

LEVEL OF EDUCATION ATTRIBUTED TO THE OLDER POPULATION IN THE EUROPEAN UNION

Sorin Petrică ANGHELUTĂ^{a*}, Florina BRAN^a, Corneliu GUȚU^b, Mihai DINU^a, Carol Cristina GOMBOS^a, Ana Mădălina BÎGU (POTCOVARU)^a

^a Bucharest University of Economic Studies, Romania

^b Academy of Economic Studies of Moldova (University)

ABSTRACT

Increases in employment rates may result from the implementation of measures to provide more flexible learning routes. The constant upgrading of one's knowledge, skills, and capacities is another result of the technological shifts that are taking place inside economic systems. A higher degree of education makes it easier to get occupations that are safer and better compensated than those held by those with less education. Additionally, when considering employment projections, the composition of the population has a significant impact. Because of this, the author of the article does an analysis taking into account the composition of the population to determine the average degree of education held by the population.

KEYWORDS: *adults, competences, European Union, level of education*

INTRODUCTION

Certain aspects related to the costs of professional training, as well as aspects regarding the time dedicated to professional training activities, make it difficult for employees to participate in professional training programs organized within enterprises. However, companies can increase their competitiveness by investing in the development of their employees' skills.

The chances of a job being accessed more easily increase by participating in vocational education and training programs. The highest employment rates are for people who have an education level of more than 5. A higher education allows graduates to benefit from opportunities on the labor market.

The problems that may arise in terms of social inclusion can be avoided by applying measures that consider flexible ways of learning. The high skills required in the workplace put pressure on employees, pressuring them to access vocational training programs leading to the acquisition of these skills. The high skills acquired contribute to the possibility that employees can perform tasks of higher complexity.

1. LITERATURE REVIEW

The education level of the older population in the European Union (EU) is an essential determinant of their employability, quality of life, and social inclusion. The European Commission (2017a) highlights that globalization has influenced education and labor markets, necessitating continuous learning throughout an individual's lifespan. The concept of lifelong learning, emphasized by the European Commission (2018b), is pivotal in equipping older adults with the necessary skills to adapt to technological and economic changes.

The European Commission (2019a) underscores the importance of adult education and vocational training, asserting that participation in lifelong learning improves employment opportunities and

* Corresponding author. E-mail address: sorin.angheluta@gmail.com

social integration. Similarly, the European Training Foundation (2018) stresses that adult education is a crucial element in preparing individuals for the evolving job market, enhancing both personal development and economic sustainability.

From a policy perspective, Angheluță et al. (2020) examine the European Union's Sustainable Development Goal on Quality Education, identifying the gaps in educational attainment among various demographic groups. Their research suggests that the aging population requires targeted policies to enhance participation in educational programs. The European Commission (2018a) highlights the role of youth, education, and culture policies in fostering social cohesion, which can extend to older populations through tailored educational initiatives.

Economic and environmental perspectives also intersect with education in later life. Bran et al. (2020) discuss the risks associated with globalization, noting that older workers with limited education face higher job insecurity. Profiroiu et al. (2020) further examine sustainable urban development challenges in the context of population growth, where education plays a crucial role in ensuring active aging and reducing socioeconomic disparities.

Rădulescu et al. (2018) provide insights into the globalization-regional development nexus, demonstrating that education policies must be region-specific to address local labor market needs. Their findings align with those of the Organization for Economic Cooperation and Development (2017), which advocates for educational opportunities that mitigate inequality throughout life.

EUROSTAT data (2019) provides statistical evidence on education levels among older populations, illustrating disparities across EU member states. These disparities reinforce the need for continued investment in adult learning programs.

Profiroiu et al. (2020) explore trends in the global economy and their impact on workforce education, suggesting that digital literacy and adaptability are crucial for older workers. Their study aligns with the European Commission's (2019) Reflection Paper on a sustainable Europe, which emphasizes education as a fundamental pillar of sustainable development.

Demographic changes, population aging, population mobility, are aspects that need to be considered when discussing the workforce. The mismatch of skills that may exist in the labor market can be removed by acquiring new skills, knowledge and competences, based on the combination of theoretical training with practical training to be carried out at the workplace.

The comparative situation of the education level of the population in the 25-34 age group, for the period 2011-2021, is presented in Table 1.

