



Lifelong learning competencies among undergraduate first year and final year midwifery-nursing students

Mukaddes Örs^a *

^a *University of Akdeniz, Antalya, Turkey*

Abstract

The aim of this research is to determine the lifelong learning competence of undergraduate first year and final year midwifery-nursing students . A quantitative research methodology was employed. The population of the study consists of a total of 375 students attending of department of midwifery (n=106) and nursing department (n= 269) in 2017-2018 academic year. Lifelong Learning Competence Scale developed was used for data collection. In the data analysis, descriptive statistics were applied. Results indicated that the midwifery and nursing students' lifelong learning competence scale and scale sub-dimensions scores are high level. As a result of the Mann Whitney U test, it was put forward that there was statistically significant differences in level of decision-making competencies based on department variable (Mdn= 3.59, U=1694.5, P <0.05). As a results of Mann Whitney U test, which was made to compare the self-management subscale scores of 1st and final year students, there was a statistically significant difference in self-management competencies subscale of students according to grade level (Mdn= 3.85, U= 2567, <0.05).

© 2016 IJCI & the Authors. Published by *International Journal of Curriculum and Instruction (IJCI)*. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (CC BY-NC-ND) (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Keywords: Lifelong Learning, Competencies, Professional Development, Midwives-Nurses, University Students

* Corresponding author name. Tel.: +0-000-000-0000
E-mail address: mukaddesors@hotmail.com

1. Introduction

In the 21st century, all occupational members need to acquire continuous learning skills and see learning as a life-long process, not a cross-section of life. Therefore, the professional member is expected to contribute to the development of his profession by developing himself in the context of lifelong learning (Aspin & Chapman, 2000; Barnard, Nash, O'Brien, 2005; Gopee, 2005).

Lifelong learning is a process that continues from the beginning of human life to the end. In this process, lifelong learning includes all kinds of knowledge, skills, attitudes and behaviors that an individual obtains through education, regardless of the age and space boundaries brought by formal education (Duman, 2007; Miser, 2002; Samancı and Ocakçı, 2017).

Even though the individual has started learning activities at school as officially he has to keep up with society, satisfy his curiosities and discover new things by continuing this learning in other stages of his life. Lifelong learning is defined by the European Commission as all learning activities carried out throughout life in order to develop knowledge, skills and competences from a personal, civic, social or employment perspective (European commission, 2002).

Lifelong learning has been recognized as a necessity for the midwifery and nursing profession (NLN, 2011). According to the recommendation of I.O.M (Medical Institute), nurses should participate in lifelong learning. For this purpose, Accreditation Board, nursing schools, health-related organizations and trainers; cooperate to engage in lifelong learning to ensure that nurses, nursing students, and faculty members continue teaching and to acquire the qualifications necessary to provide different care services. Lifelong learning has been recognized as a necessity for the midwifery and nursing profession (NLN, 2011). According to the recommendation of I.O.M (Medical Institute), nurses should participate in lifelong learning. For this purpose, Accreditation Board, nursing schools, health-related organizations and trainers; cooperate to engage in lifelong learning to ensure that nurses, nursing students, and faculty members continue teaching and to acquire the qualifications necessary to provide different care services. It is even necessary to update the curriculum (Institute of Medicine, 2010). Capacity building and commitment to lifelong learning is a new approach that attracts higher education institutions, industries and institutes that feel this need (Ambrósio, Araújo e Sá, Simões, 2014; Kember, Leung, Ma, 2007). One of the points highlighted by UNESCO on the threshold of the 21st century is about continuous learning in the field of health. According to the UNESCO (2013) report, one of UNESCO's aims and policies is to strengthen policies to create a lifelong learning system (UNESCO, 2013). Lifelong learning is an active process in which the student explores knowledge and understanding and uses it to meet lifelong professional needs (Nayda, Rankin, 2008). Lifelong learning involves formal and informal learning (Tan, Morris, 2005) and the independence of learners (self-direction) is one of the most important characteristics of lifelong learning (O'Shea, 2003; Ponton, Cerrick, Carr, 2005). Studies have shown that lifelong learning is increasing and demonstrating an emerging trend (Yousefi, Gordanshekan, 2011).

Despite the importance given to lifelong learning, few studies have been conducted on lifelong learning on nursing students. A review of studies in articles from 2000 to 2014 revealed that there is no

clear definition of lifelong learning (Dehnad, Afsharian, Hosseini, Arabshahi, Bigdeli, 2014). It is claimed that lifelong learning positively affects the growth of employees (Ionela, 2012) and professional, personal and social development of individuals (Laszlo, Strettle, 1996) and is directly related to the success of students in nursing schools (Avdal, 2013). However, the elements and strategies of lifelong learning are not clearly known. Despite the strong emphasis on lifelong learning, its prevalence is not known and people are talking about it as a basic component of professionalism only (Jarvis, 2005).

Determination of lifelong learning skills can improve the quality of nursing education. Unfortunately, few teachers are aware of lifelong learning skills (Çelebi, Özdemir, Eliçin, 2014). Although many studies have been conducted on the concepts and meanings of lifelong learning and their advantages in nursing (Ainoda, Onishi, Yasuda, 2005; Davis, Taylor, Reyes, 2014;), lifelong learning competences in midwifery and nursing have not been clearly indicated.

The use of lifelong learning competencies will lead to an increase in the quality of education, the development of nursing competence and, finally, an increase in patient care quality. A limited number of qualitative and quantitative studies indicate that more research into lifelong skills in nursing is necessary (Qalehsari, Khaghanizadeh, Ebadi, 2017).

