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# LIFELONG LEARNING THROUGH THE PRISM OF EDUCATORS

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#### Abstract/Izvleček

Continuous professional development and training represent not only choices, but also an obligation and responsibility for every single educator. The aim of the research was to investigate the attitudes of educators working in kindergartens in seven counties of the Republic of Croatia, about the importance of lifelong learning. The research was conducted on a sample of 279 female educators, and a survey questionnaire was used as a measuring instrument. The results of the study indicate that educators are aware of the importance of lifelong learning and professional development. They emphasize that it enables them to develop competences and contributes to the improvement of their educational practice. The largest number of educators participate in professional training several times a year; they choose the form of training most often by the topic in which they are interested, and the form of professional training that best suits the needs of educators is the interactive workshop.

#### Vseživljenjsko učenje z vidika vzgojiteljic

Nenehno strokovno izpopolnjevanje in usposabljanje nista le izbiri, temveč predstavljata tudi obveznost in odgovornost vsakega pedagoga. Namen raziskave je bil raziskati stališča vzgojiteljic, zaposlenih v vrtcih v sedmih županijah Republike Hrvaške, o pomenu vseživljenjskega učenja. Raziskava je bila izvedena na vzorcu 279 vzgojiteljic, kot merski instrument pa je bil uporabljen anketni vprašalnik. Rezultati raziskave kažejo, da se vzgojiteljice zavedajo pomena vseživljenjskega učenja in profesionalnega razvoja. Poudarjajo, da jim strokovno izpopolnjevanje omogoča razvoj kompetenc in prispeva k izboljšanju njihove pedagoške prakse. Največ vzgojiteljic se strokovnih izobraževanj udeležuje večkrat letno, obliko izobraževanja najpogosteje izberejo glede na temo, ki jih zanima; oblike strokovnega izobraževanja, ki najbolj ustrezajo njihovim potrebam, pa so interaktivne delavnice.

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## Introduction

Major changes in society caused by scientific and technological development have led to rapid obsolescence of existing knowledge, skills, and values. In response to these changes and the successful adaptation of the individual, the concept of lifelong learning was developed, and today we can say with certainty that it is essential for one's professional and personal growth and development. The educational system is focused at all levels on the development of competences, so that individuals can successfully deal with business challenges and be competitive on the labor market in their future work, having acquired the necessary knowledge and skills (Labak, 2020). Considering the increasing expectations and demands placed by society on modern educators, it is necessary for them to take responsibility for their own lifelong learning, because only by constantly learning, researching and reflecting on their practice, can educators optimally influence their own development, as well as the development and well-being of children.

## Theoretical framework

The most commonly used definition of lifelong learning is that lifelong learning includes "all types of learning during adulthood with the aim of improving knowledge, skills and competences within the personal, civic, social or professional activities of individuals? (European Commission, 2000). In today's society, it is important that individuals have an in-depth knowledge of a specific field, and are willing to continue learning and broadening their knowledge, as well as making critical judgments and autonomous, responsible decisions in their future professional work (Boud, 2000; Vermunt and Donche, 2017, as cited in Šteh and Šarić, 2020). The digital literacy of adults stands out as increasingly important and necessary, owing to the use of the educational potential of digital media in adult learning and teaching. In the new multimedia environment, individuals have numerous new opportunities for developing competences for lifelong learning, while increasing their ability to think, create and participate effectively in society (Zovko et al., 2019).

