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Lifelong Learning in Six Central European Countries

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Abstract

The aim of the article is to compare the situation of lifelong learning in Central European countries. Six countries were selected for the study: Poland, Lithuania, Estonia, Slovenia, the Slovak Republic, and the Czech Republic. The research is based on data from the International Survey of Adult Skills (OECD PIAAC). Respondents 30 years old and over were selected for analysis because a significant proportion of younger people have not yet completed their formal studies. According to the analysis, Estonian adults are most often involved in lifelong learning activities, while representatives from the Slovak Republic are the least involved. In all countries, those with above high school education are the most likely to participate in lifelong learning activities compared to those with lower than high school education and with high school education. In different countries, different kinds of learning activities prevail.

Key words: *adult education, lifelong learning, PIAAC*

Introduction

The idea of lifelong learning is established in the EU Memorandum on Lifelong Learning and declared as the UNESCO key principle of education and learning based on which access to continuous learning and development for both individuals and organizations is the core value for the future. Access to high quality lifelong learning is essential for all people, regardless of their occupation or circumstances. Although the concept of lifelong learning covers the learning activities of people of all ages in all life conditions, adult learning and education are among the key components of lifelong learning (UNESCO Institute for Lifelong Learning, 2016).

The field of lifelong learning research is diverse. The theoretical discourse usually distinguishes two main study approaches: at the micro (studies of individual self-determination) and macro (influence of national socio-economic factors) levels. However, the researchers note that the establishment of lifelong learning was a paradigm leap from lifelong education, where the concept of education is seen as a collective entity and a state obligation, to the concept of learning where learning is "seen as an individual entity and a personal duty" (Barros, 2012, 120).

At the individual level, lifelong learning provides the necessary knowledge, skills and a broader perspective as well as enabling adaptation to an ever-changing, global, competitive world marked by rapid technological development and immense flow of information. From a societal perspective, lifelong learning contributes to the creation of productive, innovative and competitive societies. The members of society who are more educated and seek constant professional development create new ideas and adapt to challenges and changes more easily (Laal & Salamati, 2012). Adult learning and education now also gain special weight in the context of the Education 2030 Agenda, which is linked to the UN Sustainable Development Goals.

Analysis of the discourse of scientific publications of recent years has revealed that the concept of lifelong learning is most often associated with the concept of formal education, especially higher education, as well as adult education and continuing professional development. The concepts of self-directed learning, employability, collaborative learning, literacy, mobile learning and sustainable development are also increasingly examined (Erdoğan, 2020).

Formal education is implemented in specialized institutions and confers an academic degree and leads to a profession or qualification. Such learning is usually associated with an earlier stage of life. Continuing professional development is usually analysed in the context of non-formal learning, which is carried out through the implementation of various educational and professional upskilling programmes. It is the most common form of lifelong learning for adult learners, usually for those who have already completed a certain stage of formal education. In the context of lifelong learning, the dimension of informal learning has also emerged (Mankin, 2009). Such learning is primarily related to everyday life, with emphasis on its naturalness by nature when the learner does not always even become aware of the learning process and learns without extra effort by simply performing various roles in life. In work activities, this learning is seen in various unregulated situations, e.g. when a more experienced employee instructs a less experienced one. Finally, all other direct and implicit forms of learning that a person engages in without a direct correlation to a teacher or

formally designed learning programme can be referred to self-directed learning. Thus, continuing professional development encompasses a wide range of adult professional learning activities: from a variety of courses offered by various organizations to a variety of unregulated informal learning activities in a specific work environment.

The analysis of scientific discourse shows that adult involvement in lifelong learning is not as active as intended in the programme documents. As Capman (2006) notes, adults make the decisions themselves, and some people live full lives without the need to engage in learning activities. However, there are certain obstacles to lifelong learning: many adults have negative learning experiences, their learning skills are poorly developed and they fear further learning (Beardwell et all, 2007), they lack time, energy, and curiosity (Delahaye, 2003). A person's decision to engage in lifelong learning is influenced by external pressure (e.g. societal attitudes), subjective perception of and resilience to such pressure, and the socio-economic situation which enables or hinders the use of free time for learning (Silva et all, 1998).

