An Investigation of Preschool Teacher Candidates' Lifelong Learning Tendencies

İlkay Aşkın Tekkolⁱ Kastamonu University

Melek Demirelⁱⁱ
Hacettepe University

Abstract

This research aims to determine the preschool teacher candidates' lifelong learning tendencies and preschool teacher candidates' opinions about lifelong learning. The study group of this research is first, second, third and fourth grade students of preschool teaching in the primary school education department of a public university in Turkey. A mixed-method was used in this research. Data were gathered via the "Lifelong Learning Tendency Scale" which is developed by Diker-Coşkun and via the "Interview Form" which is developed by researchers. The lifelong learning tendency scale is applied to 362 students, and interviews are done with 27 students. Results show that the students' lifelong tendencies are above the average point of the scale. There is no significant difference in lifelong learning tendencies between grade levels. There is a significant difference in lifelong learning tendencies between the different levels of academic success and whether or not students desire to get postgrad education.

Keywords: Lifelong Learning; Lifelong Learning Tendencies; Preschool Teacher Candidates

DOI: 10.29329/ijpe.2022.467.8

Correspondence: ilkayaskin@hotmail.com

¹ İlkay Aşkın Tekkol, Assoc. Prof. Dr., Eğitim Fakültesi, Kastamonu Üniversitesi

ii Melek Demirel, Prof. Dr., Eğitim Fakültesi, Hacettepe Üniversitesi

INTRODUCTION

Individuals' needs for science and learning, increase in correlation with their knowledge levels. It can be said that learning is a need that starts at birth at continues throughout life. Continuousness of learning is mentioned even in the times of ancient Greek. Plato said: 'Learning starts when people are born and continues until the end of life'. This refers to the learning aspect of being lifelong. This shows that lifelong learning ideas existed in the B.C. era. Lately, this concept became more important and it is seen as a basic skill that every individual should develop. Lifelong learning starts at an early age as a way of fulfilling one's needs and desires and continues throughout life as a tool for developing individuals (Oester & Oester, 1997). Lifelong learning increases individuals' comprehensive abilities with the aid of surroundings and it enables individuals to catch up with the ever-increasing amount of information via using new technological ways to access information. Adams (2007) mentioned seven core factors that affect lifelong learning. These factors are:

- Organizational skills
- Communicative skills
- Research skills
- Ability to determine one's own goals
- Being susceptible to change
- Social skills
- Literacy skills and technology literacy (Adams, 2007).

Demirel (2009) mentioned that people who will be successful should use technology efficiently, they should be able to solve problems and manage /her own learning. Several efforts need to be done to become lifelong learning individuals. Longworth (2001) summarizes these efforts as follows:

- To have information about how individuals learn and their own learning styles,
- Mastering educational technologies and using them effectively,
- To know how to develop and use evaluation techniques and personal development modules,
- Using communication technologies effectively to provide innovative learning,
- Supporting studies that will strengthen communication between schools, communities and nations,
- Being a guide, for each learner to set his/her own goals, make his/her own learning plan and commence learning,
- To use regional, national and international resources to identify learning needs and evaluate learning opportunities to meet these needs,
- Researching and using new learning techniques,

• Motivating individuals and providing self-confidence by making learning a fun and creative experience.

Although the skills and practices mentioned above are important for all professions, they have a special place and importance in the teaching profession. Because lifelong learning teachers are defined as teachers who can follow technological developments and perform effective teaching in the information age (European Commission, 1997). Coolahan (2002) also talks about the characteristics of the teacher required for the students of today and tomorrow and states that the teacher should understand herself/himself and the nature of her/his studies in depth. And also emphasizes that teachers must have developed a wide range of professional skills in teaching, planning, assessment and personal relationships, have the flexibility and be open to self-renewal and lifelong learning (Coolahan, 2002). In addition, it is thought that teachers with lifelong learning skills can contribute to their students' lifelong learning as well as their own development (Yildirim, Genc & Eryaman, 2016). For this reason, it has been deemed necessary to examine the lifelong learning skills of preschool teachers, where the students left their families for the first time and met a different environment. In this context, this research aims to determine the lifelong learning tendencies of preschool teacher candidates. For this purpose, answers to the following questions were sought:

- 1. What are the lifelong learning tendencies of preschool teacher candidates?
- 2. What are the opinions of preschool teacher candidates about lifelong learning?
- 3. Do preschool teacher candidates' lifelong learning tendencies differ significantly according to grade level?
- 4. Do preschool teacher candidates' lifelong learning tendencies differ according to academic success?
- 5. Do the preschool teacher candidates' lifelong learning tendencies differ according to their desire to pursue postgraduate education?