Interest in lifelong learning in Turkey continues to grow every year. This interest also manifests itself in academic studies. While no postgraduate studies on lifelong learning have been conducted until 2003, it is observed that there has been a significant increase in academic studies conducted in the following years as articles, master's thesis and to a lesser degree in doctoral thesis (Yüksel et al., 2016).

In Turkey lifelong learning related literature which generally seem to have studied the relationship between different variables, teachers, pre-service teachers, lecturers and university or vocational college students' lifelong learning competencies and trends and which seem to have studied the relationship between different variables (Ayra and Kösterelioglu, 2015; Ayaz and Ünal, 2016; Bozat, Bozat and Hürsen, 2014; Diker-Coşkun and Demirel, 2012; Gencel-Evin, 2013; Horoz, 2017; İzci and Koç, 2012; Karakuş, 2013; Kılıç, 2014; Kılıç and Ayvaz-Tuncel, 2014; Kuzu, Demir and Canbolat, 2015; Oral and Yazar, 2015; Örs, 2016; Özdamlı and Özdal, 2015; Özçiftçi and Çakır, 2015; Selvi, 2011; Şahin and Arcagök, 2014; Şahin, Akbaşı and Yanpar-Yelken, 2010; Tunca, Alkın-Şahin and Aydın, 2015; Uzunboylu and Hürsen, 2013; Uzunboylu and Selçuk, 2016; Yaman and Yazar, 2015; Yalız-Solmaz and Aydın, 2016, Yalız-Solmaz, 2017; Yavuz-Konokman and Yanpar-Yelken, 2014; Yıldırım, 2015; Yıldırım, 2017).

It should not be ignored that midwives and nurses must have certain competencies and skills in order to become lifelong learning individuals / professional members. Gopee (2002) nurses' lifelong learning individuals / profession members to be continuous learning, learning to learn in the context of self-development, Dickinson (2000) and Maslin (1997) using information and communication technology, problem solving, written-verbal communication skills, Titmus (1999), self-learning skills, Hincliff (1994) emphasizes that it is possible to have access to information resources.

In the literature on lifelong learning competence and trends of nursing and midwifery students in Turkey are found in limited research. “An Investigation of the Opinions of Pre-Service Midwives and Nurses Regarding Lifelong Learning” (Örs and Kılınc, 2017). Avdal (2013) by “The effect of self-directed learning abilities of student nurses on success in Turkey”, Şenyuva and Çalışkan (2014) “Lifelong Learning Perception Metaphoric of Nurses”. In nursing and midwifery students in Turkey did not find any research on lifelong learning competence in literature.

In of this information, the determination of lifelong learning competencies of midwifery and nursing students of Faculty of Health Sciences and whether these competencies have changed in terms of some variables constituted the problem of this research.

1.1. Purpose of the study

The aim of this study is to determine the lifelong learning competence of midwifery and nursing students of Faculty of Health Sciences as well as whether these competencies differ in terms of selected variables (gender, grade level, department, academic average, type of high school graduation, family residence). For this purpose, the following questions were sought;

1. What is the the level of lifelong learning competence of midwifery and nursing students in general and sub-dimensions (self-management, learning to learn, initiative and entrepreneurship, acquiring information, digital competencies, decision-making).
2. Is there a significant difference between lifelong learning competence and gender of midwifery and nursing students?
3. Is there a significant difference between life-long learning competence and the department they study in?
4. Is there a significant difference between lifelong learning competence and grade levels of midwifery and nursing students?

3. Method

3.1. Research Design

This research is a quantitative study and is based on a screening model. The screening model is a research approach that aims to describe a past or present situation as it exists (Karasar, 2014).

2.2. Population and Sampling

The population of the study consists of a total of 375 students attending Department of Midwifery (n = 106) and nursing department (n= 269) of Faculty of Health Sciences of University of Amasya in 2017-2018 academic year. The sample consisted of a total of 160 students attending 1st and 4th grades (studying) among these students. Before starting the research, written permission was obtained from the Office of the Chancellor of the Amasya University, and the principle of volunteering was sought for the participation of the students. The students in the sample were informed about the purpose of the research and they were

asked to fill in the data collection tools on a voluntary basis. 160 students (midwifery students =42), nursing students=118) were reached due to reasons such as being on leave or sick leave or missing answers to the questionnaires. Demographic information about the students participating in the research is presented in Table 1.

Table 1. Demographic characteristics of participants

Variable	Category	n	%
Gender	Female	130	81.3
	Male	30	18.8
	Total	160	100.0
Academic Level	First year	89	55.6
	Final year	71	44.4
	Total	160	100.0
Department	Nursing	118	73.8
	Midwifery	42	26.3
	Total	160	100.0

When Table 1 is examined, 81.3% of the students participating in the research were female, 18.8% were male, 73.8% were nursing and 26.3% were students in midwifery department, 55.6% were in 1st grade, 44.4% were in final year.

2.3. Instrument

Lifelong Learning Competence Scale developed by Uzunboylu and Hürsen (2011) was used for data collection. The scale consists of 51 items and the scale consists of the sub-dimensions of “Self-Management Competencies”, “Learning to Learn Competencies”, “Initiative and Entrepreneurship Competencies”, “Competencies of Acquiring Information”, “Digital Competencies” and “Decision Making Competencies.”