Research Problem

Although the guidelines for adult lifelong learning are developed in the EU and globally, there might be differences in impact among countries. In each country, there could be a reinterpretation of lifelong learning guidelines based on the specific contextual aspects that are valued in various national adult education policies (Guimaraes, 2017). In this context, it is important to analyse how the idea of lifelong learning and the conditions and opportunities for its implementation are realized in different regions, how adult learning differs in non-formal education, and what social factors are related to this learning in different countries.

Research Focus

Six Central European countries (Poland, Lithuania, Estonia, Slovenia, Slovak Republic, and Czech Republic) have been selected for the research. The OECD PIAAC (International Survey of Adult Skills) data are analysed. The choice of countries was determined by the fact that these six Central European countries participated in the OECD PIAAC survey. The article analyses only adult participation in non-formal education through courses, seminars, etc. as this form of learning can be objectively measured, which would be difficult to do with other forms of lifelong learning (e.g. self-directed learning).

The purpose of the article is to analyse the prevalence of adult lifelong learning and the factors determining this learning in six Central European countries.

Analysis of non-formal adult education aspects in the research area is uncommon partly due to the difficulty in establishing a reliable sample of adults. This article will contribute to filling the gap in adult lifelong learning research in the Central European context.

Research Methodology

Research General Background

Assessment of the prevalence of lifelong learning in the Central European countries requires data covering the adult population in these countries. Data from the OECD Programme for the International Assessment of Adult Competencies (PIAAC) were used for the analysis as the most suitable source for this purpose. The analysis covers the data of the following six Central European countries which have participated in the PIAAC study: Poland, Lithuania, Estonia, Slovenia, Slovakia, and the Czech Republic. The PIAAC questionnaire databases of the aforementioned countries were used for the analysis.

Research Sample

In the PIAAC study, the respondents were aged 16–65. Respondents from 30 years of age and over were selected for the analysis because a significant proportion of younger people have not yet completed their formal studies. The survey sample by country: Poland – 9366, Lithuania – 5093, Estonia – 7632, Slovenia – 5331, Slovakia – 5723, the Czech Republic – 6102 persons from all geographic areas and different types of living areas. The probabilistic systematic sample method was applied in the survey.

Instrument and Procedures and Data Analysis

A block of questionnaire variables was used for the analysis to address the topic of lifelong learning. The main analysis was carried out by applying descriptive statistics methods. The Independent Sample T-test and Spearman correlation were used to calculate the statistical significance. The IBM SPSS 25 software package was used for the data analysis.

Research Results

In the PIAAC survey, the questionnaire included some questions aimed at assessing the lifelong learning situation. These were questions about attending various courses, trainings and private lessons which are not related with pursuing formal education but with upskilling for work purposes or learning for pleasure and expanding knowledge.

The summarised data of the analysed Central European countries show that the largest proportion of adults aged 30 and over who tend to study in non-formal education is recorded in Estonia (47.8 per cent) (Table 1). Similar situation is observed for the Czech Republic (44.2 per cent) and Slovenia (43.2 per cent). In the other three countries, the proportion of adults who are inclined to engage in non-formal education is significantly smaller: in Lithuania and Poland – 28.6 per cent in each, in Slovakia – 27.2 per cent. These statistical data refer to the proportion of adults aged 30 and over in each country who have participated in non-formal education activity (courses, trainings, seminars, etc.) at least once in the last 12 months before the PIAAC study.