From the data presented at the level of the European Union, compared to 2011, in 2021 the share of the population aged between 25 and 34 years and with a level of education 0-2 decreased (-4.3%), respectively with education level 3-4 (-3.9%). Only the share of the population with education level 5-8 increased (+8.2%). Also, for people with education level 0-2, the weights decreased in all countries, less so in the following countries where the weights increased: Czechia (+1.4%), Germany (+1.6%), Hungary (+0.3%), Poland (+1.0%), Slovakia (+0.3%). For people with education level 3-4 the situation is similar. The countries where the shares increased are: Greece (+4.1%), Malta (+6.8%), Portugal (+7.4%), Romania (+4.0%). For this age group (25-34 years), in all countries the shares of people with education level 5-8 have increased. The most significant increases were registered in: Luxembourg (+16.0%), Malta (+16.2%), Netherlands (+15.6%), Austria (+21.5%), Portugal (+20.0%).

Table 1. Comparative situation of the education level of the population in the 25-34 age group, 2011-2021, (%)

Countries	Less than primary, primary and lower secondary education (levels 0-2)		Upper secondary and post-secondary non-tertiary education (levels 3 and 4)		Tertiary education (levels 5-8)	
	2011	2021	2011	2021	2011	2021
European Union	19,1	14,8	47,9	44,0	33,0	41,2
Belgium	18,1	12,6	39,4	36,6	42,5	50,9
Bulgaria	17,9	17,3	54,9	49,1	27,2	33,6
Czechia	5,7	7,1	69,2	58,0	25,1	34,9
Denmark	20,3	16,4	41,2	34,6	38,6	49,1
Germany	13,0	14,6	59,5	49,7	27,6	35,7
Estonia	14,1	11,8	46,9	45,0	39,0	43,2
Ireland	14,9	5,2	36,5	33,0	48,6	61,7
Greece	23,1	7,1	44,6	48,7	32,3	44,2
Spain	34,6	27,7	25,1	23,6	40,3	48,7
France	16,8	11,9	40,4	37,8	42,8	50,3
Croatia	9,8	4,9	65,8	59,3	24,4	35,7
Italy	28,5	23,2	50,4	48,5	21,1	28,3
Cyprus	15,3	9,9	34,2	31,8	50,5	58,3
Latvia	17,2	8,5	47,7	46,0	35,1	45,5
Lithuania	10,4	6,1	41,3	36,4	48,2	57,5
Luxembourg	16,6	11,0	36,7	26,4	46,6	62,6
Hungary	12,9	13,2	58,9	53,9	28,2	32,9
Malta	43,6	20,6	30,2	37,0	26,2	42,4
Netherlands	18,1	10,2	42,0	34,2	40,0	55,6
Austria	12,0	10,6	67,1	47,0	20,9	42,4
Poland	6,0	7,0	55,0	52,4	39,0	40,6
Portugal	44,0	16,7	28,5	35,9	27,5	47,5
Romania	23,9	19,1	53,6	57,6	22,5	23,3
Slovenia	6,0	4,2	60,2	47,8	33,8	47,9
Slovakia	6,0	6,3	68,5	54,2	25,5	39,5
Finland	9,8	9,7	50,8	50,2	39,4	40,1
Sweden	13,0	11,1	44,1	39,6	42,8	49,3

Source: made by the authors based on the data available on the EUROSTAT website

For the 25-34 age group, it is observed that there are countries where approximately one fifth of the population has less than primary, primary and lower secondary education (levels 0-2): Spain (27.7%), Italy (23.2%), Malta (20.6%), Romania (19.1%). The countries with low shares are: Ireland (5.2%), Croatia (4.9%), Slovenia (4.2%). Also, for some countries more than half of the population has upper secondary and post-secondary non-tertiary education (levels 3-4): Czechia (58.0%), Croatia (59.3%), Hungary (53.9%), Poland (52.4%), Romania (57.6%), Slovakia (54.2%), Finland (50.2%). More than half of the population has tertiary education (levels 5-8) in the following countries: Belgium (50.9%), Ireland (61.7%), France (50.3%), Cyprus (58.3%), Lithuania (57.5%), Luxembourg (62.6%), Netherlands (55.6%).

The evolution at European level of the shares of the population in the 25-34 age group, depending on the level of education, is presented in the Figure 1.