These sub-dimensions are important for Lifelong Learning and among the objectives of this research. It is a five point likert type scale with no (1) - less (2) - medium (3) - very (4) - full (5). The reliability coefficient of the scale was Cronbach Alpha 0.95 and the total variance explained was 58.9%. 0.93 for the sub-scale of “Self-Management Competencies”, 0.91 for the sub-scale of “Learning to Learn Competencies”. 0.89 for the sub-scale of “Initiative and Entrepreneurship Competencies”, 0.83 for the sub-scale of “competencies of acquiring information”, and 0.85 for the sub-scale of “Digital competencies,” and 0.75 for the sub-scale of “decision making sub-dimensions of the scale. In addition, factor load values of the items ranged from 458 to 784 (Uzunboylu and Hürsen, 2011). The Cronbach alpha reliability coefficient of the scale calculated in the present study is 0.88. The Cronbach alpha reliability coefficients of the sub-dimension scales were calculated as .96, .74, .93, .88, .96, .90, respectively. It should be over 70. of the coefficient for reliability measurement. (Hung at al., 2010;

Tezbaşaran, 1997; Hung at al., 2010; Nunally, 1978). The findings indicate that the scale can be accepted as a reliable measurement tool.

In the first part of this scale, personal information of the students and in the second part, there are questions to determine the lifelong learning competencies of the students. There are questions about personal variables such as gender, department of study, grade level. Table 2 shows the score limits used in the interpretation.

Table 2. The score limits used in the interpretation.

Likert type ratings	Score limit	Options
1	1.00 – 1.80	No
2	1.81 – 2.60	Less
3	2.61 – 3.40	Medium
4	3.41 – 4.20	Very

1.4. Data analysis techniques

A statistical software program was used for statistical analysis of the research data. Frequency and percentage were used for the data obtained from the demographic characteristics of the students. Kolmogorov-Smirnov and Shapiro-Wilk tests were performed to determine whether the data obtained from the study showed normal distribution. The data in this study were non-normally distributed as mentioned in the findings of the Kolmogorov Smirnov and ShapiroWilk tests ($p < 0.05$). Since the groups did not show a normal distribution, Mann Whitney U Test, which are nonparametrics tests, were used (Büyüköztürk, 2010, 155-166; Sönmez and Alacapınar, 2016, 198-214).

2. Results

Table 3. Mean, Median, Minimum, Maximum and Standart Deviation of Lifelong learning Competencies Scale and Sub-Dimensions

Variable	n	Mean	Median	Minimum	Maximum	SD
Self- management competencies	160	3.71	3.77	1.00	5.00	.67
Competencies of Learning how to learn	160	3.67	3.75	1.00	5.00	.68
Initiative and entrepreneurship competencies	160	3.76	3.83	1.00	5.00	.73
Competencies of acquiring information	160	3.79	3.83	2.00	5.00	.67
Digital competencies	160	3.80	3.75	2.17	5.00	.76
Decision making competencies	160	3.59	3.50	1.75	5.00	.73
Lifelong Learning Total Scores	160	3.70	3.72	2.15	5.00	.57

Table 3 Shows that, the “self-management competence” subscale is in the interval of the minimum value of 1 and maximum of 5, with a average score of 3.71 (SD .67). The “Competencies of learning

to learn” subscale is in the interval of the minimum value of 1 and the maximum of 5, with a average score of 3.67 (SD 0.68). The “competencies of initiative and entrepreneurial” subscale is in the interval of the minimum value of 1.50 and the maximum of 5, with a average score of 3.58 (SD .73). The “competencies on acquiring information” subscale is in the interval of the minimum value of 2 and the maximum 5, with a average score of 3.79 (SD .67). The “digital competencies” subscale is in the interval of the minimum value 2.17 and the maximum 5, with a average score of 3.80 (SD .076). The “competencies of decision-taking” subscale is in the interval of the minimum value of 1.75 and maximum 5, with a average score of 3.59 (SD .73). The average total scores of lifelong learning competence was 3.70 (SD .57). It is seen that the students' lifelong learning competence scale and scale sub-dimensions scores are high level.

Table .4 Results of the Mann Whitney U Test concerning the Differences between the Gender in Terms of the Lifelong Learning Competencies Scale Scores

	Gender	n	Mean	Median	Minimum	Maximum	SD	Mann-Whitney U test		
								Mean rank	U	p
Self-management competencies	Female	130	3.73	3.77	1.00	5.00	.65	81.32	1843.5	0.641
	Male	30	3.66	3.73	1.77	4.85	.72			
	Total	160	3.71	3.77	1.00	5.00	.67			
Competencies of Learning how to learn	Female	130	3.69	3.75	1.00	5.00	.70	82.25	1722	0.318
	Male	30	3.59	3.58	2.58	4.67	.58			
	Total	160	3.67	3.75	1.00	5.00	.68			
Initiative and Entrepreneurship Competencies	Female	130	3.57	3.50	1.50	5.00	.70	79.76	1854	0.673
	Male	30	3.60	3.63	2.00	5.00	.68			
	Total	160	3.58	3.50	1,50	5.00	.69			
Competencies of acquiring information	Female	130	3.84	3.83	2,00	5.00	.66	83.50	1560	0.087
	Male	30	3.61	3.50	2.50	5.00	.65			
	Total	160	3.79	3.83	2.00	5.00	.67			
Digital Competencies	Female	130	3.84	3.92	2.17	5.00	.77	83.56	1552	0.081
	Male	30	3.60	3.50	2.50	5.00	.68			
	Total	160	3.80	3.75	2.17	5.00	.76			
Decision making competencies	Female	130	3.63	3.50	2.00	5.00	.73	82.40	1703	0.277
	Male	30	3.43	3.63	1.75	5.00	.70			
	Total	160	3.59	3.50	1.75	5.00	.73			
Lifelong Learning Competencies Scores	Female	130	3.73	3.74	2.15	5.00	.58	82.52	1687.5	0.251
	Male	30	3.59	3.53	2.56	4.53	.54			
	Total	160	3.70	3.72	2.15	5.00	.57			

As can be seen in Table 4, although the average score of female students' lifelong learning competence (3.73) is slightly higher than the average score of male students (3.59), the scores of male and female students are very close to each other. In the sub-dimensions of the scale, it is seen that the

mean scores of female and male students are very close to each other. Both male and female students have lifelong learning competence perceptions at above the middle level. According to Mann Whitney U test results, there is no significant difference in lifelong learning competence of students according to gender ($p > .05$). This finding shows that gender has no significant effect on lifelong learning competences of students.

