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Lifelong Learning Tendencies of Prospective Teachers

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Abstract
Stunning developments in this era have brought different meanings in both educational conditions and time and space in education. Developing technologies have made education applicable everywhere. In other words, education has been taken outside of the known space (classic school walls). Individuals' constant innovation has caused the development of the concept of "lifelong learning", which is among the primary concepts in today's educational studies. However, teachers play a key role in accepting and accurately perceiving this approach. Because approaches and tendencies of teachers concerning this subject will be effective upon forming a relevant perception in their environment. Education received by teachers in the preservice period plays an important role in the formation of a positive or a negative tendency. Thus, the determination of lifelong learning tendencies of prospective teachers is very important in terms of educational strategies to be developed in this direction. The objective of this study is to determine lifelong learning tendencies of prospective teachers according to different variables. Target population of the study consisted of students studying in different grades of Gazi University Gazi Faculty of Education. As the group where the study data would be collected was very intense; no sample was selected to represent the population. In this context, 350 students studying in different grades were included in the sample. In the study, the data were collected via a scale that was developed by Coskun Diker (2009). The collected data were analyzed and tabulated via the SPSS package software. Examining the data; it was observed that lifelong learning tendencies of prospective teachers differed according to gender, academic achievement, grade and the state of participating in a personal development course.
Keywords: Lifelong Learning, Lifelong Learning Tendency, Prospective Teacher, Teacher Training, Continuing Education
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1. Introduction

Rapid developments in technology have necessitated the restatement of the process of learning-teaching and the development of individuals' lifelong learning skills. Lifelong education is considered an indispensable process for raising individuals in accordance with the necessities of the time. Educational system, where students used to get immediate information and participate in the educational process passively, has been replaced by a new educational system, where students participate in the learning process actively, examine the cause and effect relationship of events and generate solution to problems by applying new knowledge to new conditions (Oskay, 2007).

Knowles (1996) suggests that it is not possible for individuals to use the knowledge they learn at school throughout their lives. Because individuals who do not constantly renew themselves will fail in keeping pace with changes in both their own areas (occupation) and other areas, and consequently fall behind their opponents. Thus, today's individuals will be able to immediately perceive the changes, realize their rights and responsibilities, and use knowledge only through formal and informal educational institutions, as well as activities to be presented by these institutions within the scope of lifelong learning. In other words, individuals are required to constantly educate, change and renew themselves (Yılmaz,2000).

In order to sustain lifelong learning, it is required to have; 1. Basic skills (reading, writing, maths, speaking and listening), 2. Personal features (responsibility-taking, efficient communication, cognitive awareness, self-management, self-evaluation), 3. Thinking skills (problem solving, critical thinking, creative thinking, reflective thinking and scientific thinking) (Koç Erdamar, 2010).

The concepts of lifelong education and lifelong learning started to be frequently used towards the end of the 1960s. In international commission reports, lifelong education was used as a philosophical concept aimed at educational organization rather than a system. Then the concept started to be defined as "a process for individuals to complete their personal, social and occupational expertise development in order to increase the life quality of both theirs and other people throughout their lives" in a broader context (Akbaş and Özdemir, 2002; Ersoy and Yılmaz, 2009; Budak, 2009; Özen, 2011;. Cevher, Atagül and Enser, 2016).

Basic features of lifelong learning, which is currently used synonymously with concepts like adult education, continuing education and public education, include integrity, integration, convenience, flexibility, democratization, facility and motivation, education, variety, learning and life quality (Duman, 2011). The year 1996 was accepted as "European Year of Lifelong Learning" and basic skills of lifelong learning were determined as "communication in the mother tongue", "communication in foreign languages", "maths skill,

basic competences in science and technology", "digital competence", "learning to learn", "social and humane competences", "taking initiative and entrepreneurship" and "cultural awareness and expression" in the report published by the Parliament and Council of the European Union in 2006 (Özcan, 2008).

It is required to bring the aforementioned basic skills in individuals at young ages and keep them dynamic throughout the process of education. It is very important for teachers, who play an important role in the education of individuals, to be open to innovations, have lifelong learning skills and use these skills in the process of teaching-learning in order to allow students to acquire and use these skills. Thus, if prospective teachers accurately know and adopt the process of lifelong learning and its importance, this will prevent the development of distresses or misunderstandings before they become teachers. Prospective teachers who are trained with this consciousness will become a better role model for their students and environment, with whom they constantly interact.

The training intended for raising awareness of lifelong learning is very important for prospective teachers throughout the process of candidateship. Thus, state-determining studies regarding lifelong learning tendencies of prospective teachers will contribute to the present and future applications on this issue. In this study, lifelong learning tendencies of prospective teachers are tried to be determined according to different variables.