METHOD

Research model

In this study, where preschool teacher candidates' lifelong learning tendencies were examined, qualitative and quantitative data collection techniques and analyses were used together and interpreted together. Therefore, the method used in the research was a mixed method. Creswell (2003) defines the mixed method as a research approach in which quantitative and qualitative data are integrated and then the results are drawn by using the advantages of integrating these two data sets. In the quantitative stage of the mixed method, where the pre-service teacher candidates' lifelong learning tendencies were examined, the screening method was used because the current situation was tried to be described. A screening method is a research approach that aims to describe a situation that exists in the past or still as it exists (Karasar, 2009). At the qualitative stage of the research, semi-structured interviews were conducted with preschool teacher candidates.

Research group

The study group of the research consisted of teacher candidates studying in the first, second, third and fourth grade in a public university, Faculty of Education, Department of Basic Education, Preschool Division in Turkey. A total of 362 teacher candidates participated in the study.

Data gathering tools

The data of the research were collected by using the 'Lifelong Learning Tendencies Scale' and 'Interview Form'. The 'Lifelong Learning Tendencies Scale' developed by Diker Coşkun (2009) is a five-point Likert-type scale developed to measure university students' lifelong learning tendencies. The 74-item form of the scale was shaped in line with expert opinions, and its correlation with the 'Curiosity Index' scale, which is known to measure the same scope, was examined. This value has been calculated as 76. The trial form of the scale was administered to 642 students who are educated in seven different faculties and departments of the university in Turkey. The data obtained were subjected to exploratory factor analysis and it was determined that the scale consists of four subdimensions: motivation, persistence, lack of regulation in learning, and lack of curiosity. The total reliability of the scale for the final form consisting of 27 items was determined as 89 (Diker Coskun, 2009). The reliability of the "Lifelong Learning Tendencies Scale" calculated after the application in this study was calculated at ,92. The questions of the semi-structured interview form, which is another measurement tool used in the research, were prepared and arranged in line with the opinions of the experts and they were finalized by conducting a pre-interview with the three preschool teacher candidates. The questions in the interview form have been prepared in a way to provide in-depth information about the lifelong learning tendencies of teacher candidates. Focus group interviews were conducted with 27 teacher candidates selected from the group where the scale was applied. These candidates were selected via convenience sampling which is a purposive sampling method. It is aimed to get in-depth information about the questions on the scale with the interview questions.

Analysis of the data

Descriptive statistics were calculated using SPSS 24 in the study; for independent samples t-test, one-way ANOVA and Bonferroni tests were done. The data obtained from the interviews were first converted into plain text, and then the data was coded and how often the information was repeated get determined. The data obtained from the interviews were analyzed separately by two researchers. To establish reliability among the researchers, the percentage of compatibility between coding was calculated. This was calculated via a percentage of compatibility suggested by Miles and Huberman (1984), compatibility value was calculated at ,84. Interview data were analyzed using the descriptive analysis method and presented with direct quotations.

FINDINGS

Findings regarding the levels of lifelong learning tendencies of preschool teacher candidates

Descriptive statistics related to the lifelong learning tendencies of preschool teacher candidates are shown in Table 1.

Table 1. Arithmetic means and standard deviations of students' lifelong learning tendency scores.

	n	Lowest	Highest	$\overline{\mathbf{X}}$	Sd
Scale total	362	41	162	128,78	20,13
1st Subdimension: Motivation	362	7	36	31,29	4,07
Perseverance	362	7	36	27,49	5,36
3rd Subdimension: Lack of Regulating Learning	362	7	36	29,35	6,34
4th Subdimension: Lack of Curiosity	362	13	54	40,65	10,21

When Table 1 is analyzed, it can be seen that the preschool teacher candidates' lowest score on the scale of lifelong learning tendencies is 41 points and the highest is 162 points. The scale average is calculated as 128,78. It is observed that the arithmetic averages of teacher candidates regarding lifelong learning tendencies are above the mean score of the scale (27x3,5=94,5). When the statistics related to the sub-dimensions of the scale are examined; the motivation dimension is 31,29;

perseverance is 27,49; lack of regulating learning dimension has an average of 29,35 and the lack of curiosity dimension has an average of 40,65. When the average scores of the dimensions are calculated, the motivation dimension is 21 (6x3,5); the size of perseverance is 21 (6x3,5); It was determined that the lack of regulating learning dimension was 21 (6x3,5) and the lack of curiosity dimension is 31 (9x3,5) in the regulation of learning. Accordingly, the preschool teacher candidates' scores from the dimensions of the scale are above the average scores. The distribution of teacher candidates' answers is shown in Table 2.

