

DOES STATISTICAL MANAGEMENT OF WELL-BEING INFLUENCE THE STATE OF HAPPINESS IN ROMANIA COMPARED TO EU COUNTRIES?

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ABSTRACT

High levels of quality of life are a defining characteristic of developed countries, where populations experience well-being and report increased satisfaction in specific areas such as health, education, and safety, as well as overall life satisfaction. A comprehensive understanding of the factors that contribute to well-being can lead to the development of targeted programs and initiatives that directly enhance citizens' lives. Improved access to education and healthcare services can increase life expectancy and happiness, while enhanced safety and income levels can reduce stress and social inequalities. Population well-being is closely linked to productivity and economic stability, as a healthy and happy populace tends to be more productive and contributes more effectively to the national economy. This research aims to analyze the disparities in well-being indicators between Romania and other EU countries by examining factors such as average income, life expectancy, health, happiness, and satisfaction with education. Using statistical analysis of data from global databases such as Eurostat, WHO, and OECD, the study will highlight cultural and socioeconomic inequalities over a four-year period. The goal is to provide a comprehensive assessment of the strengths and weaknesses of each national system, supporting the formulation of recommendations to improve public policies and enhance the quality of life for Romanians.

KEYWORDS: *education, happiness, income, welfare management, well-being.*

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1. INTRODUCTION

The evaluation of human development has shifted during the past 20 years to emphasize quantitative results, particularly in terms of economic performance. The development perspective, justification, and metrics have evolved over time. In contemporary times, development encompasses not only economic performance but also population growth and quality of life. As a result, development encompasses both economic growth and the welfare of the local populace. The primary objective of development is to increase the population's well-being, and raising economic growth is one way to achieve this. Economic growth must translate into tangible benefits for people's lives, particularly through higher living standards, better healthcare, and improved education. Significant disparities in the standard of human development among various categories and groups lead to inequality and can result in deprivation for both individuals and future generations. The social context, personal circumstances, and external environments in which individuals live all significantly influence how people perceive their quality of life. Macro factors that impact quality of life and define the specific circumstances of an individual's life include financial resources, political systems, employment features, and health and education systems (Precupețu, 2024). In this context,

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it is crucial to analyze the population's self-perceived health indicator to understand the relationship between subjective health beliefs and information. This measure considers an individual's physical condition, their access to high-quality care, preventive services, and the extent of health education and information available to them. The shift from using purely economic measures like GDP to focusing on the "happiness economy" highlights how socio-economic inequalities, public trust, health outcomes, and environmental factors significantly influence happiness, particularly in Eastern Europe (Agrawal et al., 2024).

Socio-economic factors such as income inequality, employment, and access to education and healthcare have a profound effect on happiness and well-being in Eastern European countries, illustrating key differences in life satisfaction and overall well-being (Baláková et al., 2023).

The transition from centrally planned to market economies in Eastern Europe has affected happiness, revealing disparities in indicators like life satisfaction, income, and healthcare, as well as ongoing socio-economic challenges in the region (Hayo, 2007).

In the context of the provided research, the research question can be framed as follows:

"How does the statistical management of well-being in Romania compare to that of other EU countries, particularly in terms of health, education, income, and happiness, and how do these disparities affect the overall state of happiness and quality of life in Romania?"

This question addresses the core elements of the study, focusing on the statistical management of well-being and comparing Romania with other EU member states. By analyzing key well-being indicators such as health, education, and income, the research aims to highlight disparities and propose recommendations for improving the quality of life in Romania.

2. WELFARE MANAGEMENT - A VECTOR OF HAPPINESS?

In the context of globalization and increasing social complexity, the concept of well-being has become essential for the development of public policies. Welfare management is a complex and multidimensional concept involving various policies and strategies aimed at improving people's quality of life. The multifaceted nature of well-being directly influences the quality of life and happiness of individuals.

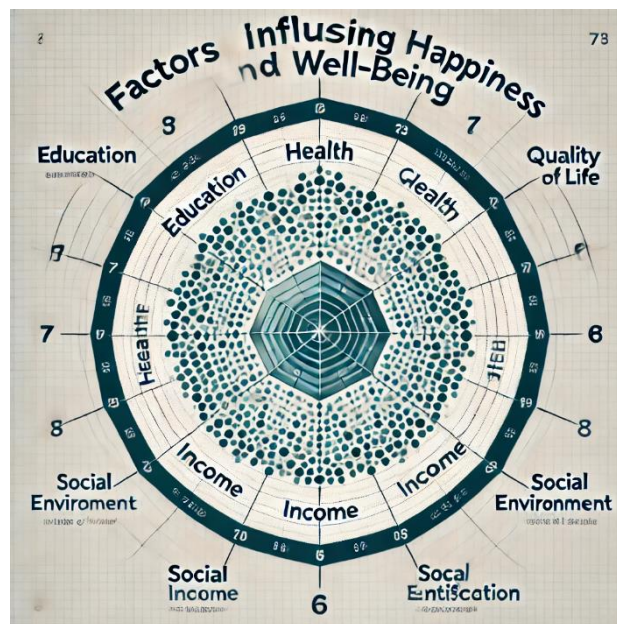


Figure 1. Factors Driving Happiness and Well-Being

Source: Author's compilation

Access to quality healthcare, disease prevention, and an effective health system contribute significantly to individual and collective happiness. Studies show a strong correlation between health and happiness; healthy individuals tend to be happier and more productive. Diener and Chan (2011) emphasize that "happy people live longer and are healthier, which contributes to increased longevity." Educational satisfaction is another important indicator of well-being. Education not only provides knowledge and skills but also forms the basis for better economic and social opportunities. Quality education contributes to personal development and a sense of fulfillment, both of which are essential for long-term happiness. Helliwell argues that education positively impacts happiness, not only by increasing income but also by improving overall well-being and life satisfaction (Helliwell et al., 2020).

Life expectancy is an indicator that reflects the general health and well-being of a population. Countries with higher life expectancy tend to offer better health services, better education, and a safer environment, all of which contribute to the happiness of their citizens. The OECD (2020) emphasizes that life expectancy is an aggregate indicator of well-being and quality of life, reflecting the success of public policies in health and social protection.

Happiness, as measured by various surveys and studies, is often considered a goal of welfare policies. Public policies that succeed in increasing the happiness of the population are those that improve health, education, safety, and economic opportunities. There is evidence that happiness depends not only on material factors but also on social relations and a sense of belonging to the community. Easterlin (2001) argues that happiness depends not only on income but also on social relations and a sense of belonging, emphasizing the importance of non-material factors.

Gross national income per capita is an economic indicator that reflects the level of material well-being. Although it is not the only factor contributing to happiness, sufficient income allows access to education, health, and other essential services. An equitable distribution of income contributes to reducing inequality and thus increasing overall happiness. Wilkinson et al. (2009) argue that a more egalitarian society tends to be happier because reduced inequality contributes to social cohesion and community stability.

Taking all these factors into account and applying a general well-being approach is essential for sustainable development and long-term prosperity.

3. RESEARCH METHODOLOGY

Given the choice of the research topic "Does the statistical management of well-being influence the state of happiness in Romania compared to EU countries?", we opted for the exploratory research method, using secondary data. This method involves utilizing pre-existing data previously collected by various entities and available in publications, reports, and databases. For this analysis, the primary data source is the Eurostat database, which provides relevant indicators such as the Human Development Index, Life Expectancy, Educational Attainment, and Average Income. The document highlights that the statistical methods and the use of secondary data were specifically chosen to directly address the research questions regarding well-being in Romania compared to other EU countries. These methods enable a detailed analysis of relevant indicators such as health, education, income, and happiness, thus offering a solid foundation for evaluating disparities and similarities across different national systems. By using internationally recognized sources like Eurostat, WHO, and OECD, the data ensures relevance and accuracy, helping to effectively respond to each of the research hypotheses.

Additionally, the bibliometric analysis enhances the contextualization of the research within the academic field, facilitating the identification of significant contributions in the well-being literature. These approaches were selected not only to provide a comprehensive view of well-being but also to directly address the core research questions, offering robust statistical evidence that supports the conclusions and policy recommendations proposed.