In this study, lifelong learning tendencies of prospective teachers are tried to be determined according to different variables. Accordingly, answers are sought to the following questions.

1. What is the level of lifelong learning tendencies of prospective teachers?
2. Do lifelong learning tendencies of prospective teachers differ according to their gender?
3. Do lifelong learning tendencies of prospective teachers differ according to their grades?
4. Do lifelong learning tendencies of prospective teachers differ according to the state of participating in personality development courses?
5. Do lifelong learning tendencies of prospective teachers differ according to their academic achievement?

2. Methodology

2.1. Research Design

The study was conducted in the screening model. Screening studies aim to describe a past or a present condition as it is. Thus, such studies are conducted either in the entire population or a group, an example or a sample from the population for the purpose of making a general judgement in a population that consists of a number of elements (Karasar, 2002).

2.2. Study Group

Study group consists of 350 students studying in 4 teaching programs (Turkish, Science, Classroom Teaching, English Teaching) at Gazi University Gazi Faculty of Education in the school year of 2016-2017. 53% of students are female and 47% male. Departments that participated in the study were determined randomly and an assessment instrument was applied to students in this department based on voluntariness. Students were classified according to their academic achievement based on grade records in the student information system.

2.3. Data Collection Tool

The data in the study were collected via "Lifelong Learning Tendencies" scale that was developed by Coşkun Diker (2009). This 6 point likert scale involves 27 items as "suits very much", "suits partially", "suits merely", "does not suit merely", "does not suit partially" and "does not suit at all". These items are involved in four lower dimensions as; "motivation" 6 items, "persistence" 6 items, "deprivation in regulating the learning" 6 items and "deprivation of curiosity" 9 items. Lifelong learning tendencies of university students were determined based on the criterion of total average scores and standard deviations, as well as minimum, medium and maximum scores to be obtained from the scale. The minimum score to be obtained from the entire scale is (27x1) 27, medium score (27x3,5) 94,5 and the maximum score (27x6) 162. The lowest score to be obtained from three dimensions consisting of six items in the scale is (6x1) 6, medium score (6x3,5) 21 and the highest score (6x6) 36. The lowest score to be obtained from the dimension of deprivation of curiosity is (9x1) 9, medium score (9x3,5) 31,5 and the highest score (9x6) 54. The cronbach alpha internal consistency coefficient of the scale was determined as 0.89 by Coşkun Diker (2009).

2.4. Data Analysis

The data in the study were analyzed via the SPSS 18. Package software. Independent samples t-test was used for determining whether or not the opinions of university students about Lifelong Learning Tendencies differed according to their gender and state of participating in a personal development course and variance analysis for determining whether or not the opinions of students differed according to their academic achievement and grade. Besides, eta-square (ŋ2) correlation coefficients were calculated for comparing the influence quantity of average

scores, which gave the opportunity of examining the effect of independent variables on lifelong learning tendencies (Cohen, Manion & Morrison, 2007).

3. Results

The first sub-problem of the study is "*What is the level of lifelong learning tendencies of prospective teachers*?". Table 1 shows the distribution of scores obtained by participants from the scale and the statistics regarding the distribution.

Table 1. Score Distributions of Prospective Teachers Regarding Lifelong Learning Tendencies

Lifelong Learning Tendency	N	Minimum	Maximum	M	SD	Median
1.Lower Dimension (Motivation)	350	20	36	31.81	3.21	21
2.Lower Dimension (Persistence)	350	13	36	28.52	4.96	21
3.Lower Dimension (Deprivation in Regulating the Learning)	350	11	36	29.71	5.72	21
4.Lower Dimension (Deprivation of Curiosity)	350	9	54	41.45	9.06	31.5
Entire Scale	350	85	161	131.49	16.97	94.5

Examining table 1; the general average of scores obtained by prospective teachers who participated in the study from the scale regarding lifelong learning tendencies was determined as M=131.49. This score average of prospective teachers is higher than the median score (94.5) of the scale. According to this result, it may be suggested that prospective teachers have a positive tendency towards lifelong learning. On the other hand, examining the score distributions regarding four lower dimensions of the scale, it is observed that averages of scores obtained by prospective teachers from the lower dimensions of the scale are respectively as; motivation (M=31.81), persistence (M=28.52), deprivation in regulating the learning (M=29.71) and deprivation of curiosity (M=41.45). It may be suggested that the scores obtained from the lower dimensions of the scale show a parallelism with the scores obtained from the entire scale, in other words, they reflect a positive tendency towards lifelong learning. In this sense, it may be indicated that prospective teachers are open to lifelong learning and consider learning a part of their lives.