Table 5. Results of the Mann Whitney U Test concerning the Differences between the Departments in Terms of the Lifelong Learning Competencies Scale Scores

	Department	n	Mean	Median	Minimum	Maximum	SD	Mann-Whitney U test		
								Mean rank	U	p
Self management Competencies	Nursing	118	3.76	3.85	1.00	5.00	.72	84.16	2046	0.093
	Midwifery	42	3.59	3.62	2.31	4.46	.47	70.21		
	Total	160	3.71	3.77	1.00	5.00	.67			
Competencies of Learning to how Learn	Nursing	118	3.73	3.75	1.00	5.00	.70	84.76	1975	0.051
	Midwifery	42	3.50	3.50	2.17	4.75	.56	68.52		
	Total	160	3.67	3.75	1.00	5.00	.68			
Initiative and Entrepreneurship Competencies	Nursing	118	3.63	3.50	1.50	5.00	.73	84.26	2034	0.083
	Midwifery	42	3.42	3.50	2.25	4.75	.55	69.93		
	Total	160	3.58	3.50	1.50	5.00	.69			
Competencies acquiring information	Nursing	118	3.83	3.83	2.50	5.00	.70	82.45	2247.5	0.369
	Midwifery	42	3.71	3.83	2.00	5.00	.55	75.01		
	Total	160	3.79	3.83	2.00	5.00	.67			
Digital competencies	Nursing	118	3.81	3.75	2.17	5.00	.78	80.90	2431	0.855
	Midwifery	42	3.78	3.75	2.33	5.00	.71	79.38		
	Total	160	3.80	3.75	2.17	5.00	.76			
Decision making competencies	Nursing	118	3.70	3.75	1.75	5.00	.74	87.14	1694.5	0.002
	Midwifery	42	3.29	3.25	2.25	4.50	.59	61.85		
	Total	160	3.59	3.50	1.75	5.00	.73			
Lifelong Learning Competencies Total Scores	Nursing	118	3.75	3.82	2.15	5.00	.61	84.58	1997	0.062
	Midwifery	42	3.56	3.55	2.75	4.42	.42	69.05		
	Total	160	3.70	3.72	2.15	5.00	.57			

When Table 5 is examined, although the average score of lifelong learning competence of nursing students (3.75) is slightly higher than the average of midwifery students (3.56), midwifery and nursing students are very close to each other. According to Mann Whitney U test results, there is no statistically significant difference in lifelong learning competence of students according to department variable ($p > .05$). When the sub-dimensions were examined; “Decision-making competencies scale” score (Mdn=3.29) of midwifery students was significantly lower than that of nursing department students (Mdn=3.70). According to Mann Whitney U-test results, it was seen that “decision-making competencies” subscale showed a statistically significant difference according to department variable

(Mdn= 3.59, U=1694.5, P <0.05). According to this result, it can be said that department variable has an effect on students' decision making competence. There was no statistically significant difference between the sections in terms of other sub-dimensions ($p > 0.05$).

Table 6. Results of the Mann Whitney U Test concerning the Differences between the Academic Levels in Terms of the Lifelong Learning Competencies Scale Scores

	Academic Levels	n	Mean	Median	Minimum	Maximum	SD	Mann-Whitney U test		
								Mean rank	U	P
Self- management competencies	First Year	89	3.62	3.69	1.00	4.92	.64	73.84	2567	0.042
	Final year	71	3.83	3.85	1.77	5.00	.68	88.85		
	Total	160	3.71	3.77	1.00	5.00	.67			
Competencies of Learning how to learn	First year	89	3.59	3.58	1.00	4.75	.68	76.31	2786.5	0.201
	Final year	71	3.76	3.75	1.83	5.00	.67	85.75		
	Total	160	3.67	3.75	1.00	5.00	.8			
Initiative and entrepreneurship competencies	First year	89	3.51	3.50	1.50	5.00	.69	77.18	2864	0.307
	Final year	71	3.65	3.50	2.25	5.00	.70	84.66		
	Total	160	3.58	3.50	1.50	5.00	.69			
Competencies of acquiring information	First year	89	3.74	3.83	2.00	5.00	.60	77.00	848	0.283
	Final year	71	3.86	4.00	2.50	5.00	.74	84.89		
	Total	160	3.79	3.83	2.00	5.00	.67			
Digital competencies	First year	89	3.79	3.83	2.17	5.00	.73	80.40	3150.5	0.975
	Final year	71	3.81	3.67	2.17	5.00	.80	80.63		
	Total	160	3.80	3.75	2.17	5.00	.76			
Competencies of decision making	First year	89	3.50	3.50	1.75	5.00	.68	75.92	2751.5	0.158
	Final year	71	3.70	3.75	2.00	5.00	.77	86.25		
	Total	160	3.59	3.50	1.75	5.00	.73			
Lifelong Learning Competencies Total Score	First year	89	3.63	3.65	2.54	4.72	.52	75.25	2692.5	0.109
	Final year	71	3.78	3.83	2.15	5.00	.62	87.08		
	Total	160	3.70	3.72	2.15	5.00	.57			

When Table 5 is examined, although the total score average (3.78) regarding the lifelong learning competence of final year students is slightly higher than the average score of 1st grade students (3.63), the scores of 1st grade and final year students are slightly higher very close to each other. According to the results of Mann Whitney U test, there is no significant difference in lifelong learning competence of students in terms of grade level ($p > .05$). When the sub-dimensions were examined; The “self-management competence scale” score (Mdn=3.69) of the first year students was significantly lower than that of the 4th year students (Mdn=.85). According to the results of Mann Whitney U test, which was made to compare the self-management subscale scores of 1st and final year students, there was a statistically significant difference in self-management competencies of students according to grade level (Mdn= 3.85, U= 2567, <0.05). According to this result, it can be said that the grade level variable

of students has an effect on self-management competence scores. There was no significant difference between the academic levels in terms of other sub-dimensions ($p > 0.05$).

