THE USV ANNALS OF ECONOMICS AND PUBLIC ADMINISTRATION | VOLUME 23, ISSUE 1(37), 2023

EUROPEAN CONTEXT EMPIRICAL ANALYSIS OF THE QUALITY OF LIFE FROM THE PERSPECTIVE OF HUMAN CAPITAL IN ROMANIA

Daniela Mihaela NEAMȚU, Daniela BURAC
"Stefan cel Mare" University of Suceava, Suceava, Romania
dana.neamtu@usm.ro, danaburac@usv.ro

Received 10 March 2023; Accepted 10 June 2023

Abstract:
Human capital is of particular importance for political decision-makers in addressing various aspects, such as: economic growth, quality of life, social cohesion and progress, as well as sustainable development. The (reciprocal) relationship between education/human capital and the quality of life is a positive influence of education on individual and social well-being. Throughout this paper we explore the question of how quality of life and its various dimensions have evolved, taking into account the dimension of sustainable development while measuring progress and improving conventional measurements. The purpose of this paper is to provide an image of the quality of life in Romania in the context of European countries from the perspective of education. For this purpose, we propose an evaluation of the quality of life of European countries by means of socio-economic indicators Human Development Index (HDI), Life expectancy at birth, Quality of life Index (QOL), Average rating of satisfaction over a period of time 2013- 2020 that include sub-indicators such as the level of education, also examining whether education influences the quality of life. The structure of the paper is as follows. Section 1- Introduction to the subject of the study; Section 2 - introduces the concept of quality of life in the context of education and investment in human capital as well as the specialized literature; Section 3 - The research methodology which consists in the analysis of social indicators in the European and national context in the time horizon 2013-2021 and the last section - discussions and conclusions.

Key words: education, human capital, quality of life, economic and social indicators.

JEL classification: I25, J24, I30, O10

1. INTRODUCTION

Measuring the progress of societies based on quality of life and decent living for citizens, as a complement to traditional economic and social indicators, brings a requirement for a new development model that places quality of life at the center of its concerns. The approach comes in an international context characterized by growing social disparities, the emergence of new societal and environmental challenges, the escalation of societal unrest and the multiplicity of forms of development policies, which has made social measurement issues the center of academic, national and international. and the institutional debate of recent years. There is a positive correlation between the quality of educational systems and the level of economic development of countries. Developed countries have better educational systems and vice versa. It has practically become an axiom, that to the extent, in which the education system is more advanced, the economy develops better, unemployment decreases and life expectancy increases. Additionally, a good education positively influences the quality of governance and the social sphere. William Schweke, the author of the book "Smart Money", believes that the states of the world must invest primarily in human capital. Investments in education, health and professional training lead not only to increased productivity, but also alleviate the severity of some social problems such as poverty, alcoholism, drug addiction and criminality, which constitute a burden on the economy and on the quality of life.

2. INTERDEPENDENCE BETWEEN EDUCATION - HUMAN CAPITAL - QUALITY OF LIFE

This type of relationship between education - human capital and development/welfare can have different characteristics from one country to another, from one era to another and from one economic cycle to another. Education has a multiple purpose: to form a healthy and active man, endowed with a solid culture, connected to life with moral feelings and prepared to practice a profession. Such a man can really be happy. As a complex anthropological phenomenon, education is a process similar to other processes, such as work, play, economic exchange, the sacred, the everyday, health, personality.

Education is a process specific to human nature and any educational act has a perceptible finality. The concept of human capital emphasizes the idea that education, training, and investment in individuals' skills and knowledge contribute to economic growth and development. It recognizes that individuals are valuable assets in an economy, and their abilities and qualifications are crucial for productivity and innovation.

At the individual level, human capital refers to an individual's education, skills, training, and experience that contribute to their productivity and earning potential. It includes formal education obtained through schools, colleges, and universities, as well as informal learning and on-the-job training. At the enterprise level, human capital refers to the collective skills, knowledge, and expertise of the employees within an organization. Companies invest in human capital by providing training programs, professional development opportunities, and creating a supportive work environment that encourages continuous learning. At the regional level, human capital encompasses the educational attainment, skills, and capabilities of the workforce within a particular geographical area. Regions with a higher concentration of highly skilled workers are more likely to attract investments, foster innovation, and experience economic growth. At the national level, human capital represents the overall educational attainment, skills, and health condition of the population. Countries with a well-developed human capital base tend to have higher productivity, better economic outcomes, and higher standards of living. Understanding and measuring human capital is essential for policymakers, as it helps identify areas for investment in education, healthcare, and skills development. By fostering human capital development, countries can enhance their competitiveness, attract investments, and improve the well-being of their citizens. It is worth noting that the concept of human capital is dynamic and evolves over time. Technological advancements, globalization, and changing labor market demands require continuous investments in education and skills to adapt to new challenges and opportunities. (Babina et. all., 2018).

Education opens up a wider range of opportunities for individuals, enabling them to pursue their interests, passions, and meaningful careers. Having access to diverse educational options and acquiring knowledge and skills relevant to their chosen field can enhance individuals' sense of fulfillment and satisfaction. Through education, individuals gain critical thinking skills, problem-solving abilities, and improved self-confidence. These qualities can contribute to a sense of empowerment and self-efficacy, which are important factors in subjective well-being. (Pfeifer (2007). Educational institutions provide opportunities for social interactions and the formation of social networks. Building relationships with peers, mentors, and teachers can foster a sense of belonging and social support, which are essential for overall well-being. Education can also promote civic engagement and participation in community activities, further enhancing social connections and a sense of purpose. People with higher levels of education tend to have greater health literacy, make informed decisions about their well-being, and adopt healthier behaviors. Education also correlates with improved access to healthcare services and better awareness of preventive measures, leading to improved physical and mental well-being. (UNESCO, 1997, in Khan and Williams, 2006, p. 2).