The second sub-problem of the study is "*Do lifelong learning tendencies of prospective teachers differ according to their gender?*". Table 2 shows the distribution of scores obtained by participants from the scale and the statistics regarding the distribution.

Table 2: Results of the t Test Regarding Lifelong Learning Tendencies of Students According to the Variable of Gender

Scale Dimensions	Gender	N	M	SD	t	P
Motivation	Female	243	32,07	3,00	2,27	0.024*
	Male	107	31,22	3,60		
Persistence	Female	243	29,14	4,82	3,59	0.000***
	Male	107	27,11	5,00		
Deprivation in Regulating the Learning	Female	243	30,15	5,86	2,17	0.031*
	Male	107	28,72	5,26		
Deprivation of Curiosity	Female	243	42,88	8,64	4,59	0.000***
	Male	107	38,19	9,20		
Total	Female	243	134,23	16,40	4,70	0.000***
	Male	107	125,24	16,67		

*p< .05 , ***p< .001

Examining table 2; it is seen that score averages obtained by female students who participated in the study from the entire scale regarding lifelong learning (M=134.23) are different from the score averages of male students (M=125.24). As a result of the t-test that was conducted for determining the significance of this difference; it was determined that the difference between the scores was significant [t(348)=4,70, p<0.001]. According to this result, it may be suggested that female students have higher lifelong learning tendencies than male students. It may also be suggested that the distribution of scores obtained from the entire scale within the scope of the variable of gender is similar to the distribution of scores obtained from the other four lower dimensions of the scale.

Eta-square (Π^2) values were calculated for determining the effect of the variable of gender on the scores of lifelong learning tendency in detail. Eta-square was calculated as Π^2= .060 for the total scale, which shows that the influence quantity is "medium". In other words, this result shows that 6% of variability regarding lifelong learning tendency of students is explained by the variable of gender. Examining the eta-square values in terms of the lower dimensions of the scale; it was determined that the sub-factor of "Motivation" was .015, "Persistence" .036, "Deprivation in Regulating the Learning" .013 and "Deprivation of Curiosity" .057, which were low and medium.

The third sub-problem of the study is "*Do lifelong learning tendencies of prospective teachers differ*

according to their grades?". Table 3 shows the distribution of scores obtained by participants from the scale and the statistics regarding the distribution.

Table 3: Results of the Variance Analysis Regarding Lifelong Learning Tendencies of Students According to Grades

Scale Dimensions	Grade	N	M	SD	F	p	Intergroup Difference
Motivation	1. Grade	72	31,60	3,74	,257	,857	--
	2. Grade	72	31,76	3,78			
	3. Grade	120	32,00	2,70			
	4. Grade	86	31,76	2,91			
Persistence	1. Grade	72	28,10	5,85	2,173	,091	--
	2. Grade	72	28,17	5,75			
	3. Grade	120	29,44	3,86			
	4. Grade	86	27,88	4,69			
Deprivation in Regulating the Learning	1. Grade	72	28,89	6,61	2,214	,086	--
	2. Grade	72	28,89	6,74			
	3. Grade	120	30,70	4,75			
	4. Grade	86	29,71	5,06			
Deprivation of Curiosity	1. Grade	72	39,29	10,06	4,190	,006**	4-1
	2. Grade	72	39,76	10,29			
	3. Grade	120	41,98	8,38			
	4. Grade	86	43,37	7,66			
Total	1. Grade	72	127,88	18,99	4,147	,007**	4-1
	2. Grade	72	128,58	19,07			
	3. Grade	120	131,33	15,81			
	4. Grade	86	135,51	14,31			

**p< .01

As a result of the variance analysis that was conducted for testing the significance of the difference between the score averages obtained by students regarding lifelong learning tendency according to their grades; it was determined that there was a significant difference between lifelong learning tendency scores of students according to their grades [$F_{(3-3467)}$= 4,147, p<0.01]. The results of the Tukey test that was conducted for determining the groups causing the difference show that senior students (M=135,51) have higher lifelong learning tendency scores than first grade students (M=127,88). Examining the score averages; it may be suggested that as the grade increases, score averages positively increase. In other words, educational process creates a positive awareness in students in terms of lifelong learning. Examining the score averages from this aspect, on the other hand; the difference is observed in the total score obtained from the entire scale and the lower dimension of "deprivation of curiosity".