Thus, the methods align with the study's objectives, ensuring that each research question is systematically explored and that the analysis leads to well-founded recommendations for improving quality of life in Romania.

The adopted methodology includes several essential steps:

- Identification and collection of relevant data from the specified source.
- Assessment of the quality and validity of these data.
- Processing the data to answer the research questions.

Secondary data downloaded from the Eurostat database are particularly valuable due to their timeliness and adherence to research standards in the field, thus allowing for a rigorous and well-grounded analysis of population well-being. By using this methodology, the research aims to provide relevant and well-documented findings on the well-being of the Romanian population in the EU context.

To gain a comprehensive understanding of the topic under investigation, we chose to conduct a bibliometric analysis, which focuses on the quantitative examination of scientific publications for statistical insights. Bibliometrics is a research method that involves inventorying publishing activities at the national or institutional level and is used for comparative analysis of academic field productivity. Additionally, bibliographic data can provide benchmarks for scientific and technical concerns, as longitudinal studies of academic interest can help identify areas of research that are developing or declining. Scientometric indicators are also important for analyzing scientific research (Volovici et. al., 2015).

The analysis was carried out using information obtained by querying the existing database on the Web of Science platform, which contains information on scientific journals, papers, books, and more. For the quantitative analysis of scientific interest in organizational identity in the digital age, we used the software product VOSviewer (version 1.16.20), developed by Nees Jan van Eck and Ludo Waltman at the Centre for Science and Technology Studies at Leiden University. VOSviewer is used extensively in science and research to analyze relationships between scientific papers, keywords, authors, and other entities in the scientific literature. It is a tool that facilitates big data analysis.

VOSviewer allows for the creation of maps that graphically represent the links between the most frequently occurring words in the filtered documents on the Web of Science platform. These maps are based on articles, publications, books, or citations related to scientific documents existing in the Web of Science database, following the download of a ".ris" file extension from the platform.

The aim of this research is to compare the level of well-being of the Romanian population with that of the European Union by analyzing key indicators to identify differences and similarities in the quality of life.

The proposed objectives will offer a comprehensive understanding of the well-being of Romanians and will highlight differences and similarities with the European average, while also identifying strengths and weaknesses. The specific objectives are:

O1: Assess health status by analyzing life expectancy and identifying the factors contributing to differences between Romania and other European Union countries.

O2: Evaluate the level of happiness by analyzing the population's educational attainment to understand how education influences satisfaction and well-being.

The research aims to address the following questions:

- What are the major differences in well-being levels between Romania and other EU member countries?
- What are the regional variations in health status, life expectancy, and happiness within Romania, and how do these compare with the European average?
- How do education and health impact the level of well-being in Romania relative to EU countries?
- How is the happiness of the Romanian population measured, and how does it compare with that of other European countries, considering factors such as income and overall life satisfaction?

Research Hypotheses

Main Hypothesis: There are significant differences in the level of well-being between Romania and the European Union, with Romania experiencing a lower level of well-being.

Specific Hypotheses:

H1: Life expectancy in Romania is lower than the EU average, negatively impacted by limited access to healthcare services and socio-economic factors. According to a report by the European Observatory on Health Systems and Policies, Romania's life expectancy ranks among the lowest in the EU, with significant disparities linked to education levels and healthcare access (Poças et al., 2020). Research indicates that socio-economic inequalities substantially affect health and longevity, with notable differences between various socio-economic groups (Corsini, 2015).

H2: The level of satisfaction with education in Romania is below the EU average, due to issues related to the quality of the education system. Challenges such as inadequate resources and systemic problems contribute to lower satisfaction levels compared to other EU countries (Public Health, 2023).

H3: The happiness of the Romanian population may be influenced by socio-economic factors such as education, health, and safety. Studies on quality of life demonstrate a strong correlation between education levels, self-perceived health, and overall happiness (Poças et al., 2020).

4. RESULTS AND DISCUSSION

The results presented in this section are derived from the analysis of statistical and bibliometric indicators, highlighting key trends and correlations essential for a deeper academic understanding of the research topic in relation to the existing body of literature.

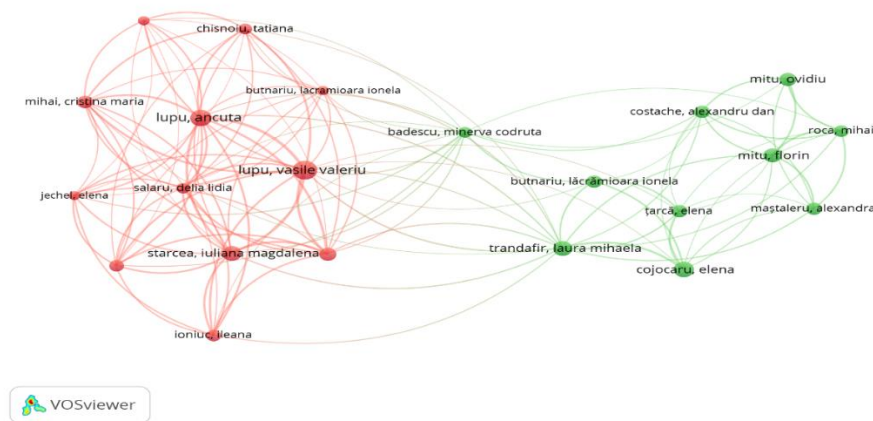


Figure 2. Map of relevant authors in the research

Source: Conceptualization by VosViewer

The map presented above highlights the key contributors in the researched field, showcasing their collaborations and influence. The prominent authors identified through the keyword search "quality of life, well-being population, Romania, and Europe" are Lupu Vasile Valeriu, Lupu Ancuța, Cojocaru Elena, Trandafir Laura Mihaela, and Starcea Iuliana Magdalena. On the map, nodes represent these authors, with node size reflecting their level of influence and productivity, as indicated by the number of papers published and cited.

Lines connecting the nodes depict co-authorship relationships, illustrating the frequency of collaborations between authors. This visualization, shown in Fig. 2, offers a clear view of the network of influence and collaboration among leading scholars in the field.

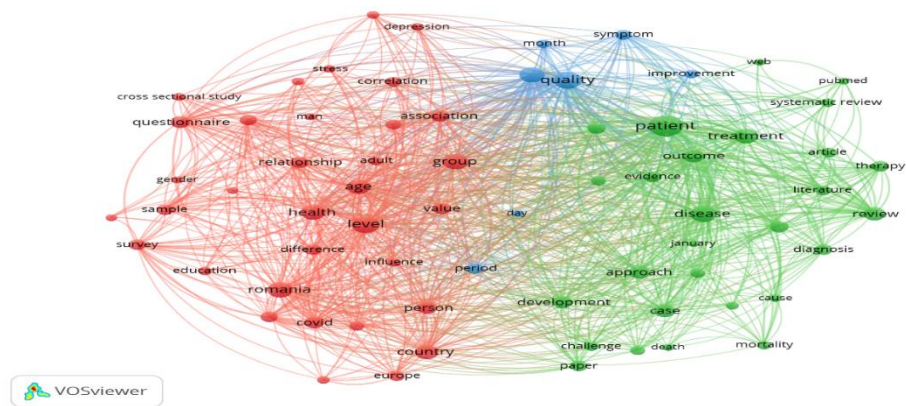


Figure 3. Map of predominant words in the analysis of thematic articles
Source: Conceptualization by VosViewer

The analysis of relevant keywords in the thematic research reveals key trends in the literature. By examining terms such as "quality," "Romania," "patient," "health," "level," "education," "value," "Europe," and "development," several significant interconnections and topics of interest emerge. The term "quality" stands out as a central issue, highlighting the focus on improving standards and practices across various domains. The inclusion of "Romania" suggests a specific interest in the country's situation and development within different contexts, while "level" and "health" point to efforts aimed at assessing and enhancing overall population well-being. This analysis provides a comprehensive overview of the main research concerns and thematic focuses in the field.