Continued learning throughout life, whether through formal education or self-directed learning, has been associated with better cognitive functioning and reduced risk of cognitive decline later in life. (Oreopoulos, 2007; Helliwell, 2008, cited in Stiglitz et al., 2009, p. 166).

The quality of life encompasses various dimensions, including physical health, mental well-being, social relationships, environmental factors, and access to resources and opportunities. It reflects the overall satisfaction and happiness individuals experience in their lives. (Bejinaru et al., 2018; Bejinaru & Hapenciuc, 2016). Human capital, on the other hand, refers to the knowledge, skills, abilities, and attributes that individuals possess and contribute to their productivity and economic value. Investments in education, training, and healthcare are essential for developing human capital and improving overall societal well-being. Regarding the "model of a human" and its connection to quality of life, it is important to note that societies often have dominant models or frameworks that shape the values, beliefs, and motivations of individuals within that society. These models influence the goals individuals pursue and the means they adopt to achieve those goals. The "consumer" becomes a central actor in such societies, where material goods and pleasure are considered important indicators of quality of life. The level of consumption is closely tied to an individual's purchasing power and the ability to meet their needs and desires.

It is worth noting that the understanding of quality of life and its determinants may vary across cultures, societies, and individuals. Different models and frameworks can coexist within a society, reflecting diverse values and priorities. Therefore, multidimensional approaches are often employed to capture the complex nature of quality of life and its relationship with human capital and societal development.

Additionally, multidimensional approaches allow for comparisons and analyses across different cultures and societies, facilitating a more nuanced understanding of how quality of life is shaped by various factors and contexts. Cultural, societal, and individual factors significantly influence how quality of life is perceived and valued. Different cultures and societies may prioritize different aspects of well-being, such as community ties, spiritual fulfillment, environmental sustainability, or work-life balance. (Figure 1).

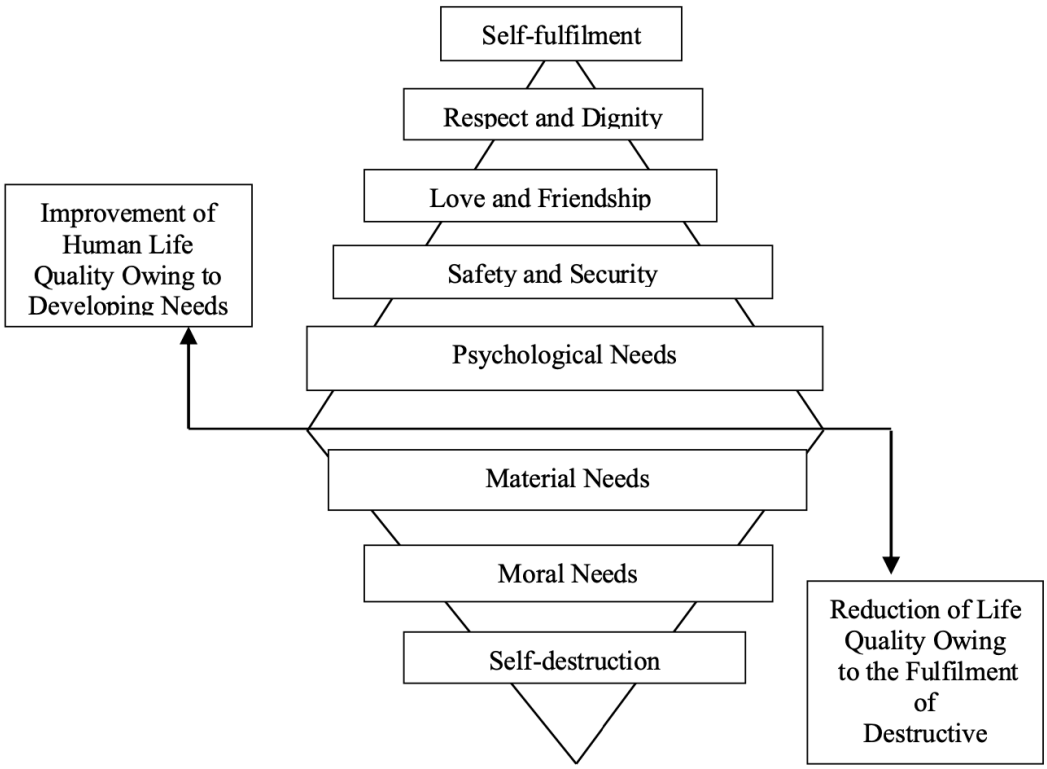

Figure no. 1. The demands impact on human life quality

Source: Makarova Lyudmila, Tkach Elena, Kudryavtseva Irina, Seliverstova Anna and Vinogradova Natalya (2021). Life quality and human capital within reproduction system: regional aspect SHS Web of Conferences

Necessary quality of life of working force is an important aspect of the working potential reproduction process including their working force and human capital as well. The improvement of

life quality by fulfillment of developing needs leads to the enrichment of human capital. On the contrary, decrease in life quality because of fulfillment of destructive needs leads to decrease of human capital. System approach to the quality-of-life analysis proposes to consider the quality of human life as subsystem of reproduction process quality on society level within social system. Furthermore, the process of life quality management is based on society reproduction management guided by moral and cultural type and material (economic) type of reproduction considered via category of quality. Human capital refers to investments made to advance human growth and quality of life. Economic science has conducted extensive research on the "human capital" category. We believe it is crucial to do study on the relationship between the reproduction of human capital and their territorial budget. Because a territory offers the conditions necessary for human activity, including both personal and professional abilities, a territory's level primarily defines a person's qualification for life. Therefore, one of the key topics in economic science is the spatial reproduction of human capital [5–15]. The primary components of social infrastructure are situated on a predetermined area.

