfully identify their learning needs, direct their own learning processes, and also the college program in which they were enrolled enabled them to develop lifelong learning tendencies.

Limitations of the Study

The results of this study do not represent all nursing students in Turkey and are limited to the students who received education at the school where the study was conducted.

CONCLUSION

Nursing is a profession which emphasizes and supposes that lifelong learning is essential. It is asserted that having high motivation levels

and obtaining lifelong learning qualities during the college years will enable nursing students to succeed in playing effective roles in healthy individual/societal transformations, obtaining different perspectives towards health problems and enhancing the quality of solutions.[4,13,14]

With this study, it was found that the nursing students had high levels of achievement-focused motivation and life-long learning tendencies. Moreover, it was identified that the nursing students' levels of achievement-focused motivation had an effect on their lifelong learning tendencies, and as the levels of achievement-focused motivation increased, lifelong learning tendencies were also enhanced. It was determined that certain variables such as the place of residence, father's profession, mother's profession, voluntary selection of the profession, membership to student clubs and GPA affected the achievement-focused motivation and lifelong learning tendency scores.

In light of these results, "orientation seminars" should be organized in order to raise the motivation levels of students, who have started and will continue to have their academic careers away from their families, and to promote their adaptation to the new educational setting. With a view to exchanging learnt knowledge and skills and raising motivation, during trainings on nursing skills, an inter-class coaching system may be implemented by prioritizing the concepts of "being a guiding light" and "helping". In order to ensure that students can internalize the profession of nursing better and enhance their lifelong learning tendencies, "professional career days" which host leading figures of the profession should be organized. Education on how students can access lifelong learning resources (internet, library, seminar, convention, conference, training course, student club membership and so on) should be provided to students in order to promote their motivation and accomplishments in university settings, and systems and settings to which they would have easy access should be created. Elective courses that will motivate and support students' lifelong learning should be added to the curriculum by instructors, and also educational methods that will enable students to take responsibility should be developed by lecturers interactively with students. In order to identify the weaknesses of students with low GPAs and raise their levels of achievement-oriented motivation, meetings should be scheduled with their advisors.

ACKNOWLEDGEMENTS

The authors would like to thank all the participants.

MAIN POINTS

- Lifelong learning is important for nursing staff who spend a long time with patients, as well as providing health service delivery.
- Success in the professional life is related to academic success during the university years, lifelong learning and motivation.
- It was observed that as the success-oriented motivation of the nursing students increases, they tend towards lifelong learning.
- It is thought that strategies developed by nursing schools to promote lifelong learning and raise motivation will raise the education quality and enhance the quality of healthcare services offered to patients.

ETHICS

Ethics Committee Approval: Before data collection, Ethics committee approval was gained from the Ethics Committee of Non-Interventional Clinical Studies of Burdur Mehmet Akif Ersoy University (decision number: GO 2019/36, date: 06.02.2019).

Informed Consent: The written consents of the students who participated in the study were obtained after reading an informed consent text.

Peer-review: Externally peer-reviewed.

Authorship Contributions

Concept: S.Ş., B.K., A.Y.K., Design: S.Ş., B.K., A.Y.K., Supervision: S.Ş., B.K., A.Y.K., Data Collection and/or Processing: S.Ş., B.K., Analysis and/or Interpretation: S.Ş., A.Y.K., Literature Search: S.Ş., B.K., A.Y.K., Writing: S.Ş., B.K., A.Y.K., Critical Reviews: S.Ş., B.K., A.Y.K.

DISCLOSURES

Conflict of Interest: The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

Financial Disclosure: The authors did not receive any financial support in conducting this study.

