

# Evaluation of Teachers' Attitudes and Perceptions of Competence Regarding Lifelong Learning

Huseyin Uzunboylu and Cigdem Hursen  
*Near East University*

## **Abstract**

*This study investigated teachers' attitudes and perceptions of competence in relation to lifelong learning. The lifelong learning attitudes and competence scale was administered to 614 teachers in order to find out their attitudes and perceptions of competence regarding lifelong learning. The research findings showed that teachers' age and gender seemed to be influential in their lifelong learning process. The findings also indicated that there was a positive correlation between the teachers' attitudes and perceptions of competence.*

**Key words:** *education; learners; learning; professional development; scale.*

## **Introduction**

Knowledge, which is the most significant characteristic of today's knowledge society, has been changing and improving very rapidly. Particularly, the developments in science and technology have been influencing social, economical and cultural life (Demirel, 2009a; Keser, Uzunboylu & Ozdamli, 2010; Pieri & Diamantini, 2010; Hussein, 2010); thus professions and descriptions of professions have been continuously renewed. In addition, the needed profile of man power relevant to the changing professions has been changing continuously and the acquired knowledge has not been prevalent. For this reason, there is a need for individuals to update their knowledge and skills continuously in order to adapt themselves to the technological changes and new work conditions (Fahr, 2005). Lifelong learning can provide societies and individuals with opportunities to catch up with these changes and developments.

Lifelong learning which has been the subject of national governmental and international organizations such as UNESCO and OECD (Rogers, 2004), and which has also created learning societies (Davey, Neale, & Matthews, 2003), is known as LLL.

It is also explained as lifewide, voluntary and self-motivated and it describes individual and professional development (Coşkun & Demirel, 2010). Besides, “lifelong learning”, which is interpreted as learning through lifetime, is believed to be vital for meeting rapidly changing social needs (Wang, 2008) and following knowledge and technology (Bryce, 2004). Furthermore, lifelong learning provides individuals with knowledge, skills and competence continuously (Sim et al., 2003; Cowan et al., 2004; Figel, 2006) and it is also a political strategy essential for the development of societies (European Commission, 2002; Uggla, 2008).

Literature offers plenty of studies conducted regarding lifelong learning in various fields (Kilpatrick et al., 2003; Desjardins, 2003; Colardyn, 2004; Cantwell & Scevak, 2004; Peat et al., 2005; Longworth, 2006; Bath & Smith, 2009; Özcan, 2011). This is an indication of the importance of lifelong learning. Basi Yeaxlee emphasized the impact of lifelong learning on many areas in 1929 by stating that lifelong learning can take place in many places (at homes, clubs, churches, cinemas, theatres, concert halls, unions and political societies), in media and societies (Hsieh, 2010). Kiley and Cannon (2005) pointed out that lifelong learning has been significant for many reasons. These are “finding influential ways for restricted sources in education”, “meeting the increasing educational needs and expectations of learners from various origins”, “explosion in the area of knowledge and technology”, “transition to knowledge society”, “restructuring in economy”, “organizational reforms” and “changes in work places”.

Lifelong learning has particularly focused on improving learners' educational careers (Nind, 2007); it has also been explained as a concept that increases active citizenship, social competition and employment and it has been influential in all stages of our lives, not restricted only with classroom and childhood periods (Coşkun & Demirel, 2010). Most of the relevant literature suggests that lifelong learning that continues a lifetime occurs and gains importance in formal education, non-formal education and informal education processes (Antikainen, 1998; Woodrow, 1999; Tuijnman & Boström, 2002; Fahr, 2005; Mojab, 2006; Eneroth, 2008; Vandebroek, Verschelden, & Boonaert, 2008; Hsieh, 2010).

In formal education lifelong learning focuses on planned and programmed activities that are equipped with qualified teachers whereas non-formal education contains learning activities out of formal education such as organizing a visit to a museum. Informal education activities are not programmed and planned out of an educational institution activities and are done without being aware of them most of the time (Nordin, Embi, & Yunus, 2010). During this process, learners who are the Essentials of learning should be able to “plan their own learning”, “evaluate their own learning”, “be more active than passive learners”, “learn in every environment” and “employ different learning strategies in different conditions” (Knapper & Cropley, 2000).

In particular, globalization and technological changes have been influencing people's daily lives (Knapper & Cropley, 2000). Therefore, individuals need to grow as lifelong

learners in order to adapt themselves to these changes. In this process, teachers play an important role. Harpe and Radloff (2001) stated that while it is essential to raise learners as lifelong learners in order to be members of knowledge society, it is also essential to inform teachers about lifelong learning.

There is a need for teachers to help their learners gain lifelong learning habits and skills in order to adapt themselves to the changes they face in life and update themselves continuously (Soran, Akkoyunlu, & Kavak, 2006; Demiralay & Karadeniz, 2008). This is only possible when teachers possess lifelong learning habits and skills. Lifelong learning provides individuals with opportunities to gain basic knowledge and skills and in this process teachers find new and flexible learning opportunities and thus develop themselves (Öztaşkın, 2010).

Teachers, as lifelong learners, should continuously investigate and research their field or other areas of their interest. Besides, they should “have a desire to learn”, “take responsibility of their own learning”, “learn how to learn”, “be curious”, “be interested in current topics and developments”, “be knowledge literate”, “possess organizational skills”, “be researchers”, “possess communication skills”, “use technology effectively”, “be creative” and “be inclined to teamwork” (Akkoyunlu, 2008; Demirel, 2009b). In addition, relevant literature gives us many factors that influence teachers’ learning skills. Researchers found that particularly gender (Rogers, 2003; Hughes, Blaxter & Jackson, 2006) and age (Hsieh, 2010) have impact on the development of individuals’ learning skills.

Gender not only has an important social meaning in all societies (Sullivan, 2003); but also has an impact on various areas such as cultural values, interpersonal communication, motivation and technology (Dasen & deRibaupierre, 1987; Mwamwenda, 1992; John et al., 1983; Ainley, 2006; Houtz & Gupta, 2001; Almerich et al., 2005; Hargittai & Shafer, 2006; Taçman, 2006; Bakioglu & Hacifazlıoglu, 2010; Steinerová & Šušol, 2007; Tella & Mutula, 2008; Haubner et al., 2009; Chu, 2010) while it has a significant role in individuals’ learning process (Lloyd & Duveen, 1992; Gouthro, 2009; Tondeur, 2010) and influences their learning (Dresel & Haugwitz, 2005; Kesici, Şahin, & Aktürk, 2009; Mojab, 2006). Similarly, age reflects the time dimension in the frame of lifelong learning and emphasizes the different stages of learning in the individuals’ learning process (Desiardins, 2003).

Research literature suggests that since teachers are of paramount importance in the process of educating learners to become lifelong learners which are needed in knowledge societies, it is also essential to train the teachers for this process. Also, in literature, it is emphasized that attitude, defined as tendency forming an individual’s behaviours, opinions and emotions towards a psychological object regularly (Smith, 1968), and competence defined as combination of knowledge, skills and attitudes (Raičević et al., 2006) are important to become a lifelong learner. However, there has not yet been a study exploring and improving teachers’ attitudes and perceptions of

competence regarding lifelong learning, as is this study. Teachers' gender and age have been taken into account in this study because relevant literature suggests that gender and age are of paramount importance in learning process.

The purpose of this study is to explore the attitudes and perceptions of competence of teachers working at different stages of education regarding lifelong learning. In this investigation the key research questions were as follows:

- What are the teachers' attitudes about lifelong learning?
- What are the teachers' perceptions of competence regarding lifelong learning?
- What is the relationship between the teachers' attitudes and their perceptions of competence regarding lifelong learning?
- Is there a significant difference in the teachers' attitudes about lifelong learning in relation to gender?
- Is there a significant difference in the teachers' attitudes about lifelong learning in relation to age?
- Is there a significant difference in the teachers' perceptions of competence about lifelong learning in relation to gender?
- Is there a significant difference in the teachers' perceptions of competence about lifelong learning in relation to age?