On a particular region, necessary conditions for a balanced, complete individual development are also put in place. According to Mitchell et al. (2000), there is currently no agreement in the literature about the definition of quality of life, the articulation of its fundamental characteristics, or the appropriate method of measurement. A number of factors that point to a numerical idea of quality of life have been previously offered in the literature (Kamp et al. 2003; Ulengin et al. 2001; Salvaris et al. 2000). These factors include health, the physical environment, natural resources, personal development, and safety. However, some groups believe that the idea of quality of life encompasses a subjective element, like the European Commission (Rojas 2010) and the World Health Organization (WHO—Quality of Life Group). According to the WHO, quality of life (QoL) refers to a person's assessment of his or her place in life in relation to their objectives, expectations, standards, and concerns within the framework of the culture and value systems in which they reside (Kamp et al. 2003, p. 7). Although there is a wide range of understanding and experiences, measuring activities are now possible because, according to Yuan et al. (1999, p. 3), "within a context, that is, a given time, place, and society, some agreements can usually be reached on what would constitute quality of life." The degree to which a person's life is desirable versus undesirable, frequently with an emphasis on external components, such as environmental factors and income, is what quality of life refers to, according to some consensus that has been established, even though a complete consensus on what constitutes quality of life has not yet been reached (Diener 2006, p. 401). We used the definition of quality of life offered by the Australian Project Social Benchmarks and Indicators for Victoria (Salvaris et al. 2000) for the purposes of this paper: A person's quality of life (QoL) is defined as "the overall level of wellbeing and fulfillment that they experience from a combination of their social, economic, and community environment, as well as their physical and material conditions."

The creation of quality-of-life initiatives and indicator sets is a general step towards expanding the body of research and creating a consensus on what makes for a higher quality of life. Nevertheless, acquiring sufficient data about people's lives is insufficient to fulfill the goal of improving policy and decision-making. It is necessary to collect data, assess people's lives, do it frequently, and then publish the results.

These indicators lose importance if they aren't used to create policies for a better life. As part of the process of creating frameworks for measuring quality of life, many nations have taken on the duty of conducting public consultations. To establish a clear method of demonstrating dedication to improving people's quality of life by learning what matters to the general public in order to understand and assess it. In this framework, we can discuss many examples of quality-of-life standards and methods for promoting national development from around the world.

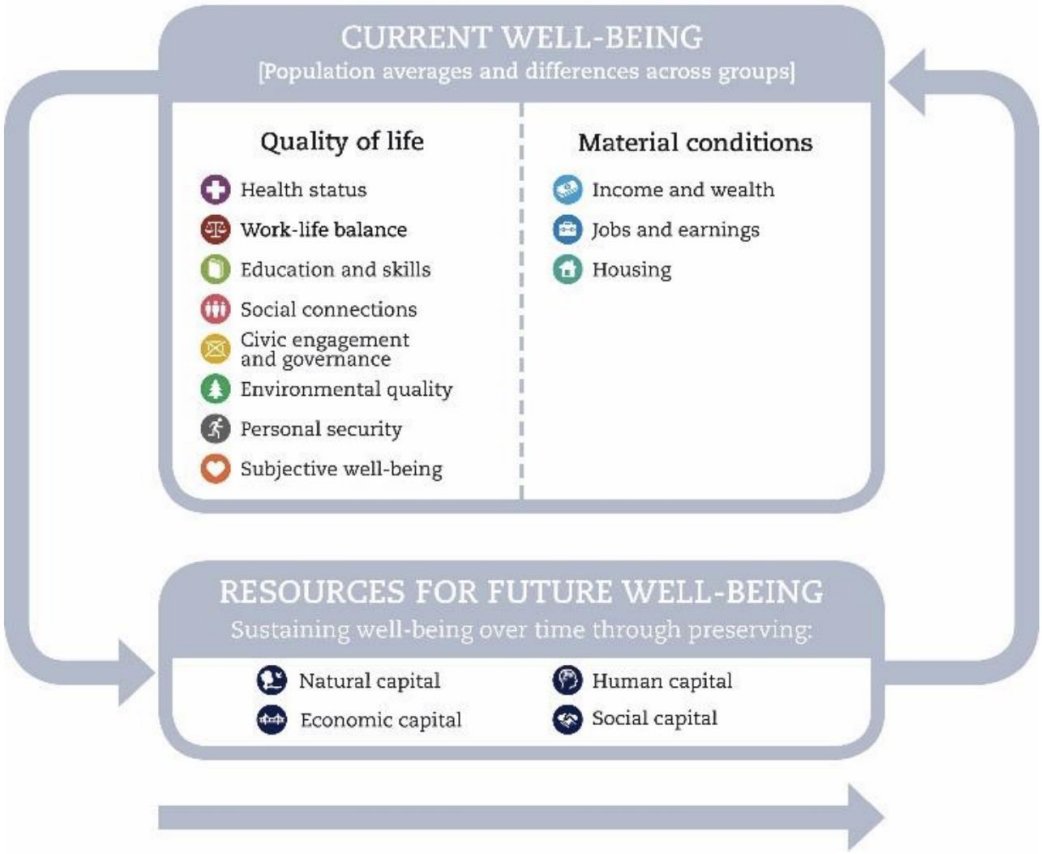

Figure no. 2. The OECD well-being conceptual framework
Source: OECD (2011), How's Life? Measuring well-being. OECD Publishing, Paris