Eta-square (η^2) values were calculated for determining the effect of the variable of grade on the scores of lifelong learning tendency in detail. Eta-square was calculated as η^2= .035 for the total scale, which shows that the influence quantity is "low". In other words, this result shows that 4% of variability regarding lifelong learning tendency of students is explained by the variable of grade. Examining the eta-square values in terms of the lower dimensions of the scale; it was determined that the sub-factor of "Motivation" was .002, "Persistence" .018, "Deprivation in Regulating the Learning" .019 and "Deprivation of Curiosity" .035, which were low.

The fourth sub-problem of the study is "*Do lifelong learning tendencies of prospective teachers differ according to the state of participating in personality development courses?*. Table 4 shows the distribution of scores obtained by participants from the scale and the statistics regarding the distribution

Table 4: Results of the t Test Regarding Lifelong Learning Tendencies of Students According to the Variable of Participating in Personality Development Courses

Scale Dimensions	State of Participting in Courses	N	M	SD	t	P
Motivation	Yes	231	32,34	3,04	4,44	0.000***
	No	119	30,77	3,29		
Persistence	Yes	231	29,41	4,27	4,81	0.000***
	No	119	26,80	5,71		
Deprivation in Regulating the Learning	Yes	231	30,34	5,27	2,91	0.004**
	No	119	28,49	6,35		
Deprivation of Curiosity	Yes	231	43,25	8,55	5,38	0.000***
	No	119	37,95	9,04		
Total	Yes	231	135,34	15,54	6,23	0.000***
	No	119	124,01	17,20		

p< .01,***p< .001

Table 4 gives information about lifelong learning tendencies of students according to the state of participating in personality development courses. Examining the table; it is seen that score averages obtained by students who stated that they had participated in personality development courses from the entire scale regarding lifelong learning tendency (M=135,34) are different from the score averages of students who had not participated in any personality development courses (M=124,01). As a result of the t-test that was conducted for determining the significance of this difference; it was determined that the difference between the scores was significant [t(348)=6,23, p<0.001]. According to this result, it may be suggested that students who had participated in personality development courses have higher lifelong learning tendencies than students who had not. On the other hand, examining the score distribution regarding four lower dimensions of the scale; it is seen that it shows a parallelism with the general distribution obtained from the scale.

Eta-square (η^2) values were calculated for determining the effect of the variable of participating in personality development courses on the scores of lifelong learning tendency in detail. Eta-square was calculated as η^2= .100 for the total scale, which shows that the influence quantity is "high". In other words, this result shows that 10% of variability regarding lifelong learning tendency of students is explained by the variable of participating in personality development courses. Examining the eta-square values in terms of the lower dimensions of the scale; it was determined that the sub-factor of "Motivation" was .054, "Persistence" .062, "Deprivation in Regulating the Learning" .024 and "Deprivation of Curiosity" .077, which were low and medium and high.

The fifth sub-problem of the study is "*Do lifelong learning tendencies of prospective teachers differ according to their academic achievement*?". Table 5 shows the distribution of scores obtained by participants from the scale and the statistics regarding the distribution.

Table 5. Results of the Variance Analysis Regarding Lifelong Learning Tendencies of Students According to the Variable of Academic Achievement

Scale Dimensions	Academic Achievement	N	M	SD	F	p	Intergroup Difference
Motivation	1.Medium	137	30,92	3,61	9.79	0.000***	1-2,1-3
	2.Good	184	32,28	2,83			
	3.Very Good	29	33,03	2,51			
Persistence	1.Medium	137	27,33	5,74	6.93	0.001***	1-2,1-3
	2.Good	184	29,20	4,37			
	3.Very Good	29	29,83	3,11			
Deprivation in Regulating the Learning	1.Medium	137	28,82	6,60	3.70	0.026*	1-3
	2.Good	184	28,93	4,83			
	3.Very Good	29	30,49	5,87			
Deprivation of Curiosity	1.Medium	137	38,47	10,13	12.99	0.000***	1-2,1-3
	2.Good	184	42,83	8,03			
	3.Very Good	29	43,44	5,63			
Total	1.Medium	137	125,55	18,44	14.91	0.000***	1-2,1-3
	2.Good	184	134,62	15,32			
	3.Very Good	29	135,41	10,96			

* P<.05, *** P<.001

As a result of the variance analysis that was conducted for testing the significance of the difference between the score averages obtained by students regarding lifelong learning tendency according to their

academic achievement; it was determined that there was a significant difference between lifelong learning tendency scores of students according to their academic achievement [$F_{(2-347)}$= 14.91, p<0.001]. The results of the Tukey test that was conducted for determining the groups causing the difference show that students who have "very good" achievement (M=135,41) and "good" achievement (M=134,62) have higher lifelong learning tendency scores than students who have "medium" achievement (M=125,55). According to this result, it may be suggested that students with higher academic achievement are more eager for and open to lifelong learning than students with lower achievement.