## **Method**

### ***Participants***

In this study the participants were the teachers from Cyprus. 2138 teachers teaching in secondary schools, lycee and vocational high schools were the target population; however, it was not possible to reach the whole population. Therefore, a sample was selected. 30% of the target population was selected through "stratified sampling" and "simple random sampling" methods. As a result, 642 teachers were selected. However, the research was conducted with 614 teachers since 28 teachers did not return the scales. 66.3% of the participants were female and 33.7% of them were male. Age distribution was as follows: 9.4% of the participants' age ranged from 22 to 26, 20.2% ranged from 27 to 31, 27.2% ranged from 32 to 36, 17.8% ranged from 37 to 41, 14.5% ranged from 42 to 45 and 10.9% of them were 46 years old and above.

### ***Instrument***

In this study, "the lifelong learning attitude scale" and "lifelong learning perceptions of competence scale" designed by the researchers (Uzunboylu & Hürsen, 2010) were employed. The development process of the "lifelong learning attitude scale" and "lifelong learning perceptions of competence scale" is explained in details below.

### ***Lifelong Learning Attitude Scale (LLAS)***

"The lifelong learning attitude scale" was designed for the purpose of exploring the teachers' attitudes about lifelong learning. The scale was prepared on the basis

of expert (n=17) views and reading the relevant literature. Experts from whom we obtained opinions during the development process are lecturers at Education Faculties. The scale, developed as a result of literature scan and experts' opinions, was distributed to 300 teachers as a pre-application. The scale was piloted and its validity and reliability were tested. The structure validity factor analysis of the scale and internal consistency reliability test were examined by Cronbach alpha coefficient. Having done the statistical analysis, eleven items, with the load factor estimated below 0.40 were taken out of the scale; the scale's final draft version contains 19 items. The scale consists of two sections. The first section yielded demographic information about the participants' gender and age. In the second section of the scale, there were three themes: "unwillingness to learn" (7 items), "believing in the benefit of learning activities for professional development" (6 items) and "awareness regarding individual learning abilities" (6 items). The scale consisted of 19 items. In the scale, a 5 point Likert-scale format (1 representing strongly disagree and 5 representing strongly agree) was used. The scale consisted of positive and negative statements. Positive statements were scored as 5, 4, 3, 2, and 1 while negative statements were scored as 1, 2, 3, 4, and 5. The Cronbach's alpha score of the scale was calculated as 0.896. Cronbach's alpha values of the scale's sub-dimensions are calculated as "unwillingness to learn" (0.840), "believing in the benefit of learning activities for professional development" (0.850) and "awareness regarding individual learning abilities" (0.780). Besides, in the scale there were items such as "individuals' incompetence regarding their knowledge in their field should be disregarded", "individuals should be conscious about the fact that knowledge continuously changes", "individuals should have a continuous desire for learning for professional development".

### ***Lifelong Learning Perceptions of Competence Scale (LLLPCS)***

"The lifelong learning perceptions of competence scale" was designed for the purpose of exploring the teachers' perceptions of competence regarding lifelong learning. The scale was prepared by interviewing teachers and getting expert (n=17) views. The scale developed as a result of literature scan and experts' opinions, was distributed to 300 teachers as a pre-test. The scale was piloted and its validity and reliability were tested. The structure validity factor analysis of the scale and internal consistency reliability test were examined by Cronbach Alpha coefficient. Having done the statistical analysis, the fifteen items, whose load factor is estimated below 0.40, were taken out of the scale; the scale's final draft version contains 51 items. The scale consisted of two sections. The first section yielded information about the participant teachers' gender and age. The second section consisted of 51 items which focused on six themes: "self-direction competence" (13 items), "learning to learn competence" (12 items), "sense of initiative and entrepreneurship competence" (10 items), "obtaining knowledge competence" (6 items), "digital competence" (6 items) and "decision-making competence" (4 items). A 5 point Likert-scale was used (1 representing never and 5 representing always). The scale consisted of positive statements which were scored as 5, 4, 3, 2, and 1. The

Cronbach's alpha score was calculated as 0.956. Cronbach's alpha values of the scale's sub-dimensions are calculated as "self-direction competence" (0.930), "learning to learn competence" (0.910), "sense of initiative and entrepreneurship competence" (0.890), "obtaining knowledge competence" (0.830), "digital competence" (0.850) and "decision-making competence" (0.750). In the scale there were items such as "being able to lead a group in the activities relevant to his/her profession", "knowing the essential learning activities for professional development", "being able to benefit from websites such as Facebook and Twitter in the process of obtaining knowledge".

### ***Data Collection***

In the process of data collection, after gaining access permission by the Cyprus Ministry of Education and Culture, the researcher contacted the head teachers of the schools and the dates for visiting the schools were decided together by the researchers and the school authorities. The researchers visited the schools and the data collection instruments were introduced to the teachers. During this process, the participants were informed about the importance of providing the researchers with correct information. Every teacher was given a week to answer "lifelong learning attitude scale" and "lifelong learning perceptions of competence scale". The researchers visited the schools a week later and collected the scales.

### ***Data Analysis***

The data obtained from the scales were analyzed using SPSS 16. In the analysis of the data, Pearson correlation, percentages, means and standard deviations were calculated. One-way ANOVA, LSD test, Dunnett C test and t-test were administered. The findings were interpreted at the 0.05 significance level.

## **Results**

### ***The Teachers' Attitudes Regarding Lifelong Learning***

The mean scores of the teachers' attitudes related to lifelong learning were  $M=4.43$ ,  $SD=.655$  for "unwillingness to learn",  $M=4.21$ ,  $SD=.817$  for "believing in the benefit of learning activities for professional development" and  $M=4.24$ ,  $SD=.681$  for "awareness of lifelong learning skills".

The teachers' attitudes in relation to unwillingness to learn were in the boundaries of "strongly agree". This seems to indicate that the teachers were unwilling to learn. But the teachers' attitudes about "believing in the benefit of learning activities for Professional development" and "awareness of individual learning abilities" were in the boundaries of "strongly agree". The findings indicated that although teachers seemed to believe in the benefit of learning activities and they seemed to be highly aware of individual learning abilities, they did not seem to be willing to learn.

### ***The Teachers' Perceptions of Competence Regarding Lifelong Learning***

The mean score of the participant teachers' perceptions of competence regarding lifelong learning was  $M=3.92$ ,  $SD=.592$ . The findings show that regarding lifelong learning, teachers seemed to perceive themselves competent in general.

### ***The Relationship between the Teachers' Attitudes and Perceptions of Competence Regarding Lifelong Learning***

The Pearson correlation results indicated that there was a significant positive correlation ( $r=.424$ ,  $r^2=.179$ ,  $p<0.01$ ) at medium level between the teachers' attitudes and perceptions of competence regarding lifelong learning. This shows that these two variables seemed to influence each other at medium level and got influenced from each other at medium level.

### ***The Teachers' Attitudes about Lifelong Learning in Relation to Gender***

A t-test was administered to find out whether there was a significant difference in the teachers' attitudes according to gender. Table 1, below, illustrates the findings about the participant teachers' ( $n=614$ ) attitudes according to gender.

**Table 1.** *The teachers' attitudes about lifelong learning in relation to gender*

	Gender	N	M	SD	df	T	p	Explanation
Unwillingness to learn	Female	407	4.51	.585	337.351	4.109	000	p<0.05 Significant
	Male	207	4.27	.749				
Believing in the benefit of learning activities	Female	407	4.29	.751	349.753	3.174	002	p<0.05 Significant
	Male	207	4.05	.917				
Awareness of individual learning abilities	Female	407	4.32	.636	363.918	3.921	000	p<0.05 Significant
	Male	207	4.09	.739				

As Table 1 shows, the scores of the female teachers' attitudes about "unwillingness to learn" ( $M=4.51$ ,  $SD=.585$ ) were higher than the male teachers' ( $M=4.27$ ,  $SD=.749$ ) ( $t=4.109$ ,  $p<0.05$ ). This shows that the male teachers seemed to be more willing to learn. Regarding the scores of the participant teachers' attitudes about "believing in the benefit of learning activities for professional development", the female teachers scored higher ( $M=4.29$ ,  $SD=.751$ ) than the male teachers ( $M=4.05$ ,  $SD=.917$ ). Besides, the attitude scores of the participant teachers' attitudes about "awareness of individual learning abilities", the female teachers scored higher ( $M=4.32$ ,  $SD=.636$ ) than the male teachers ( $M=4.09$ ,  $SD=.739$ ). This finding might mean that the female teachers were more aware than the male teachers of "believing in the benefit of learning activities for professional development" and "awareness of individual learning abilities".