Table 2. Distribution of answers to the 'Lifelong Learning Tendencies Scale'

Item No	Very S	Suitable	Partly	Suitable		Slightly table		Slightly Suitable		y is not itable	Not S	uitable	$\bar{\mathbf{X}}$
	f	%	f	%	f	%	f	%	f	%	f	%	
1	188	51,9	137	37,8	27	7,5	5	1,4	3	0,8	2	0,6	5,37
2	228	63,0	110	30,4	16	4,4	4	1,1	2	0,6	2	0,6	5,52
3	149	41,2	143	39,5	57	15,7	5	1,4	6	1,7	2	0,6	5,15
4	206	56,9	103	28,5	42	11,6	5	1,4	3	0,8	3	0,8	5,37
5	135	37,3	153	42,3	55	15,2	11	3,0	7	1,9	1	0,3	5,09
6	84	23,2	164	45,3	86	23,8	14	3,9	7	1,9	7	1,9	4,78
7	52	14,4	142	39,2	100	27,6	39	10,8	19	5,2	10	2,8	4,38
8	54	14,9	136	37,6	106	29,3	39	10,8	19	5,2	8	2,2	4,40
9	67	18,5	126	34,8	95	26,2	40	11,0	15	4,1	19	5,2	4,37
10	117	32,3	143	39,5	65	18,0	19	5,2	16	4,4	2	0,6	4,88
11	80	22,1	148	40,9	78	21,5	27	7,5	23	6,4	6	1,7	4,60
12	124	34,3	124	24,3	80	22,1	17	4,7	9	2,5	8	2,2	4,86
13	170	47,0	50	13,8	33	9,1	33	9,1	36	9,9	40	11,0	4,46
14	191	52,8	58	16,0	32	8,8	38	10,5	30	8,3	13	3,6	4,84
15	233	64,4	48	13,3	25	6,9	28	7,7	19	5,2	9	2,5	5,16
16	242	66,9	46	12,7	20	5,5	29	8,0	14	3,9	11	3,0	5,22
17	165	45,6	79	21,8	33	9,1	48	13,3	25	6,9	12	3,3	4,76
18	185	51,1	76	21,0	30	8,3	40	11,0	19	5,2	12	3,3	4,92
19	138	38,1	78	21,5	52	14,4	43	11,9	31	8,6	20	5,5	4,52
20	52	14,4	92	25,4	54	14,9	84	23,2	49	13,5	31	8,6	3,78
21	116	32,0	83	22,9	42	11,6	61	16,9	40	11,0	20	5,5	4,31
22	199	55,0	57	15,7	33	9,1	35	9,7	26	7,2	12	3,3	4,92
23	238	65,7	53	14,6	19	5,2	21	5,8	26	6,6	7	1,9	5,21
24	230	63,5	42	11,9	26	7,2	30	8,3	19	5,2	14	3,9	5,09
25	78	21,5	92	25,4	52	14,4	50	13,8	57	15,7	33	9,1	3,96
26	98	27,1	90	24,9	44	12,2	64	17,7	37	10,2	29	8,0	4,17
27	191	52,8	52	14,4	20	5,5	42	11,6	28	7,7	29	8,0	4,69

When Table 2 is analyzed, it can be seen that the averages of lifelong learning tendencies of preschool teacher candidates are generally high. The items that the teacher candidates have the highest average are 'I can learn all kinds of information easily if I believe that they will provide my personal development' (i2; 5,52) and 'It is suitable for me to develop new and skills and to learn new information in different fields to improve myself' (i1; 5,37). The item with the lowest average on the scale is (i20) 'I prefer to spend the time I spend for my personal development with my loved ones' (3,78) and 'I prefer to spend time to do my hobbies instead of making efforts to learn new things except for compulsory situations' (i20; 3,96).

Findings regarding the preschool teacher candidates' views on lifelong learning

The questions regarding the opinions of preschool teacher candidates on lifelong learning have been prepared by the items in the scale to provide clues about the preschool teachers' lifelong learning tendencies. Accordingly, four questions were prepared. The first question was 'What are your opinions on learning new information?' and the analysis of this question is presented in Table 3.