Table 1. Learning activities over the last 12 months among population aged 30 and over

Country	Proportion of adults who attended learning activities (per cent)	Average time spent on learning activities (days)	Average time spent for learning activities (hours)	Mean of the number of learning activities per total population	Std. Deviation
Czech Republic	44.2	8.5	31.6	1.9	4.5
Estonia	**47.8**	8.4	**45.3**	**2.1**	4.7
Lithuania	28.6	7.4	33.1	1.5	4.2
Poland	28.6	**10.4**	37.4	1.2	3.6
Slovak Republic	27.2	7.0	21.4	1.1	3.3
Slovenia	43.2	7.5	40.2	1.7	4.0

Analysis of the data on time spent by adult population for non-formal education activities in the last 12 months reveals ambiguous results: in terms of days, the largest number of days spent by adults on learning activities was recorded in Poland (10.4 days), while in terms of hours – in Estonia (45.3 hours). The least time for learning was spent by Slovaks: 7.0 days and 21.4 hours. The calculation of the average number of learning activities in the last 12 months per total population

aged 30 and older shows that the largest number of learning activities is recorded for Estonia (2.1, Std. Dev. 4.7), the smallest – for Slovakia again (1.1, Std. Dev. 3.3). Upon summarizing the above data, it can be stated that the representatives of Estonia are the most likely to participate in non-formal education activities, and the representatives of Slovakia – the least likely.

The assessment of correlation between the adults who are inclined to engage in non-formal learning and the educational attainment shows that the number of learning activities attended in all countries is directly correlated with the highest level of education attained. The calculated correlation coefficients vary from 0.31 (the Czech Republic) to 0.47 (Lithuania), $p < 0.001$. The summarised data on the correlation between educational attainment and the number of the attended learning activities, with the level of educational attainment grouped into three groups (less than high school, high school, above high school), are shown in Figure 1. The graph reveals the same trend in all countries: the higher the educational attainment of a person, the more learning activities he/she chooses to attend.

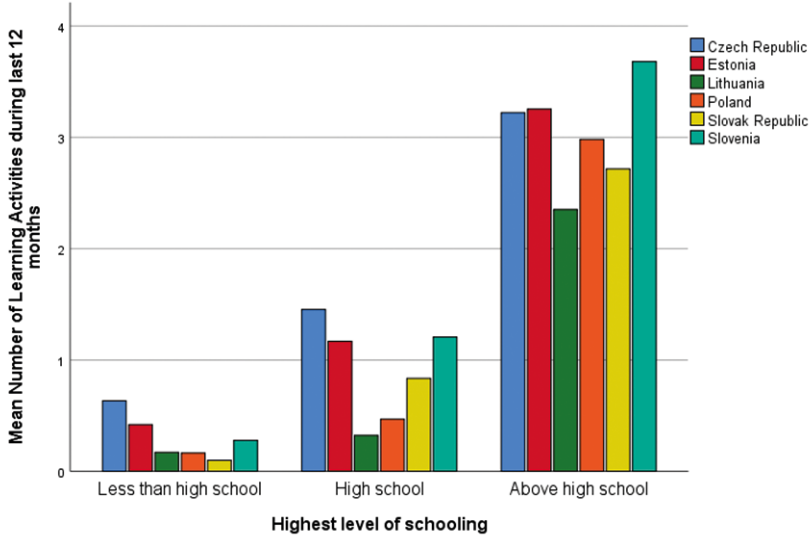

Figure 1. Correlation between educational attainment and learning activities in the last 12 months

A closer look at specific learning activities attended by adults in the last 12 months reveals that different learning activities prevail in different countries (Fig. 2). The most popular learning activities in Estonia and the Czech Republic are private

lessons (39.3 and 27.7 per cent respectively). In Lithuania and Poland, distance education prevails (28.5 and 21.7 per cent respectively). Seminars and workshops are the most frequently attended in Slovenia (32.4 per cent). Job-related training ranks second in popularity in all countries. In Slovakia, there are no priorities in terms of learning activities: all types of activities are chosen approximately equally.