#### Competences and professional development of educators

An educator is a professional who deals with the overall development of a preschool

child in an educational institution. His job requires him to possess, but also continuously develop numerous competences to help him to act actively and effectively in a certain situation. When defining the concept of competence, many authors agree that it represents a dynamic combination of knowledge, skills, and values, which allows them to act in various professional relationships (Vizek Vidović, 2009, Slunjski, Šagud, and Brajša - Žganec 2006). In 2006, the European Parliament issued official recommendations for eight key competences for lifelong learning, Recommendation of the European Parliament and of the Council of 18 December 2006 on Key Competencies for Lifelong Learning, which they claim are necessary for the personal and professional fulfilment of an individual, as well as for development, active citizenship and social inclusion. Most European institutions have accepted and integrated these competences into their strategic documents and curricula. The fundamental document in the preschool system in the Republic of Croatia - the National Framework Curriculum for Early and Preschool Education (MZOS, 2014), has accepted and integrated these key competences: Literacy competence; Multilingual competence; Mathematical competence and competence in science, technology and engineering; Digital competence; Personal, social and learning-to-learn competence; Citizenship competence; Entrepreneurship competence, and Cultural awareness and expression competence.

#### Professional development and training of educators

Professional development and training are the key to the quality of the educational process and the development of educators' competences. This can be defined as a continuous activity that includes various processes such as training, practice, and receiving/giving feedback. Such development is part of an education system in which adequate time and support are dedicated to teachers for their lifelong learning (OECD, 2009). According to Mendeš (2018), an educator's professional development can be described through three related cycles: Initial education, internship, and continuous professional development. The third cycle is one of the key determinants of the quality of the system of early and preschool education, which aims to develop and perfect acquired competences, and the professional development of educators should be based on it. It is the cycle that lasts the longest because it encompasses the lifelong learning and education of an individual (Mendeš, 2018).

# Methodological framework

# The aim and tasks of the research

The aim of the research was to examine the attitudes of educators working in kindergartens in seven counties of the Republic of Croatia about the importance of lifelong learning. In doing so, we investigated how educators assess the importance of professional training, how important they assess certain key competences for lifelong learning, what are the most common obstacles they encounter when participating in professional training, and which forms of professional training are best suited to their needs and interests.

## Considering the aim of the research, the following research questions were set:

1. Is there a difference in attitudes about the importance of lifelong learning of educators regarding their age, work experience and qualifications?

2. Is there a difference in attitudes about the importance of certain key competences of educators regarding their age, work experience and qualifications?

3. Is there a difference in educators' attitudes about the obstacles to participation in professional training programs regarding their age, work experience and professional education?

4. How often do educators participate in professional training programs?

5. What forms of professional training are best suited to educators?

## Based on the aim and the research questions, the following hypotheses were proposed:

H1: It is assumed that older respondents with more work experience, and higher qualifications will have more positive attitudes towards the importance of lifelong learning.

H2: It is assumed that there are no statistically significant differences in the expressed degree of importance of certain key competences for educators, with regard to the independent variables of age, work experience and qualifications.

H3: It is assumed that there are no statistically significant differences in the degree of agreement about the obstacles to participation in professional training programs, with regard to the independent variables age, work experience and qualifications.

### Ethics in conducting research

When conducting the research, basic ethical principles were considered. The informed consent of the respondents was ensured, as well as notes on data confidentiality and voluntary participation. The right to privacy and the principle of minimal risk were ensured by the informed consent of the respondents and anonymous participation.

#### Research instrument

For the purpose of this research, the questionnaire was constructed by the researcher, based on the research of recent and relevant literature on the highlighted topic. The survey contains closed-ended questions and questions of a linear scale.

## Data processing

For the purpose of this research, quantitative methodology was used. The collected data were edited and then processed and analysed using the SPSS statistical program. Descriptive statistics were performed; arithmetic mean, standard deviation, frequencies, and percentages, as well as the procedure of inferential statistics; Pearson's and Spearman's correlation coefficient.

## Sample

In the study conducted during May 2023, a total of 279 respondents participated, educators employed in Early Childhood and preschool education institutions, in seven counties in the Republic of Croatia: Istarska, Međimurska, Primorsko-goranska, Splitsko-dalmatinska, Varaždinska and Zadarska County, and in the City of Zagreb.

Of the total number of respondents (N=279), 100% are female. The age of the respondents ranges from 21 to 64 years, while the average age is around 41 years (M= 41.7; SD= 10.39).

The largest number of respondents (N=212) have a bachelor's degree, while 64 respondents have a master's degree (N=64). None of the educators has a doctorate, while 3 of them have a secondary vocational education.