4. Discussion

Midwifery and nursing students who participated in this research were found to have high level of competence in lifelong learning competencies scale and its sub-dimensions. In the study conducted by Karakuş (2013) on students, lifelong learning competencies were found to be good level. In the study conducted by Şahin and Arcagök (2014) teachers' lifelong learning competencies were determined high level and, Yavuz Konokman and Yanpar Yelken (2014), lifelong learning competencies of the instructors were found to be high level. These results are consistent with the results of the present research. It can be said that Students have Self-directed, willing to learn, supervised, high-level thinking skills, responsible awareness, independent decision-making, problem solving, willing to receive information, effective communication, adaptation to changes and innovations, willingness to learn and skills related to information technologies learning individuals. It can be thought that individuals can update their knowledge, and understand the developments that affect their lives, expand their horizons, consciously expand their personal, professional and intellectual levels. In Kozukoğlu's (2014) study, the lifelong learning competences of the students are at the medium level according to the average scores obtained from the whole scale and each sub-dimension in general. The results of some studies in the literature (Gencil Evin, 2013; Karakuş, 2013; Kirby, Knapper, Lamon and Egnatoff, 2010; Şahin, Akbaşlı and Yanpar -Yelken, 2010;) are in parallel with the present study. Despite that; in the study conducted by Karakuş (2013), when the sub-dimensions of the scale were examined; Initiative and entrepreneurship competence, information acquisition competence and decision-making competence were found to be lower than average. The fact that students do not consider themselves to be sufficient for lifelong learning may be due to their educational life or the social-cultural opportunities provided to them.

In the present study, no significant difference was found between midwifery and nursing students' lifelong learning competence and scale subscales in terms of gender. This finding shows that gender has no significant effect on lifelong learning competences of students. Although there is a significant difference in favor of female students in one study in the literature (Diker-Coskun, 2009), in many studies (Arsal, 2011; Demirel and Akkoyunlu, 2010; Gencil Evin, 2013; Kirby, Knapper, Lamon, Egnatoff, 2010; Şahin, Akbaşlı and Yanpar -Yelken, 2010; Şahin and Arcagök, 2014; Oral and Yazar, 2015) findings parallel to this research were found. In general, it can be interpreted that male and female students consider themselves to be of sufficient level of lifelong learning. If lifelong learning is considered to be a feature that is needed by every individual without distinction between boys and girls, it is normal to have similar levels of competence.

There was no significant difference between lifelong learning competence perceptions and the type of department in which the students continued their education. Many studies in the literature (Arsal, 2011; Gencil Evin, 2013; Karakuş, 2013; Şahin, Akbaşlı and Yanpar -Yelken, 2010) found similar findings to this research. When the differences between sub-dimensions are examined; Although there were significant differences according to different dimensions, it was observed that “the decision making competencies” subscale scores changed in favor of nursing students. This result indicates that department variable has a significant effect on students' decision making competencies.

When examining the lifelong learning competence of midwifery and nursing students the present, it was found that there was no significant difference between 1st and final year. In the study conducted by Karakuş (2013), while the lifelong learning competence of vocational school students was examined, t test results showed that there was a relationship between 1st grade and 2nd grade. It was observed that the lifelong learning competence of 2nd grade students was higher and the results changed positively. In the present study, when the differences between grade levels in sub-dimensions were examined; Although there were significant differences according to different dimensions, it was observed that self-management competencies” sub-dimension scores changed in favor of final year students. This result indicates that the grade level variable has a significant effect on students' self-management competencies.

Appley (2001) stated that lifelong learning competencies can be learned in addition to field teaching during university education. For this purpose, it is necessary to prepare implicit programs in which students can realize their lifelong learning competencies effectively and create positive attitude and desire towards learning. According to the results of the present research, it is concluded that the support of the effect of faculties in this field is the result of the increase in lifelong learning competencies when students go to final year. In order to increase this effect, the higher education institution has important duties. In this context, it will be appropriate to include programs and learning processes that will provide lifelong learning competencies of students in health sciences faculties.

Parkinson (1999) emphasized that lifelong learning competences can be developed in universities and that some strategies should be given importance. These strategies are: communication expectations, students' taking on their own learning responsibilities, motivating students, enabling extracurricular learning, and teaching students how to learn. Inclusion of all these activities in the educational process prepares students for life after graduation as well as lifelong learners and serves to make them better learners throughout their university life.

5. Conclusions

This research revealed that lifelong learning competencies of midwifery and nursing students in the final year were high level. In order to develop lifelong learning competencies in universities, it is necessary to enable students to manage their own educational processes, to include active learning methods in education, to enable students to take part in problems, and to encourage self-assessment of students.