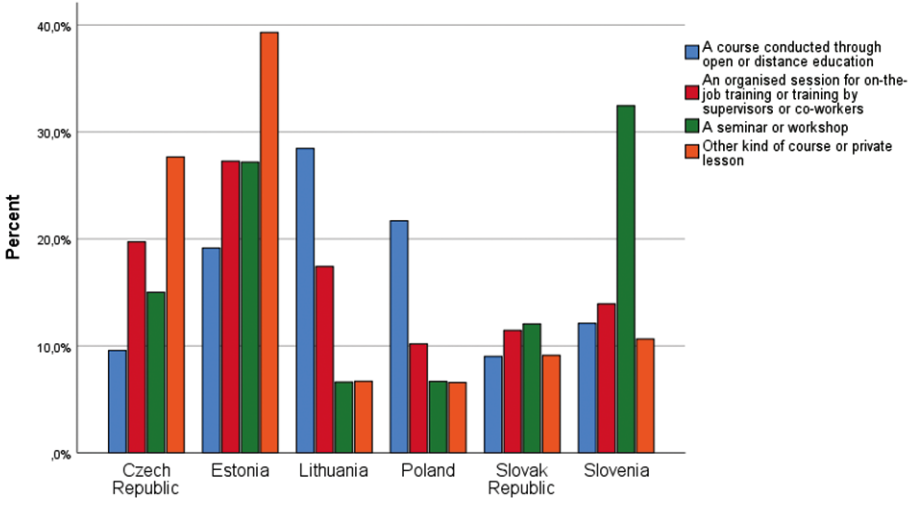

Figure 2. Proportion of adults aged 30 and over who attended different learning activities in the last 12 months

It is important to assess whether employers are interested in raising the qualification of their employees and their willingness to learn. The data presented in Figure 3 show whether the employer paid for the job-related (upskilling) learning activities last attended by the employee. The graph shows that in all countries, especially in the Czech Republic and Slovenia, employers tend to reimburse all learning-related costs: such costs are reimbursed in full by 50.2–61.1 per cent of the employers. However, 11.7–26.1 per cent of employers do not reimburse learning-related costs at all, as is often the case in Slovakia.

Analysis reveals that not all adults aged 30 and over could participate in the learning activities they wanted. Table 2 presents the data on the proportion of adults who wanted to participate in learning activities but, for some reason, could not do so. The largest such proportion was recorded in Estonia (30.0 per cent), the smallest – in Slovakia (7.7 per cent). It is interesting to compare these results with

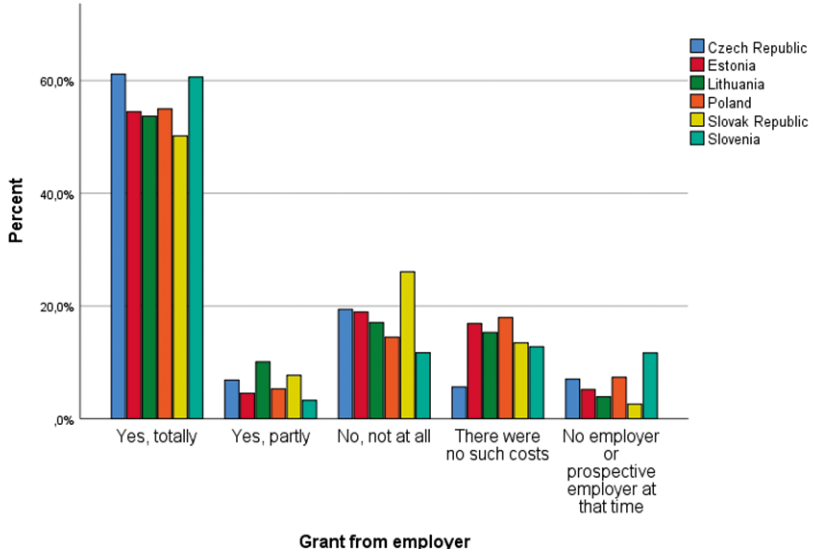

Figure 3. Did the employer pay for the job-related learning activities?

the results provided in Table 1: in terms of participation in learning activities, the highest activity is observed in Estonia, the lowest – in Slovakia. Hence, in Estonia, even more people would study in non-formal education if they had the conditions, while in Slovakia, even if learning conditions were more favourable, an increase in learning activity would not be so significant.