Table 3. Descriptive statistics related to teacher candidates' opinions on learning new information

Categories	f
Motivating the individual to be a lifelong learner	7
Enabling the individual to access information that will be useful	6
Ensuring the development of the individual	6
Enabling the discovery of life	4
Stimulating a sense of wonder	4
Making the individual happy	2

When Table 3 is analyzed, it can be said that preschool teacher candidates stated that learning new information motivates them to be lifelong learners (24,14%). This is followed by the view that learning new information will benefit them and ensure their development (20,69%). The view that learning new information enables one to discover life and stimulates curiosity is among the answers of teacher candidates (13,79%). Finally, preschool teacher candidates state that learning new information makes the individual happy (6,90%). These opinions of teacher candidates are given below:

Learning is a lifelong process, as we all heard and know. We cannot limit learning only to schools. Our life is the most important learning environment for us (k8) (Motivation about lifelong learning).

I think it is necessary to learn new information because it is necessary for human development, especially for cognitive development. (k1) (Ensuring the development of the individual).

Learning new information allows me to understand that I am involved in life and that I am still living. Learning every new information makes me feel more ready for life. I have the opportunity to use it somewhere in my life. Anyway, I do not think as this is not my field this information will not be useful. (k13) (Accessing information that will benefit the individual)

Another question is, 'Do you think learning is important and how much do you include learning in your life?' Here, all preschool teacher candidates state that learning is important. Their answers regarding how much they have included learning in their lives are presented in Table 4.

Table 4. Descriptive statistics of teacher candidates' inclusion levels of learning in their lives

Categories	f
Every moment of life	16
In the vast majority of life	9
In the half of life	2

More than half of the pre-school teacher candidates stated that they include learning in every moment of their lives (59,26%). The remaining part states that they include learning in most of their lives (33,33%) and half of their lives are spent with learning (7,41%). The opinions of teacher candidates on this subject are given below:

Of course, learning is as important as humans' basic needs. I find it important to learn at every moment of my life. From birth, people improve themselves with continuous learning. As a requirement of my profession, I have to constantly improve myself to provide more efficient attainment to myself and my students. For this, I need to read psychology books, guide books and child development books and teach the information I get to my students (k12) (At every moment of life)

Yes, learning is very important. I include learning for most of my life. Each person learns very useful information from another person, regardless of age and experience (k19) (in the vast majority of life)

Learning is of course very important, especially in the age we are in the information is constantly updated and changing. Therefore, we must constantly update our information. Half of my life is learning new things (k1) (Half of life)

Another question addressed to preschool teacher candidates is 'When trying to learn a topic you like/are interested in, does the difficulty level prevent you to stop? Or do you continually try to learn this information? How? Does the situation change when the topic is something that you do not like?' 26 of the preschool teacher candidates stated that they did not give up, no matter how hard it was when they liked the topic. Findings about the answers they gave regarding the disliked topics are given in Table 5.

Table 5. Descriptive statistics on teacher candidates' opinions on learning the topics they do not like

Categories	f
Searching for new ways to make individuals like the subject	11
Being persistent in learning regardless of challenges	10
Giving up learning	5

Nearly half of preschool teacher candidates stated that whenever there is a topic that they do not like, they search for new ways to love it and motivate themselves and do not give up learning (42,31%). The number of teacher candidates who stated that they did not give up learning and persevered in learning regardless of the subject was also quite high (38,46%). Five of the preschool teacher candidates stated that they gave up learning and gave up when there was an issue they did not like (19,23%). The opinions of teacher candidates on this subject are given below:

If I encounter a challenge in learning information about a topic that I like, this challenge motivates me to keep trying. I am looking for ways to love it if the subject is something that I don't like (k2) (Searching for learning new ways that can make the subject love)

If a topic that I like challenges me, I will not stop learning. Yes, it can reduce my motivation to study for a while, but I can make it easier to learn by asking someone who has already experienced or learned the information. I can try to solve the situation that I have difficulty with by researching from the books, the Internet, etc. The situation does not change a topic is something that I do not like. We never know how much the things we learned will impact somewhere in our lives. Therefore, I do not think that should lose motivation by separating information as we like or dislike (k17) (Being persistent in learning regardless of challenges)

Yes, I can give up because I don't enjoy learning when there is a topic that I dislike (k14) (Giving up learning)

'How important is it for you to learn new information about your profession?' All of the teacher candidates answered the question as very important. The findings about their learning on this subject are presented in Table 6.