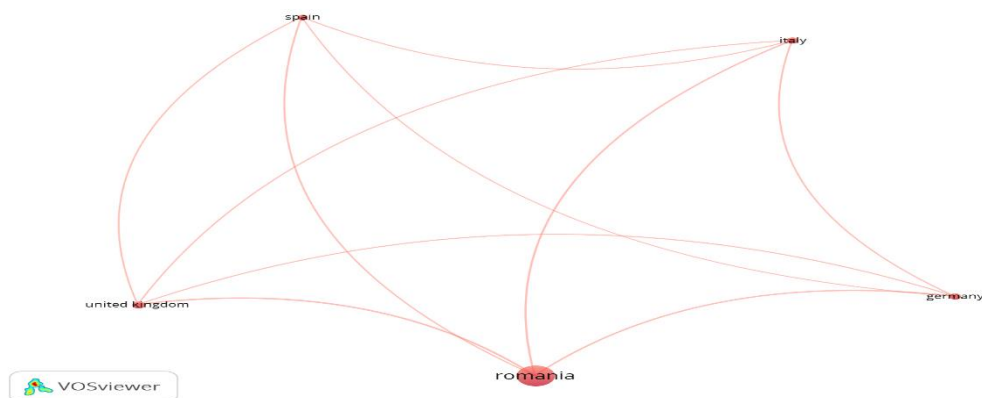


Figure 4. Map of interactions between countries
Source: Conceptualization by VosViewer

Map No. 4 highlights Romania as the central node, underscoring its prominent importance and influence in the thematic area. Secondary nodes include the UK, Germany, Italy, and Spain, which interact with Romania, facilitating the exchange of ideas and collaboration. This map visually represents the network of international cooperation and connections among these countries.

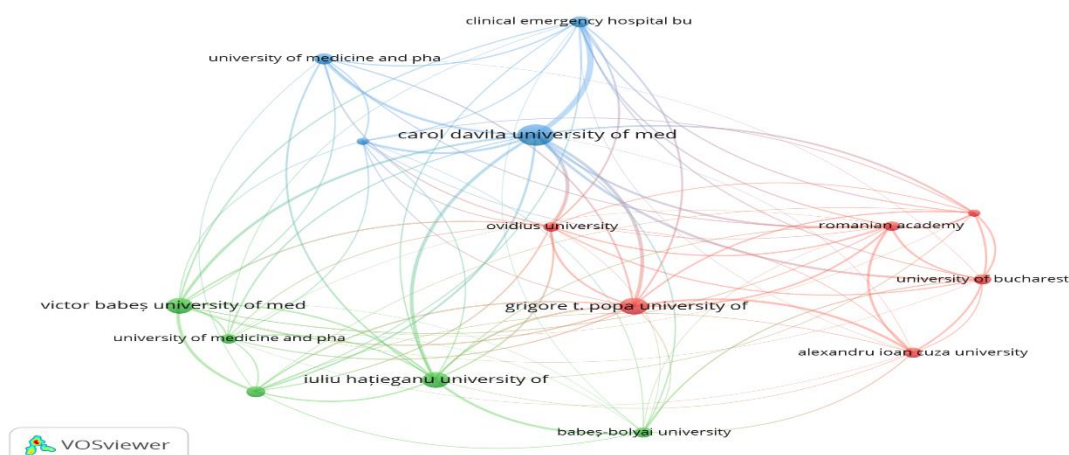


Figure 5. Map of institutional collaboration
 Source: Conceptualization by VosViewer

Figure No. 5 of institutional collaboration offers a comprehensive view of partnerships among key institutions, including Carol Davila University of Medicine, Grigore T. Popa University of Medicine, the Romanian Academy, and the University of Bucharest. This map illustrates the exchange of knowledge and highlights the significant contributions these institutions make to academic and scientific advancement in the field, particularly within Romania.

The VosViewer analysis has provided a clear depiction of collaborative networks and dominant research themes. These visualizations reveal key relationships, central concepts, and primary concerns related to population well-being, significantly advancing our understanding and promoting academic and scientific collaboration. To gain a deeper insight into the quality and impact of this research, it is essential to transition to an analysis based on specific indicators. This approach allows for a detailed examination of research performance and individual contributions using criteria such as the Human Development Index (HDI), life expectancy, education, income, and happiness levels. By shifting from a quantitative to a qualitative assessment through these relevant indicators, we can identify critical issues driving knowledge advancement and its practical application, ensuring a comprehensive perspective on the field under study.

Analysis of the Human Development Index (HDI) in European Union Countries

The HDI is a composite measure that assesses average achievement across three fundamental dimensions of human development: a long and healthy life, access to knowledge, and a decent standard of living.

Table 1. EU Human Development Index

Human Development Index(HDI)					
Countries	2022	2021	2020	2019	2018
Austria	0.926	0.920	0.916	0.920	0.917
Belgium	0.942	0.938	0.930	0.936	0.933
Bulgaria	0.799	0.796	0.802	0.813	0.811
Croatia	0.878	0.867	0.860	0.866	0.860
Cyprus	0.907	0.901	0.900	0.901	0.896
Czechia	0.895	0.891	0.891	0.896	0.893
Denmark	0.952	0.947	0.946	0.946	0.942
Estonia	0.899	0.890	0.891	0.893	0.890
Finland	0.942	0.941	0.939	0.939	0.936

Human Development Index(HDI)					
Countries	2022	2021	2020	2019	2018
France	0.910	0.906	0.900	0.905	0.903
Germany	0.950	0.948	0.948	0.951	0.946
Greece	0.893	0.887	0.887	0.890	0.886
Hungary	0.851	0.846	0.849	0.849	0.854
Ireland	0.950	0.946	0.945	0.942	0.938
Italy	0.906	0.899	0.892	0.899	0.894
Latvia	0.879	0.865	0.873	0.873	0.868
Lithuania	0.879	0.875	0.880	0.886	0.882
Luxembourg	0.927	0.927	0.921	0.925	0.921
Malta	0.915	0.912	0.901	0.905	0.903
Netherlands	0.946	0.941	0.938	0.941	0.939
Poland	0.881	0.876	0.874	0.880	0.876
Portugal	0.874	0.965	0.861	0.864	0.858
Romania	0.827	0.825	0.828	0.834	0.829
Slovakia	0.855	0.852	0.860	0.863	0.860
Slovenia	0.926	0.916	0.910	0.918	0.916
Spain	0.911	0.904	0.894	0.899	0.896
Sweden	0.952	0.949	0.944	0.947	0.943

Source: own elaboration based on United Nations Development Programme. (n.d.b)

According to the table 1, Sweden and Denmark exhibit the highest Human Development Index (HDI) values in the European Union for 2022, both at 0.952. This high ranking is attributed to their well-established health and education systems and high living standards. Other countries with notable HDI values include Belgium, Finland, Ireland, and the Netherlands, which benefit from robust education policies, strong economic growth, and comprehensive social infrastructures.

Conversely, Romania and Hungary have lower HDI values (Romania - 0.827, Hungary - 0.851), reflecting challenges in their health and education sectors. Bulgaria has the lowest HDI value at 0.799, due to limited access to healthcare and educational services and lower living standards.

The HDI trends over the past four years (2018-2022) indicate ongoing investments in health, education, and social policies in countries with high HDI values. In Sweden and Denmark, advancements in innovation and technology have significantly enhanced the efficiency of services. Romania and Hungary, while still facing challenges, have made strides in improving access to education and healthcare. Bulgaria, however, requires substantial reforms to address inequality and invest in economic development to improve its HDI standing.