Table 2. Proportion of adults aged 30 and over who in the last 12 months wanted to participate in learning activities but could not do so

Country	Learning activities: interested but didn't start (per cent)
Czech Republic	16.6
Estonia	**30.0**
Lithuania	14.6
Poland	10.1
Slovak Republic	7.7
Slovenia	17.2

As regards lifelong learning, it is important to examine whether any demographic factors influence adults' choices or opportunities to devote their time to learning. Tables 3 and 4 provide analysis of the correlation between the number

of learning activities and gender, country of birth, having partner and children – these are the key factors which could have a direct effect on conditions related to a person's ability to devote time and money to learning.

Table 3. Correlation between participation of adults aged 30 and over in the learning activities in the last 12 months and gender, and whether they still live in their birth country

Country	Gender	T-test		Country of birth	T-test	
		Number of activities (mean)	Sig. (2-tailed)		Number of activities (mean)	Sig. (2-tailed)
Czech Republic	Male	2.0	$p \geq 0.05$	Yes	1.9	$p \geq 0.05$
	Female	1.8		No	1.4	
Estonia	Male	1.6	**$p < 0.001$**	Yes	2.2	**$p < 0.001$**
	Female	2.5		No	1.6	
Lithuania	Male	1.1	**$p < 0.001$**	Yes	1.6	$p \geq 0.05$
	Female	1.8		No	1.3	
Poland	Male	1.0	**$p < 0.05$**	Yes	1.2	$p \geq 0.05$
	Female	1.3		No	1.2	
Slovak Republic	Male	1.1	$p \geq 0.05$	Yes	1.1	$p \geq 0.05$
	Female	1.1		No	0.9	
Slovenia	Male	1.5	**$p < 0.001$**	Yes	1.8	**$p < 0.001$**
	Female	2.0		No	1.1	

Table 3 shows that women are more likely to engage in learning activities in most of the six Central European countries: Estonia, Lithuania, Poland and Slovenia. The largest difference between women and men in terms of the average number of learning activities attended in the last 12 months was recorded in Estonia (the number of learning activities attended by women averages 2.5, by men – 1.6, t-test $p < 0.001$). In Slovakia, there is no difference between men and women in this regard. In the Czech Republic, men are more likely to engage in learning activities, but the difference between men and women is not statistically significant. When assessing who is more likely to engage in learning activities – local residents (people born in the country they live) or immigrants, statistically significant difference is observed only in two countries: Estonia and Slovenia, where learning activities are more often attended by local residents (in Estonia, 2.2. and 1.6 respectively, t-test $p < 0.001$; in Slovenia, 1.8 and 1.1 respectively, t-test $p < 0.001$).

Assessment of correlation between the number of lifelong learning activities and the factor whether a person lives with a spouse/partner showed that a statistically significant difference is recorded only for Poland where persons living with spouse/partner are more likely to engage in learning activities (1.3 and 0.8 respectively, t-test $p < 0.01$). In other countries, except Slovakia, the trend is similar, yet no statistical significance is observed. In Slovakia, there is no difference whether a person lives with a partner or alone in terms of the average number of learning activities attended. Statistically significant childlessness contributes to an increase in learning possibilities only in the Czech Republic (2.4 and 1.8 respectively, t-test $p < 0.05$). In Estonia, Lithuania and Slovenia, the trend is similar, yet no statistical significance is observed. In Poland and Slovakia, having/not having children does not affect the frequency of learning activities.