**The Teachers' Attitudes about Lifelong Learning in Relation to Age**

Table 2 illustrates the statistical findings of the teachers' attitudes about lifelong learning in relation to age.

**Table 2.** The teachers' attitudes about lifelong learning in relation to age

Dimension	Age	N	M	SD
Unwillingness to learn	22-26	58	4.59	.487
	27-31	124	4.51	.708
	32-36	167	4.43	.654
	37-41	109	4.32	.756
	42-45	89	4.44	.614
	46 and above	67	4.30	.509
Total		614	4.43	.655
Believing in the benefit of learning activities	22-26	58	4.39	.614
	27-31	124	4.32	.800
	32-36	167	4.17	.808
	37-41	109	4.20	.770
	42-45	89	4.08	.929
	46 and above	67	4.11	.915
Total		614	4.21	.817
Awareness of individual learning abilities	22-26	58	4.46	.514
	27-31	124	4.34	.681
	32-36	167	4.20	.691
	37-41	109	4.23	.636
	42-45	89	4.16	.754
	46 and above	67	4.14	.716
Total		614	4.24	.681

As Table 2 shows, the teachers' age range is between 22- 46 and above. Also, One-Way ANOVA which was carried out to find out whether there was significance among the teachers' lifelong learning attitudes and their age is presented below in Table 3.

**Table 3.** ANOVA for the teachers' attitudes about lifelong learning in relation to age

Dimension	Source of variance	Sum of squares	SD	Mean square	F	P	Explanation
Unwillingness to learn	Between groups	4.671	5	.934	2.195	.053	p>0.05 Insignificant
	Within groups	258.787	608	.426			
	Total	263.458	613				
Believing in the benefit of learning activities	Between groups	5.685	5	1.137	1.710	.130	p>0.05 Insignificant
	Within groups	404.290	608	.665			
	Total	409.976	613				
Awareness of individual learning abilities	Between groups	5.390	5	1.078	2.346	.040	1-3, 1-4, 1-5, 1-6 Significant
	Within groups	279.340	608	.459			
	Total	284.730	613				

As illustrated in Table 3, there was no significance among the teachers' age and "unwillingness to learn" ( $F_{(5;608)}=2.195, p>0.05$ ) and "believing in the benefit of learning activities for professional development" ( $F_{(5;608)}=1.710, p>0.05$ ). However, there



was a significance among the teachers' age and their attitudes regarding "awareness of individual learning abilities" ( $F_{(5,608)}=2.346, p<0.05$ ). For the purpose of finding out where the significance is among the groups, an LSD test was employed. The test results showed that teachers who were between 22 and 26 years old showed more awareness than the teachers who were 32-36, 37-41, 42-45, 46 and above. This might mean that awareness of novice teachers about individual learning abilities was more positive than the other teachers.

### *The Teachers' Perceptions of Competence about Lifelong Learning in Relation to Gender*

A t-test was administered for the purpose of finding out whether there was significance between the teachers' gender and their perceptions of competence regarding lifelong learning. The t-test results about the participant teachers' gender and their perceptions of competence regarding lifelong learning are presented in Table 4, below.

**Table 4.** *The teachers' perceptions of competence about lifelong learning in relation to gender*

	Gender	N	M	SD	df	T	p	Explanation
Competence for self direction	Female	407	4.00	.604	371.007	3.224	.001	p<0.05 Significant
	Male	206	3.82	.681				
Learning to learn	Female	407	4.05	.611	374.821	3.138	.002	p<0.05 Significant
	Male	206	3.87	.680				
Sense of initiative and entrepreneurship	Female	407	4.09	.616	611	2.968	.003	p<0.05 Significant
	Male	206	3.93	.693				
Competence for obtaining Knowledge	Female	407	3.85	.744	611	1.561	.119	p>0.05 Insignificant
	Male	206	3.75	.790				
Digital competence	Female	407	3.84	.938	611	.394	.694	p>0.05 Insignificant
	Male	206	3.81	.912				
Decision-making	Female	407	3.92	.762	611	1.019	.308	p>0.05 Insignificant
	Male	206	3.85	.761				
General score	Female	407	3.96	.574	611	2.375	.018	P<0.05 Significant
	Male	206	3.84	.622				

As illustrated in Table 4, the female teachers' perception of competence for self direction ( $M=4.00, SD=.604$ ) was higher than the male teachers' ( $M=3.82, SD=.681$ ) ( $t=3.224, P<0.05$ ). This might mean that the female teachers perceived themselves more competent than the male teachers regarding self direction.

The results showed that the mean score for the perception of the teachers about "competence for learning to learn" was  $M=4.05, SD=.611$  for the females and  $M=3.87, SD=.680$  for the males. This might mean that female teachers perceived themselves

more competent than male teachers regarding learning to learn ( $t=3.138, P<0.05$ ). Regarding the mean scores indicating the perceptions of the teachers about “sense of initiative and entrepreneurship”, it was found that the mean scores for the perception scores of the female teachers ( $M=4.09, SD=.616$ ), were higher than the male teachers’ ( $M=3.93, SD=.693$ ). It seemed that the female teachers perceived themselves more competent compared to the male teachers ( $t=2.968, P<0.05$ ). However, the mean scores showing the female ( $M=3.85, SD=.744$ ) and male teachers’ ( $M=3.75, SD=.790$ ) perceptions about “competence for obtaining knowledge” did not show a significance ( $t=1.561, P>0.05$ ).

Similarly, there was no significance between the mean scores of female ( $M=3.84, SD=.938$ ) and male ( $M=3.81, SD=.912$ ) teachers’ perceptions regarding “digital competence” ( $t=.394, P>0.05$ ). The findings showed that the female teachers’ and male teachers’ perceptions regarding “competence for decision-making” were  $M=3.92, SD=.762$  and  $M=3.85, SD=.761$ , respectively. This indicated that there was no significance between the female and male teachers’ perceptions regarding “competence for decision-making” ( $t=1.019, P>0.05$ ). In general, the female teachers’ perceptions ( $M=3.96, SD=.574$ ) were slightly higher than the male teachers’ perceptions ( $M=3.84, SD=.622$ ) of competence regarding lifelong learning ( $t=2.375, P<0.05$ ).

### ***The Teachers’ Perceptions of Competence about Lifelong Learning in Relation to Age***

Descriptive statistics results of the teachers’ perceptions about lifelong learning in relation to age are presented in Table 5, below.

As Table 5 shows, the teachers’ ages are between 22- 46 and above. Also, One-Way ANOVA conducted in order to determine whether there was a significant difference among the teachers’ perceptions of competence and their ages is presented in Table 6, below.

As illustrated in Table 6, there was no significance among teachers’ age and their perceptions regarding “competence for self direction” ( $F_{(5;608)}=1.306, p>0.05$ ), “competence for learning to learn” ( $F_{(5;608)}=1.022, p>0.05$ ), “sense of initiative and entrepreneurship” ( $F_{(5;608)}=.604, p>0.05$ ), “competence for obtaining knowledge” ( $F_{(5;608)}=1.477, p>0.05$ ), “competence for decision-making” ( $F_{(5;608)}=.426, p>0.05$ ) and in general, their perceptions regarding their competence for lifelong learning ( $F_{(5;608)}=1.544, p>0.05$ ). However, there was a significance among the teachers’ age and their perceptions regarding “digital competence” ( $F_{(5;608)}=6.525, p<0.05$ ).