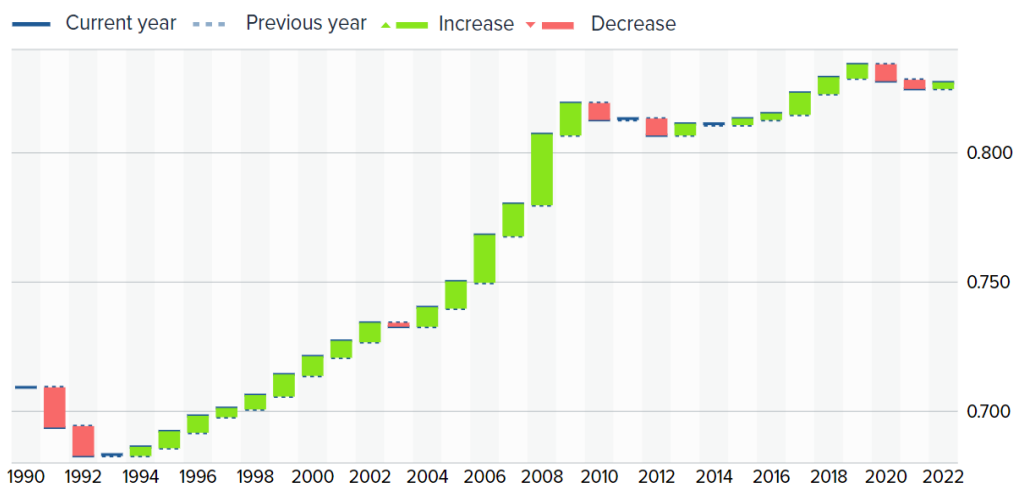


Figure 6. HDI evolution – Romania

Source: own elaboration based on United Nations Development Programme. (n.d.b)

According to Figure 6, Romania's HDI value for 2022 is 0.827, placing the country in the "Very High Human Development" category, and ranking it 53rd out of 193 countries and territories. From 1990 to 2022, Romania's HDI increased from 0.709 to 0.827, representing a 16.6% improvement. During this period, Romania's life expectancy at birth rose by 4.4 years, estimated years of schooling increased by 2.0 years, and average years of schooling grew by 2.9 years. Additionally, Romania's Gross National Income (GNI) per capita saw a substantial increase of approximately 136.8% between 1990 and 2022.

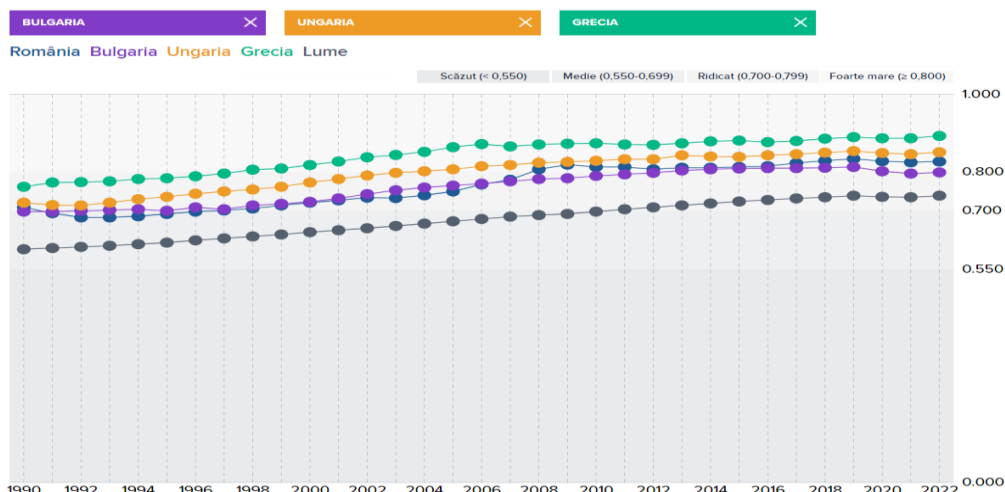


Figure 7. Comparison of HDI between Romania, Bulgaria, Hungary and Greece

Source: authors from United Nations Development Programme. (n.d.a)

In 2022, Romania's HDI (0.827) is higher than Bulgaria's (0.799), but lower than Hungary and Greece. This reflects differences in life expectancy, education and living standards between these countries. Romania performed better than Bulgaria due to higher investment in social and economic infrastructure, but is below Hungary and Greece, which benefit from a more stable business climate and higher quality of life. Hungary and Greece have higher levels of innovation and research, which has allowed them to grow at a faster pace and provide opportunities for their citizens.

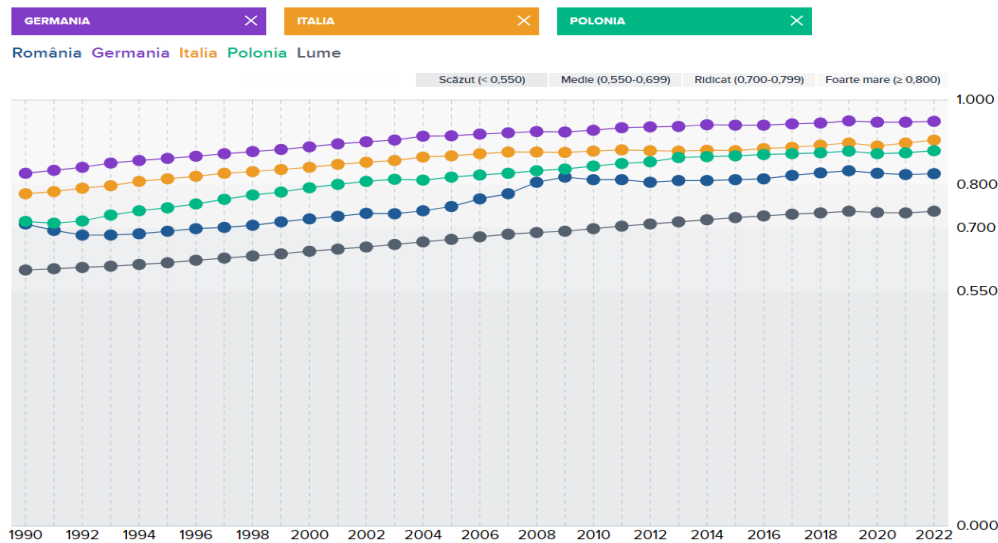


Figure 8. Comparison of HDI between Romania, Germany, Italy and Poland
Source: authors based on United Nations Development Programme. (n.d.)

Based on the HDI trends depicted in Figure 8, Romania's HDI lags those of Germany, Italy, and Poland, revealing notable disparities in human development among these European countries. Germany and Italy significantly surpass Romania, benefiting from advanced healthcare and education systems as well as higher living standards. Although Poland's HDI is closer to Romania's, it is still higher at 0.881, indicating positive social and economic progress. These differences suggest that Romania could benefit from adopting policies and practices employed by Germany, Italy, and Poland. This comparison supports the confirmation of Hypothesis 1 (H1).

The Evolution of Life Expectancy in EU Member States: Focus on Romania's Perception

Life expectancy is a key indicator reflecting the health status and quality of life within a population. It is influenced by various factors including access to healthcare services, socio-economic conditions, lifestyle, environment, and genetic factors. This measure is widely used in public health planning and evaluation, providing valuable insights for comparing development levels across regions and monitoring progress in public health.

In 2023, Spain leads with the highest life expectancy at 84 years, followed closely by Malta at 83.6 years and Sweden at 83.4 years. These high figures are attributed to efficient healthcare systems, a strong emphasis on preventive care, easy access to quality medical services, and overall healthy lifestyles coupled with high dietary and environmental standards.

Conversely, Bulgaria and Romania report some of the lowest life expectancies in the EU, at 75.8 and 76.6 years respectively. These lower levels are likely influenced by limited access to healthcare, less healthy lifestyles, lower educational attainment, and income disparities, as well as broader socio-economic challenges including economic instability.

To improve life expectancy, comprehensive strategies are needed. These should address healthcare system enhancements, lifestyle modifications, better living conditions, and educational improvements to foster long-term health and well-being for the population.

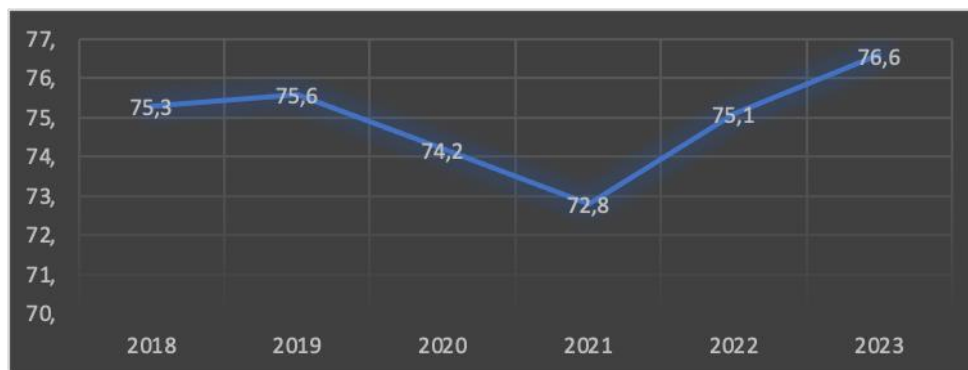


Figure 9. The evolution of life expectancy in Romania in the period 2018-2023
 Source: authors based on Monitor Social (2023)

Between 2018 and 2023, Romania experienced some fluctuations in life expectancy. In 2018, life expectancy was 75.3 years, but it declined to 72.8 years in 2021, reaching a low point for this period. However, by 2023, life expectancy had risen to 76.6 years, although it still falls below the European average of 81.5 years. Despite these annual variations, the overall trend indicates a gradual improvement in life expectancy in Romania over these years.