Table 4. Correlation between participation of adults aged 30 and over in the learning activities in the last 12 months and living with partner, having children

Country	Living with spouse or partner	T-test		Having children	T-test	
		Number of activities (mean)	Sig. (2-tailed)		Number of activities (mean)	Sig. (2-tailed)
Czech Republic	Yes	1.9	$p \geq 0.05$	Yes	1.8	**$p < 0.05$**
	No	2.0		No	2.4	
Estonia	Yes	2.2	$p \geq 0.05$	Yes	2.1	$p \geq 0.05$
	No	2.1		No	2.4	
Lithuania	Yes	1.7	$p \geq 0.05$	Yes	1.5	$p \geq 0.05$
	No	1.3		No	1.8	
Poland	Yes	1.3	**$p < 0.01$**	Yes	1.2	$p \geq 0.05$
	No	0.8		No	1.1	
Slovak Republic	Yes	1.1	$p \geq 0.05$	Yes	1.1	$p \geq 0.05$
	No	1.1		No	1.1	
Slovenia	Yes	1.8	$p \geq 0.05$	Yes	1.7	$p \geq 0.05$
	No	1.5		No	1.9	

Discussion

When analysing the models of adult engagement in learning, one of the most important criteria is participation rate, which indicates the proportion of adults participating in lifelong learning activities. According to Desjardins at al (2006),

the analysis of the data of the International Adult Literacy Survey (IALS) (1994–1998) by proportion of adults participating in non-formal education distinguished four groups of countries. In a small group of countries (Scandinavian countries), participation in learning activities exceeded 50 per cent. A strong tradition of adult learning, many state-supported learning sectors in these countries have enabled a large proportion of the adult population to engage in lifelong learning. In the second group of countries (UK, USA, Canada, Switzerland), the adult engagement in learning accounted for 35–50 per cent. Slovenia and the Czech Republic fell into the third group of countries with adult participation rate of 20–30 per cent. The last group includes some Southern European countries (Greece, Portugal) and Eastern European countries (Hungary, Poland). Lithuania and Estonia did not participate in the IALS study.

In later PIAAC surveys (2012, 2015), adult participation rates are higher. Countries featuring the lowest annual flows of non-formal AE have participation rates ranging from as low as 20 per cent in Greece, Italy and Turkey. Lithuania, Poland and Slovakia are among the countries with adult participation rate below 30 per cent. In the leading countries of adult participation in non-formal education, participation rates are 2–3 times higher. In Slovenia and the Czech Republic, the rate of adult participation in non-formal learning exceeds 40 per cent. Meanwhile, the participation rate in Estonia is close to that of the Nordic countries including Denmark, Finland, Norway and Sweden (Desjardins, 2020). Why are the data for Estonia so different? Estonia adopted a perception of non-formal (in particular non-formal vocational) education as an important part of the adult learning system from the Nordic countries at the very beginning of the education reform. The government focused on non-formal adult learning system, ensured the existence of a non-formal education institutions network and applied funding models that allowed the cost of such education to be reduced (Märja, 2008). Meanwhile, Lithuania, which had similar starting positions, chose another model of non-formal adult education.

The research on adult participation in lifelong learning shows a tendency that adults who have already participated in learning activities are more inclined towards learning. In virtually all countries, there was a trend observed that more than half of adults who had participated in non-formal education were engaged in more than one such activity (Desjardins, 2020).

Gender and education attainment are the characteristics for more detailed analysis of models of adult participation in lifelong learning. The Eurostat data show that women participate in lifelong learning more actively than men (Eurostat, 2018). The results of the study in the Central European countries are not unam-

biguous in terms of gender and only partially confirm the tendencies emerging in the scientific literature (Chang, Wu & Lin, 2012) that women are more actively involved in lifelong learning activities than men.

The results show that in the Central European countries, the number of adult non-formal learning activities correlates with educational attainment. Greater involvement in learning activities by adults with higher educational attainment is also confirmed by the data of other researchers (Desjardins, 2020). Even in developed countries, social gaps still exist, with less educated people facing barriers to education that deter them from learning (Árnason & Valgeirsdóttir, 2015).

Studies carried out in countries with high immigrant flows (Scandinavian countries, Germany, Canada, USA) show that there are quite significant differences between immigrant and non-immigrant learning in these countries (Støren & Børing, 2018). These differences are particularly obvious in non-formal learning related with work activities. In the analysed Central European countries, this trend is not observed. Only in two countries (Estonia and Slovenia) local residents statistically significantly more often engage in learning activities. Such results may also be determined by lower flows of immigrants.