Table 6. Descriptive statistics on teacher candidates' learning in professional subjects

Categories	f
Researching (article, current publications, books, etc.)	12
Consulting with experienced people/getting help from them	10
Keeping up with social media/Internet	4
Going courses	4
Attending congresses/seminars	4
Observing/internships	3
Exchanging information with friends	2
Learning by doing/learning from students	2

When Table 6 is examined, it can be seen that the most preferred way for preschool teacher candidates to learn professional topics is to research, the is, the research articles, current books and innovations (29,27%). This is followed by consulting experienced people (preschool teachers, academicians, etc.) and getting help from them (24,39%). Following professional issues on social media/internet, attending courses, and attending congresses/seminars are among the preferred learning pathways for teacher candidates (9,76%). While three preschool teacher candidates (7,32%) stated that they learned professional subjects through internships and observations; two preschool teacher candidates stated that they preferred to learn by exchanging information with their friends and practicing their profession (4,88%).

I think it is important to learn new information and new things before school because this period is a critical period for children, we need to transfer them to the right method in the right way we should research it. I constantly read the works in the field, besides, I follow the magazines constantly (k9) (Researching).

Learning new information about my profession is vitally important. Because as a teacher, as I will raise a new generation in a constantly renewed and changing life, I have to keep my mind fresh and alive to bring them to the best and the best. To learn new information, I can go to courses, use published academic articles, get help from my university professors or learn with my students. I am not going to be competent in all matters. They can teach me because their minds are fresher. I can realize the mutual learning-teaching process (k5)

Findings Regarding Investigation of Lifelong Learning Tendencies According to Grade Level

The data on the distribution of the average preschool teacher candidates' lifelong learning tendencies according to grade level are given in Table 7.

Table 7. Arithmetic means and standard deviations of teacher candidates' lifelong learning tendencies by grade level

Grade Level	n	$\bar{\mathbf{X}}$	sd
First Grade	49	126,57	22,22
Second Grade	106	128,68	20,65
Third Grade	134	129,61	18,05
Fourth Grade	74	128,90	21,79
Total	362	128,78	20,13

When Table 7 is examined, it can be seen that the scores of teacher candidates on lifelong learning tendencies belong to the lowest first-year students (126,57); it is observed that the second grade follows (128,68) and the highest average belongs to third-grade students (129,61). ANOVA results are given in Table 8 to reveal whether there is a significant difference between grade levels.

Table 8. ANOVA results on lifelong learning tendencies by grade level

Source of Variance	Sum of Squares	df	Mean Square	F	p
Between groups	333,72	3	111,24	0,273	,0845
Within groups	146000,04	358	407,82		
Total	146333,76	361			
0.05					

p>0.05

When the table is examined, it can be seen that the preschool teacher candidates' lifelong learning tendencies do not change according to the grade level.

Findings Regarding Investigation of Lifelong Learning Tendencies According to Academic Success

The data on the distribution of the averages regarding preschool teacher candidates' lifelong learning tendencies in terms of academic success are given in Table 9.

Table 9. Arithmetic means and standard deviations of teacher candidates' lifelong learning tendencies by academic success

Academic Success Level	n	$\overline{\mathbf{X}}$	sd
0-2,49	48	114,13	21,97
2,50-2,99	159	127,62	19,92
3,00 and above	155	134,52	17,15
Total	362	128,78	20,13

When the table is examined, it can be seen that the scores of teacher candidates regarding lifelong learning tendencies belong to the students with the lowest grade average of 0-2,49 (114,13); it can be seen that the average of 2,50-2,99 is followed by (127,62) and the highest average belongs to students with an average of 3,00 and above (134,52). ANOVA results are given in Table 10 to reveal whether there is a significant difference between the academic success levels.

Table 10. ANOVA results on lifelong learning tendencies by academic success

Source of Variance	Sum of Squares	df	Mean Square	F	p
Between groups	15624,20	2	7812,10	21,46	0,000
Within groups	130709,56	359	362,09		
Total	146333,76	361			

p<0,05

According to table 10, the lifelong learning tendencies of preschool teacher candidates show a significant difference in terms of academic success. Bonferroni test was done to determine where this difference originated. The results are given in Table 11.

Table 11. Group comparisons of lifelong learning tendencies by academic success

Groups		Differences in mean scores
0-2,49	2,50-2,99	-13,49*
	3,00 and above	-20,39*
2,50-2,99	0-2,49	13,49*
	3,00 and above	-6,90*
3,00 and above	0-2,49	20,39*
	2,50-2,99	6,90*

When Table 11 is analyzed, it can be seen that the scores of preschool teacher candidates with a grade average of 3,00 and above differ significantly from the group with an average of 0-2,49 and 2,50-2,99. In addition, it is revealed that the preschool teacher candidates' lifelong learning tendencies with a grade average of 2,50-2,99 are significantly higher than the teacher candidates with an average of 0-2,49. Accordingly, it is determined that preschool teacher candidates who have high academic success levels have significantly higher lifelong learning tendencies scores.