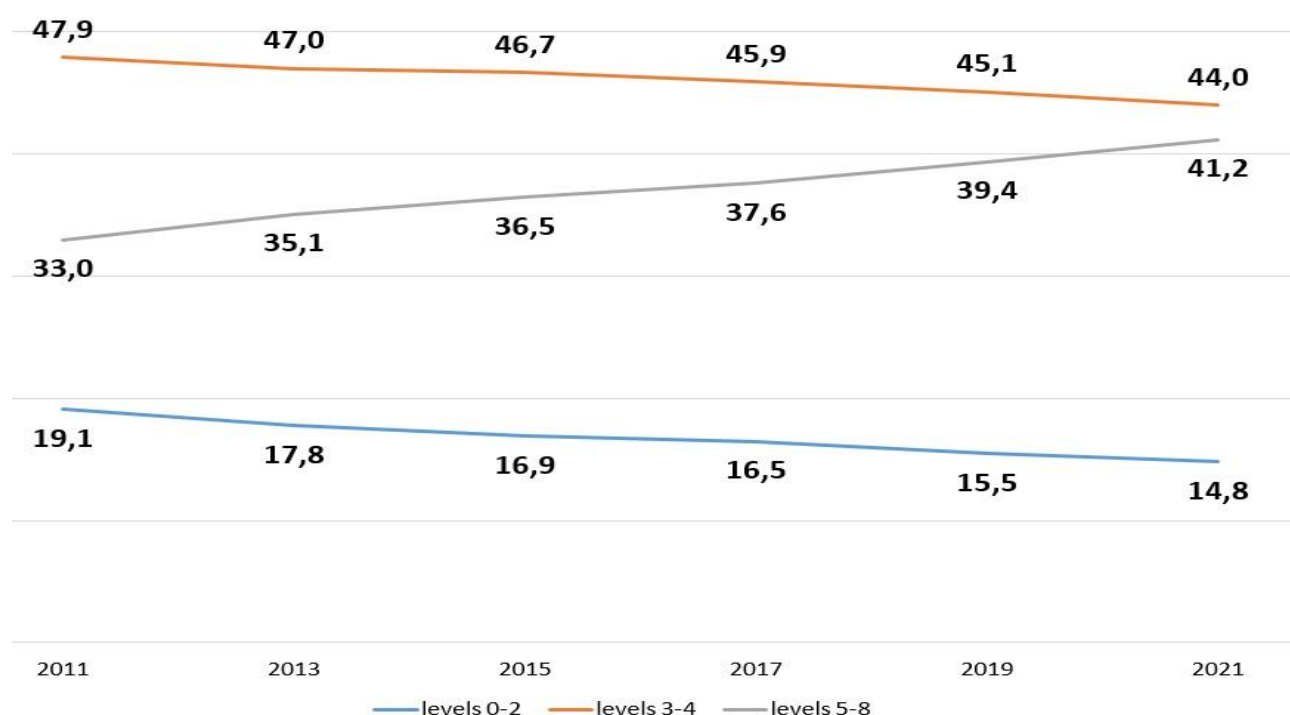


Figure 1. Evolution of the shares of the population in the 25-34 age group, depending on the level of education, 2011-2021, (%)

Source: made by the authors based on the data available on the EUROSTAT website

We can observe the decreasing trends of the values for the population of level 0-2 (from 47.9% in 2011 to 44.0% in 2021), respectively of level 3-4 (from 19.1% in 2011 to 14.8% in 2021). At the same time, for the 5-8 level population, the trend is increasing (from 33.0% in 2011 to 41.2% in 2021).

The following table presents the comparative situation of the education level of the population in the 55-64 age group, for the period 2011-2021 (%).