Eta-square (Π^2) values were calculated for determining the effect of the variable of academic achievement on students' scores of lifelong learning tendency in detail. Eta-square was calculated as Π^2= .079 for the total scale, which shows that the influence quantity is "medium". In other words, this result shows that 8% of variability regarding lifelong learning tendency of students is explained by the variable of academic achievement. Examining the eta-square values in terms of the lower dimensions of the scale; it was determined that the sub-factor of "Motivation" was .053, "Persistence" .038, "Deprivation in Regulating the Learning" .021 and "Deprivation of Curiosity" .070, which were low and medium.

4. Discussion

This study aims to reveal lifelong learning tendencies of prospective teachers and whether or not these tendencies differ according to the variables of gender, grade, state of participating in a personal development course and academic achievement.

The study primarily determined the score distributions of prospective teachers regarding lifelong learning tendencies. According to the study findings; it was observed that the score average obtained by prospective teachers from the scale was higher (M =131.49) than the average score of the scale (94,5). In the study, as well as total score averages obtained from the scale, score averages regarding four lower dimensions of the scale were analyzed according to each variable. Accordingly, it was determined that teachers obtained higher lifelong learning tendency score averages from each dimension of the scale than the average score of the scale. In general, it may be suggested that prospective teachers regard lifelong learning and believe in the necessity and importance of creating educational opportunities on this matter. Results of studies conducted by Demirel and Akkoyunlu (2010), Arsal (2011), Gencel (2013), Erdoğan (2014), Özçiftçi (2014), Kılıç and Tuncel (2014), Poyraz (2014), Kuzu, Demir and Canpolat (2015), Ayra amd Kösterelioğlu (2015), Özçiftçi and Çakır (2015), Yaman and Yazar (2015) support relevant findings.

In addition to this, it was determined that the variables of gender, grade, state of participating in a personal development course and academic achievement created a significant difference in lifelong learning tendencies of prospective teachers. Evaluating the distribution of scores obtained by prospective teachers from the scale; it was observed that female prospective teachers had higher lifelong learning tendencies than male prospective teachers. In this context, it may be suggested that female prospective teachers are more eager for and interested in lifelong learning activities, which is also observed in relevant studies (Gürbüztürk and Koç, 2002; Rogers 2006; Coşkun, 2009; Diker Çoşkun and Demirel, 2012; İzci and Koç, 2012; Gencel, 2013; Kılıç and Tuncel, 2014; Konokman and Yanpar Yelken, 2014; Kılıç, 2014).

Evaluating the distribution of scores obtained by prospective teachers regarding lifelong learning tendencies according to their grades; it was observed that as their grades increased, lifelong learning tendencies positively increased. Findings of the study are consistent with the study results of (Karakuş (2013), Seyhan and Kadı (2015). Evaluating the distribution of scores obtained by prospective teachers from the scale according to the state of participating in a personal development course; it was observed that scores obtained from the scale showed a distribution on behalf of prospective teachers who had participated in personal development courses. In this sense, findings of the study are consistent with the study results of Atacanlı (2007), Ayaz and Ünal (2016). On the other hand, it was observed that lifelong learning tendencies of prospective teachers differed on behalf of those with higher academic achievement according to the variable of academic achievement. The literature is consistent with the study findings of Demirel and Akkoyunlu (2010).

The study also examined the effect of independent variables on lifelong education tendencies. Eta-square (ŋ2) values were calculated for comparing the influence quantity of average scores. Accordingly, it was determined that the state of participating in a personal development course had a "high" effect, variables of gender and academic achievement "medium" and variable of grade "low" on lifelong education tendencies.

5. Conclusion

Teachers are key elements in an educational system. Professional competence of teachers also includes lifelong learning. Prospective period plays an important role for prospective teachers to acquire this competence. Competences to be acquired by prospective teachers in this process will allow them to raise enterprising individuals who will learn to learn, easily access accurate information and use it efficiently, make learning a part of their lives, have learning skills, communicate efficiently and master technology in their teaching career. It is

very important to determine factors that would positively develop lifelong learning tendencies of prospective teachers during the preservice period in detail.

6. Suggestions

Curriculums of faculties of education should be regulated in a way that they will develop lifelong learning competence of prospective teachers based on the interests of students in this issue in a modern sense. It is recommended to evaluate positive tendencies of prospective teachers towards lifelong learning as an opportunity and try to preserve positive attitudes and even better them.

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