Out of the total number of respondents, the largest number of educators have more than 20 years of work experience, which is 32.6% of them. Moreover, 21.1% of these educators have 11-15 years of experience, followed by 18.3% of respondents with less than 5 years of work experience. Additionally, 14.7% of educators have between 5 and 10 years of work experience, and 13.3% possess 16-20 years of experience. Considering the county where they work, the largest number of respondents (N= 76) are employed in Splitsko-Dalmatinska County (27.2%), and the lowest number (N=15) in Međimurska County.

#### Research results and interpretation

#### Educators' attitudes towards lifelong learning

To examine the attitudes of educators about lifelong learning, a scale was created with twelve statements, through which respondents expressed their degree of agreement in the range of 1-5: 1 – strongly disagree, 2 - disagree, 3 - neither agree nor disagree, 4 - agree, and 5 - strongly agree. Table 1 shows the results on the scale of attitudes.

Analysis of the data show that the respondents evaluate all the items in the upper part of the theoretical range, that is, at the level of individual items, they consider professional training important. It should be taken into account that the fifth and seventh item are posed in a direction opposite from the others. From the obtained data, it is evident that educators express the highest degree of agreement with the statement that they consider lifelong learning and training important for the profession of educator (M=4.8; SD=0.53). Mendeš (2018) points out that lifelong education is the right, obligation, and responsibility for every educator. The statements on which educators show a very high degree of agreement are those that it is important for them to be informed about current topics and research in their profession (M=4.7; SD=0.66), that they are open to new ideas and changes in their educational work (M=4.7; SD=0.61) and that they develop their educational competences by participating in professional training (M=4.7; SD=0.60).

				Strongly		Neither		Strongly
Variable	N	м	SD	disaoree	Disagree	nor	Agree	aoree
vallable	1	141	50	ensugree		disagree		agree
				%	%	%	%	%
It is important for me to be								<u> </u>
informed about current	270	47		1.1	4	2.0	15.4	70.2
topics and research in my	2/9	4./	.66	1.1	.4	3.9	15.4	/9.2
profession.								
I am open to new ideas and	270	47	(1	4	4	4.2	21 F	72 F
changes in educational work	279	4./	.01	.4	.4	4.3	21.5	/3.3
I consider lifelong learning								
and training important for	278	4.8	.53	.0	1.1	2.5	12.6	83.8
the profession of educator								
By participating in								
professional training, I	278	47	60	0	14	32	187	76.6
develop my educational	270	<b>T.</b> /	.00	.0	1.7	5.2	10.7	70.0
competences.								
Professional training is	278	2.0	1 16	45.3	24.8	147	12.6	2.5
usually not useful to me.	270	2.0	1.10	чэ.э	24.0	14.7	12.0	2.5
Participating in professional								
training contributes to the	279	45	71	0	11	9.7	25.1	64.2
quality of my educational	217	1.5	• / 1	.0	1.1	2.1	23.1	01.2
practice.								
I mostly get involved in								
professional training	276	2.3	1.26	36.6	22.5	20.7	14.5	5.8
because I have to.								
It is important for me to								
have my personal	278	3.9	.97	1.8	5.0	27.7	34.2	31.3
professional training plan.								
I always learn something								
new at professional training	278	4.1	.87	.7	4.7	16.2	442	34.2
that I can apply in practice.								
Professional training								
motivates me to be an even	277	4,3	.83	.4	2.5	14.1	32.5	50.5
better educator.								
I often reflect on my								
practice and how I can	278	4.3	.76	.0	2.2	11.5	37.8	48.6
improve it.								
Professional training helps								
me to advance in my	278	4.2	.96	1.4	4.7	14.4	29.5	50.0
profession.								

Table 1. Descriptive statistics for individual items of the Attitude Scale about the importance of lifelong learning

A personal professional training plan can be used by educators to best adapt the offered training programs to their own needs and interests. Also, the personal training plan should be flexible and subject to change (Pavlic, 2015).