Table 2. Comparative situation of the education level of the population in the 55-64 age group, 2011-2021, (%)

Countries	Less than primary, primary and lower secondary education (levels 0-2)		Upper secondary and post-secondary non-tertiary education (levels 3 and 4)		Tertiary education (levels 5-8)	
	2011	2021	2011	2021	2011	2021
European Union	37,8	27,5	43,8	48,6	18,5	23,8
Belgium	44,5	28,5	30,4	36,1	25,1	35,4
Bulgaria	27,2	17,7	52,1	58,5	20,7	23,8
Czechia	13,4	6,5	74,4	75,4	12,1	18,2
Denmark	30,7	23,8	42,1	45,6	27,2	30,5
Germany	15,5	15,0	58,3	58,2	26,2	26,8
Estonia	13,2	7,8	51,2	54,2	35,6	38,0
Ireland	47,3	25,4	29,0	37,7	23,7	36,9
Greece	55,3	34,8	27,1	38,8	17,6	26,3
Spain	66,4	47,4	15,0	22,9	18,6	29,7
France	42,4	27,1	38,9	46,3	18,6	26,6
Croatia	33,1	21,6	50,4	61,5	16,5	16,9
Italy	59,7	49,4	29,5	37,8	10,8	12,7
Cyprus	47,7	25,7	29,9	44,7	22,4	29,6
Latvia	14,6	4,9	64,7	65,2	20,7	29,9
Lithuania	10,4	2,4	65,4	66,1	24,3	31,5
Luxembourg	29,1	31,0	42,6	36,9	28,3	32,1
Hungary	25,0	16,4	58,8	61,0	16,1	22,5

Countries	Less than primary, primary and lower secondary education (levels 0-2)		Upper secondary and post-secondary non-tertiary education (levels 3 and 4)		Tertiary education (levels 5-8)	
	2011	2021	2011	2021	2011	2021
Malta	81,7	66,5	10,7	19,3	7,6	14,2
Netherlands	39,6	29,9	34,5	39,6	25,9	30,5
Austria	27,7	18,0	56,9	56,2	15,4	25,8
Poland	20,0	9,6	67,2	73,1	12,8	17,3
Portugal	81,7	63,3	7,4	19,0	10,9	17,6
Romania	39,5	21,9	51,2	68,1	9,3	10,0
Slovenia	27,1	14,9	56,5	57,7	16,4	27,4
Slovakia	15,9	8,4	70,2	73,2	13,8	18,3
Finland	28,7	14,8	40,0	47,9	31,3	37,3
Sweden	29,4	16,2	42,7	48,8	28,0	35,0

Source: made by the authors based on the data available on the EUROSTAT website

From the data presented at the level of the European Union, compared to 2011, in 2021 the share of the population aged between 55 and 64 and with a level of education 0-2 decreased (-10.3%). The share of the population with education level 3-4 (+4.8%), respectively with education level 5-8 (+5.3%) increased. Also, for people with education level 0-2 the weights decreased in all countries, less in Luxembourg where the weight increased (+1.9%). For people with education level 3-4, the countries where the weights decreased are: Germany (-0.1%), Luxembourg (-5.7%), Austria (-0.7%). For this age group (55-64 years), in all countries the shares of people with education level 5-8 have increased. For the 55-64 age group, it is noted that there are countries where approximately half of the population has less than primary, primary and lower secondary education (levels 0-2): Spain (47.4%), Italy (49.4%), Malta (66.5%), Portugal (63.3%). For the level of upper secondary and post-secondary non-tertiary education (levels 3-4), the highest values are recorded in: Czechia (75.4%), Poland (73.1%), Slovakia (73.2%). Also, more than a third of the population has tertiary education (levels 5-8) in the following countries: Belgium (35.4%), Estonia (38.0%), Ireland (36.9%), Finland (37.3%), Sweden (35.0%).

The evolution at European level of the shares of the population in the 55-64 age group, depending on the level of education, is presented in the Figure 2.