2.1. METHODOLOGY

This paper explores the question of how quality of life and its various dimensions have evolved, taking into account the dimension of sustainable development while measuring progress and improving conventional measurements. The purpose of this empirical analysis is to answer the question If education influences the quality of life and what would be the mechanisms through which education improves well-being because it increases access to nonalienated paid work and economic resources that increase the sense of control over life, as well as access to stable social relationships, especially marriage, that increase social support. In this sense, we selected a category of socio-economic indicators that make up education: Human Development Index (HDI), Life expectancy at birth, Quality of life Index (QOL), Average rating of satisfaction over a period of time 2013-2020, in Romania and in a European context. The formulation of the Indicators completes the operationalization of the analyzed concepts. They represent the direct result of this theoretical activity, in other words, they derive directly from the analysis of the field under research, using both the knowledge accumulated in its study and the results of direct observation of social reality. The exploratory comparative study uses data on the 27 member states of the European Union and Romania from the Eurostat database.

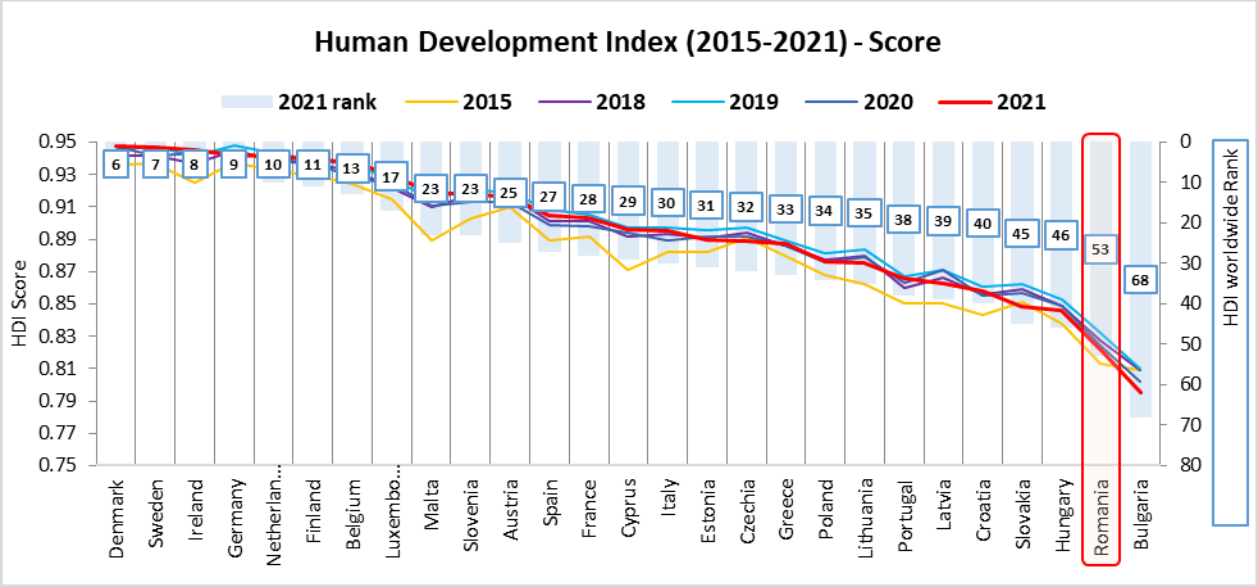

Figure no. 3. Human Development Index (2015-2021)

Source: own contribution based on data available from the United Nations Development Programme (UNDP) website

Switzerland occupied 1st place throughout the entire analysis period, followed by Norway and Iceland. In fact, from top 10 countries as per HDI rank, only Hong Kong, China is from outside Europe. From all European Union countries, Romania has the second lowest score, with only Bulgaria (.795) ranking lower - which places the latter under High Human Development category. Denmark placed 6th on the 2021 HDI rank, followed by Sweden, Ireland, Germany and Netherlands closing top 10. As compared to 2015 rank, Bulgaria had the highest decrease in HDI world ranking (down by 9 positions), followed by Czech Republic (-6), Slovak Republic and Germany (minus 5 positions each).

Table no. 1.

Country	HDI rank	Human Development Index (HDI)	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2017 PPP$)	GNI per capita rank minus HDI rank
Denmark	6	0.948	81.4	18.7	13.0	60,365	6
Sweden	7	0.947	83.0	19.4	12.6	54,489	9
Ireland	8	0.945	82.0	18.9	11.6	76,169	-3
Germany	9	0.942	80.6	17.0	14.1	54,534	6
Netherlands	10	0.941	81.7	18.7	12.6	55,979	3
Finland	11	0.940	82.0	19.1	12.9	49,452	11
Belgium	13	0.937	81.9	19.6	12.4	52,293	7
Luxembourg	17	0.930	82.6	14.4	13.0	84,649	-13
Malta	23	0.918	83.8	16.8	12.2	38,884	12
Slovenia	23	0.918	80.7	17.7	12.8	39,746	10
Austria	25	0.916	81.6	16.0	12.3	53,619	-8
Spain	27	0.905	83.0	17.9	10.6	38,354	10
France	28	0.903	82.5	15.8	11.6	45,937	-2
Cyprus	29	0.896	81.2	15.6	12.4	38,188	9
Italy	30	0.895	82.9	16.2	10.7	42,840	0
Estonia	31	0.890	77.1	15.9	13.5	38,048	8
Czechia	32	0.889	77.7	16.2	12.9	38,745	4
Greece	33	0.887	80.1	20.0	11.4	29,002	17
Poland	34	0.876	76.5	16.0	13.2	33,034	8
Lithuania	35	0.875	73.7	16.3	13.5	37,931	5
Portugal	38	0.866	81.0	16.9	9.6	33,155	3