In order to determine where the significance was among the groups, Dunnett C test was employed. The test results showed that there was significance among the teachers whose age was 22-26, 27-31 and 32-36 and the teachers who were 46 years old and above. The teachers who were between 22 and 26, 27 and 31, 32 and 36 were more positive in their responses. Besides, there was a significant difference among the teachers who were between the age of 22 and 26, 27 and 31, 32 and 36 and 46 years old and above.

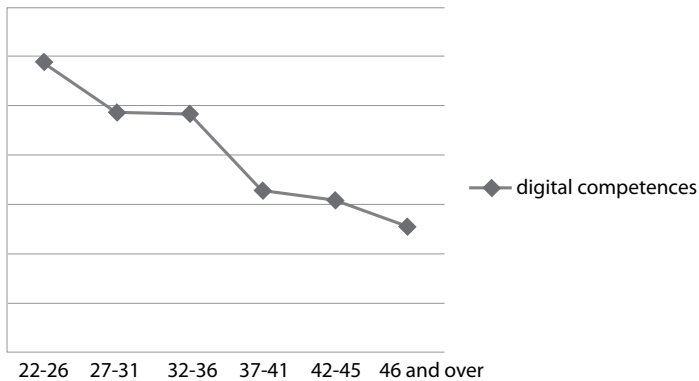
**Table 5.** *The teachers' perceptions of competence about lifelong learning in relation to gender*

Dimension	Age	N	M	SD
Competence for self direction	22-26	58	4.03	.580
	27-31	124	3.87	.650
	32-36	167	4.01	.630
	37-41	109	3.86	.627
	42-45	89	3.95	.647
	46 and above	67	3.94	.660
Total		614	3.94	.636
Competence for learning to learn	22-26	58	4.11	.589
	27-31	124	3.93	.679
	32-36	167	4.02	.647
	37-41	109	3.96	.598
	42-45	89	4.03	.660
	46 and above	67	3.92	.625
Total		614	3.99	.639
Sense of initiative and entrepreneurship	22-26	58	4.14	.562
	27-31	124	4.00	.669
	32-36	167	4.06	.631
	37-41	109	4.03	.633
	42-45	89	4.04	.687
	46 and above	67	3.96	.686
Total		614	4.04	.647
Competence for obtaining knowledge	22-26	58	3.98	.751
	27-31	124	3.88	.718
	32-36	167	3.81	.735
	37-41	109	3.83	.705
	42-45	89	3.75	.849
	46 and above	67	3.65	.846
Total		614	3.82	.760
Digital competence	22-26	58	4.17	.842
	27-31	124	3.97	.788
	32-36	167	3.97	.860
	37-41	109	3.65	.927
	42-45	89	3.62	1.02
	46 and above	67	3.51	1.07
Total		614	3.83	.928
Competence for Decision-making	22-26	58	3.93	.748
	27-31	124	3.85	.801
	32-36	167	3.94	.748
	37-41	109	3.83	.716
	42-45	89	3.92	.772
	46 and above	67	3.93	.797
Total		614	3.89	.761
General Score	22-26	58	4.06	.563
	27-31	124	3.92	.570
	32-36	167	3.97	.581
	37-41	109	3.86	.585
	42-45	89	3.89	.620
	46 and above	67	3.82	.646
Total		614	3.92	.592

**Table 6.** *The teachers' perceptions of competence about lifelong learning in relation to age*

Dimension	Source of variance	Sum of squares	SD	Mean square	F	p	Explanation
Competence for self direction	Between groups	2.636	5	.527	1.306	.260	p>0.05 Insignificant
	Within groups	245.448	608	.404			
	Total	248.083	613				
Competence for learning to learn	Between groups	2.092	5	.418	1.022	.404	p>0.05 Insignificant
	Within groups	248.932	608	.409			
	Total	251.024	613				
Sense of initiative and entrepreneurship	Between groups	1.270	5	.254	.604	.697	p>0.05 Insignificant
	Within groups	255.445	608	.420			
	Total	256.174	613				
Competence for obtaining knowledge	Between groups	4.250	5	.850	1.477	.195	p>0.05 Insignificant
	Within groups	349.889	608	.575			
	Total	354.139	613				
Digital competence	Between groups	26.917	5	5.383	6.525	.000	1-4, 1-5, 1-6, 2-6, 3-6 Significant
	Within groups	501.603	608	.825			
	Total	528.520	613				
Competence for decision-making	Between groups	1.241	5	.248	.426	.831	p>0.05 Insignificant
	Within groups	354.099	608	.582			
	Total	355.340	613				
General score	Between groups	2.701	5	.540	1.544	.174	p>0.05 Insignificant
	Within groups	212.715	608	.350			
	Total	215.416	613				

who were between the age of 22 and 26 were more positive in their responses. This finding indicated that the teachers between the age of 22-26 perceived themselves highly competent regarding “digital competence” while the teachers who were 46 years old and above perceived themselves less competent compared to the other teachers. This might mean that the teachers’ age influenced their perceptions regarding digital competence. Figure 1, below, shows the teachers’ perceptions regarding digital competence.



**Figure 1.** *The teachers' perception of digital competence*

## **Discussion**

The results show that although teachers seemed to believe in the benefit of learning activities and they seemed to be highly aware of individual learning abilities, they did not seem to be willing to learn. The most important reason for unwillingness is thought to be lack of motivation. Motivation, which has been explained as one of the concepts of individual differences by most of the psychologists (Urđan & Schoenfelder, 2006), influences individuals' learning (Deci & Ryan, 2000; Iqbal, Kankaanranta & Neittaanmäki, 2011). In addition, individuals with a high motivation level become highly successful in the learning process and in the duties given to them (Viljaranta et al., 2009). This finding showed that teachers needed to get motivated about learning.

The study results also indicated that teachers' gender and age had an impact on their attitudes and perceptions of competence regarding lifelong learning. Younger teachers seemed to be more aware of individual learning abilities compared to older teachers. Desiardins's study (2003) also indicated that the older the teachers got, the less they tended to read. Besides, perceptions of the younger teachers regarding digital competence were higher than for older teachers. This finding might mean that novice teachers perceived themselves more competent regarding digital competence compared to experienced teachers. Mutka, Punie and Redecker (2008) expressed the need for emphasizing the importance of digital competence in the learning and teaching process to the teachers and they stated that it should have the priority among lifelong learning strategies.

## **Conclusions and Recommendations**

The findings of the study showed that teachers were not willing to learn. A further investigation is needed to explore teachers' unwillingness in more detail. Besides, teacher educating institutions should design their curriculum to increase pre-service teachers' desire for learning and should help them develop positive attitudes for learning. In addition, the Ministry of Education should organize activities to increase the teachers' motivation for learning and should encourage teachers to learn.

The relevant literature and the results showed that the gender factor has been influential in the teachers' learning process. There is a need for further research investigating gender and its influence on lifelong learning in more detail.

The Ministry of Education, school administrators and experts should organize in-service training courses and seminars to increase the perceptions of experienced teachers in particular regarding digital competence and awareness of individual learning skills. Besides, teachers working in this process should be awarded by the Ministry of Education.

The findings showed that there was a positive correlation at a medium level between teachers' lifelong learning attitudes and their perceptions of competence. Researchers should conduct more studies and their findings should be compared with the findings of this study.

Further investigations should focus on the attitudes and perceptions of competence of school administrators, parents and learners. What is more, attitudes and perceptions of competence of the individuals from different fields should be investigated and explored.