Variable	Ν	Μ	SD	Min	Q1	С	Q3	Max	α
The importance of lifelong learning	279	4.3	.52	2.3	4.1	4.4	4.8	5	.84

Table 2. Descriptive indicators for the Attitude Scale about the importance of lifelong learning

M-arithmetic mean; SD – standard deviation; Min – the lowest achieved result; Q1 – first quartile; C – the median; Q3 – the third quartile; Max – the maximum achieved result, a – Cronbach alpha coefficient

The results show that the scale has satisfactory reliability (Cronbach alpha=0.84) and that the average values of the scale are in the upper part of the theoretical range of the scale. To check the prerequisites for the implementation of parametric analyses, the following table shows the indicators of normality of the scale.

Table 3. Indicators of normality of the Attitude Scale on the importance of professional development

Variable	Ν	Skew	SE Skew	Kurt	SE Kurt	KS	KS p	SW	SW P
The importance of lifelong learning	279	-1.07	0.146	1.27	0.291	0.11	0.000	0.92	0.000

Skew – skewness; SE Skew – standard error of skewness; Kurt – kurtosis; SE Kurt – standard error of kurtosis; KS, KS p – statistic and p value of the Kolmogorov-Smirnov normality test; SW, SW p – statistic and p value of the Shapiro-Wilk normality test

The results of the normality analysis show that the scale is negatively asymmetric, and both normality tests show a statistically significant deviation from the normal distribution. Nevertheless, considering the absolute values of the index of flattening and curvature, and in accordance with the recommendations stated by Kline (2016) that the values of the index of curvature should not exceed 3, and the index of flattening should not exceed 7, parametric statistical methods were used to test the hypotheses.

To address the qustion Is there a difference in attitudes about the importance of professional training of educators with regard to their age, work experience and qualifications? Pearson's correlation coefficients were used. Since in the qualification variable only three respondents have a secondary professional education, two correlation coefficients

were calculated. Spearman's correlation coefficient was calculated for the total sample, while for the calculation of the Pearson's coefficient, the results of respondents with a high school diploma were excluded, and thus the variable was dichotomized. Pearson's correlation coefficient is equivalent to the t-test for independent samples when the variable has two levels (qualification), while for other variables it assumes a linear relationship between related variables.

Table 4. Correlation coefficients for the relationship between attitudes about the importance of professional development and age, work experience and qualification

No.	Variable	1	2	3ª	4	5
1	The importance of professional training	1	.010	.065	.061	.022
2	Age	.010	1	187**	159**	.833**
3	Qualification <sup>a</sup>	.065	187**	1	-	222**
4	Qualification (HVE-HE)	.061	159**	-	1	216**
5	Years of work experience as an educator	,022	,833**	-,222**	- ,216**	1

\*\* p<0,01; a – Spearman's correlation coefficient

The results show that none of the variables is statistically significantly related to the importance of professional training. In other words, Hypothesis 1 was disproved, which states *It is assumed that older respondents with more work experience, and higher qualifications, will have more positive attitudes towards the importance of lifelong learning*, since the results show that professional training is equally important to the respondents regardless of age, qualifications or work experience.

#### Attitudes about the importance of certain key competences to educators

To examine the attitudes of educators towards the importance of certain key competences (European Parliament, 2006), a list was created on which respondents expressed their attitude towards the importance of a certain competence on a scale of 1-5, with 1 - not at all important, 2 - slightly important, 3 - moderately important, 4 - very important, and 5 - extremely important. As in the previous analysis, descriptive indicators of individual particles were first analysed, as shown in Table 5.