Country	HDI rank	Human Development Index (HDI)	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2017 PPP$)	GNI per capita rank minus HDI rank
Latvia	39	0.863	73.6	16.2	13.3	32,803	4
Croatia	40	0.858	77.6	15.1	12.2	30,132	8
Slovakia	45	0.848	74.9	14.5	12.9	30,690	1
Hungary	46	0.846	74.5	15.0	12.2	32,789	-2
Romania	53	0.821	74.2	14.2	11.3	30,027	-4
Bulgaria	68	0.795	71.8	13.9	11.4	23,079	-8

In terms of correlation between the country's wealth expressed by GNI's value, data from the above table for 2021 show several EU Member States, most notably Luxembourg, Austria and Bulgaria where GNI per capita rank is much higher than that of the HDI Rank, whereas for countries like Greece, Malta, Slovenia, Spain, Sweden, Poland or Croatia the HDI Rank is at least 8 places higher than the GNI per capita rank, showing better comparative achievement in human development areas, even with a lower comparative individual wealth.

LIFE EXPECTANCY AT BIRTH

According to explanatory text available on Eurostat product's webpage, "life expectancy at certain ages represents the mean number of years still to be lived by a person who has reached a certain exact age, if subjected throughout the rest of his or her life to the current mortality conditions (age-specific probabilities of dying)". Life expectancy at birth therefore indicates how many years a newborn infant would live, following the above definition. Eurostat aggregates and updates regularly the yearly dataset for Life expectancy, with data available as far back as 1960 and below considerations based on available dataset have to take into consideration the fact that 2021 data are marked as "estimated". The average life expectancy for newborns in the European Union has been between 80.9 and 80.1, with the highest life expectancy recorded in 2019 and the lowest in 2021.

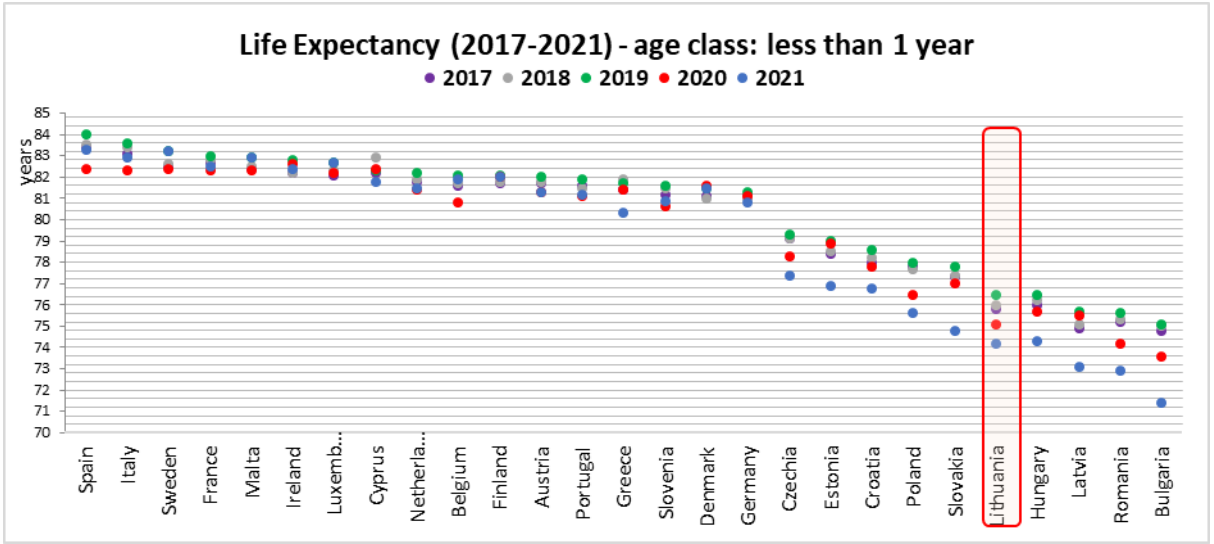

Figure no. 4. Life Expectancy (2017-2021)
Source: own contribution based on data available on the EUROSTAT website

Highest life expectancy is recorded in Spain (84 years in 2019 and 83.3 in 2021), followed by Italy, Sweden and France, whereas lowest life expectancy is recorded in Romania (75.5 years in 2019 and 72.9 in 2021) and Bulgaria (75.1 in 2019, 71.4 in 2021), meaning Romanian newborns have a life expectancy of almost a decade shorter than their fellow residents from Spain. Covid-19 pandemics determined a decrease in life expectancy (2020 as compared to 2019) of EU residents, with largest negative difference being registered in Spain (-1.6 years), Poland and Bulgaria (each by

-1.5 years), Lithuania and Romania (each by -1.4 years). Since 1990, life expectancy in Romania has increased from 69.9 years to 72.9 years, differing by sex, with women leaving longer and improving their life expectancy by 3.6 years between 1990 and 2021 and by even more (4.8 years) between 1980 and 2021, explainable by the birth control regulations in force in communist era. By comparison, Romanian men have seen their life expectancy at birth increasing by 2.7 years (2021 vs. 1990) and 2.8 years (2021 vs. 1980). On average, based only on data available from 22 EU Member States, European Union residents of the selected countries have increased their life span from 74.04 years (1990) to around 80.47 years (2019), then down to 79.5 in just one year, with slightly larger decrease in life expectancy for males between 2019 and 2020 (minus 0.78 years in males and 0.66 years in females, respectively).

