

## Lifelong Learning Tendencies of Primary Education Teachers

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### ABSTRACT

This study determined the lifelong learning tendencies of primary education teachers and compared these tendencies using different variables. The participants included 140 primary education teachers from several primary schools in Afyonkarahisar selected through random sampling. The Lifelong Learning Tendency scale developed by Coşkun (2009) to determine the lifelong learning tendencies of primary education teachers was used to collect data. Confirmatory factor analysis (CFA) confirmed that the scale in both the original study and this study had four factors. In addition, the Cronbach Alpha coefficient was 0.90. The data displayed a normal distribution in the dimensions of motivation and persistence, but a non-normal distribution in the dimensions of lack of regulating learning and lack of curiosity. The results revealed that participants have high tendencies towards pursuing lifelong learning. In particular, the tendencies in the motivation dimension were the highest. A significant relationship was only found in the dimension of lack of curiosity with female participants. It was determined that the lifelong learning tendencies of primary education teachers do not differ significantly according to grade level, education level, or professional seniority.

### INTRODUCTION

The lifelong learning concept has been known for centuries, but only came to the forefront in the last quarter of the past century. Due to rapid developments in information and communication technologies, we live in the information age and an information society and, consequently, individuals have been forced to update their knowledge. Thus, this situation has propelled the lifelong learning concept to the forefront. Lifelong learning aims to restructure the current education system and develop the ability to recognize education beyond formal education to also include informal educational activities (Güleç, Çelik, & Demirhan; 2012). According to Aktan (2007, 22), this is a concept that includes continuous learning from childhood to retirement. Lifelong learning includes informal as well as formal learning.

The paradigm of lifelong learning was first described in a meeting of higher education ministers from European Union member countries as follows (Aktan, 2007, 23): “Implementing the lifelong learning approach requires a close relationship between working and learning, which requires a closer relationship between education and business life. For this reason, continuing education should be considered more in terms of initial training and instruction. Educational institutions and companies should be learning organizations working in cooperation based on partnership.” There are objectives and practices related to lifelong learning in the European Union projects (Akbaş & Özdemir, 2002). The contribution of lifelong learning and vocational training to employment and the necessity of providing lifelong learning for all ages and occupations are among the foundations of the Leonardo da Vinci program, a European Union program (Duman, 2001). The lifelong learning concept began to be discussed in our country in the 2000s; thus, the General Directorate of Lifelong Learning was established within the Ministry of National Education. Now, lifelong learning is one of the attitudes fostered in the primary, secondary, and higher education (Coşkun, 2009). Therefore, it is of critical importance to determine the views and actions of primary education teachers. This study aims to reveal the lifelong learning tendencies of primary education teachers. In addition, these tendencies were investigated in terms of variables such as gender, grade level, education level, and professional seniority.

### METHODOLOGY

This study was designed as a survey study. Surveys revealed the respondents' attitudes, views, and past or present behaviors (Neuman, 2007). The primary education teachers in the center of Afyonkarahisar constituted the study population. The participants consisted of 140 primary education teachers from randomly selected primary schools. The information regarding participants' gender, grade level, education level, and professional seniority is presented in Table 1.

**Table 1:** Participant demographic information.

Variables		Total
<b>Gender</b>	Female	63
	Male	77
	Total	140
<b>Grade level</b>	1 <sup>st</sup> grade	33
	2 <sup>nd</sup> grade	27
	3 <sup>rd</sup> grade	38
	4 <sup>th</sup> grade	42
	Total	140
<b>EducationLevel</b>	Associate's degree	20
	Bachelor's degree	113
	Graduate degree	7
	Total	140
<b>Professional seniority</b>	1-5 years	8
	6-10 years	12
	11-15 years	15
	16 years and more	105
	Total	140

The participants were somewhat evenly distributed between grade level taught. Most teachers were male, had bachelor's degrees, and had taught for more than 16 years.”

The Lifelong Learning Tendency scale developed by Coşkun (2009) to determine the lifelong learning tendencies of primary education teachers was used to collect data. The scale has 27 items with a 6-point Likert-type (6=Strongly Agree, 1=Strongly Disagree). Based on the factor analysis performed by Coşkun (2009), the scale has four factors: motivation, persistence, lack of regulating learning, and lack of curiosity. The Cronbach Alpha internal consistency coefficient ( $\alpha$ ) of the scale is 0.89.