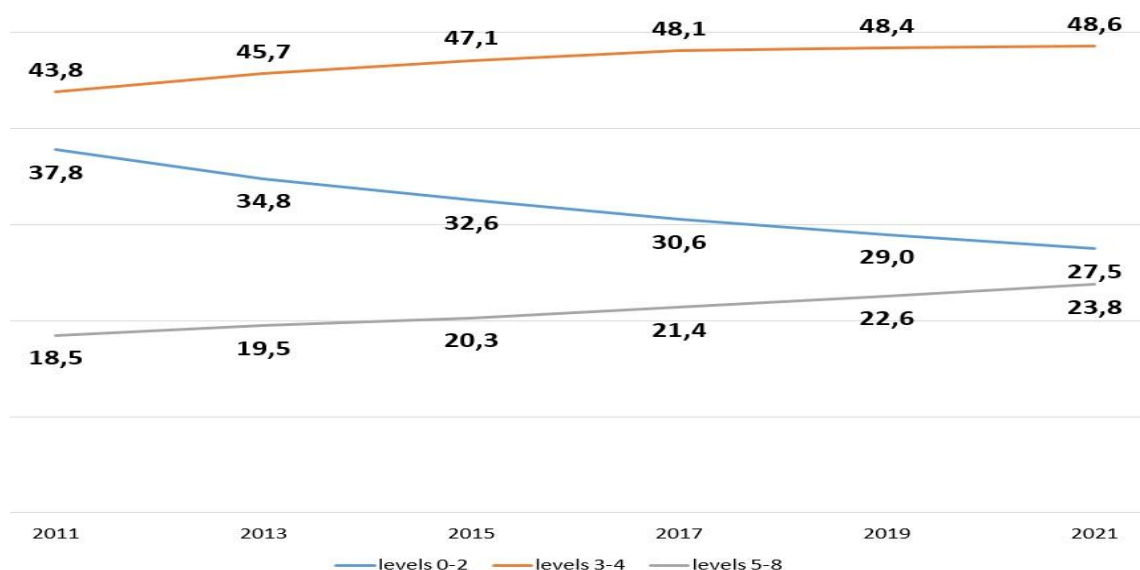


Figure 2. Evolution of the shares of the population in the 55-64 age group, depending on the level of education, 2011-2021, (%)

Source: made by the authors based on the data available on the EUROSTAT website

The increasing trends of the values for the population of level 3-4 (from 43.8% in 2011 to 48.6% in 2021), respectively of level 5-8 (from 18.5% in 2011 to 23.8% in 2021). At the same time, for the population of level 0-2, the trend is a decreasing one (from 37.8% in 2011 to 27.5% in 2021).

The situations presented are more relevant when we analyze the proportions of the population by age group. Thus, the following table presents the comparative situation of the proportions of the population in the age groups 25-49 years, respectively 50-64 years, for the period 2011-2021.

Table 3. Comparative situation of the proportions of the population in the age groups 25-49 years, respectively 50-64 years, 2011-2021, (%)

Countries	Proportion of population			
	25-49 years		50-64 years	
	2011	2021	2011	2021
European Union	35,5	32,7	19,6	20,9
Belgium	34,4	32,5	19,4	20,1
Bulgaria	35,0	34,2	21,5	20,6
Czechia	37,2	36,2	20,8	18,6
Denmark	33,4	31,6	19,4	19,7
Germany	34,6	31,1	20,1	23,0
Estonia	34,6	34,4	19,6	19,3
Ireland	38,4	35,0	16,0	17,6
Greece	36,7	32,2	18,5	20,7
Spain	39,9	34,4	17,7	21,4
France	33,0	30,5	19,4	19,2
Croatia	34,2	32,6	21,0	21,1
Italy	36,0	31,2	19,5	22,6
Cyprus	36,9	37,4	17,6	17,8
Latvia	34,5	33,2	19,5	20,9
Lithuania	34,1	32,9	19,0	22,1
Luxembourg	38,5	38,2	18,1	19,9
Hungary	35,9	35,6	20,4	19,2
Malta	34,0	40,2	21,8	17,4
Netherlands	34,4	31,4	20,4	21,1
Austria	36,5	33,6	18,9	22,2
Poland	36,0	36,9	21,4	19,0
Portugal	36,2	32,4	19,1	21,1
Romania	35,7	34,5	20,1	19,9
Slovenia	37,2	33,7	20,9	21,2
Slovakia	38,1	37,7	19,9	19,3
Finland	32,1	31,4	21,6	19,4
Sweden	32,8	32,9	18,8	18,1

Source: made by the authors based on the data available on the EUROSTAT website

It is observed that, at the European level, compared to 2011, in 2021, the proportion of the population in the 25-49 age group decreased by -2.8%. In most countries the value has decreased. Increases were registered in: Cyprus (+0.5%), Malta (+6.2%), Poland (+0.9%), Sweden (+0.1%). In 2021, high values were in: Cyprus (37.4%), Luxembourg (38.2%), Malta (40.2%), Slovakia (37.7%). Also, the proportion of the population in the 50-64 age group increased by +1.3%. Significant increases were registered in: Germany (+2.9%), Greece (+2.2%), Spain (+3.7%), Italy (+3.1%), Lithuania (+3.1%), Austria (+3.3%). In 2021, high values were in: Germany (23.0%), Spain (21.4%), Italy (22.6%), Lithuania (22.1%), Austria (22.2%), Slovenia (21.2%).