Variable	N	М	SD	Not at all important	Slightly important	Moderately important	Very importan	Extremely t important
				%	%	%	%	%
Literacy competence	279	4.6	.65	.0	1.1	5.7	25.4	67.7
Multilingual competence	279	3.3	.93	3.6	12.9	46.6	27.2	9.7
Mathematical, science, technology, and engineering competence	279	3.9	.92	1.1	4.7	24.4	38.0	31.9
Digital competence	279	3.9	.98	3.6	3.9	23.3	41.9	27.2
Personal, social, and learning-to-learn competence	279	4,4	,76	,0	2.2	10.0	29.0	58.8
Citizenship competence	279	4,5	,70	,0	1,1	9,0	31,5	58,4
Entrepreneurship competence	279	4,2	,79	,0	1,8	17,9	40,5	39,8
Cultural awareness and expression competence	279	4,5	,69	,0	1,1	7,9	28,7	62,4

Table 5. Descriptive indicators of the importance of certain competences

The results show that the average values for all competences are above the theoretical middle range of the scale (3); that is, the respondents, on average, rate all the listed competences as at least moderately important. As expected, the highest average score was given for Literacy competence (M=4.6; SD=0.65); as many as 67.7% of educators state that this competence is extremely important. Šagud (2006) points out that one of the important ways of developing the professional competence of educators is precisely the building of the communication skills necessary in interaction with children, parents, and colleagues. In the early and preschool years, it is extremely important to strengthen communication in the mother tongue so that children can express their thoughts, feelings, and experiences. This is followed by the competence of Cultural awareness and the expression competence, which is considered extremely important by more than 60% of educators. About a third of the educators, 31.9% (M=3.9; SD=0.92), state that the science and technology competence is extremely important. In the first years of schooling, as well as in kindergarten, educators' support in the learning process is crucial. The learning process must be based on the child's natural curiosity, on learning about the child's experience and knowledge, the encouragement of cognitive conflict, and scaffolding in the process of its resolution (Blanuša Trošelj et al., 2021). The lowest estimates were obtained for the multilingual competence (M=3.3; SD=0.93), which is somewhat surprising since foreign language learning

programs have been encouraged and strengthened in kindergartens in recent years, given there are numerous biological and psychological benefits to learning a foreign language at an early age. In addition, the language policy of the EU is based on respect for language diversity in all the member states, and the teaching and learning of foreign languages are highly encouraged. Knowing foreign languages is considered a key factor that significantly increases education and employment opportunities (Velički i Aladrović Slovaček, 2020).

Before the statistical analysis, the normality parameters of the distributions presented in Table 6 were checked.

Variable	Ν	Skew	SE Skew	Kurt	SE Kurt	KS	KS p	SW	SW p
Literacy competence	279	-1.60	0.146	2.26	0.291	0.41	0.000	0.64	0.000
Multilingual competence	279	-0.09	0.146	0.03	0.291	0.24	0.000	0.89	0.000
Mathematical, science, technology,	279	-0.60	0.146	-0.06	0.291	0.22	0.000	0.85	0.000
Digital competence	279	-0.87	0.146	0.73	0.291	0.25	0.000	0.85	0.000
Personal, social, and learning to learn	279	-1.24	0.146	0.86	0.291	0.35	0.000	0.72	0.000
Citizenship competence	279	-1.15	0.146	0.67	0.291	0.36	0.000	0.72	0.000
Entrepreneurship competence	279	-0.56	0.146	-0.52	0.291	0.25	0.000	0.81	0.000
Cultural awareness and expression	279	-1.32	0.146	1.15	0.291	0.38	0.000	0.69	0.000

Table 6. Normality indicators of the importance of certain competences

Skew – skewness; SE Skew – standard error of skewness; Kurt – kurtosis; SE Kurt – standard error of kurtosis; KS, KS p – statistic and p value of the Kolmogorov-Smirnov normality test; SW, SW p – statistic and p value of the Shapiro-Wilk normality test

The results show that although the statistical tests indicate a deviation from normality, the absolute values of the index of curvature and flattening do not exceed the limit values of 3 and 7 (Kline, 2016). As with the previous analysis, Pearson's correlation coefficients were used, and for the sake of transparency, intercorrelations between variables are not shown, but the analysis is focused on the connection between the importance of individual competences and the target variables of the problem. The results are shown in Table 7.