This study performed confirmatory factor analysis (CFA) in order to ensure the construct validity of the scale. CFA is used to test an existing theory (Matsunaga, 2010). The CFA results determined that the scale had four factors, similar to the original report, and fit indices were obtained ( $\chi^2=544.36$ ;  $df=318$ ;  $\chi^2/df=1.711$ ;  $RMR=0.11$ ;  $SRMR=0.069$ ;  $GFI=0.78$ ;  $CFI=0.87$   $AGFI=0.73$ ;  $RMSEA=0.072$ ). A coefficient of 0.85 and over (Anderson & Gerbing, 1984; Cole, 1987; Marsh, Balla & McDonald, 1988) or a coefficient of 0.90 (Kline, 2005; Schumacker & Lomax, 1996) for GFI, CFI, and AGFI is assumed to be a good fit. A RMSEA value of 0.10 or less is considered sufficient. A value between 2 and 5 for the  $\chi^2/df$  ratio indicates a good fit, whereas a value less than 2 indicates a perfect fit (Jöreskog & Sörbom, 2001). These results indicate that the model is an acceptable model. In addition, the Cronbach Alpha coefficient was 0.90. The Cronbach Alpha coefficients regarding the sub-dimensions were 0.72 for motivation, 0.87 for persistence, 0.75 for lack of regulated learning, and 0.92 for lack of curiosity. The number of items in each dimension and their Cronbach Alpha coefficients are represented in Table 2.

**Table 2:** The number of factors, items, and reliability coefficients.

Factor	The number of items	n	Alpha
Motivation	6	140	0.72
Persistence	6	140	0.87
Lack of regulating learning	6	140	0.75
Lack of curiosity	9	140	0.92
<b>Total</b>	<b>27</b>	<b>140</b>	<b>0.90</b>

SPSS software was used to analyze the data. A single sample Kolmogorov-Smirnov test was applied to test the data distribution. According to the coefficients of skewness, the data displayed a normal distribution in the dimensions of motivation and persistence and a non-normal distribution in the dimensions of lack of regulating learning and lack of curiosity, as seen in Table 3. A coefficient of skewness between -1 and 1 indicates that the data does not deviate significantly from the normal distribution (Büyüköztürk, 2007; p. 40). Therefore, both parametric and non-parametric tests were used in the study. The independent samples t-test was used to determine the tendencies of primary school teachers in the dimensions of motivation and persistence according to gender. The Mann Whitney-U test was used to determine whether the dimensions of lack of regulating learning and curiosity differ according to gender. The one-way ANOVA test was used to determine if the lifelong

tendencies of primary education teachers in the dimensions of motivation and persistence differ according to grade level, the level of education, and professional seniority. The Kruskal-Wallis H-test was used to determine whether the dimensions of lack of regulating learning and curiosity differ according to grade level, the level of education, and professional seniority.

**Table 3:** The Kolmogorov-Smirnov test results and the coefficients of skewness.

Factor	N	p	Coefficient of Skewness
Motivation	140	.000	-.548
Persistence	140	.000	-.949
Lack of regulating learning	140	.000	-1.319
Lack of curiosity	140	.000	-1.528

## FINDINGS

The mean scores and standard deviation for the data factors collected to determine the primary education teachers' tendencies towards lifelong learning are presented in Table 4. The primary school education teachers' tendencies regarding the motivation dimension were high and this was followed by the lack of curiosity, lack of regulating learning, and persistence dimensions.

**Table 4:** Primary education teachers' lifelong learning tendencies.

Factor	N	Lowest	Highest	Mean	sd
Motivation	140	4.17	6.00	5.4571	0.40794
Persistence	140	2.50	6.00	5.0643	0.68808
Lack of regulating learning	140	1.00	6.00	5.0702	0.97389
Lack of curiosity	140	1.00	6.00	5.1095	1.04223

The independent samples t-test was conducted to reveal whether the tendencies of participants regarding the dimensions of motivation and persistence varied according to gender (Table 5). The motivation dimension did not reveal any significant differences between genders ( $t_{(138)} = 1.10, p > 0.05$ ). In addition, persistence did not reveal any significant differences between genders ( $t_{(138)} = 0.11, p > 0.05$ ). Thus, male and female teachers had similar motivation and persistence tendencies.