CONCLUSIONS

From the analysis carried out, it is found that, at the level of the European Union, compared to 2011, in 2021 the share of the population aged between 25 and 34 years decreased both for education level 0-2 and for education level 3-4. For this age group (25-34 years), in all countries the shares of people

with education level 5-8 have increased. For the 25-34 age group, it is noted that there are countries where about a fifth of the population has the 0-2 education level: Spain (27.7%), Italy (23.2%), Malta (20.6%), Romania (19.1%). The countries with low shares are: Ireland (5.2%), Croatia (4.9%), Slovenia (4.2%). Also, for some countries more than half of the population has upper secondary and post-secondary non-tertiary education (levels 3-4): Czechia (58.0%), Croatia (59.3%), Hungary (53.9%), Poland (52.4%), Romania (57.6%), Slovakia (54.2%), Finland (50.2%). More than half of the population has tertiary education (levels 5-8) in the following countries: Belgium (50.9%), Ireland (61.7%), France (50.3%), Cyprus (58.3%), Lithuania (57.5%), Luxembourg (62.6%), Netherlands (55.6%). Compared to 2011, in 2021 the share of the population aged between 55 and 64 years, with a level of education 0-2, decreased. It also increased the share of the population with education level 3-4, respectively with education level 5-8. It is observed that, at the European level, compared to 2011, in 2021, the proportion of the population in the 25-49 age group has decreased.

At the same time, it can be appreciated that the lack of basic skills in reading, mathematics and science can be eliminated by implementing measures related to digitization.

REFERENCE

- Angheluță, P. S., Rădulescu, C. V., Bran, F., Gole, I., & Bălu, O. F. (2020, April). Achieving the goals proposed in the European Union for the Sustainable Development Goal-Quality Education. In *The 35th IBIMA Conference, Seville, Spain* (pp. 01-02).
- Bran, F., Rădulescu, C. V., Bodislav, D. A., Burlacu, S. (2020). Environmental risks in the context of globalization. *Journal of Economic Convergence in European Union*, 350, 228-235.
- European Commission (2017a). *Reflection paper on harnessing globalisation*. Online, available at: https://commission.europa.eu/publications/reflection-paper-harnessing-globalisation_en
- European Commission (2017b). *School development and excellent teaching for a great start in life*. Online, available at: https://commission.europa.eu/publications/reflection-paper-harnessing-globalisation_en
- European Commission (2018a). *Building a stronger Europe: the role of youth, education and culture policies*. Online, available at: <https://cor.europa.eu/en/our-work/opinions/cdr-3952-2018>
- European Commission (2018b). *Recommendation on Key Competences for Lifelong Learning*. Online, available at: <https://education.ec.europa.eu/focus-topics/improving-quality/key-competences>
- European Commission (2019a). *Adult learning statistics - characteristics of education and training*. Online, available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Adult_learning_statistics
- European Commission (2019b). *Reflection Paper – Towards a Sustainable Europe by 2030*. Online, available at: https://commission.europa.eu/publications/towards-sustainable-europe-2030_en
- European Training Foundation (2018). *Getting ready for the future*. Online, available at: <https://www.etf.europa.eu/en/publications-and-resources/publications/getting-ready-future>
- Organization for Economic Cooperation and Development (2017). *Educational Opportunity for All: Overcoming Inequality throughout the Life Course*, OECD Publishing.
- Rădulescu, C.V., Petrescu, I.E., Pârgaru, I. (2018). Globalization and Regional Development from a Durable Perspective. *Quality – Access to Success*, 19(S1), 264-267.
- Profiroiu, C.M., Bodislav, D.A., Burlacu, S., Rădulescu, C.V. (2020). Challenges of Sustainable Urban Development in the Context of Population Growth. *European Journal of Sustainable Development*, 9(3), 51-51.
- Profiroiu, M. C., Radulescu, C. V., Burlacu, S., Guțu, C. (2020). Changes and trends in the development of the world economy. In *Conference “Competitiveness and Innovation in the Knowledge Economy”*, Chisinau, Moldova, p. 324-330.