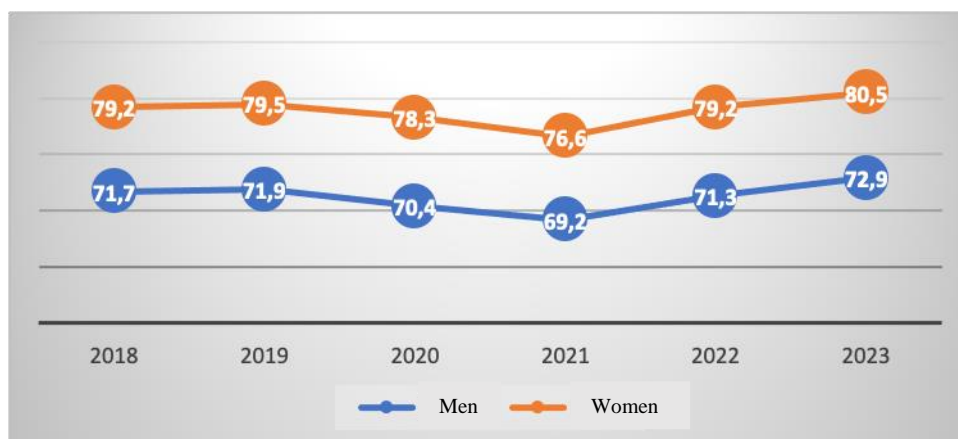


Figure 10. Evolution of life expectancy in Romania by gender, 2018-2023
 Source: authors based on Monitor Social (2023)

The evolution of life expectancy in Romania reveals significant gender disparities. In 2023, women had a life expectancy of 80.5 years, compared to 72.9 years for men. This gap in life expectancy has been consistent throughout the analyzed period. The lowest figures were recorded in 2021, with women having a life expectancy of 76.6 years and men 69.2 years.

These differences can be attributed to a combination of biological and behavioral factors, variations in access to healthcare services, and the differing impacts of diseases and environmental factors on men and women.

Educational Levels of the Population in EU Member States

Table 3. Educational Attainment in EU Member States (2018-2023)

	2018	2019	2020	2021	2022	2023
Countries						
Hungary	21,7	22,5	23,6	25,4	25,5	25,7
Malta	24,7	27,0	28,2	29,6	29,4	30,5
Netherlands	33,0	34,8	36,6	37,5	38,8	38,4

	2018	2019	2020	2021	2022	2023
Countries						
Austria	30,1	31,1	31,3	31,8	32,5	33,6
Poland	27,2	28,6	29,3	29,4	30,0	33,2
Portugal	22,5	23,8	24,8	26,0	26,7	27,2
Romania	15,5	16,0	16,2	16,4	17,1	16,1
Slovenia	28,7	29,3	31,5	35,4	35,1	29,8
Slovakia	22,0	23,1	23,9	24,7	26,0	25,8
Finland	37,3	38,5	39,8	35,5	35,9	35,7
Sweden	37,1	37,8	38,3	39,6	41,1	41,9

Source: authors from Eurostat (2024c)

According to the data Table 3, Romania exhibits the lowest educational attainment among EU countries, with only 16.1% in 2023 and a peak of 17.1% in 2022. In contrast, Sweden and the Netherlands report significantly higher levels of educational attainment, at 41.9% and 38.4% respectively. These disparities are attributable to several factors. In Romania, chronic underfunding of the education system limits resources available to schools and universities, negatively impacting educational quality. Additionally, inconsistent education policies and delays in necessary reforms exacerbate these challenges. Inequities in access to education, particularly in rural areas and among marginalized groups, combined with inadequate educational infrastructure, further hinder progress. Conversely, Sweden and the Netherlands make substantial investments in education, including substantial budgets for infrastructure improvements and teacher training. These countries benefit from well-structured education policies aligned with labor market needs, equitable access to education, and modern educational facilities. Furthermore, robust economies and competitive labor markets in Sweden and the Netherlands drive high demand for educated professionals, encouraging higher levels of educational attainment.

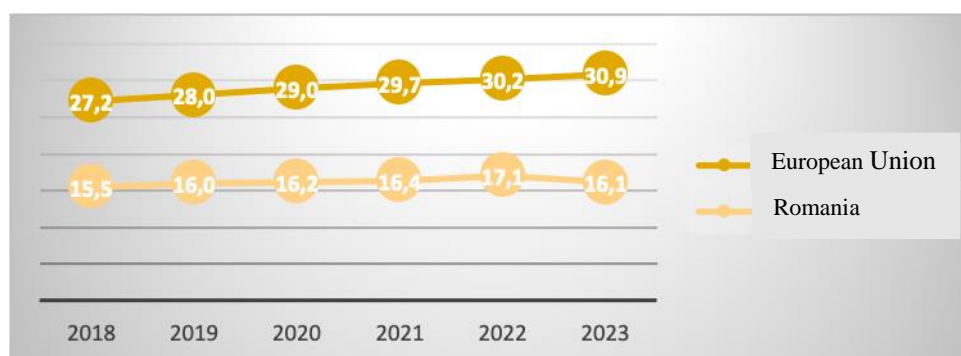


Figure 11. Educational attainment in Romania compared to the EU average

Source: authors from Eurostat (2024c)

With an educational attainment rate of just 16.1%, Romania falls significantly short of the EU average of 30.9%. This substantial gap highlights the urgent need for increased investment in educational infrastructure, ongoing teacher training, and the development of innovative educational programs. Additionally, addressing disparities in access to education, particularly in rural areas and among disadvantaged groups, is crucial for promoting equal opportunities. By committing to these improvements and investing in the education system, Romania can enhance its standing within the EU and cultivate a more educated and competitive workforce for the future. This confirms H2.

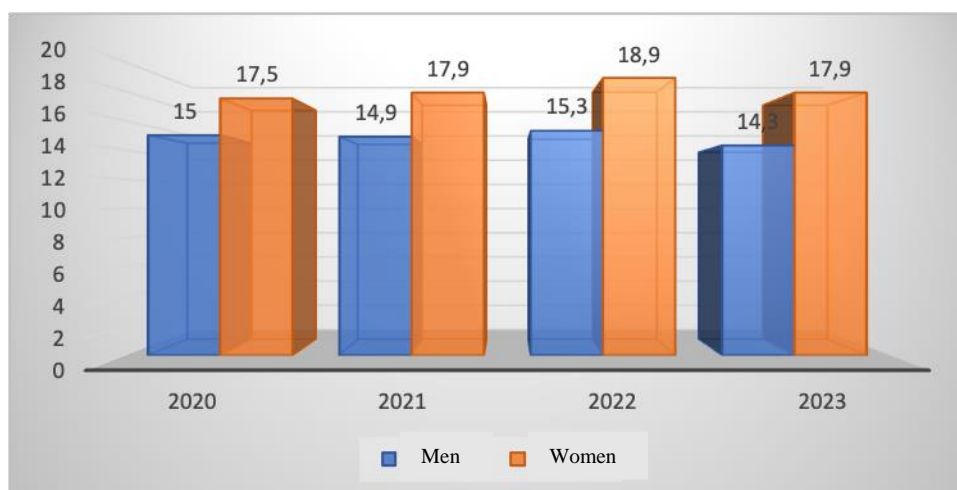


Figure 12. Educational attainment in Romania by gender
 Source: authors based on Eurostat (2024c)

In Romania, educational attainment among females decreased from 18.9% in 2022 to 17.9% in 2023, while for males, it fell from 15.3% to 14.3% during the same period. Despite both genders experiencing a 1 percentage point decline, females continue to surpass males in educational attainment, maintaining a consistent gap of 3.6% throughout these years. This indicates that, although there is a slight overall decline in educational attainment, women in Romania still achieve higher levels of education than men, with the gender disparity remaining relatively stable.