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**Huseyin Uzunboylu**

Department of Computer Education and Instructional Technology  
Near East University, Via Mersin 10, Cyprus  
huzunboylu@neu.edu.tr

**Cigdem Hursen**

Department of Computer Education and Instructional Technology  
Near East University, Via Mersin 10, Cyprus  
cigdemhursen@gmail.com

# Evaluacija nastavničkih stavova i poimanja kompetentnosti u pogledu cjeloživotnog učenja

## Sažetak

*U istraživanju su proučavani nastavnički stavovi i poimanje kompetentnosti u odnosu na cjeloživotno učenje. Skale stavova i kompetencija o cjeloživotnom učenju ispunilo je 614 nastavnika da bi se doznali njihovi stavovi i poimanja kompetencije s obzirom na cjeloživotno učenje. Istraživanje je pokazalo da spol i godine nastavnika, izgleda, imaju utjecaja na njihov proces cjeloživotnog učenja. Rezultati također pokazuju da postoji pozitivna korelacija između nastavničkih stavova i poimanja kompetentnosti.*

**Ključne riječi:** obrazovanje; profesionalni razvoj; skala; učenici; učenje

## Uvod

Znanje se kao najvažnije svojstvo današnjeg društva znanja rapidno mijenja i unapređuje. Razvoj u području znanosti i tehnologije posebno utječe na društveni, ekonomski i kulturni život (Demirel, 2009a; Keser, Uzunboylu i Ozdamli, 2010; Pieri i Diamantini, 2010; Hussein, 2010), zbog čega se zanimanja i njihovi opisi obnavljaju. Štoviše, stalno se mijenja potreban profil radne snage u skladu s promjenama u zanimanjima, a stečena znanja nisu presudna. Zbog tih razloga stvara se potreba kontinuirane nadogradnje znanja i vještina kako bi se prilagodili tehnološkim promjenama i radnim uvjetima (Fahr, 2005). Cjeloživotno učenje može društvu i pojedincima pružiti mogućnosti hvatanja koraka s tim promjenama i razvojem.

Cjeloživotno učenje, a to je tema nacionalnih vlada i međunarodnih organizacija poput UNESCO-a i OECD-a (Rogers, 2004), istovremeno stvarajući društva znanja, poznato je i kao LLL (*lifelong learning*). Takvo učenje objašnjava se i kao sveobuhvatno, dragovoljno i samomotivirajuće, a opisuje individualno i profesionalno usavršavanje (Coşkun i Demirel, 2010). Osim toga vjeruje se da je "cjeloživotno učenje", koje se tumači kao učenje tijekom cijeloga života, presudno za ostvarivanje potreba društva koje se rapidno mijenja (Wang, 2008) i za praćenje znanja i tehnologija (Bryce, 2004). Nadalje, cjeloživotno obrazovanje pojedincima kontinuirano pruža znanje, vještine i

kompetencije (Sim i sur., 2003; Cowan i sur., 2004; Figel, 2006), istovremeno bivajući i politička strategija od presudne važnosti za razvoj društava (European Commission, 2002; Ugla, 2008).

U literaturi je moguće pronaći mnoštvo provedenih istraživanja vezanih uz cjeloživotno učenje u različitim poljima (Kilpatrick i sur., 2003; Desjardins, 2003; Colardyn, 2004; Cantwell i Scevak, 2004; Peat i sur., 2005; Longworth, 2006; Bath i Smith, 2009; Özcan, 2011). To je jedan od pokazatelja važnosti cjeloživotnog obrazovanja. Basi Yeaxlee 1929. naglašava utjecaj cjeloživotnog učenja na mnoga područja tvrdeći da se cjeloživotno učenje može provoditi na mnogim mjestima (kod kuće, u klubovima, crkvama, kinima, kazalištima, koncertnim dvoranama, sindikatima i političkim društvima), kroz medije i u društvima (Hsieh, 2010). Kiley i Cannon (2005) istaknuli su važnost cjeloživotnog učenja zahvaljujući mnoštvu razloga. Neki od njih su “pronalaženje utjecajnih načina za ograničena sredstva u obrazovanju”, “ostvarivanje povećanih obrazovnih potreba i očekivanja od učenika koji potiču iz različitih sredina”, “eksplozija u području znanja i tehnologije”, “tranzicija prema društvu znanja”, “restrukturiranje ekonomije”, “organizacijske reforme” i “promjene na radnim mjestima”.

Cjeloživotno učenje posebno se usredotočilo na poboljšanje obrazovne karijere učenika (Nind, 2007). Objasnjeno je, također, i kao koncept koji povećava aktivni građanski život, natjecateljski duh društva i zapošljavanje, te ima utjecaja u svim fazama našega života, pri tome se ne ograničavajući samo na razdoblje djetinjstva i školovanja (Coşkun i Demirel, 2010). Većina relevantne literature sugerira da se cjeloživotno učenje, odvijajući se tijekom cijeloga života, događa i dobiva na značaju u formalnom, neformalnom i informalnom obrazovnom procesu (Antikainen, 1998; Woodrow, 1999; Tuijnman i Boström, 2002; Fahr, 2005; Mojab, 2006; Eneroth, 2008; Vandenbroeck, Verschelden i Boonaert, 2008; Hsieh, 2010).

U formalnom obrazovanju cjeloživotno učenje usredotočuje se na planirane i programirane aktivnosti posredovane putem kvalificiranog nastavnika za razliku od neformalnog obrazovanja koje se sastoji od aktivnosti učenja izvan formalnog obrazovanja poput, primjerice, posjeta muzeju. Informalne obrazovne aktivnosti nisu programirane i planirane, izvode se izvan obrazovne institucije i najčešće ih nismo svjesni (Nordin, Embi i Yunus, 2010). Tijekom tog procesa učenici koji su temelj procesa učenja trebali bi moći “planirati vlastito učenje”, “vrednovati vlastito učenje”, “biti više aktivni učenici nego pasivni”, “učiti u bilo kojem okružju”, i “zaposliti različite strategije učenje u različitim uvjetima” (Knapper i Cropley, 2000).

Preciznije govoreći, globalizacija i tehnološke promjene utječu na svakodnevni život ljudi (Knapper i Cropley, 2000). Zbog navedenoga, pojedinci se trebaju razvijati kao cjeloživotni učenici da bi se prilagodili navedenim promjenama. Tijekom tog procesa učitelji imaju značajnu ulogu. Harpe i Radloff (2001) ustanovili su da je, unatoč tome što je iznimno bitno odgojiti učenike sposobne za cjeloživotno učenje, da bi bili članovi društva znanja, iznimno bitno o cjeloživotnom učenju informirati i nastavnike.

Postoji potreba da učitelji pomognu svojim učenicima u stjecanju navika i vještina cjeloživotnoga učenja da bi se prilagodili promjenama s kojima se suočavaju u životu i kontinuirano se nadograđivali (Soran, Akkoyunlu i Kavak, 2006; Demiralay i Karadeniz, 2008). To je moguće samo onda kad učitelj posjeduje navike i vještine potrebne za cjeloživotno učenje. Cjeloživotno učenje pruža pojedincima mogućnosti stjecanja osnovnog znanja i vještina i tijekom tih procesa nastavnici pronalaze nove i prilagodljive mogućnosti učenja i kao posljedica toga se i sami razvijaju (Öztaşkın, 2010).

Učitelji bi kao cjeloživotni učenici trebali kontinuirano istraživati i proučavati svoje polje ili druga područja svog interesa. Osim toga, trebali bi “imati želju za učenjem”, “preuzeti odgovornost nad svojim učenjem”, “učiti kako učiti”, “biti znatiželjni”, “biti zainteresirani za trenutne teme i otkrića”, “biti učen”, “posjedovati organizacijske sposobnosti”, “biti istraživači”, “posjedovati komunikacijske vještine”, “učinkovito se služiti tehnologijom”, “biti kreativni” i “skloni timskom radu” (Akkoyunlu, 2008; Demirel, 2009b). K tome, relevantna literatura daje nam mnoštvo čimbenika koji utječu na učiteljeve vještine učenja. Istraživači su ustanovili da na razvoj vještina učenja pojedinca posebno utječu spol (Rogers, 2003; Hughes, Blaxtera i Jackson, 2006) i dob (Hsieh, 2010).