References

- Ainoda, N., Onishi, H. & Yasuda, Y. (2005). Definitions and goals of “self-directed learning” in contemporary medical education literature. *Ann Acad Med Singapore*, 34(8), 515–9.
- Aspin, N. D. & Chapman, J. D. (2000). Lifelong learning: Concepts and conception. *International Journal of Lifelong Education*, 19(1), 2-19.
- Ambrósio, S., Araújo e Sá MH., & Simões, AR. (2014). Lifelong learning in higher education: The development of non-traditional adult students’ plurilingual repertoires. *Procedia - Social and Behavioral Sciences*. 116, 3798–804. doi: 10.1016/j.sbspro.2014.01.844.
- Appley, D. (2001). The covert curriculum: The lifelong learning skills you can learn in college, http://www.hammiverse.com/apbio/student_success_resources/lifelong_learning_skills.
- Arsal, Z. (2011). Lifelong learning tendencies of the prospective teachers in the Bologna process in Turkey.
- ATTE Annual Conference (2011). *Teachers’ life-cycle from initial teacher education to experienced professional*, Latvia University, Riga 496-509.
- Ayaz, C., & Ünal, F. (2016). Öğretmenlerin yaşam boyu öğrenme eğilimlerinin bazı değişkenler açısından incelenmesi. *Uluslararası Sosyal Araştırmalar Dergisi*, 9(44), 847-856.
- Avdal, EU. (2013). The effect of self-directed learning abilities of student nurses on success in Turkey. *Nurse education today*, 33(8), 838–41. doi: 10.1016/j.nedt.2012.02.006.
- Ayra, M. & Kösterelioğlu, İ. (2015). Öğretmenlerin yaşam boyu öğrenme eğilimlerinin mesleki öz yeterlik algıları ile ilişkisi. *Education Sciences*, 9(5), 17-28. <http://dx.doi.org/10.12739/NWSA.2015.10.1.1C0630>
- Barnard, A., Nash, R. & O’Brien, M. (2005). Information literacy: developing lifelong skills through nursing education. *The Journal of Nursing Education*, 44 (11), 505-510.
- Bozat, P., Bozat, N., & Hürsen, C. (2014). The evaluation of competence perceptions of primary school teachers for the lifelong learning approach. *Procedia-Social and Behavioral Sciences*, 140, 476-482. doi: 10.1016/j.sbspro.2014.04.456.
- Büyüköztürk, Ş., Çakmak, E., Akgün, K., Özcan, E., Karadeniz, Ş. ve Demirel, F. (2010). *Bilimsel araştırma yöntemleri* (5. Baskı). Pegem Akademi, Ankara.
- Çelebi, N., Özdemir, H., & Eliçin, Ö. (2014). Studying level of awareness of teachers in terms of their lifelong learning skills. *Procedia - Social and Behavioral Sciences*, 116, 2030–8. doi: 10.1016/j.sbspro.2014.01.515. [CrossRef] [Google Scholar]
- Dehnad, A., Afsharian, F., Hosseini, F., Arabshahi, SKS. & Bigdeli, S. (2014). Pursuing a definition of self-directed Learning in literature from 2000–2012. *Procedia - Social and Behavioral Sciences*, 116(0), 5184–7. doi: 10.1016/j.sbspro.2014.01.1097.
- Davis, L., Taylor, H. & Reyes, H. (2014). Lifelong learning in nursing: A Delphi study. *Nurse Education Today*, 34(3), 441–5. doi: 10.1016/j.nedt.2013.04.014.
- Demirel, M. (2009). Lifelong learning and schools in the twenty-first century. *Procedia-Social and Behavioral Sciences*, 1(1), 1709-1716. <https://doi.org/10.1016/j.sbspro.2009.01.303>

- Demirel, M., & Akkoyunlu, B. (2010). Öğretmen adaylarının yaşam boyu öğrenme eğilimleri ve bilgi okuryazarlığı özyeterlik algıları. 10 th. International Educational Technology Conference, Boğaziçi Üniversitesi, İstanbul, *Proceedings Book*, 2, 1126- 1133
- Diker Coşkun, Y. (2009). *Üniversite öğrencilerinin yaşam boyu öğrenme becerilerinin bazı değişkenler açısından incelenmesi*. Yayınlanmamış doktora tezi, Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü, Ankara
- Dickinson, M. (2000). An analysis of the accreditation of transferable skills in extra-curricular activities within higher education. *Assessment and Evaluation in Higher Education*, 25(1), 61-70.
- Duman, Ahmet. (2000) *Yetişkin Eğitimi*. Ankara: Ütopya Yayınları.
- Embo, M., Driessen, E., Valcke, M., van der Vleuten, CP. (2014). A framework to facilitate self-directed learning, assessment and supervision in midwifery practice: a qualitative study of supervisors' perceptions. *Nurse Education in Practice*. 14(4), 441–6. doi: 10.1016/j.nepr.2014.01.015.
- Epçaçan, C. (2013). Yaşam boyu öğrenme becerilerinin ders kitaplarında yer alma düzeyine örnek bir inceleme. *Adıyaman üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 11, 353-379.
- European Commission (2002). *European report on quality indicators of lifelong learning. Fifteen quality indicators*. European Commission report, Directorate-General for Education and Culture, Brussels .
- Gencil-Evin, İ. (2013). Öğretmen adaylarının yaşam boyu öğrenme yeterliklerine yönelik algıları. *Eğitim ve Bilim*, 38(170), 237-252.
- Gopee, N. (2005). Facilitating the implementation of life long learning in nursing. *British. Journal of Nursing*, 14(4), 761-767.
- Harun, NF., Yusof, KM., Jamaludin, MZ., & Helmi Syed Hassan, SA. (2012). Motivation in problem-based learning implementation. *Procedia - Social and Behavioral Sciences*. 56(0), 233–42. doi: 10.1016/j.sbspro.2012.09.650.
- Horoz, O. R. (2017). *Mesleki eğitim merkezi öğrencilerinin yaşam boyu öğrenme eğilimlerinin incelenmesi- Bartın ili örneği*. Yayınlanmamış Yüksek Lisans Tezi, Bartın Üniversitesi, Eğitim Bilimleri Enstitüsü.
- Jarvis, P. (2010). *The Routledge international handbook of lifelong learning*. USA, Routledge Publishing.
- İzci, E. & Koç, S. (2012). Öğretmen adaylarının yaşam boyu öğrenmeye ilişkin görüşlerinin değerlendirilmesi. *Adıyaman Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 5(9), 101-114. <http://dergipark.ulakbim.gov.tr/adyusbd/article/view/5000041730/5000039258>
- Institute of Medicine (2010). *Committee on planning a continuing health care professional education institute*. Redesigning continuing education in the health professions. Washington (DC): The National Academies Press.
- Ionela AM. (2012). The Role of lifelong learning in the growth of employment and labour efficiency. The case of Romania. *Procedia - Social and Behavioral Sciences*. 46(0), 4399–403. doi: 10.1016/j.sbspro.2012.06.262