Conclusions

Comparison of the six Central European countries in terms of participation in lifelong learning activities showed that the largest number of adults participating in non-formal learning activities as well as the greatest number of hours spent on learning activities in the last 12 months were recorded in Estonia. Moreover, Estonia also has the largest number of persons who want to engage in non-formal education but, for some reason, have not been able to do so. Adults are the least involved in non-formal learning activities in Slovakia.

The frequency of participation in learning activities in all six countries correlates statistically significantly with a person's educational attainment: the higher the educational attainment, the more learning activities were attended in the last 12 months.

Different formats of learning activities prevail in different countries: private lessons are the most popular format of learning in Estonia and the Czech Republic, distance education – in Lithuania and Poland, seminars and workshops – in Slovenia.

In all six Central European countries, only about 50–60 per cent of employers pay in full for training related to professional upskilling.

In most of the six countries, women are statistically significantly more likely to participate in learning activities. Other demographic factors have little effect on the frequency of participation in learning activities in the six Central European countries.

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References

Árnason, H., & Valgeirsdóttir, H. (2015). Why do people with little formal education not participate in lifelong learning activities? *Netla: Online Journal on Pedagogy & Education*, 1-16.

Barros, R. (2012). From lifelong education to lifelong learning. Discussion of some effects of today's neoliberal policies. *European journal for Research on the Education and Learning of Adults*, 3(2), 119-134.

Beardwell, J., Holden, L. & Claydon, T. (Eds.). (2007). *Human resource management: A contemporary approach*. Pearson Education.

Chang, D.F., Wu, M.L., & Lin, S.P. (2012). Adults Engaged in Lifelong Learning in Taiwan: Analysis by Gender and Socioeconomic Status. *Australian Journal of Adult Learning*, *52*(2), 310-335.

Chapman, J., McGilp, J., Cartwright, P., de Souza, M., & Toomey, R. (2006). Overcoming barriers that impede participation in lifelong learning. In *Lifelong learning, participation and equity* (pp. 151-174). Springer, Dordrecht.

Delahaye, B. (2003). Human resoursce development and the management of knowledge capital. *Human Resource Management: Challenges & Future Directions*, 204-218.

Desjardins, R, Rubenson, K & Milana, M (2006). *Unequal chances to participate in adult learning: International perspectives*, Paris: United Nations Educational, Scientific and Cultural Organization.

Desjardins, R. (2020). *PIAAC Thematic Review on Adult Learning. OECD Education Working PaperNo. 223*. Paris: OECD.

Erdoğan, D.G. Research Trends in Studies on Lifelong Learning: A Bibliometric Analysis with Visual Mapping Technique (2016-2020). *Sakarya University Journal of Education* 10.3: 643-666.

Eurostat (2018). *Smarter, greener, more inclusive? Indicators to support the Europe 2020 strategy*. Publications Office of the European Union.

Guimaraes, P. (2017). The usefulness of adult education: Lifelong learning in the European Union and the portuguese public policy. *Andragoška spoznanja*, 23(4), 35-50

Laal, M., & Salamati, P. (2012). Lifelong learning; why do we need it?. *Procedia-Social and Behavioral Sciences*, *31*, 399-403.

Mankin, D. *Human Resource Development*. Oxford: Oxford University Press, 2009.

Märja, T. (2008). Development and State of Art of Adult Learning and Education (ALE): National Report of Estonia.

Silva, T., Cahalan, M., & Lacireno-Paquet, N. (1998). Adult Education Participation Decisions and Barriers: Review of Conceptual Frameworks and Empirical Studies. Working Paper Series.

Støren, L.A., & Børing, P. (2018). Immigrants' participation in non-formal job-related training. *International Journal of Lifelong Education*, *37*(5), 598-614.

UNESCO Institute for Lifelong Learning (2016) *Recommendation on Adult Learning and Education*, *2015*. UNESCO.