Variable	Age	Qualification <sup>a</sup>	Qualification (HVE-HE)	Years of work experience
Literacy competence	.006	.122*	.129*	.035
Multilingual competence	.002	.184**	.183**	011
Mathematical, science, technology, and engineering competence	.137*	.118*	.113	.127*
Digital competence	.044	.091	.074	.035
Personal, social, and learning to learn competence	080	.150*	.138*	081
Citizenship competence	.004	.171**	.152*	010
Entrepreneurship competence	007	.137*	.107	024
Cultural awareness and expression competence	008	.093	.107	.001

Table 7. Correlations of age, qualifications, and work experience with assessments of the importance of individual competences

\* p<0,05; \*\* p<0,01; a – Spearman's correlation coefficient

In response to the research question, Is there a difference in educators' attitudes about the importance of key competences with regard to their age, work experience and qualification?, the results show that respondents with higher qualifications rate the literacy competence, and the multilingual competence as somewhat more important, compared to respondents with lower qualifications. The same result was obtained for competences on learning skills and on the citizenship competence. Since the age and work experience of educators are highly correlated (0.833), their results are similar, and it is shown that older respondents, that is, those with more work experience, assess competences related to mathematics and science as more important. For the qualifications variable, in the calculation of the Pearson correlation coefficient, only the results of respondents with higher qualifications were used. When the results for respondents with lower qualifications are included (N=3), statistically significant positive associations between qualifications and assessments of the importance of mathematics and science competence as well as the entrepreneurship competence were obtained. In the case of other competences, no differences were obtained with regard to the analysed variables; that is, the respondents evaluate these competences as equally important regardless of age, qualifications, or work experience, which partially confirms Hypothesis 2: It is assumed that there are no statistically significant differences in the expressed degree of importance of certain key competences for the profession of educator, with regard to the independent variables of age, work experience and qualifications. Attitudes regarding obstacles to inclusion in professional training programs.

To examine the attitudes of educators about obstacles to inclusion in professional development programs, a scale consisting of 13 items was created, on which the respondents expressed their attitude on a scale of 1-5 (1 – strongly disagree, 2 – disagree, 3 – neither agree nor disagree, 4 – agree, and 5 – strongly agree).

Table 8 shows the results on the scale of attitudes. Analysis of the results shows that the respondents are motivated for lifelong learning and participation in professional training programs, and 58.8% of educators strongly agree with the statement that they feel ready for lifelong learning (M=4.5; SD=0.77). According to Šagud (2005), it is precisely the readiness of educators for professional development that is a key component for the development of professional competences, which are important for the professional achievement of educators. Furthermore, a high degree of agreement is also evident with the statement that educators consider most professional training useful (M=4.2; SD=0.78). As for the obstacles related to the cost of professional training, there is a visible dispersion in the answers to the statement that the cost of professional training is the main factor in their participation (M=3.2; SD=1.25) and to the statement that quality professional training is usually too expensive for educators (M=3.5; SD=1.29). A high degree of agreement among educators is evident in the statement that they mostly participate in professional training that is free (M=4.1; SD=1.11).

The personal professional development of educators is largely determined by their motivation and engagement, but finances also play a significant role in choosing professional training, a situation that can limit educators in choosing training in which they are genuinely interested and/or find useful. The biggest disagreement is observed with the statement that educators feel insecure in the process of learning something new (M=1.8; SD=0.8). The essential characteristics of a good educator include openness to new experiences, a tendency to challenges, changes, and innovative ideas, as well as an increased level of creativity.