REFERENCES

1. Radi MS. Baccalaureate nursing students motivation for attending university and its relationship with their academic achievement. Int J Educ Res. 2013; 1(7): 1-12.
2. Ergin A, Karataş H. Achievement-oriented motivation levels of university students. Hacettepe University J Educ. 2018; 33(4): 868-87.
3. Özcan D, Kaya FA. Determining the success-oriented motivations of gifted and non-gifted students. Kastamonu Education Journal. 2017; 25(6): 2357-68.
4. Şenyuva E. Lifelong learning in nursing: perceptions and realities. Florence Nightingale J Nurs. 2013; 21(1): 69-75.
5. Gencel İE. Öğretmen Adaylarının Yaşam Boyu Öğrenme Yeterliliklerine Yönelik Algıları. Eğitim ve Bilim Dergisi. 2013; 38: 237-46.
6. Gürdoğan A. Measurement levels of higher vocational school students motivation in education: the case of school in ortaca. Muğla University J Soc Sci. 2012; 28: 149-65.
7. Yalçın US, Özaslan Z, Şahin ŞE, Alptekin MH, Erdoğan B, Er AR. Nurse candidates' lifelong learning tendencies: a qualitative study. Gümüshane University J Health Sci. 2019; 8(1): 55-63.
8. Arslan ŞF. Lifelong learning tendency of paramedic students. RESSJOURNAL. 2017; 4(8): 235-43.
9. Qalehsari MQ, Khaghanizadeh M, Ebadi A. Lifelong learning strategies in nursing: A systematic review. Electron Physician. 2017; 9(10): 5541-50.
10. Osma I, Kemal FE, Radid M. Analysis of determinants and factors motivating students in higher education: case of the students of chemistry at the Ben M'sik faculty of sciences. Procedia Soc. 2015; 197: 286-91.
11. Odanga S. Strategies for increasing students' self-motivation. Asian Res J Arts Soc Sci. 2018; 6(4): 1-16.
12. Kulakçı H, Ayyıldız TK, Yıldırım N, Veren F, Topan AK. Motivational resources and problems of nursing students: vocational choice, school culture and other associated factors. J Health Nurs Manag. 2015; 2(2): 83-93.
13. Denat Y, Dikmen Y, Filiz YN, Başaran H. Lifelong learning tendencies in nursing students. J Hum Rhythm. 2016; 2(1): 39-45.

14. Örs M, Kılınç M. An Investigation of the Opinions of Pre-service midwives and nurses regarding lifelong learning. Univers J Educ Res. 2017; 5(12A): 56-62.

15. Semerci Ç. Developing a scale of achievement focused motivation. NWSA. 2010; 2123-33.

16. Erdoğan DG, Arsal Z. The development of lifelong learning trends scale (LLLTS). Sakarya University J Educ. 2016; 6(1): 114-22.

17. Kuzu S, Demir S, Canpolat M. Evaluation of life-long learning tendencies of pre-service teachers in terms of some variables. J Theory Pract Educ. 2015; 11(4): 1089-105.

18. Oral B, Yazar T. Examining the perception of prospective teachers about life-long learning in terms of various variables. Electron J Soc Sci. 2015; 14(52): 1-11.

19. Karaduman A, Tarhan S. Examining the relationship between university students' lifelong learning tendencies and their self-efficacy perceptions. Int J Hum Sci. 2017; 14(1): 355-375.

20. Demiralp D, Kazu H. Comparison of effective lifelong learning levels of pre-service teachers in terms of various variables. İnönü University J Fac Educ. 2017; 18(3): 71-85.

21. Meriçelli M, Ulusoy Ç. The effect of web supported and mobile supported blended learning environment on students academic achievement and motivation. Turkish Studies. 2016; 11(9): 879-904.

22. Çelik A, Karaca A. Evaluating the relationship between teamwork and motivation in nurses and affecting factors. J Educ Res Nurs. 2017; 14(4): 254-63.

23. Coşkun DY, Demirel M. Lifelong learning tendencies of university students. Hacettepe University J Educ. 2012; 42(42): 108-20.

24. Tunca N, Şahin SA, Aydın Ö. Life-long learning tendencies of pre-service teachers. Mersin University J Fac Educ. 2015; 11(2): 432-46.

25. Ünal K, Akay C. Teaching profession and lifelong learning: from the perspective of teacher candidates. Mersin University J Fac Educ. 2017; 13(3): 821-38.

26. Durak HY, Tekin S. Investigation of teachers' lifelong learning competencies according to personal and professional variables. Abant İzzet Baysal University J Educ. 2020; 20(1): 221-35.

27. Mohammed MM. Corelation between academic motivation to study nursing and health related quality of life among nursing students. J Am Sci. 2016; 12(12): 95-103.

28. Chidiebere JN, Clementine II, Noreen EA. Perception of students nurses on variables ınfluencing academic achievement in Nnamdi Azikiwe University, Anambra State Nigeria. Am J Nurs Sci. 2016; 5(6): 258-65.

29. Mohammadi I, Thaghinejad H, Suhrabi Z, Tavan H. The correlation of learning and study strategies with academic achievement of nursing students. JBRMS. 2017; 4(3): 8-13.

30. Tekkol İA, Demirel M. An Investigation of self-directed learning skills of undergraduate students. Front Psychol. 2018; 9: 2324.