Quality of Life Index (QOL)

Quality of life Index (QOL) - higher is better - represents an estimation of overall quality of life and is calculated by Numbeo, being also annually published on World Population Review's website, an independent organization. QOL measures - by means of an empirical formula - eight indicators: purchasing power (including rent), safety, health care, cost of living, property price to income ratio, traffic commute time, pollution, and climate. The 2022 ranking included 87 countries in the world, but number of countries assessed varied over time (i.e., only 60 countries in 2018) and countries being included or not from one year to the next (for example, Cyprus not included in 2018, whereas Luxembourg and Malta only being included in the QOL Index in 2022). The QOL index is published as a heat map, as well as a table, data presented below showing 2018 to 2022 data, with the heatmap showing only 2022.

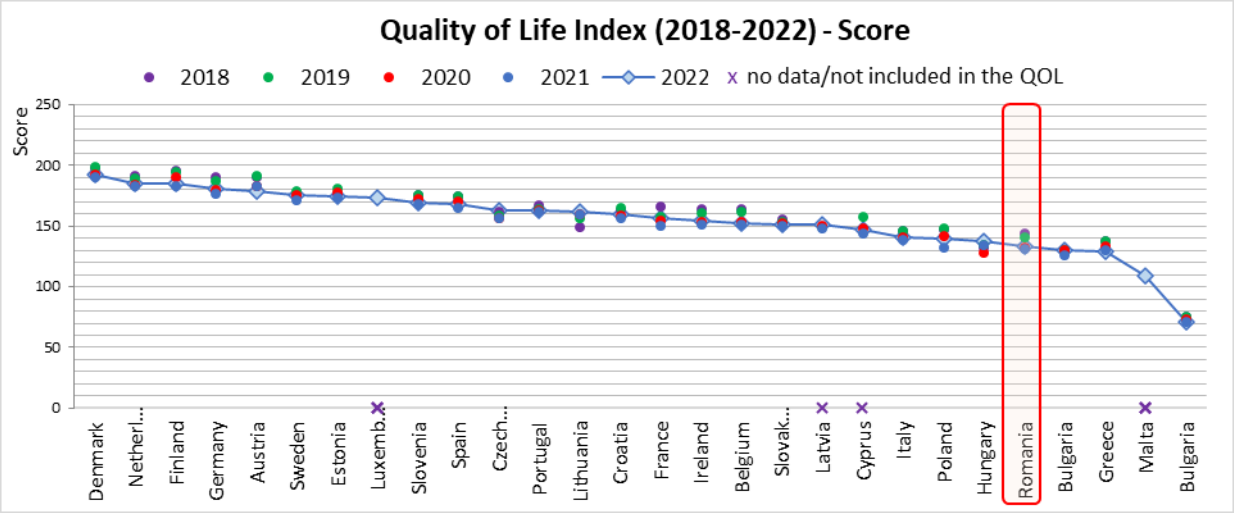

Figure no. 5. Quality of Life Index (2018-2022)

Source: own contribution based on data available on the Numbeo website

From 2018 to 2022, Romania has placed in the bottom 5 countries in the European Union, followed by either Greece, Hungary, Bulgaria (2018 and 2019), only Bulgaria and Hungary (2020), Greece and Bulgaria (2021 and 2022), on the last place out of EU-27 being Malta in 2022 (when in was included in the analysis). Difference between highest ranked country and Romania varied between 47 points (in 2021) and as much as 54.70 points (in 2019), whereas average QOL score for EU Member States included in the Numbeo analyses ranged between 156.57 (in 2021) and 164.93 (in 2018). In the QOL worldwide top, Romania's rank showed a negative development, dropping by 19 positions between 2017 and 2022 (from 33rd out of 60 analyzed countries to 42nd out of 87, respectively).

Quality of Life scale of the WHOQOL

WHOQOL is a self-rated scale analysis instrument developed by the World Health Organization Quality of Life (WHOQOL) Group, to help countries or organizations assess quality of life assessment as an attempt to develop a comparative tool to be applicable cross-culturally. WHOQOL is a methodological instrument and not an index. World Health Organization Quality of Life Instruments (WHOQOL-BREF) is an abbreviated generic Quality of Life scale of the WHOQOL-100 and comprises of 26 items in four domains: physical (raw score range: 7-35), psychological (raw score range: 6-30), social relationships (raw score range: 3-15) and environment (raw score range: 8-40). WHOQOL is therefore used to provide data for research proposes, and albeit relatively simple instrument, can be used to acquire specific information covering a multitude of life aspects satisfaction. For Europe, EUROSTAT compiles several indicators to measure quality of life, divided into 9 categories as follows: material living conditions, productivity or other main activity, health, education, leisure and social interactions, economic security and physical safety, governance and basic rights, natural and living environment, overall experience of life. Under the latter, we have chosen the Life satisfaction sub-category, dataset "Average rating of satisfaction", with comparative data from 2013, 2018 and 2021, and for: overall life satisfaction values, total (male and females), aged 16 and over. The unit of measure is the average of all individuals' ratings on a scale from 0 ("not satisfied at all") to 10 ("fully satisfied").