Ne samo da spol ima veliko društveno značenje u svim društvima (Sullivan, 2003) već također ima utjecaj i na različita područja poput kulturnih vrijednosti, interpersonalne komunikacije, motivacije i tehnologije (Dasen i deRibaupierre, 1987; Mwamwenda, 1992; John i sur., 1983; Ainley, 2006; Houtz i Gupta, 2001; Almerich i sur. 2005; Hargittai i Shafer, 2006; Taçman, 2006; Bakioğlu i Hacıfazlıoğlu, 2010; Steinerová i Šušol, 2007; Tella i Mutula, 2008; Haubner i sur., 2009; Chu, 2010), a istovremeno ima važnu ulogu kod pojedinaca u procesu učenja (Lloyd i Duveen, 1992; Gouthro, 2009; Tondeur, 2010) i utječe na njihovo učenje (Dresel i Haugwitz, 2005; Kesici, Şahin i Aktürk, 2009; Leathwood i Francis, 2006). Na sličan način životna dob održava vremensku dimenziju u okviru cjeloživotnog učenja i naglašava različite stadije učenja pojedinaca tijekom procesa učenja (Desiardins, 2003).

S obzirom na to da su učitelji najvažniji u procesu obrazovanja učenika u tome kako postati cjeloživotni učenik koji je potreban u društvu znanja, korištena literatura navodi da je istovremeno iznimno važno obrazovati učitelje za provedbu tog procesa. Literatura također naglašava da su stavovi, određeni kao sklonosti koje oblikuju ponašanje pojedinca, njegovo mišljenje i emocije prema psihološkom objektu (Smith, 1968), te kompetencije definirane kao kombinacija znanja, vještina i stavova (Raičević i sur., 2006) važnih za oblikovanje cjeloživotnog učenika. Unatoč navedenom, nije provedeno ni jedno istraživanje poput našeg, koje je istraživalo i pokušalo poboljšati učiteljske stavove i shvaćanja kompetencija vezana uz cjeloživotno učenje. U istraživanju su uzeti u obzir spol i dob učitelja jer relevantna literatura sugerira da su dob i spol u procesu učenja od iznimne važnosti.

Svrha ovog istraživanja je istražiti stavove i shvaćanje kompetencija učitelja koji rade na različitim stupnjevima obrazovanja s obzirom na cjeloživotno obrazovanje.

Ključna pitanja u ovom istraživanju bila su:

- Kakvi su stavovi učitelja prema cjeloživotnom obrazovanju?
- Kako učitelji shvaćaju kompetencije vezane uz cjeloživotno obrazovanje?
- U kakvom su odnosu stavovi i shvaćanja učitelja o cjeloživotnom obrazovanju?
- Postoji li značajna razlika u stavovima učitelja prema cjeloživotnom obrazovanju s obzirom na rod?
- Postoji li značajna razlika u stavovima učitelja prema cjeloživotnom obrazovanju s obzirom na dob?
- Postoji li kod učitelja značajna razlika u shvaćanju kompetencija o cjeloživotnom učenju u odnosu na rod?
- Postoji li kod učitelja značajna razlika u shvaćanju kompetencija o cjeloživotnom učenju u odnosu na rod?

## **Metode**

### ***Uzorak***

Sudionici u istraživanju bili su nastavnici iz Turske Republike Sjeverni Cipar (TRSC). Ciljana populacija bila je 2138 nastavnika iz viših razreda, srednjih škola i strukovnih škola. Međutim cjelokupnu populaciju nismo mogli pokriti. Zbog toga je uzorak bio biran. 30% ciljane populacije biran je metodom stratificiranog uzorkovanja i jednostavnog nasumičnog uzorkovanja. Na taj način izabrana su 642 učitelja. Međutim, istraživanje je provedeno na 614 nastavnika jer 28 nastavnika nije vratilo upitnike. Od cjelokupnog uzorka 66,3% sudionika bile su žene a 33,7% muškarci. S obzirom na dob 9,4% sudionika pripalo je skupini od 22 do 26 godina, 20,2% od 27 do 31, 27.2% od 32 do 36 godina, 17,8% od 37 do 41, 14,5 % od 42 do 45, a 10,9 % njih pripalo je skupini od 46 i više godina.

### ***Instrument***

U istraživanju je korištena skala stavova o cjeloživotnom učenju i skala kompetencija o cjeloživotnom učenju koju su razvili autori (Uzunboylu i Hürsen, 2010). Razvoj skale stavova o cjeloživotnom učenju i skale percepcije o kompetenciji cjeloživotnog učenja dalje je u tekstu detaljno objašnjen.

### ***Skala stavova o cjeloživotnom učenju (eng. LLLAS)***

“Skala stavova o cjeloživotnom učenju” osmišljena je s ciljem istraživanja nastavničkih stavova o cjeloživotnom učenju. Skala je nastala prema mišljenju stručnjaka (n=17) i prema relevantnoj literaturi. Stručnjaci koji su iznijeli svoje stavove u vrijeme razvijanja skale predavači su na učiteljskim fakultetima. Skala koja je nastala kao rezultat pregleda literature i stavova stručnjaka prošla je predtest kada je distribuirana na 300 nastavnika. Skala je pilotirana, čime je testirana njezina valjanost i pouzdanost. Analiza faktora strukturne valjanosti skale i test unutarnje pouzdanosti rađeni su prema Cronbach Alfa koeficijentu. Nakon statističke analize jedanaest puta je

faktor tereta bio određen ispod 0,40 i isključen iz skale. Konačna verzija skale sastojala se od 19 čestica. Skala je podijeljena u dva dijela. Prvi dio sastojao se od informacije vezane uz demografiju, odnosno spol i dob sudionika. Drugi dio skale podijeljen je u tri tematske cjeline: “nespremnost za učenjem” (7 čestica), “vjerovanje u korisnost učenja sa svrhom stručnog usavršavanja” (6 čestica), “osviještenost o individualnim sposobnostima učenja” (6 čestica). Skala se sastojala od ukupno 19 čestica, a korišten je format Likertove skale (1 u potpunosti se ne slažem, a 5 u potpunosti se slažem). U skali je bilo pozitivnih i negativnih tvrdnji. Pozitivne tvrdnje bodovane su sa 5, 4, 3, 2 i 1, dok su negativne tvrdnje bodovane sa 1, 2, 3, 4 i 5. Cronbach alpha izračun za skalu bio je 0,896. Cronbach alpha vrijednosti subdimenzija skale bile su sljedeće: “nespremnost za učenje” (0,840), “vjerovanje u korisnost učenja za stručno usavršavanje” (0,850) i “osviještenost o individualnim sposobnostima učenja” (0,780). Uz to je ljestvica sadržavala čestice poput “nekompetentnost pojedinaca o svom znanju iz svoga područja trebalo bi zanemariti”, “pojedinci bi trebali biti osviješteni o činjenici da se znanje stalno mijenja”, „pojedinci bi trebali imati stalnu želju za učenjem za stručnim usavršavanjem”.

### **Skala poimanja kompetencija za cjeloživotno učenje (Eng. LLLPCS)**

“Skala poimanja kompetencije za cjeloživotno učenje” izrađena je da bi se istražile percepcije nastavnika o kompetenciji vezanoj uz cjeloživotno učenje. Skala je nastala iz razgovora s nastavnicima i prema mišljenju stručnjaka (n=17). Skala koja je nastala kao rezultat pregleda literature i mišljenja stručnjaka podijeljena je među 300 nastavnika kao pilot ljestvica kojom su se utvrdile pouzdanost i valjanost. Analiza strukturnog faktora valjanosti i unutarnja konzistencija pouzdanosti mjerene su koeficijentom Cronbach Alpha. Nakon statističke obrade, 15 čestica čiji je faktor težine bio ispod 0,40 bilo je isključeno, a konačna verzija upitnika imala je 51 česticu. Skala je bila izrađena od dva dijela. Na temelju prvog dijela dobivena je informacija o dobi i spolu sudionika. Drugi je dio sadržavao 51 česticu koje su pripadale jednoj od šest tema: “kompetencija samousmjeravanja” (13 čestica), “učiti kako učiti” (12 čestica), “kompetencija inicijative i poduzetništva” (10 čestica), “stjecanje znanja” (6 čestica), “digitalna kompetencija” (10 čestica), i “kompetencija odlučivanja” (4 čestica). U upitniku je korišten oblik Likertove skale od 5 stupnjeva (1 nikada i 5 uvijek). Upitnik se sastojao od pozitivnih tvrdnji koje su vrednovane sa 5, 4, 3, 2, i 1. Cronbach alpha izračun bio je 0,956. Vrijednosti poddimenzija za Cronbach alpha su “kompetencija samousmjeravanja (0,930)”, “kompetencija učiti kako učiti” (0,910), “kompetencija inicijative i poduzetništva (0,890)”, “kompetencija stjecanja znanja” (0,830), “digitalna kompetencija” (0,850) i “kompetencija donošenja odluka” (0,750). U upitniku se nalazi i: “sposobnost vođenja grupe u aktivnostima bitnima za profesiju”, “poznavanje osnovnih aktivnosti učenja za stručno usavršavanje”, “moći iskoristiti mrežne stranice kao što su Facebook i Twitter u procesu stjecanja znanja”.