Participation rates in education and training in Romania and EU Member States

Table 4. Participation rates in education and training in the EU 2019-2023

	2019	2020	2021	2022	2023
Countries					
European Union - 27 countries (from 2020)	16,9	15,4	16,9	17,9	18,8
Belgium	15,5	15,0	17,9	18,2	18,9
Bulgaria	7,7	7,2	7,9	7,6	7,7
Czechia	13,6	11,3	11,7	14,9	16,2
Denmark	31,1	26,4	28,5	33,1	35,3
Germany	14,9	14,5	14,2	14,6	14,6
Estonia	24,1	21,4	23,0	25,6	27,7
Ireland	19,0	17,6	20,5	18,6	19,0
Greece	10,6	10,6	10,2	9,9	9,5
Spain	16,4	16,9	20,4	21,2	21,9
France	25,4	19,6	17,7	19,8	21,2
Croatia	9,4	9,2	10,9	10,2	12,6
Italy	13,5	12,5	15,1	15,2	17,2
Cyprus	10,2	8,9	13,5	14,5	14,8
Latvia	13,0	12,0	13,9	14,8	16,1
Lithuania	13,8	13,7	13,9	14,1	15,7
Luxembourg	24,7	22,8	23,9	24,9	22,3

Source: authors based on Eurostat (2024c)

The data on participation rates in education and training across EU member countries in 2023 reveal notable disparities. Denmark leads with a high participation rate of 35.3%, reflecting its strong

commitment to lifelong learning and professional development. Estonia also reports a relatively high rate of 27.7%, highlighting the effectiveness of its education policies and training initiatives. In contrast, Bulgaria and Greece exhibit much lower participation rates of 7.7% and 9.5%, respectively, pointing to significant challenges in accessing education and training in these nations.

Education systems that foster high levels of participation in education and training are crucial for economic and social advancement. By investing in human capital and promoting continuous learning, countries can enhance their resilience and competitiveness, paving the way for more dynamic and prosperous societies.

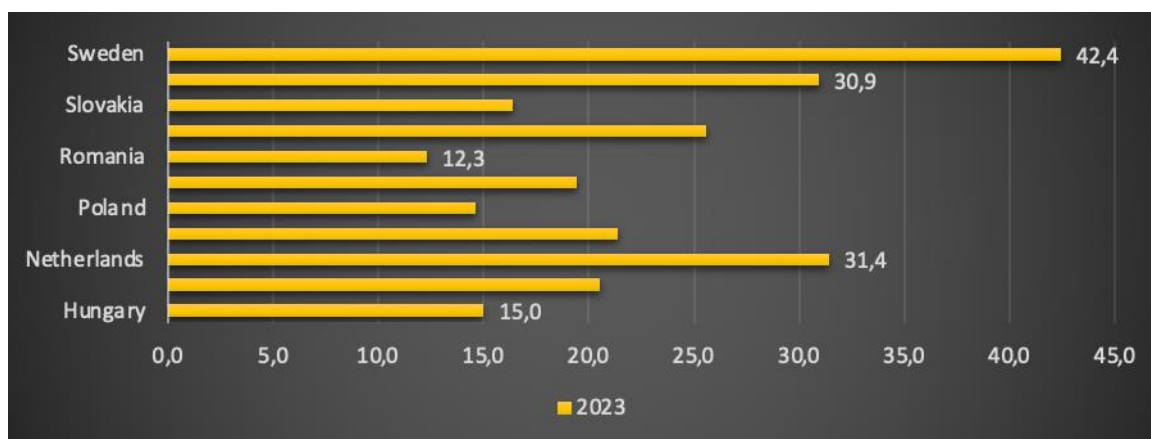


Figure 13. Participation rates in education and training in the EU - 2023

Source: authors from Eurostat (2024c)

Table 5. The level of the participation rate in education and training in the EU in the period 2019-2023

	2019	2020	2021	2022	2023
Countries					
Hungary	11,4	10,5	11,4	13,3	15,0
Malta	16,4	15,6	18,3	16,8	20,5
Netherlands	27,0	26,6	33,7	33,4	31,4
Austria	19,3	16,7	19,2	20,1	21,4
Poland	10,9	10,0	11,5	13,7	14,6
Portugal	16,5	16,3	19,0	19,9	19,4
Romania	7,0	6,7	10,3	11,2	12,3
Slovenia	17,1	14,7	25,5	28,5	25,6
Slovakia	9,9	9,0	10,9	18,5	16,4
Finland	33,1	31,3	34,7	30,0	30,9
Sweden	38,6	33,2	38,9	39,9	42,4

Source: authors based on Eurostat (2024c)

Data on participation rates in education and training across the European Union for 2023 reveal considerable variation among Member States. Romania, with a rate of 12.3%, ranks just above Bulgaria, which has the lowest rate. In contrast, Sweden leads with the highest participation rate of 42.4%. Over the period from 2019 to 2023, many countries have experienced fluctuations in their participation rates, reflecting shifts in education policies and adjustments to economic conditions. These variations highlight the urgent need to address disparities in access to education and training across Europe. Tailored, country-specific education policies are crucial for fostering sustainable

economic and social development. High participation rates in education and training are vital for the development of human capital and long-term economic growth, as they drive innovation, productivity, and competitiveness on a global scale. Therefore, Member States should prioritize investment in continuing education and training, recognizing their profound impact on societal well-being and progress.

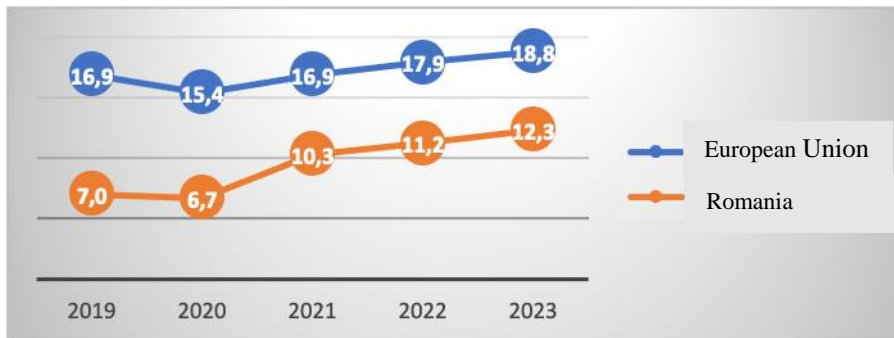


Figure 14. Evolution of the participation rate in education in Romania compared to the European average

Source: authors from Eurostat (2024c)

Between 2019 and 2023, Romania experienced a notable increase in participation rates in education and training, rising from 7% to 12.3%. This growth reflects the country's ongoing efforts to enhance access to continuing education and training. However, there was a marked decrease in 2020, largely attributed to the COVID-19 pandemic, which led to the closure of educational institutions. Despite this setback, the overall trend indicates progress. Nonetheless, Romania's participation rate remains below the European average, which grew from 16.9% in 2019 to 18.8% in 2023. This disparity underscores the need for continued efforts to align with European standards in education and training, aiming to develop a skilled and adaptable workforce that can enhance income levels and overall well-being.

Average income is a crucial economic indicator that reflects the average per capita income across Member States of the European Union. It is used to evaluate the standard of living and economic prosperity of citizens in different EU countries. The variation in average income among Member States is influenced by factors such as economic development, productivity, employment rates, and tax policies.