Findings Regarding Investigation of Lifelong Learning Tendencies in According to Will to Pursue a Post Graduate Degree

The results of the t-test analysis conducted to reveal whether the lifelong learning tendencies of preschool teacher candidates change according to the will to pursue a post-graduate degree are given in Table 12.

Table 12. Independent groups t-test statistics of lifelong learning tendencies according to having a will to pursue a post-graduate degree

Will to pursue graduate education	N	X	sd	df	t	p
Yes	196	133,30	18,91	1,35	4,78	0,00
No	166	123,45	20,28	1,57		
n<0.05						

When Table 12 is analyzed, it can be seen that the lifelong learning tendencies of preschool teacher candidates differ significantly according to their will to pursue a post-graduate degree. The lifelong learning tendencies of preschool teacher candidates who have a will to pursue a post-graduate degree are significantly higher than those who will not pursue a post-graduate degree.

CONCLUSION DISCUSSION AND SUGGESTIONS

The purpose of this research is to determine the lifelong learning tendencies of preschool teacher candidates. When the results of the research are analyzed, it was found that the arithmetic mean of the teacher candidates about lifelong learning tendencies is above the scale average score. Thus, it can be stated that preschool teacher candidates have a high lifelong learning tendency. In addition, it was determined that the scores related to the sub-dimensions of the scale were above the average scores. When the answers of preschool teacher candidates to the items in the scale are examined individually, it can be seen that the average of lifelong learning tendencies is generally high. When studies conducted with teachers, administrators, teacher candidates and university students are examined, similar results can be seen (Allan, 1980; Boztepe & Demirtaş, 2018; Demirel & Akkoyunlu, 2017; Kozikoğlu & Altunova, 2018; Nguyen, 2011; Özgür, 2016). The reason why preschool teacher candidates have a high lifelong learning tendency may be related to the reason that teachers think that they should always improve themselves. Teaching points out the necessity of being open to continuous development and change in terms of profession, and always requires learning (Day, 1999; Selvi, 2010). Accordingly, it can be said that a qualified teacher is a lifelong learning teacher who is always open to learning.

It has been revealed that the items with the highest averages of preschool teacher candidates on lifelong learning tendencies are 'I can learn all kinds of information easily if I believe that they will contribute to my personal development and 'It is exactly for me to develop new skills and learn new information in different areas to improve myself'. Accordingly, it can be said that teacher candidates are always open to learning for their own development and they are eager to develop new skills and learn new information. In the interviews conducted with preschool teacher candidates, it was concluded that the access to the new information contributed to their development and motivated them to be lifelong learners. The topic of teacher candidates learning all kinds of information that will contribute to their personal development is similar to the interview data. While the teacher candidates stated that they would not give up learning about a topic they love, they stated that if they have to learn about a topic that they do not like, they will try to find new ways to like it and they with this they would not quit on it. In addition, they stated that it is very important for them to develop themselves professionally and that they have contributed to these developments in many different ways (doing research, getting help from experienced people, following the developments related to their profession in social media, etc.). When the literature is examined, it can be seen that these results are supported (Ayaz, 2016; Bulac & Kurt, 2019; Demirel & Yağcı, 2012). In the light of all these results, it can be said that preschool teacher candidates who participated in the research found it very important to learn new information about their personal and professional development, and they followed different paths in this regard, and this motivated them for lifelong learning.

The items with the lowest average on the scale are 'I prefer to spend the time I spend for my personal development with my loved ones.' and 'I prefer to spend the time with my hobbies, rather than making an effort to learn new things except for compulsory situations'. These are also consistent with the interview data. The vast majority of preschool teacher candidates stated that they are learning in every moment of their lives. In addition, they accepted learning new knowledge affects them

positively and expressed that learning motivates them to be lifelong learners. It also contributes to their discovery of life and makes them happy by arousing curiosity. When the literature is examined, it can be seen that these results are supported (Ayaz, 2016; Ayra & Kösterelioğlu, 2015; Rempel, 2010). According to these results, it can be stated that the teacher candidates are always open to learning and they have a positive opinion about learning new information.