**Table 5:** The t-test results regarding whether the primary school education teachers' lifelong learning tendencies varied according to gender.

Factor	Gender	N	X	S	sd	t	p
Motivation	Female	63	5.41	0.41	138	1.10	0.27
	Male	77	5.49	0.41			
	Total	140					
Persistence	Female	63	5.07	0.71	138	0.11	0.91
	Male	77	5.06	0.67			
	Total	140					

In order to ascertain whether the tendencies of the participants revealed any difference regarding the dimensions of lack of regulating learning and lack of curiosity, the Mann-Whitney-U test was used (Table 6). The tendencies of primary education teachers regarding the lack of learning regulation did not reveal any significant differences based on gender ( $U = 2174.500, p > 0.05$ ). Therefore, all primary education teachers' tendencies toward the lack of regulating learning were similar. However, the tendencies of primary education teachers revealed statistically significant differences for lack of curiosity by gender ( $U = 1794.000, p < 0.05$ ). The mean score ( $X = 80.52$ ) of female teachers regarding the lack of curiosity dimension was higher than the male teachers' mean score ( $X = 62.30$ ). Thus, female primary education teachers were less curious than the male primary education teachers were.

**Table 6:** The Mann Whitney-U test results regarding the differentiation of primary education teachers' tendencies based on gender.

Factor	Gender	N	Mean Rank	Total Rank	U	Z	p
Lack of regulating learning	Female	63	74.48	4692.50	2174.500	1.061	0.289
	Male	77	67.24	5177.50			
	Total	140					
Lack of curiosity	Female	63	80.52	5073.00	1794.000	2.662	<b>0.008</b>
	Male	77	62.30	4797.00			
	Total	140					

In order to determine whether the tendencies of primary education teachers regarding the dimensions of motivation and persistence revealed any significant differences according to the grade level taught, an independent samples one-way ANOVA test was conducted (Table 7). The tendencies of primary education teachers regarding the motivation dimension did not reveal any significant differences according to the grade level taught ( $F_{(3-136)}=0.666, p>0.05$ ). Additionally, the tendencies of primary education teachers did not reveal any significant difference regarding the persistence dimension ( $F_{(3-136)}=.213, p>0.05$ ). Therefore, motivation and persistence for lifelong learning did not differ based on the grade level taught.

**Table 7:** The One-Way ANOVA results regarding the lifelong learning tendencies of primary education teachers according to grade level.

Factor	The Class Level	N	X	S	F	p
Motivation	1 <sup>st</sup> Grade	33	5.54	0.41	0.666	0.575
	2 <sup>nd</sup> Grade	27	5.40	0.41		
	3 <sup>rd</sup> Grade	38	5.45	0.41		
	4 <sup>th</sup> Grade	42	5.44	0.40		
Persistence	1 <sup>st</sup> Grade	33	5.13	0.58	0.213	0.887
	2 <sup>nd</sup> Grade	27	5.07	0.72		
	3 <sup>rd</sup> Grade	38	5.00	0.76		
	4 <sup>th</sup> Grade	42	5.06	0.69		

A Kruskal-Wallis H-Test for unrelated measurements was conducted to determine whether the tendencies of the participants regarding the lack of regulating learning and lack of curiosity varied according to the grade level taught (Table 8). The tendencies of primary education teachers regarding the lack of learning regulation revealed no significant differences according to the class grade levels ( $\chi^2=2.180, p>0.05$ ). Additionally, no significant difference was found in the tendencies of primary education teachers regarding lack of curiosity and the class grade level ( $\chi^2=3.280, p>0.05$ ). Thus, primary education teachers teaching at different class levels revealed similar tendencies regarding lack of learning regulation and lack of curiosity.

**Table 8:** The results of Kruskal-Wallis H-test regarding the differentiation of primary education teachers' tendencies according to grade level.