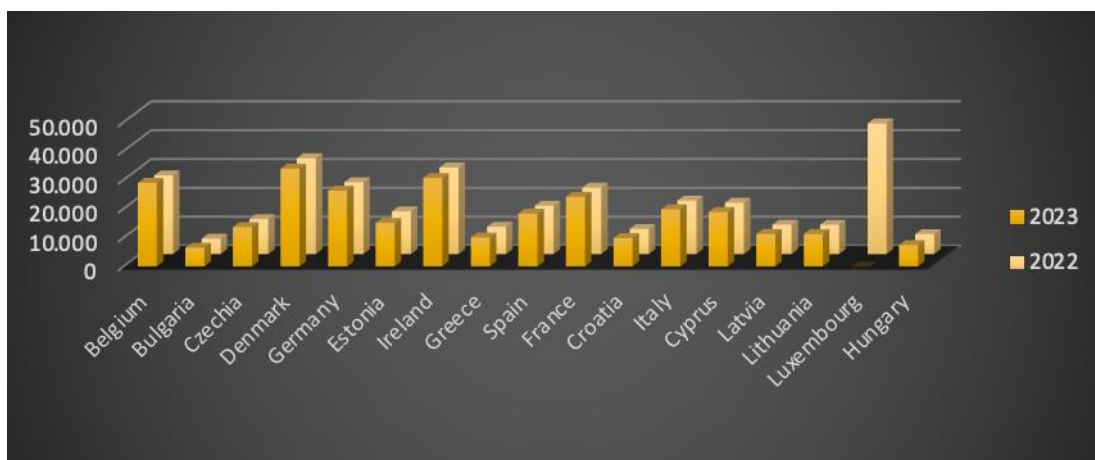


Figure 15. Average income level in EU Member States

Source: authors from Eurostat (2024b)

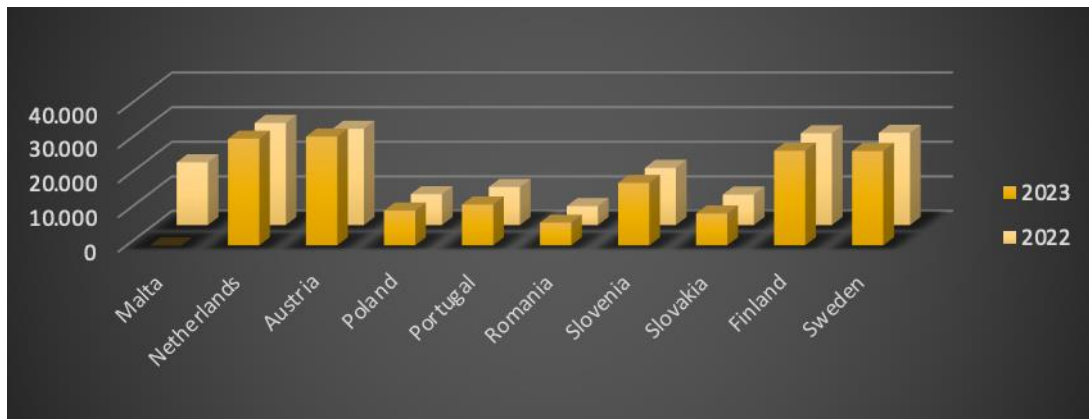


Figure 16. Average income level in EU Member States

Source: authors based on Eurostat (2024b)

The data presented in Charts 15 and 16 reveal a general increase in average income in 2023 compared to 2022, indicating a positive trend in the economies of the analyzed countries. Denmark leads with the highest average income of €33,903, followed by Austria at €31,443. In contrast, Bulgaria and Romania report the lowest average incomes at €6,523 and €6,568, respectively. These disparities highlight significant economic differences among EU Member States and may be influenced by various factors, including the level of economic development, tax policies, education, and the labor market.

Additional factors affecting average income include employment rates, the degree of urbanization, the economic structure, and each country's social policies. Understanding these elements is crucial for addressing economic inequalities and fostering balanced economic growth within the EU.

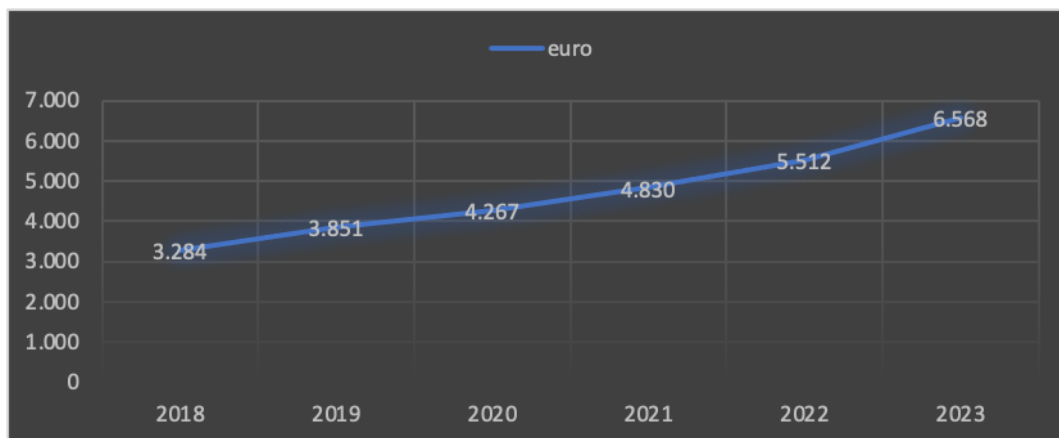


Figure 17. Evolution of average income in Romania, 2018-2023

Source: authors based on Eurostat (2024b)

The analysis of average income in Romania from 2018 to 2023 reveals a notable upward trend. In 2018, Romania's average income was €3,284, placing it among the lowest in the European Union. By 2023, this figure had increased significantly to €6,568, though it remains below the European average. This growth can be attributed to various factors, including economic development and foreign investment.

The "Happiness Level" or "Happiness Index" measures subjective well-being, reflecting how satisfied and happy individuals feel with their lives based on surveys. This index considers multiple factors such as income, financial security, physical and mental health, social relationships, job satisfaction, personal freedom, and safety. Governments and international organizations use this indicator to shape

public policies and evaluate quality of life, facilitating both research and international comparisons. The Global Happiness Index, featured in the World Happiness Report, offers valuable insights into the well-being of populations across different countries, highlighting effective practices and policies.

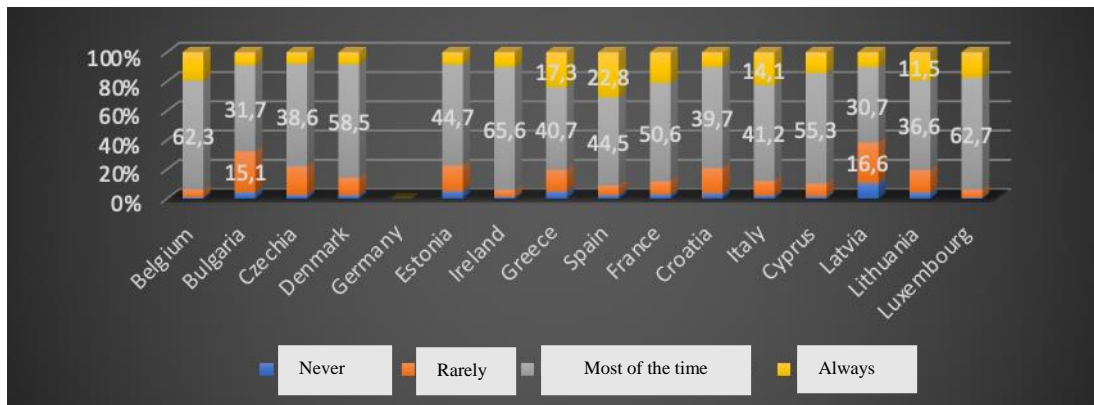


Figure 18. Happiness levels of people in EU member countries

Source: authors from Eurostat (2024a)

Analyzing happiness levels across EU Member States reveals notable variations in how people perceive and experience their well-being. In countries such as Ireland, Luxembourg, Belgium, and Denmark, a high percentage of respondents reported feeling happy or satisfied "most of the time," indicating a generally positive outlook on life. Similarly, the high proportion of respondents in France who answered "always" suggests a very favorable view of their happiness and satisfaction.

Conversely, Latvia and Bulgaria exhibit lower percentages for the response "most of the time," indicating fewer people who consistently feel happy or satisfied. This disparity may be influenced by country-specific socio-economic and cultural factors. For instance, in Bulgaria, the relatively high percentage of respondents who answered "rarely" could reflect ongoing socio-economic challenges or lower living standards.