Variable	N	М	SD	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I feel ready for lifelong learning.	279	4.5	.77	1.1	.7	8.2	31.2	58.8
I mostly participate in professional training that is free.	279	4.1	1.11	5.7	3.2	15.1	31.5	44.4
Lack of free time is a big obstacle to my lifelong learning.	279	3.5	1.17	9.7	8.2	24.0	40.1	17.9
I find most professional training useful.	279	4.2	.78	.4	1.4	14.3	40.9	43.0
If it wasn't obligatory, I wouldn't be involved in professional training.	279	1.8	1.01	55.2	21.9	15.4	6.1	1.4
The cost of professional training is the main factor in inclusion.	279	3.2	1.25	15.1	10.8	33.0	25.8	15.4
Quality professional training is usually too expensive for me.	279	3.5	1.29	10.0	12.2	25.8	24.4	27.6
Professional training takes up too much of my time.	279	2.4	1.16	30.1	25.4	26.5	14.0	3.9
I prefer online forms of professional training because I can learn from home.	279	3.8	1.17	5.7	8.6	22.9	30.1	32.6
I have the support of my employer for lifelong learning.	279	3.9	1.14	5.7	5.4	16.8	32.3	39.8
Professional training is not interesting enough for me, and I believe that I have no use for it.	279	1.7	.94	56.6	23.7	14.0	5.0	.7
I feel insecure in the processes of learning something new	279	1.8	1.16	58.4	15.1	15.8	6.8	3.9

Table 8. Descriptive indicators of the particles of the Attitude scale about obstacles to participation in lifelong learning programs

Variable	Ν	М	SD	Min	Q1	С	Q3	Max	α
Attitude towards lifelong learning	279	3.4	.55	1.8	3.1	3.4	3.8	4.8	0.730

Table 9. Descriptive indicators of the readiness scale for participation in professional training programs

M –arithmetic mean; SD – standard deviation; Min – the lowest achieved result; Q1 – first quartile; C – the median; Q3 – the third quartile; Max – the maximum achieved result, a – Cronbach alpha coefficient

The results show that the average results of the scale are around the theoretical middle of the scale (3), which indicates heterogeneity in the degree of readiness for inclusion in professional development programs; that is, the respondents report certain limitations for inclusion in professional development programs. The scale has satisfactory reliability: Cronbach's alpha is 0.73. Before further analysis, indicators of normality of distribution were checked.

Table 10. Indicators of the normality of the readiness scale for inclusion in professional training programs

Variable	Ν	Skew	SE Skew	Kurt	SE Kurt	KS	KS p	SW	SW p
Readiness to participate in professional training programs	279	-0.09	0.146	-0.08	0.291	0.05	0.200	1.00	0.482

Skew – skewness; SE Skew – standard error of skewness; Kurt – kurtosis; SE Kurt – standard error of kurtosis; KS, KSp – statistic and p value of the Kolmogorov-Smirnov normality test; SW, SW p – statistic and p value of the Shapiro-Wilk normality test

The results show that no statistically significant deviation from the normal distribution was obtained according to both tests of normality, and therefore a further correlation analysis was performed, as shown in Table 11.

Table 11. Correlation coefficients for readiness to participate in professional training programs by age, work experience, qualifications

No.	Variable	1	2	3ª	4	5
1	Attitude about lifelong learning	1	.143*	.176**	.155*	.147*
2	Age	.143*	1	187**	159**	.833**
3	Qualifications <sup>a</sup>	.176**	187**	1	-	222**
4	Qualifications (HVE-HE)	.155*	159**	-	1	216**
5	Years of work experience as an educator	.147*	.833**	222**	216**	1

\* p<0,05; \*\* p<0,01; a – Spearman's correlation coefficient

The results show that all three variables are statistically significantly related to the readiness to participate in professional training programs. At the same time, respondents who are older, have more work experience and higher qualifications are more ready to be included in professional training programs. Taking that into consideration, Hypothesis 3, which assumes that *there are no statistically significant differences in the degree of agreement about obstacles to the inclusion of educators in professional training programs*, has been disproved with regard to the independent variables of age, work experience and qualifications.

#### Other variables

Regarding the frequency of participation in professional training programs, the results show that educators participate in professional training on average several times a year (N=114), while 89 of them participate on average once a month (N=89). Three educators stated that they did not participate in professional development programs at all (N=3).

With regard to how educators obtain information about opportunities for professional training, the largest number of educators (N=136) independently research this information via the Internet. About a third, 30.1% of educators (N=84), receive that information from their professional associates, while the rarest way to obtain information is from their colleagues (N=27).