## **Prikupljanje podataka**

Za vrijeme prikupljanja podataka, nakon dobivanja dopuštenja od Ministarstva obrazovanja, autori su s ravnateljima škola dogovorili datume posjeta školama. Istraživači su posjetili škole i upoznali nastavnike s instrumentom za prikupljanje podataka. U isto vrijeme sudionici su bili obaviješteni o važnosti davanja točne informacije. Svaki nastavnik imao je tjedan dana na raspolaganju za ispunjavanje upitnika "Cjeloživotno učenje" i "Percepcije kompetencije cjeloživotnog učenja". Istraživači su posjetili škole tjedan dana poslije i preuzeli ljestvice.

## **Analiza podataka**

Podatci koji su dobiveni iz upitnika analizirani su korištenjem alata SPSS 16. U analizi podataka koristili smo se Pearsonovom korelacijom, postotcima, srednjim vrijednostima i standardnim devijacijama. Jednosmjerna Anova, LSD test, Dunett C test i t-test također su primjenjivani u obradi podataka. Rezultati su interpretirani sa stupnjem značajnosti od 0,05.

## **Rezultati**

### ***Stavovi nastavnika o cjeloživotnom učenju***

Srednje vrijednosti za stavove nastavnika prema cjeloživotnom učenju bile su ( $M=4,43$ ,  $SD=,655$ ) za "nezainteresiranost za učenje", ( $M=4,21$ ,  $SD=,817$ ) za "vjerovanje u korisnost učenja za stručno usavršavanje" i ( $M=4,24$ ,  $SD=,681$ ) za "osviještenost o vještinama cjeloživotnog obrazovanja".

Stavovi nastavnika s obzirom na nespремnost na učenje bili su u granicama tvrdnje "jako se slažem". To nam ukazuje na to da nastavnici nerado uče. Međutim, stavovi nastavnika o "vjerovanju u korisnost obrazovnih aktivnosti za stručno usavršavanje" i "osviještenost pojedinca o vlastitim sposobnostima učenja" bili su u granicama "jako se slažem". Rezultati su pokazali da iako nastavnici uglavnom vjeruju u korisnost obrazovnih aktivnosti i iako su vrlo osviješteni o vlastitim sposobnostima učenja, oni zapravo nisu bili voljni učiti.

### ***Nastavničko poimanje kompetencije cjeloživotnog učenja***

Srednja vrijednost nastavničkog poimanja kompetencije cjeloživotnog učenja bila je  $M=3,92$ ,  $SD=,59$ . To nam govori o tome da se u vezi s cjeloživotnim učenjem, nastavnici smatraju općenito kompetentnima.

### ***Povezanost nastavničkih stavova i poimanja kompetencije cjeloživotnog učenja***

Rezultati Pearsonove korelacije ukazuju na to da postoji značajna pozitivna korelacija ( $r=,424$ ,  $r^2=,179$ ,  $p<0,01$ ) na srednjoj razini između nastavničkih stavova i poimanja kompetencija vezanih uz cjeloživotno obrazovanje. To pokazuje da te dvije varijable na srednjoj razini utječu jedna na drugu i da su doživjele utjecaj jedna na drugu.



### **Stavovi nastavnika o cjeloživotnom učenju s obzirom na spol**

Uz pomoć t-testa htjeli smo utvrditi postoji li značajna razlika između stavova nastavnika i njihova spola. Tablica 1 prikazuje rezultate stavova nastavnika (n=614) prema spolu.

Tablica 1.

Kao što je prikazano u Tablici 1 rezultati stavova nastavnica o “nezainteresiranosti za učenje” ( $M=4,51$ ,  $SD=,585$ ) bili su viši od onih nastavnika ( $M=4,27$ ,  $SD=,749$ ) ( $t=4,109$ ,  $p<0,05$ ). To pokazuje da su nastavnice uglavnom spremniji učiti. S obzirom na rezultate nastavničkih stavova o “vjerovanju u korisnost obrazovnih aktivnosti za stručno usavršavanje” nastavnice su imale više rezultate ( $M=4,29$ ,  $SD=,751$ ) od nastavnika ( $M=4,05$ ,  $SD=,917$ ). Nadalje, kod stavova nastavnika o “osviještenosti o vlastitim sposobnostima učenja” nastavnice imaju više rezultate ( $M=4,32$ ,  $SD=,636$ ) od nastavnika ( $M=4,09$ ,  $SD=,739$ ). To nam pokazuje da su nastavnice više osviještene od nastavnika u “vjerovanju u korisnost obrazovnih aktivnosti za stručno usavršavanje” i u “osviještenosti o vlastitim sposobnostima učenja”.

### **Stavovi nastavnika o cjeloživotnom učenju s obzirom na dob**

Tablica 2 prikazuje statističke rezultate stavova nastavnika o cjeloživotnom učenju s obzirom na dob.

Tablica 2.

Kao što je prikazano u Tablici 2, dob nastavnika je između 22 i 46 i više godina. Jednosmjernim ANOVA testom saznali smo postoji li značajna razlika između stavova nastavnika o cjeloživotnom učenju i njihove dobi a to je prikazano u Tablici 3.

Tablica 3.

Kao što je prikazano u Tablici 3 ne postoje značajne razlike između dobi nastavnika i “nespremnosti za učenje” ( $F_{(5;608)}=2,195$ ,  $p>0,05$ ) i kod “vjerovanja u korisnost obrazovnih aktivnosti za stručno usavršavanje” ( $F_{(5;608)}=1,710$ ,  $p>0,05$ ). Međutim, postoji značajna razlika između dobi nastavnika i “osviještenosti o vlastitim sposobnostima učenja” ( $F_{(5;608)}=2,346$ ,  $p<0,05$ ). Da bismo otkrili gdje postoji značajnost među grupama, upotrijebili smo LSD test. Rezultati testa pokazuju da su nastavnice u dobi između 22 i 26 godina više osviještene od onih u dobi između 32 i 26 godina, 37 i 41, 42 i 45, te 46 i više godina. To može značiti da je osviještenost mladih nastavnika o vlastitim sposobnostima učenja rezultat pozitivnijeg razmišljanja od ostalih nastavnika.

### **Poimanje nastavnika o kompetenciji cjeloživotnog učenja s obzirom na spol**

T-test bio je primijenjen kako bismo saznali postoji li značajnost između spola nastavnika i njihova poimanja kompetencije cjeloživotnog učenja. Rezultati t-testa o nastavničkom poimanju kompetencije vezane uz cjeloživotno učenje s obzirom na spol prikazani su u Tablici 4.

Tablica 4.

Kao što je prikazano u Tablici 4, nastavnice percipiraju kompetencije za samousmjerenje ( $M=4,00$ ,  $SD=,604$ ) više nego nastavnici ( $M=3,82$ ,  $SD=,681$ ) ( $t=3,224$ ,  $P<0,05$ ). To bi moglo značiti da se nastavnice smatraju kompetentnijima od nastavnika u pitanju samousmjerenja.