It has been determined that the lifelong learning tendencies of preschool teacher candidates increase as the grade level increases, but they do not differ significantly. Accordingly, it can be said that the lifelong learning tendencies of preschool teacher candidates do not differ according to the grade level. When the literature is examined, it can be seen that there are studies supporting this result (Akcaalan, 2016; Yurdakul, 2017). The reason why there is no difference in lifelong learning tendencies in terms of grade level may be because lifelong learning is not completely dependent on formal education and it is related to individual characteristics. However, it seems to be very important to reinforce these skills with education at school. According to this, although lifelong learning tendency is related to the self-development of the individual, it is considered very critical to develop in pre-service education, especially for teachers (Coolahan, 2002).

It has been determined that the preschool teacher candidates' lifelong learning tendencies increase as their academic success increases and this increase is significant. Thus, it can be said that preschool teacher candidates who are more successful academically have higher lifelong learning tendencies. When the literature is examined, it can be seen that these results are supported (Akcaalan, 2016, Diker-Coşkun, 2009). Lifelong learning teachers can be seen as individuals who see learning as a need and can determine their own learning needs, see themselves as always open to learning, are learning new information for a great part of their lives and benefit from different ways in this process. These skills are known to be associated with academic success. Subaşı (2000) demonstrated that efficient study methods such as determining their priorities, planning by analyzing time, utilizing different learning strategies and managing their work increase academic success. This result explains preschool teacher candidates have a lifelong learning tendency and also have high academic success.

It has been demonstrated that the preschool teacher candidates' lifelong learning tendencies differ significantly according to their desire to pursue postgraduate education. Accordingly, it was concluded that preschool teacher candidates who want to pursue postgraduate education have a significantly higher lifelong learning tendency. When the literature is examined, it is revealed that the desire to pursue postgraduate education makes a significant difference in terms of lifelong learning of students and teacher candidates (Demirel & Akkoyunlu, 2017; Diker-Coşkun & Demirel, 2012; Kozikoğlu, 2014). It is thought that individuals who want to do postgraduate studies have a positive attitude towards research and learning (Diker-Coşkun, 2009). Also, postgraduate education enables individuals to progress in their field, gain in-depth knowledge, sustain their education and improve themselves. In addition, it can be stated that individuals who want to pursue postgraduate education are individuals who are motivated about learning. In the study of Saracaloğlu (2008), it was concluded that students who are enrolled in a postgraduate education curriculum had an 'adequate' level of academic motivation. These results explain the reason why individuals who want postgraduate education have high lifelong learning tendencies.

In line with the results of the research, although preschool teacher candidates were found to have a high lifelong learning tendency, it is noticeable that there is no significant difference according to the grade level. Accordingly, it is thought that it is important to include activities that will contribute to lifelong learning in undergraduate programs to contribute preschool teacher candidates to be lifelong learners. In addition, preschool teacher candidates who are willing to pursue postgraduate education have higher lifelong learning tendencies. In this case, it may be suggested that preschool teacher candidates should be informed about postgraduate education and be directed and they should be guided in this regard, considering that this will contribute to being a lifelong learner. This research was carried out with preschool teacher candidates studying in the field of preschool education at universities at the department of education. It may be suggested to conduct the study with different universities and make comparisons between universities. In addition, by conducting experimental

studies on activities that can be applied to improve the lifelong learning tendencies of preschool teacher candidates, clues about the applications that can be done in undergraduate curricula can be presented.