Factor	Grade level	N	Mean Rank	sd	Chi-square	p	Significant Difference
Lack of regulating learning	2 <sup>nd</sup> Grade	33	76.21	3	2.180	0.536	-
	3 <sup>rd</sup> Grade	27	72.98				
	4 <sup>th</sup> Grade	38	71.80				
		42	63.24				
Lack of curiosity	1 <sup>st</sup> Grade	33	70.03	3	3.280	0.350	-
		27	79.80				
		38	73.18				
		42	62.46				

In order to determine whether the tendencies of the sample primary education teachers regarding the dimensions of motivation and persistence differed according to educational level obtained, the independent samples one-way ANOVA test was conducted (Table 9). There was no significant difference regarding the education level of primary education teachers' and their tendencies regarding the motivation dimension ( $F_{(2-137)}=1.477, p>0.05$ ). Additionally, the primary education teachers' tendencies regarding the persistence dimension did not reveal any significant differences ( $F_{(2-137)}=0.707, p>0.05$ ). Thus, primary education teachers from different educational backgrounds revealed similar tendencies regarding motivation and persistence.

**Table 9:** The ANOVA results regarding the differentiation of primary education teachers according to their education level.

Factor	Education Level	N	X	S	F	p
<b>Motivation</b>	Associate's Degree	20	5.45	0.50	1.477	0.232
	Bachelor's Degree	113	5.44	0.39		
	Graduate Degree	7	5.71	0.27		
<b>Persistence</b>	Associate's Degree	20	5.15	0.72	0.707	0.495
	Bachelor's Degree	113	5.03	0.70		
	Graduate Degree	7	5.31	0.29		

In order to determine whether the participants' tendencies regarding the dimensions of lack of regulating learning and lack of curiosity differed, a Kruskal-Wallis H-Test for unrelated measurements was conducted (Table 10). There was no significant difference in the tendencies of primary education teachers regarding the lack of regulating learning dimension in relation to the level of education ( $\chi^2=2.714, p>0.05$ ). The primary education teachers with a different level of education revealed similar tendencies regarding the lack of regulating learning dimension. In addition, the primary education teachers' tendencies regarding the lack of curiosity dimension revealed no significant differences according to the level of education ( $\chi^2=1.627, p>0.05$ ). The tendencies of primary education teachers with different educational backgrounds regarding the lack of curiosity dimension revealed similarities.

**Table 10:** The results of Kruskal-Wallis H-test concerning the lifelong learning tendencies of primary education teachers in relation to the education level variable.

Factor	Education Level	N	Mean Rank	sd	Chi-square	p	Significant Difference
Lack of regulating learning	Associate's Degree	20	60.85	2	2.714	0.257	-
	Bachelor's Degree	113	73.18				
	Graduate Degree	7	54.86				
Lack of curiosity	Associate's Degree	20	63.83	2	1.627	0.443	-
	Bachelor's Degree	113	72.52				
	Graduate Degree	7	56.93				

An independent samples one-way ANOVA test was conducted to determine whether the primary education teachers' tendencies regarding the dimensions of motivation and persistence revealed any significant differences according to professional seniority (Table 11). The primary education teachers' tendencies regarding the motivation dimension revealed no significant differences in relation to professional seniority ( $F_{(3-136)}=0.758, p>0.05$ ). Additionally, the primary education teachers' tendencies regarding the persistence dimension revealed no significant differences according to professional seniority ( $F_{(3-136)}=0.142, p>0.05$ ). Therefore, primary education teachers with different professional seniority revealed similar tendencies regarding motivation and persistence.

**Table 11:** The One-Way ANOVA test results regarding the differentiation of primary education teachers' lifelong learning tendencies according to professional seniority.

Factor	Professional Seniority	N	X	S	F	p
<b>Motivation</b>	1-5 years	8	5.29	0.39	0.758	0.519
	6-10 years	12	5.37	0.46		
	11-15 years	15	5.52	0.40		
	16 years or more	105	5.47	0.41		
<b>Persistence</b>	1-5 years	8	5.02	0.51	0.142	0.935
	6-10 years	12	4.96	0.56		
	11-15 years	15	5.03	0.88		
	16 years or more	105	5.08	0.69		

In order to determine whether the participants' tendencies regarding the dimensions of lack of regulating learning and lack of curiosity differed according to professional seniority, a Kruskal-Wallis H-Test was conducted (Table 12). Primary education teachers' tendencies regarding the lack of regulating learning dimension revealed no significant differences according to professional seniority ( $\chi^2=6.007, p>0.05$ ). The primary education teachers did not reveal any statistically significant results regarding the lack of curiosity dimension according to

professional seniority ( $\chi^2=2.722, p>0.05$ ). Thus, primary education teachers with different professional seniority levels revealed similar tendencies regarding the lack of learning regulation and lack of curiosity dimensions.