It is important to recognize that happiness and satisfaction are subjective experiences shaped by a multitude of factors, including economic conditions, quality of life, and social and cultural relations.

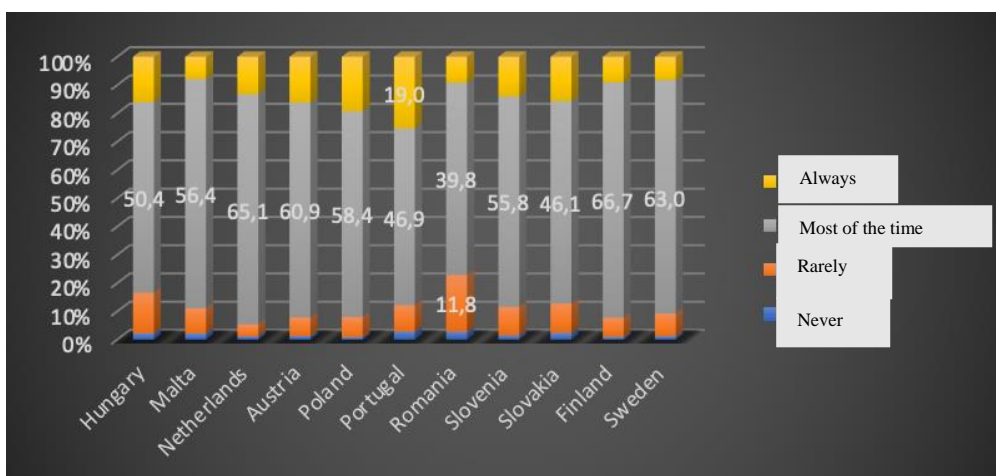


Figure 19. Happiness levels of people in EU countries

Source: authors based on Eurostat (2024a)

In countries like Ireland, the Netherlands, and Sweden, the high percentages of respondents who reported feeling happy and satisfied "most of the time" suggest a generally high level of well-being.

This positive outlook is likely influenced by favorable socio-economic conditions, robust infrastructure, well-developed health and education systems, and a high standard of living.

In Romania, 39.8% of respondents reported feeling happy and satisfied "most of the time," indicating that a significant portion of the population experiences a reasonable level of contentment. However, the relatively high percentage of those who answered "rarely" (11.8%) points to notable dissatisfaction or concerns among some segments of the population. This disparity could be attributed to various challenges facing the country, such as economic issues, social inequalities, or deficiencies in public services.

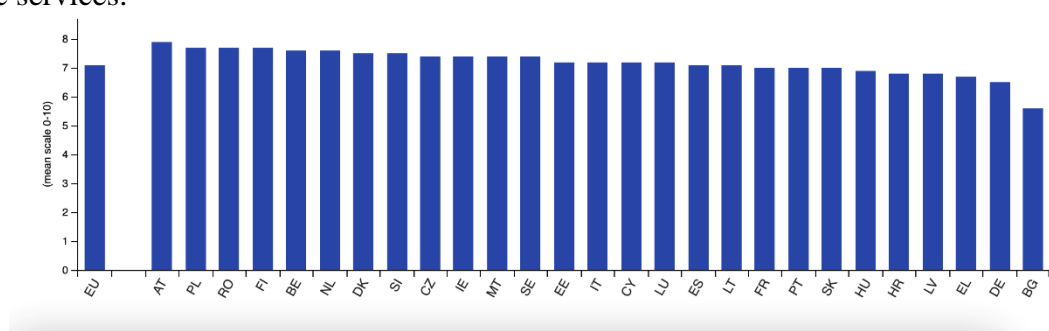


Figure 20. Overall life satisfaction, 2023

Source: authors from Eurostat (2024a)

In 2023, as illustrated in Figure 20, the average life satisfaction rating across the European Union was 7.1 out of 10. Austria emerged as the happiest country with a satisfaction score of 7.9, followed by Finland, Poland, and Romania, each scoring 7.7. Conversely, Bulgaria recorded the lowest score at 5.6, while Germany also fell below the EU average with a score of 6.5.

The comparative analysis of well-being indicators between Romania and other EU Member States reveals both progress and ongoing challenges. Romania has made notable strides in education and health, evidenced by increased access to these services. However, it continues to lag behind many EU countries. While average income is rising, socio-economic disparities remain, and happiness levels underscore the complex social and economic issues facing the nation. Despite these hurdles, Romania's ongoing development and reform efforts offer promise for closing the well-being gap with its EU counterparts.

To further enhance well-being, Romania must address socio-economic and regional inequalities, bolster public infrastructure and services, and foster sustainable economic growth. Addressing corruption, improving governance, and strengthening the rule of law are crucial for creating an environment conducive to investment and long-term development. By tackling these challenges comprehensively and committing to continuous reform and progress, Romania can improve its position within the European Union and elevate the well-being and quality of life for all its citizens. In interpreting the results, directly referencing each hypothesis strengthens the coherence of the narrative.

For **H1**, the results confirm that life expectancy in Romania is indeed below the EU average and is negatively impacted by **limited access to healthcare services** and **socio-economic factors**. Data from Eurostat clearly show that Romania has one of the lowest life expectancies in the EU, with significant disparities linked to socio-economic inequalities such as education levels and healthcare access, thus confirming the hypothesis that these factors substantially affect health and longevity.

Regarding **H2**, the analysis of education satisfaction data reveals that Romania's satisfaction levels are below the EU average, due to issues such as **the quality of the education system**. Inadequate resources and systemic challenges confirm this hypothesis, as demonstrated by reports that highlight Romania's underperformance in education compared to other EU countries.

For **H3**, the results confirm a strong correlation between **socio-economic factors** such as education, health, and safety, and the **happiness of the Romanian population**. Studies on quality of life show

that higher education levels and self-perceived health significantly contribute to overall happiness, supporting the hypothesis that these factors are critical to the well-being of the population.

5. CONCLUSIONS

The comparative analysis of well-being among the Romanian population and other EU Member States offers valuable insights into both progress and disparities in this domain. While Romania lags the European average in several well-being indicators, it is evident that improvements are occurring, albeit at a slower pace. Despite increases in economic well-being, reported happiness levels in Romania have not mirrored this positive trend. This suggests that factors beyond economic performance, such as social relationships, health, and personal safety, play a crucial role in determining overall happiness.

Romania ranks lower in happiness and well-being indices compared to many EU countries. According to Eurostat data, Romania's levels of higher education and average income are lower compared to top-ranking countries like Denmark and Luxembourg. For instance, Austria, with a life satisfaction score of 7.9, ranks among the happiest EU nations, while Romania scores 7.7. This disparity highlights that Romania's lower income and education levels are significant factors contributing to its lower ranking in happiness.

To enhance overall well-being, Romania needs to focus on improving access to educational and health resources, reducing inequalities, and fostering collective values. An integrated and well-coordinated approach is essential for achieving higher levels of well-being and happiness. In Romania, collective values such as family and community have a profound impact on happiness, reflecting similar patterns observed in other Eastern European societies where social relationships are highly valued. Studies suggest that prioritizing time spent with family and friends can enhance happiness, even in the face of lower incomes.

Effective statistical well-being management involves ongoing monitoring and analysis of key indicators such as income, education, and health. By implementing targeted public policies aimed at improving these indicators, Romania can potentially enhance happiness levels. A multidimensional approach that incorporates not only economic metrics but also social and health aspects is crucial for positively influencing overall happiness in Romania.

A key innovation in this research is the application of **methodological triangulation**, integrating **bibliometric analysis**, quantitative data analysis, and a comprehensive review of the specialized literature. This scientific approach allows for a **multi-dimensional evaluation**, combining the rigorous assessment of scholarly publications with statistical data analysis and theoretical frameworks, thus providing a more robust and comprehensive understanding of well-being and happiness metrics in the studied context. For future research, it is recommended to conduct a more in-depth exploration of specific socio-economic factors, such as regional disparities within Romania or the impact of rural-urban differences on well-being. Additionally, applying this methodology to other Eastern European countries could provide broader insights into regional trends, facilitating a better understanding of shared challenges and solutions for improving well-being across the region.

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