- Karakuş, C. (2013). Meslek yüksekokulu öğrencilerinin yaşam boyu öğrenme yeterlikleri. *Eğitim ve Öğretim Araştırmaları Dergisi*, 2(3), 26-35. <http://jret.org/FileUpload/ks281142/File/04.karakus.pdf>.
- Karasar, N. (2014). *Bilimsel araştırma yöntemi: “Kavramlar ilkeler teknikler”* (27. Basım). Ankara: Nobel.
- Kember, D., Leung, D., Ma, R. (2007). Characterising learning environment capable of nurturing generic capabilities in higher education. *Research in Higher Education*, 48, 609–31. doi: 10.1007/s11162-006-9037-0.
- Kılıç, Ç. (2014). Öğretmen adaylarının yaşam boyu öğrenmeye yönelik algıları. *Eğitim ve Öğretim Araştırmaları Dergisi*, 3(4), 79-87.
- Kılıç, H., & Ayvaz-Tuncel, Z. (2014). İlköğretim branş öğretmenlerinin bireysel yenilikçilik düzeyleri ve yaşam boyu öğrenme eğilimleri. *International Journal of Curriculum and Instructional Studies*, 4(7), 25-37.
- Kirby J. R., Knapper C., Lamon, P., & Egnatoff W. J. (2010). Development of a scale to measure lifelong learning. *International Journal of Lifelong Education*, 29(3), 291-302.
- Knapper, C., & Cropley, A. (2000). *Lifelong Learning in Higher Education*. London: Kogan Page
- Kozukoğlu, İshak (2014). Üniversite ve Meslek Yüksekokulu Öğrencilerinin Yaşam Boyu Öğrenme Yeterliklerinin İncelenmesi. *Öğretim Teknolojileri ve Öğretmen Eğitimi Dergisi*, 3(3), 29-43.
- Kuzu, S., Demir, S. & Canpolat, M. (2015). Evaluation of life-long learning tendencies of pre-service teachers in terms of some variables. *Journal of Theory & Practice in Education (JTPE)*, 11(4), 1089- 1105.
- Laszlo, H. & Strettle, RJ. (1996). Midwives’ motivation for continuing education. *Nurse education today*, 16(5), 363–7. doi: 10.1016/S0260-6917(96)80010-4.
- Maslin, S. E. (1997). A perspective on lifelong learning and its implications for nurses. *Nurse Education Today*, 17: 431-436
- Miser, R. (2002). Küreselleşen Dünyada Yetişkin Eğitimi. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 35 (1-2), <http://dergiler.ankara.edu.tr/dergiler/40/137/956.pdf>.
- Samancı, O., Ocakcı, E. (2017). Hayat boyu öğrenme. *Bayburt Eğitim Fakültesi Dergisi*, 12(24), 711-722.
- Miflin, BM., Campbell, CB. & Price, DA. (2000). A conceptual framework to guide the development of self-directed, lifelong learning in problem-based medical curricula. *Med Educ.*, 34(4), 299–306. doi: 10.1046/j.1365-2923.2000.00564.x.
- Nadi, MA., Gordanshekan, M. & Golparvar, M. (2011). Effect of critical thinking, problem solving, and metacognition teaching on self-directed learning in students. *Research in Curricula*, 8(1–2), 3–61.