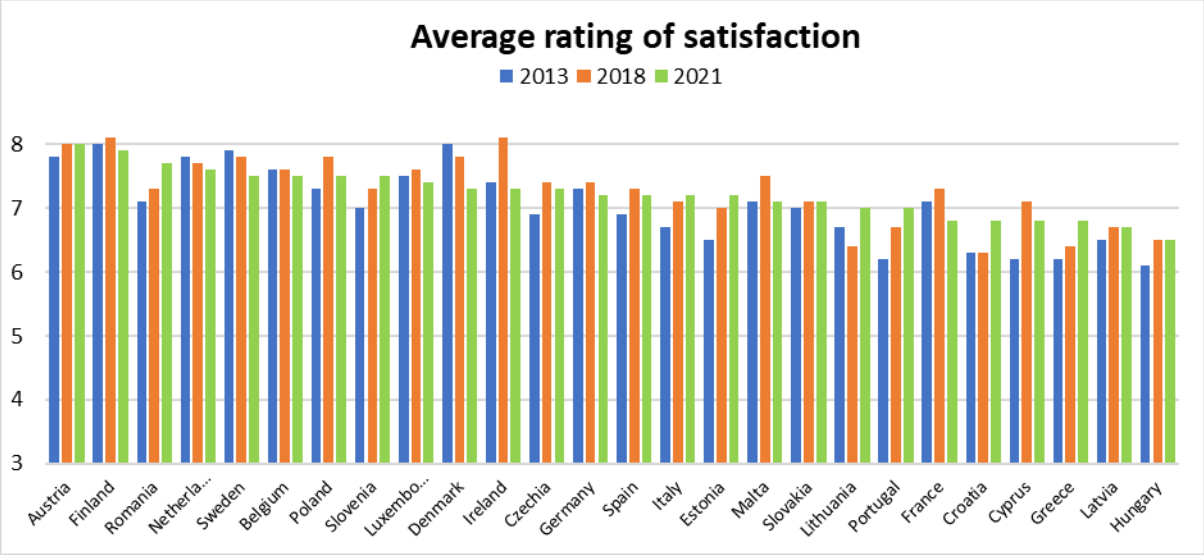

Figure no. 6. Average rating of satisfaction (2013, 2018, 2021)
Source: own contribution based on data available on the Eurostat website

Average rating of satisfaction in the European Union ranged between 7.0 (in 2013) to 7.3 (in 2018), slightly decreasing to 7.2 (in 2021). Romania placed really close to the EU average, with a score of 7.1 (2013), 7.3 (2018) and up to 7.7 in 2021, placing it on the 3rd place being outnumbered only by Austria (8.0) and Finland (7.9). By education level, average rating of satisfaction was higher for people with tertiary education (with an average at the level of EU-27 increasing from 7.49 in 2013 to 7.71 in 2018 and down to 7.58 in 2021, whereas Romanian residents with the same level of education had an even higher ration of satisfaction (placing Romania on top in 2021, with the highest rating of all EU Member States - 8.4). By comparison, EU residents with levels 0-2 of education (less than primary, primary and lower secondary education) had an average rating of satisfaction of less than 7.0 (6.59-2013; 6.75-2018; 6.76-2021). People with upper secondary and post-secondary non-tertiary education (levels 3 and 4) have also a lower rating of satisfaction (6.99-2013, 7.23-2018, 7.15-2021), while in Romania for the same category, the rating ranges between 7.3 and 7.8. Overall and by each and every education levels (ISCED, 2011), Bulgaria has the lowest rating of satisfaction amongst all EU Member States, with ratings across all education levels and all three years of analysis being by 16%-30% lower than EU-27 average.

3. CONCLUSIONS

Since education is an important lever of economic and social development, constituting a necessary condition for effective economic and social integration, the right to education is closely linked to economic rights, being a main vector of development and the achievement of other sustainable development objectives. Determining accumulations indispensable for sustained development, education and investments in education, in human capital, through the knowledge and skills acquired by individuals, have a positive influence not only on personal development, on the quality of life, but also on the general development of society. For these reasons, the society that succeeds in structuring a good education system and ensuring the widest possible access of its population to the various levels of the system will progress faster, both due to scientific results and due to the human quality of its members. We would like to see Romania advance from the last position in Europe, something that did not happen this year, despite the progress registered by our country in all three categories of analyzed indicators.

The analysis reveals that the effects of educational attainment on quality of life are multidimensional (spanning life domains) and often reciprocal (conditioning and domain-conditioned) in nature.

Since education is an important lever of economic and social development, constituting a necessary condition for effective economic and social integration, the right to education is closely linked to economic rights, being a main vector of development and the achievement of other sustainable development objectives. Determining accumulations indispensable for sustained development, education and investments in education, in human capital, through the knowledge and skills acquired by individuals, have a positive influence not only on personal development, on the quality of life, but also on the general development of society. For these reasons, the society that succeeds in structuring a good education system and ensuring the widest possible access of its population to the various levels of the system will progress faster, both due to scientific results and due to the human quality of its members. We would like to see Romania advance from the last position in Europe, something that did not happen this year, despite the progress registered by our country in all three categories of analyzed indicators.

The analysis reveals that the effects of educational attainment on quality of life are multidimensional (spanning life domains) and often reciprocal (conditioning and domain-conditioned) in nature.

BIBLIOGRAPHY

1. Babina, S.I., Sadovnikov, I. I. (2018), *Vestnik Kemerovskogo gosudarstvennogo universiteta*, https://doi.org/10.21603/2500-3372-2018-3-69-74
2. Barreto Torres, L.D., Asmus, G.F., da Cal Seixas, S.R. (2019), *Quality of Life and Sustainable Development*. In: Leal Filho, W. (eds) Encyclopedia of Sustainability in Higher Education. Springer, Cham. https://doi.org/10.1007/978-3-319-63951-2_26-1
3. Bejinaru, R., Hapenciuc, C. V., Condratov, I. and Stanciu, P. (2018), *The University Role in Developing the Human Capital for a Sustainable Bioeconomy,* Amfiteatru Economic, 20(49), pp. 583-598. http://doi.org/10.24818/EA/2018/49/583
4. Bejinaru, R., Hapenciuc, C. V., (2016), *Valorization of the learning organization's principles in the business Higher Educational System (HES),* Opportunities and Risks in the Contemporary Business Environment, 600.
5. Becker, G. (1964), *Human Capital*, (N.Y.: Columbia University Press.
6. Costanza, R. et al (2006), *Quality of life: an approach integrating opportunities, human needs, and subjective well-being*, Ecological Economics, 61(2-3), 267-276. https://doi.org/10.1016/j.ecolecon.2006.02.023