**Table 12:** The results of Kruskal-Wallis H-test regarding the differentiation of primary education teachers lifelong learning tendencies according to professional seniority.

Factor	Education Level	N	Mean Rank	sd	Chi-square	p	Meaningful Difference
Lack of regulating learning	1-5 years	8	103.00	3	6.007	0.111	-
	6-10 years	12	74.04				
	11-15 years	15	63.50				
	16 years or more	105	68.62				
Lack of curiosity	1-5 years	8	79.13	3	2.722	0.436	-
	6-10 years	12	58.17				
	11-15 years	15	60.50				
	16 years or more	105	72.68				

### CONCLUSION, DISCUSSION, AND IMPLICATIONS

This study assessed the lifelong learning tendencies of primary education teachers and compared these tendencies using several variables. In this study, the primary education teachers' lifelong learning tendencies levels were first determined. According to the findings, the lifelong learning tendencies of primary education teachers were high. Similarly, Kılıç and Tuncel's (2014) study found that lifelong learning tendencies of primary education teachers were high. Additionally, the teachers that participated in Ayra and Kösterelioğlu's (2015) study also revealed high lifelong learning tendencies. Özçiftçi and Çakır (2015) found the lifelong learning tendencies of teachers who were enrolled in a distant education non-thesis master's program to be high. Additionally, the primary education teachers' tendencies were highest in the motivation dimension. Similarly, in Ayra and Kösterelioğlu's (2015) study and Özçiftçi and Çakır's (2015) study, the motivation dimension had the highest mean score among other dimensions in the lifelong learning tendencies scale. This finding suggests that primary education teachers generally attach importance to developing new knowledge and skills in different fields. Therefore, they acquire new knowledge and skills to enable personal development. This finding is important for the teaching profession. The motivation dimension is followed by lack of curiosity, lack of regulating learning, and persistence.

Secondly, in this study, the primary education teachers' lifelong learning tendencies were compared according to different variables. Motivation, persistence, and lack of regulating learning tendencies of primary education teachers did not reveal any significant differences according to gender. In light of these findings, it was concluded that the tendencies of teachers from different genders were similar with regard to these three dimensions. In Tunca, Alkın-Şahin, and Aydın's (2015) study, the prospective teachers' motivation, persistence, and lack of learning regulation sub-dimensions had no significant difference according to gender. The results of Yaman and Yazar's (2015) study also suggested that there was not a significant difference between female and male teachers' lifelong learning tendencies. In this study, a significant difference was found only in the lack of regulating learning dimension in favor of female teachers. This study is in line with Tunca, Alkın-Şahin, and Aydın's (2015) findings who suggested that female teachers viewed libraries as boring, did not want to do research to learn anything new or participate in courses/seminars unless required, and preferred to spend time with the people they love or their hobbies rather than for their self-development.

Motivation, persistence, lack of regulating learning, and lack of curiosity sub-dimensions of lifelong learning tendencies of primary education teachers did not reveal any significant difference according to the grade level, level of education, or professional seniority variables. Özçiftçi and Çakır's (2015) study also revealed no significant difference between the professional seniority variable and teachers' lifelong learning tendencies. The findings suggest that the grade level, level of education, and professional seniority did not influence the lifelong learning tendencies of teachers.

Based on the results of this study, in order for teachers to become lifelong learners, activities for their personal and professional development must be organized and teachers must be encouraged to participate in these activities. In parallel, teachers must be encouraged to pursue graduate education and the necessary arrangements must be made in order to enable teachers' personal and professional development. A qualitative study regarding what primary education teachers know and what activities they do for lifelong learning can be conducted. This study can be replicated with a larger sample.

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