- Nayda, N & Rankin, E. (2008). Information literacy skill development and lifelong learning: Exploring nursing students' and academics' understandings. *Australian Journal of Advanced Nursing*, 26(2), 27–33.
- NLN. (2011). Academic progression in nursing education: A living document from the National League for Nursing. Retrived from http://www.nln.org/docs/default-source/about/nln-vision-series-%28position-statements%29/nlnvision_1.pdf?sfvrsn=4.
- Qalehsari, MQ., Khaghanizadeh, M., Ebadi, A. (2017). Lifelong learning strategies in nursing: A systematic review. *Electron Physician*, 9(10), 5541–5550. doi: 10.19082/5541
- O'Shea, E. (2003). Self-directed learning in nurse education: a review of the literature. *J Adv Nurs.*, 43(1), 62–70. doi: 10.1046/j.1365-2648.2003.02673.x.
- Oral, B., & Yazar, T. (2015). Öğretmen adaylarının yaşam boyu öğrenmeye ilişkin algılarının çeşitli değişkenlere göre incelenmesi. *Electronic Journal of Social Sciences*, 14(52), 1-11.
- Özdamlı, F., & Özdal, H. (2015). Life-long learning competence perceptions of the teachers and abilities in using information-communication technologies. *Procedia-Social and Behavioral Sciences*, 182: 718-725. <https://doi.org/10.1016/j.sbspro.2015.04.819>.
- Örs, M. (2016). İlkokul öğretmenlerinin yaşamboyu öğrenme eğilimlerinin incelenmesi. 7. *International Educational Administrative Forum*, 03-05 November 2016, Acapulco Hotel, Girne, North Cyprus.
- Örs, M., & Kılınc, M. (2017). An investigation of the opinions of pre-service midwives and nurses regarding lifelong learning. *Universal Journal of Educational Research*, 5(12A), 56-62. 2332-3213 (Online).
- Özçiftçi, M., & Çakır, R. (2015). Öğretmenlerin yaşam boyu öğrenme eğilimleri ve eğitim teknolojisi standartları özyeterliklerinin incelenmesi. *Eğitim Teknolojisi Kuram ve Uygulama*, 5(1), 1-19.
- Parkinson, A. (1999). Developing the attribute of lifelong learning. *29th ASEE/IEEE Frontiers in Education Conference*, November 10 - 13, San Juan, Puerto Rico.
- Ponton, M., Cerrick, M., & Carr, P. (2005). The relationship between resourcefulness and persistence in adult autonomous learning. *Adult Education Quarterly*, 55(2), 116–28. doi: 10.1177/0741713604271848.
- Selvi, K. (2011). Teachers' lifelong learning competencies. *International Journal of Curriculum and Instructional Studies*, 1(1), 61-69.
- Sönmez, V., & Alacapınar, F. (2016). *Örneklendirilmiş Bilimsel Araştırma Metotları* (4.Baskı). Ankara: Anı yayıncılık.
- Şahin, M., Akbaşlı, S., & Yanpar Yelken, T. (2010). Key competences for lifelong learning: The case of prospective teachers. *Educational Research and Review*, 5(10), 545-556.
- Şahin, Ç., & Arcagök, S. (2014). Öğretmenlerin yaşam boyu öğrenme yeterlikleri düzeyinin çeşitli değişkenler açısından incelenmesi. *Journal of Social Sciences/Sosyal Bilimler Dergisi*, 7(16), 394-417.

- Şenyuva E., & Çalışkan F. (2014). Lifelong learning perception metaphoric of nurses. *Procedia - Social and Behavioral Sciences*, 152(0), 372–8. doi: 10.1016/j.sbspro.2014.09.214.
- Tan, C., & Morris, J. (2005). Undergraduate college students, laptop computers, and lifelong learning. *The Journal of General Education*, 54(4), 316–38. doi: 10.1353/jge.2006.0013.
- Tanca, H. A. (2017). *Yaşam boyu öğrenme bağlamında kamu spot göstergeleri hakkında üniversite öğrencilerinin görüşlerinin incelenmesi*. Bartın üniversitesi örneği. Yayınlanmamış Yüksek Lisans Tezi, Bartın Üniversitesi, Eğitim Bilimleri Enstitüsü, Bartın.
- UNESCO (2013). Institute for Lifelong Learning. *Annual Report 2013. 2014*.
- Uzunboylu, H., & Hürsen, C. (2013). Evaluation of teachers' attitudes and perceptions of competence regarding lifelong learning. *Croatian Journal of Education: Hrvatski časopis za odgoj i obrazovanje*, 15(3), 177-204.
- Uzunboylu, H., & Hürsen, Ç. (2011). Lifelong learning competence scale (LLCS): The study of validity and reliability. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 41(41), 449- 460.
- Uzunboylu, H., & Selcuk, G. (2016). Lifelong learning competency perceptions of teacher candidates according to a teacher training program. *Anthropologist*, 24(1), 119-125.
- Yalız-Solmaz, D. (2017). Relationship between lifelong learning levels and information literacy skills in teacher candidates. *Universal Journal of Educational Research*, 5(6), 939-946. Doi: 10.13189/ujer.2017.050605
- Yalız-Solmaz, D., & Aydın, G. (2016). Evaluation of lifelong learning tendencies of pre-service teachers. *The Anthropologist*, 24(1), 55-63.
- Yaman, F., & Yazar, T. (2015). Öğretmenlerin yaşam boyu öğrenme eğilimlerinin incelenmesi (Diyarbakır ili örneği). *Kastamonu Eğitim Dergisi*, 23(4), 1553-1566.
- Yavuz-Konokman, G., & Yanpar-Yelken, T. (2014). Eğitim fakültesi öğretim elemanlarının yaşam boyu öğrenme yeterliklerine ilişkin algıları. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 29(2), 267-281.
- Yıldırım, Z. (2015). *Sınıf öğretmenlerin yaşam boyu öğrenmeye yönelik yeterlik alguları ve görüşleri*. Yayınlanmamış Yüksek Lisans Tezi. Çanakkale Onsekiz Mart Üniversitesi Eğitim Bilimleri Enstitüsü, Çanakkale.
- Yıldırım, R. (2017). *Üniversitelerdeki yaşam boyu öğrenme hizmetlerinin yönetsel etkililiğinin değerlendirilmesi*. Yayınlanmamış Doktora tezi. Çanakkale Onsekiz Mart Üniversitesi Eğitim Bilimleri Enstitüsü, Çanakkale.
- Yousefi, A., & Gordanshekan, M. A (2010). A review of self-directed learning development. *Iranian Journal of Education in Medical Sciences*. 10(5), 776–83.
- Yüksel, S., Gündoğdu, K., Akyol, B., & Akar-Vural, R. (2016). Hayat boyu öğrenme konusunda yayımlanan tez ve makalelere ilişkin bir içerik analizi: 2000-2015. *Erzincan Üniversitesi Eğitim Fakültesi Dergisi*, 18(2), 1491-1513. Doi:10.17556/jef.88957.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the Journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (**CC BY-NC-ND**) (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).