Rezultati su pokazali da je srednja vrijednost za nastavničko poimanje "kompetencije za cjeloživotno učenje" bila ( $M=4,05$ ,  $SD=,611$ ) za nastavnice, a ( $M=3,87$ ,  $SD=,680$ ) za nastavnike. To bi moglo značiti da se nastavnice smatraju kompetentnijima od nastavnika u pogledu kompetencije učiti kako učiti ( $t=3,138$ ,  $P<0,05$ ). U vezi sa srednjom vrijednosti za poimanje kompetencije "osjećaj za inicijativu i poduzetništvo" rezultati pokazuju da nastavnice ( $M=4,09$ ,  $SD=,616$ ) to ocjenjuju više nego njihovi kolege ( $M=3,93$ ,  $SD=,693$ ). Čini se da se nastavnice smatraju kompetentnijima od nastavnika ( $t=2,968$ ,  $P<0,05$ ). Međutim, srednje vrijednosti pokazuju da nema značajne razlike između nastavnica ( $M=3,85$ ,  $SD=,744$ ) i nastavnika ( $M=3,75$ ,  $SD=,790$ ) za poimanje kompetencije "stjecanje znanja" ( $t=1,561$ ,  $P>0,05$ ).

Slično tome, nije bilo značajne razlike između srednjih vrijednosti rezultata za nastavnice ( $M=3,84$ ,  $SD=,938$ ) i nastavnike ( $M=3,81$ ,  $SD=,912$ ) s obzirom na poimanje "digitalne kompetencije" ( $t=,394$ ,  $P>0,05$ ). Rezultati pokazuju da je percepcija nastavnica i nastavnika za kompetenciju "sposobnost odlučivanja" ( $M=3,92$ ,  $SD=,762$ ) i ( $M=3,85$ ,  $SD=,761$ ). To nam pokazuje da ne postoji značajna razlika između nastavnica i nastavnika u vezi s poimanjem kompetencije "sposobnost odlučivanja" ( $t=1,019$ ,  $P>0,05$ ). Općenito, nastavnice smatraju kompetenciju za cjeloživotno učenje ( $M=3,96$ ,  $SD=,574$ ) nešto vrjednijom od nastavnika ( $t=2,375$ ,  $P<0,05$ ).

### ***Nastavničko poimanje kompetencije o cjeloživotnom učenju s obzirom na dob***

Rezultati deskriptivne statistike nastavničkih poimanja o cjeloživotnom učenju s obzirom na dob prikazani su u Tablici 5.

Tablica 5.

Kao što je vidljivo iz Tablice 5, nastavnici pripadaju dobnoj skupini od 22 do 46 i više godina. Jednosmjernim ANOVA testom mogli smo vidjeti postoji li značajna razlika između nastavničkih percepcija kompetencije s obzirom na dob, što je prikazano u Tablici 6.

Tablica 6.

Kao što je prikazano u Tablici 6, nema značajne razlike između dobi nastavnika i njihova poimanja kompetencije "samousmjerenje" ( $F_{(5;608)}=1,306$ ,  $p>0,05$ ), "učiti kako učiti" ( $F_{(5;608)}=1,022$ ,  $p>0,05$ ), "osjećaj za inicijativu i poduzetništvo" ( $F_{(5;608)}=,604$ ,  $p>0,05$ ), "stjecanje znanja" ( $F_{(5;608)}=1,477$ ,  $p>0,05$ ), "sposobnost odlučivanja" ( $F_{(5;608)}=,426$ ,  $p>0,05$ ) i općenito, njihovih poimanja o kompetencijama za cjeloživotno učenje

( $F_{(5;608)}=1,544, p>0,05$ ). Međutim, postoji značajna razlika između dobi nastavnika i njihova poimanja “digitalne kompetencije” ( $F_{(5;608)}=6,525, p<0,05$ ).

Kako bismo mogli odrediti u kojoj je skupini razlika značajna, primijenili smo Dunnettov C test. Rezultati testa pokazali su da razlike postoje u dobnim skupinama od 22 do 26, od 27 do 31, od 32 do 36 i onih od 46 i više godina. Nastavnici u dobnim skupinama od 22 do 26, od 27 do 31, od 32 do 36 bili su pozitivniji u svojim odgovorima. Značajna razlika bila je među nastavnicima u dobnim skupinama od 22 do 26, od 37 do 41, od 42 do 45. Nastavnici u skupini od 22 do 26 bili su pozitivniji u svojim odgovorima. Takav rezultat ukazuje na to da se nastavnici u dobnj skupini od 22 do 26 godina smatraju visoko kompetentnima kada se radi o “digitalnoj kompetenciji”, dok se nastavnici u dobnj skupini od 46 i više godina smatraju manje kompetentnima u odnosu na ostale nastavnike. To može značiti da dob nastavnika utječe na njihovo poimanje digitalne kompetencije.

Slika 1.

## Rasprava

Rezultati pokazuju da, iako se čini da učitelji vjeruju u dobrobit učenja i da su izrazito svjesni individualnih sposobnosti učenja, ne izgleda da sami žele učiti. Mislilo se da je najvažniji razlog nepostojanja želje za učenjem nedostatak motivacije. Motivacija, koju većina psihologa objašnjava kao jedan od koncepata individualnih razlika (Urđan i Schoenfelder, 2006), utječe na način na koji pojedinci uče (Deci i Ryan, 2000; Iqbal, Kankaanranta i Neittaanmäki, 2011). K tomu, pojedinci s visokom razinom motivacije postaju izrazito uspješni u procesu učenja i u povjerenim im zadacima (Viljaranta i sur., 2009). To otkriće pokazalo nam je da učitelje treba motivirati na učenje.

Rezultati istraživanja također su ukazali na to da na stavove i poimanje kompetencija vezanih uz cjeloživotno obrazovanje utječu rod i dob nastavnika. U usporedbi sa starijim učiteljima mlađi učitelji su djelovali svjesnije individualnih sposobnosti učenja. Desiardinovo istraživanje (2003.) je isto tako ukazalo na to da s godinama nastavnici sve manje čitaju. Uz to, utvrđene su velike razlike u poimanjima digitalnih kompetencija između mlađih i starijih učitelja. To bi moglo značiti da učitelji početnici u usporedbi s učiteljima s iskustvom sebe doživljavaju kompetentnijima u pogledu digitalnih kompetencija. Mutka, Punieand i Redecker (2008) izrazili su potrebu naglašavanja važnosti digitalnih kompetencija učitelja u procesu učenja i poučavanja i ustvrdili da bi to trebao biti prioritet među strategijama cjeloživotnog učenja.

## Zaključci i preporuke

Rezultati istraživanja pokazuju da nastavnici nisu voljni učiti. Daljnja istraživanja potrebna su kako bi se detaljno istražili uzroci tog fenomena. Nadalje, institucije za obrazovanje nastavnika trebale bi doraditi svoje kurikule kako bi se kod budućih nastavnika razvila želja za učenjem i kako bi se stvorili pozitivni stavovi prema učenju. Nadalje, Ministarstvo obrazovanja trebalo bi organizirati aktivnosti kako bi se povećala motivacija nastavnika za učenjem i kako bi se potaknulo nastavnike na učenje.

Relevantna literatura i rezultati ovoga istraživanja pokazali su da je faktor spola prilično utjecajan u procesu učenja. Postoji potreba za daljnjim istraživanjem spola i njegova utjecaja na cjeloživotno učenje.

Ministarstvo obrazovanja, uprava škole i stručnjaci trebali bi organizirati seminare za nastavnike u školama kako bi se promijenilo poimanje nastavnika s iskustvom za kompetencijama kao što su digitalna kompetencija i osviještenost o vlastitim sposobnostima učenja. Nadalje, nastavnici koji su uključeni u taj proces trebali bi biti motivirani od Ministarstva obrazovanja.

Rezultati su pokazali da postoji pozitivna korelacija na srednjoj razini između stavova nastavnika o cjeloživotnom učenju i njihova poimanja kompetentnosti. Istraživači bi trebali provesti još studija kako bi se njihovi rezultati mogli usporediti s rezultatima ovoga istraživanja.

Daljnja istraživanja trebala bi se usredotočiti na stavove i poimanja kompetencija školske uprave, roditelja i učenika. Štoviše, stavovi i poimanja kompetencija pojedinaca iz drugih područja trebali bi se istražiti i proučiti.