REFERENCES

- Adams, D. (2007). Lifelong learning skills and attributes: The perceptions of Australian secondary school teachers. *Issues in Educational Research*, 17, 149-160.
- Akcaalan, M. (2016). *Investigation of the relationships between lifelong learning and social emotional learning with reference to various variables*. Unpublished Master Thesis. Sakarya: Sakarya University, Institute of Educational Sciences.
- Allan, W. E. (1980). Continuing education relations between Lake-Sumter Community College and its service area as embodied in the concept of lifelong learning. Unpublished Doctor of Education Thesis. Florida: Florida State University.
- Ayaz, C. (2016). The analysis of lifelong learning tendencies of teachers in terms of some variables. Unpublished Master Thesis. Bartın: Batın University, Institute of Educational Sciences.
- Ayra, M & Kösterelioğlu, İ. (2015). The relationship between teachers' lifelong learning tendencies and their perceptions of professional self-efficacy. *NWSA-Education Sciences*, 10, (1), 17-28.
- Barrow, R. & Keeney, P. (2001). Lifelong learning and personal fulfillment. Aspin, D. ve Chapman, J., Hatton, M., Sawano Y. (Eds.). *International handbook of lifelong learning* (Volume 1), 53-60. Dordecht: Kluwer Academic Publishers.
- Boztepe, Ö & Demirtaş, Z. (2018). Investigation of pre-service teachers' lifelong learning and communication satisfaction levels. *Journal of Higher Education and Science*, 8 (2), 327-335.
- Bulaç, E. & Kurt, M. (2019). Investigation of tendencies of prospective teachers towards lifelong learning. *Amasya Education Journal*, 8(1), 125-161.
- Coolahan, J. (2002), Teacher education and the teaching career in an era of lifelong learning. *OECD Education Working Papers*, No. 2, OECD Publishing.
- Creswell, J. W. (2003). Research design: Qualitative, quantitative, and mixed methods approaches. Thousand Oaks, CA: Sage.
- Day, C. (1999). Developing teachers: the challenges of lifelong learning.educational change and development series. Bristol: Taylor & Francis Inc.
- Demirel, M. (2009). Lifelong learning and schools in the twenty-first century. *Procedia Social and Behavioral Sciences*, 1, 1709–1716.
- Demirel, M. & Akkoyunlu, B. (2017). Prospective teachers' lifelong learning tendencies and information literacy self-efficacy. *Educational Research and Reviews*, 12 (6), 329-337.
- Demirel, M. & Yağcı, E. (2012). Perceptions of primary school teacher candidates about lifelong learning. *H.U. Journal of Education*, Special Issue, 1: 100-111.
- Diker Coşkun, Y. & Demirel, M. (2012). Lifelong learning tendencies of university students. *H.U. Journal of Education*, 42, 108-120.

- Diker Coşkun, Y. (2009). Investigation of lifelong learning tendency of undergraduate students' in terms of some variables. Unpublished Ph.D. Dissertation. Ankara: Hacettepe University, Institute of Social Sciences.
- Organization for Economic Cooperation and Development (OECD) (1997). *Lifelong learning for all*. Paris: OECD
- Karasar, N. (2009). Bilimsel araştırma yöntemi [Scientific method of research]. Ankara: Nobel Yayın Dağıtım.
- Kozikoğlu, İ. & Altunova, N. (2018). The predictive power of prospective teachers' self-efficacy perceptions of 21st century skills for their lifelong learning tendencies. *Journal of Higher Education and Science*, 8 (3), 522-531.
- Kozikoğlu, İ. (2014). Analysis of university and vocational school students' lifelong learning competences. *Journal of Instructional Technologies & Teacher Education*, 3 (3), 29-43.
- Longworth, N. (2001). Learning communities for a learning century. Aspin, D. ve Chapman, J., Hatton, M., Sawano Y. (Eds.). *International handbook of lifelong learning* (Volume 2), 591-617. Dordecht: Kluwer Academic Publishers.
- Miles, M. B. & Huberman, A. M. (1994). *Qualitative data analysis: an expanded sourcebook.* California: Sage Publications.
- Nguyen, H. C. (2011). *California Community College educational leaders' perceptions of lifelong learning*. Unpublished Doctor of Education Thesis. California: California State University.
- Oester, T., K. & Oester, D., E. (1997). *Life-long learning: learning to be productive*. [Online: http://files.eric.ed.gov/fulltext/ED425409.pdf], Accessed: 18.02.2020.
- Özgür, H. (2016). A study on information literacy self-efficacies and lifelong learning competences of pre-service teachers. *Mersin University Journal of the Faculty of Education*, 12 (1), 22-38.
- Rempel, K. A. (2010). *The reality of lifelong learning in a rural community*. Unpublished Doctor of Philosophy Thesis. Alberta: University of Calgary.
- Saracaloğlu, A. S. (2008). Lisansüstü öğrencilerin akademik güdülenme düzeyleri, araştırma kaygıları ve tutumları ile araştırma yeterlikleri arasındaki ilişki. Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi, 5 (2), 179-208.
- Selvi, K. (2010). Teachers' competencies. *Cultura. International Journal of Philosophy of Culture and Axiology*, 7 (1), 167-175.
- Subaşı, G. (2000). The effect of productive study habits training on students' academic achievement, academic self-concept and study habits. *Education and Science*, 25 (117), 50-56.
- Yildirim, Z.; Genc, S. Z. & Eryaman, M. Y. (2016). The Views of Primary School Teachers Towards Lifelong Learning. *Route Educational and Social Science Journal*. *3*(1), 337-350
- Yurdakul, C. (2017). An investigation of the relationship between autonomous learning and lifelong learning. *International Journal of Educational Research Review*, 2 (1), 15-20.