7. Diener, E. (2006), *Guidelines for national indicators of subjective well-being and ill-being*, Applied Research in Quality of Life, 1(2), 151–157.
8. Fukuda, S., Murakami, M., Noda, K., Oki, T. (2016), *How Achieving the Millennium Development Goals Increases Subjective Well-Being in Developing Nations,* Sustainability 8, 189. https://doi.org/10.3390/su8020189
9. Helliwell, J. F., (2008), *Life Satisfaction and Quality of Development*, working paper 14507, National Bureau of Economic Research, Cambridge.
10. Ionescu, D. D., Ionescu A. M., Jaba, E. (2013), *The Investments in Education and Quality of Life,* Journal of Knowledge Management, Economics and Information Technology, Special Issue.
11. Khan, H., Williams, J. B., (2006), *Poverty Alleviation through Access to Education: Can E-Learning Deliver?,* Working Paper No. 002/2006.
12. Kamp, I., Leidelmeijer, K., Marsman, G., & de Hollander, A. (2003), *Urban environmental quality and human well-being: Towards a conceptual framework and demarcation of concepts; a literature study*.
13. Makarova, L., Tkach, E., Kudryavtseva, I., Seliverstova, A. and Vinogradova, N. (2021), *Life quality and human capital within reproduction system: regional aspect*, SHS Web Conf., 110, https://doi.org/10.1051/shsconf/202111002005
14. Millennium Ecosystem Assessment (2005), *Ecosystems and Human Well-being: Synthesis*, Island Press, Washington, DC Reports of Subjective Well-Being: Judgmental 9–30.
15. Mincer, J. (1994). Working Paper of the NBER.
16. Minayo, M. C. de S., Hartz, Z. M. de A., & Buss, P. M. (2000), *Qualidade de vida e saúde: um debate necessário,* Ciência & Saúde Coletiva, 5(Ciênc. saúde coletiva, 2000 5(1)), 7–18. https://doi.org/10.1590/S1413-81232000000100002
17. Oreopoulos, P., (2007), *Do dropouts drop out too soon? Wealth, health and happiness from compulsory schooling*, Journal of Public Economics, vol. 91(11-12), December 2007
18. Pacione, M. (2003). *Urban environmental quality and human wellbeing—a social geographical perspective,* Landscape and Urban Planning, 65(1), 19-30.
19. Pfeifer, A., (2007), *Good Practices in Basic Education in Latin America*, OECD Conference, Istanbul, Turkey.
20. Platis-Iordache, M. (2020), *Strategy for Well-Being in Universities: A Romanian Higher Education Approach, Sustainability 2020,* 12(19), 8243. https://doi.org/10.3390/su12198243
21. Rojas, M. (2010), *The Measurement of economic performance and social progress report and quality of life: Moving forward*. Social Indicators Research. https://doi.org/10.1007/s11205-010-9737-x
22. Salvaris, M., Burke, T., Pidgeon, J., & Kelman, S. (2000), *Social benchmarks and indicators for Victoria. Technical report*. Melbourne: Institute for Social Research, Swinburne University of Technology.
23. Shultz, T. (1968), *Human Capital in the International Encyclopedia of the Social Sciences*.
24. Stiglitz, J. E., Sen, A. K., Fitoussi, J.P., *Report by the Commission on the Measurement of Economic Performance and Social Progress*, https://www.economie.gouv.fr/files/finances/presse/dossiers_de_presse/090914mesure_perf_eco_progres_social/synthese_ang.pdf
25. Ulengin, B., Ulengin, F., & Guvenc, U. (2001), *A multidimensional approach to urban quality of life: The case of Istanbul*. European Journal of Operational Research, 130(2), 361–374.

26. Wiesli Thea Xenia, Liebe Ulf, Hammer Thomas, Bar Roger (2021), *Sustainable Quality of Life: A Conceptualization That Integrates the Views of Inhabitants of Swiss Rural Regions*, Sustainability 2021, 13, 9187. https://doi.org/10.3390/su13169187
27. Yuan, L. L., Yuen, B., & Low, C. (1999), *Urban quality of life: Critical issues and options*. Singapore: Singapore University Press.
28. https://www.mdpi.com/journal/sustainability [accessed at 19.02.2023]
29. https://hdr.undp.org/data-center/human-development-index#/indicies/HDI [accessed at 20.02.2023]
30. https://www.numbeo.com/quality-of-life/rankings_by_country.jsp?title=2018 [accessed at 20.02.2023]
31. https://worldpopulationreview.com/country-rankings/standard-of-living-by-country [accessed at 20.02.2023]
32. https://scireproject.com/outcome/world-health-organization-quality-of-life-bref-whoqol-bref/ [accessed at 20.02.2023]
33. https://ec.europa.eu/eurostat/web/quality-of-life/data/database [accessed at 21.02.2023]
34. https://ec.europa.eu/eurostat/web/quality-of-life/data/database [accessed at 23.02.2023]
35. https://ec.europa.eu/eurostat/databrowser/view/ilc_pw01$DV_528/default/table?lang=en [accessed at 24.02.2023]
36. ISCED 2011
37. http://www.epi.org/publication/book_smart_money/ [accessed at 24.02.2023].