In order to determine which forms of professional training best suit the needs of educators, that is, which types they consider to be high-quality and effective for their lifelong learning, a 5-point Likert-type scale was created, on which educators indicated the extent to which a particular form of professional training suited them: a sore of 1 indicated that it did not suit them at all and 5 that it suited them completely. Table 12 shows the results of the attitude scale.

The highest degree of agreement was obtained for interactive workshops, given that more than half the educators (53.6%) stated that this was the format that suited them completely. This result is not surprising since workshops, along with seminars, are the most common form of professional training that teaches educators new forms of practice, new methods and approaches in educational work (Slunjski, 2016). Such workshops also encourage collaborative and experiential learning, while the key goal of interactive workshops is to acquire practical skills that participants will use in the work and life environment (Martinko, 2012).

Variable	N	М	SD	Does not su at all	Mostly it doesn't suit	Neutral	Mostly suits	Completely suits
				%	%	%	%	%
Lectures	275	4.0	.81	1.5	3.6	11.6	57.5	25.8
Seminars	276	4.0	.80	.4	4.3	16.7	51.4	27.2
Interactive workshops	276	4.4	.83	.7	2.9	9.8	33.0	53.6
Online learning	274	4.2	.96	1.8	4.7	13.5	33.6	46.4
Learning groups	274	3.8	1.00	1.5	8.8	24.8	34.7	30.3
Supervision	273	3.4	104	4.8	11.4	39.6	27.8	16.5
Visitation	273	3.5	1.02	4.8	8.1	41.0	29.3	16.8
Work on projects	276	4.0	.94	2.5	2.5	21.7	39.1	34.1
Action research	276	3.8	1.04	3.6	5.8	29.0	33.3	28.3
Professional literature	278	4.2	.82	.7	2.2	14.0	41.4	41.7

Table 12. Forms of professional training that meet the needs of educators

The highest degree of agreement was obtained for interactive workshops, given that more than half the educators (53.6%) stated that this was the format that suited them completely. This result is not surprising since workshops, along with seminars, are the most common form of professional training that teaches educators new forms of practice, new methods and approaches in educational work (Slunjski, 2016). Such workshops also encourage collaborative and experiential learning, while the key goal of interactive workshops is to acquire practical skills that participants will use in the work and life environment (Martinko, 2012).

A high degree of agreement can also be noted in the case of online learning (M=4.2; SD=0.96) and the study of professional literature (M=4.2; SD=0.82). Online learning is a modern form of training, which, especially during the global epidemiological situation caused by the corona virus, has become a frequently used medium among educators. Although the results show that many educators prefer online learning, there are also those who resist this approach, and some of the reasons can be identified in the low level of digital competence, as well as the weaker technological equipment of preschool institutions (Celizić and Zovko, 2021). Supervision (16.5%) and visitation (16.8%) proved to be the least desirable forms of professional training, which did not meet the needs of educators.

#### Conclusion

The results of this study indicate that educators are aware of the importance of lifelong learning and professional training. They realize that it benefits them in their work and in strengthening their competences. Since educators partially agree that high-quality professional training is expensive, and takes up a lot of free time, it is necessary for Early and Preschool education institutions to do as much as possible to motivate educators to participate. To do so, they must recognize educators needs and interests, and accordingly organize as many professional training events as possible. The employer's support for lifelong learning is especially important, so it would be significant to increase flexibility in terms of timing the professional training, but also to reduce costs in order to involve as many educators as possible in lifelong learning processes. In so doing, educators could be more successful in responding to the numerous requests and challenges that this profession brings.

The significance of this research lies in its assistance in making educators aware of their needs and interests related to professional development and lifelong learning, but it can also be useful to the professional team and directors to better understand the needs and expectations that educators have from professional development, which could form the basis for building a better educational practice. In future research on this topic, it would be interesting to investigate the role of educators, as well as parents, in encouraging key competences for lifelong learning in early and preschool children.

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