

Geliş Tarihi / Received Date
05.07.2022

Kabul Tarihi / Accepted Date
04.11.2022

A General Assessment of Life Quality in Turkey and Several East European Countries During the COVID-19 Pandemic¹

COVID-19 Pandemisi Sırasında Türkiye ve Bazı Doğu Avrupa Ülkelerinde Yaşam Kalitesinin Genel Bir Değerlendirmesi

Yasemin ASLAN²

Orhan ZENGİN³

Abstract

The COVID-19 pandemic has deeply affected societies. The pandemic has rapidly spread throughout the world, causing illnesses and deaths. Furthermore, it has adversely affected individuals' economic status, social relationships, psychological situation, and health status. Most global epidemics are known to harm people's quality of life. The standard of living varies by country. Evaluating the quality of life in different countries during the pandemic could be important, especially for taking necessary precautions and proactive measures against future pandemics. This study aims to evaluate the quality of life of Hungary, Slovakia, Latvia, Poland, and Estonia in comparison with Turkey during the COVID-19 pandemic and to make recommendations to policymakers. The results of the "Living, Working and COVID-19 Survey" implemented by Eurofound in European countries at the beginning of the pandemic were compared between Hungary, Slovakia, Latvia, Poland, Estonia, and Turkey, and the economic, social, health, and psychological impact of the pandemic on societies was examined. It was found that the countries with the highest happiness mean scores were Latvia and Estonia, the countries with the lowest happiness mean scores were Turkey and Hungary, the countries with the highest mean satisfaction score were Estonia and Latvia, and the countries with the lowest mean satisfaction score were Turkey and Slovakia. It was also determined that the countries with the highest mean score of trust in the healthcare system and government institutions were Estonia and Latvia. The results of the study indicate that the factors affecting the quality of life of people during the pandemic differ between countries and that the countries with a high average of trust in government institutions and health systems also have high average scores of satisfaction and happiness. Policymakers need to have information about the factors affecting the quality of life of society to be prepared for pandemics.

Keywords: COVID-19, Quality of Life, Turkey, East European Countries, Pandemic

¹This article is the final version of the paper titled "Comparison of Quality of Life in Turkey and Estonia at the End of the First Phase of the COVID-19 Pandemic", which was presented as an oral presentation at the TÜSEB TUSPE International Health Policies Congress held online between May 25 and May 26, 2022 and the summary of which was published in the symposium proceedings summary book.

² Corresponding Author, Asst. Prof., Bandırma Onyedi Eylül University, Faculty of Health Sciences, Balıkesir/TÜRKİYE, E-mail: yaseminaslan@bandirma.edu.tr, ORCID ID: 0000-0001-6292-2332

³ Res. Asst. Marmara University, Faculty of Health Sciences, İstanbul/TÜRKİYE, E-mail: orhanzen@gmail.com, ORCID ID: 0000-0002-0701-6019



Öz

COVID-19 pandemisi toplumları derinden etkilemiştir. Pandemi dünyaya hızla yayılarak hastalıklara ve ölümlere neden olmuştur. Buna ek olarak COVID-19 pandemisi bireylerin ekonomik durumlarını, sosyal ilişkilerini, psikolojik durumlarını ve sağlık durumlarını olumsuz etkilemiştir. Çoğu küresel salgının yaşam kalitesini önemli ölçüde düşürdüğü bilinmektedir. Yaşam kalitesi ülkeler arasında farklılık gösterebilir. Pandeminin farklı ülkelerin yaşam kalitesi üzerindeki etkilerinin değerlendirilmesi, özellikle gelecekte yaşanma ihtimali bulunan pandemilere karşı gerekli koruyucu önlemlerin alınması açısından önemli olabilir. Bu çalışma, COVID-19 pandemisi sırasında Macaristan, Slovakya, Letonya, Polonya ve Estonya'nın yaşam kalitesini Türkiye ile karşılaştırmalı olarak değerlendirmeyi ve politika yapıcılara önerilerde bulunmayı amaçlamaktadır. Eurofound tarafından pandemi başlangıcında Avrupa ülkelerinde uygulanan "Yaşamak, Çalışmak ve COVID-19 Anketi"nin sonuçları Macaristan, Slovakya, Letonya, Polonya, Estonya ve Türkiye arasında karşılaştırılarak, toplumların pandemiden ekonomik, sosyal, sağlık ve psikolojik açıdan etkilenme düzeyleri incelenmiştir. Mutluluk puan ortalaması en yüksek ülkelerin Letonya ve Estonya, en düşük ülkelerin Türkiye ve Macaristan olduğu, memnuniyet puan ortalaması en yüksek ülkelerin benzer şekilde Estonya ve Letonya, en düşük ülkelerin Türkiye ve Slovakya olduğu tespit edilmiştir. Çalışmada sağlık sistemine ve devlet kurumlarına en yüksek güven puan ortalamasına sahip ülkelerin Estonya ve Letonya olduğu saptanmıştır. Çalışma sonuçları, pandemi döneminde halkın yaşam kalitesini etkileyen faktörlerin ülkeler arasında farklılık gösterdiğine işaret etmektedir. Çalışmada, devlet kurumuna ve sağlık sistemine güven puan ortalaması yüksek olan ülkelerin memnuniyet ve mutluluk puan ortalamalarının da yüksek olduğu dikkat çekmektedir. Politika yapıcıların pandemilere hazırlıklı olmak amacıyla toplumun yaşam kalitesini etkileyen faktörler hakkında bilgi sahibi olması önemlidir.

Anahtar Kelimeler: COVID-19, Yaşam Kalitesi, Türkiye, Doğu Avrupa Ülkeleri, Pandemi

Introduction

The coronavirus pandemic, which poses a potential threat to public health, first emerged in December 2019 in Wuhan, China's Hubei province (Ren et al., 2020: 1016). The first case in Europe reported on January 24, 2020, was from France and, had a history of traveling to China (Stoecklin et al., 2020: 2). The first COVID-19 case in Turkey was announced by the Ministry of Health on March 11, 2020 (Ministry of Health, 2020). Due to the spread of the virus around the World in a short time, it was declared a pandemic by the World Health Organization. The pandemic has affected societies around the World in different ways.

The pandemic has placed unprecedented pressure on societies and health systems around the World and has affected the quality of life of individuals. World Health Organization defines "Quality of Life" as an individual's perception of their position in life in the context of the culture and value systems in which they live and about their goals, expectations, standards, and concerns" (Ferreira et al., 2021: 1390-1391; WHO, 2020). Quality of life, which is one of the most important universal values that societies aim to achieve, covers a wide range of areas such as international progress, health, the environment, and politics (Streimikiene, 2015). The objective dimension of the quality of life is defined as individuals' living conditions such as physical health, income, quality of the house they live in, their

social roles, and physical activity status, and the subjective dimension is the satisfaction that individuals receive from these conditions (The WHOQOL Group, 1998) while the health-related dimension is defined as a multidimensional concept that refers to patients' subjective perception of the impact of their illness and treatment on physical, psychological and social aspects of daily life (Bottomley et al., 2019). As global life expectancy increases and people live longer, quality of life has become one of the most important indicators for modern societies (Lee et al., 2020: 1).

Quality of life is a multidimensional notion. Factors such as age, gender, education level, marital status, and income have a significant impact on quality of life. Studies show that being a woman, being older, having a low education level, and having a low-income level negatively affect the quality of life (Bakar, 2012: 41; Tamson et al., 2022: 1). In a study conducted by the World Health Organization, it was determined that men had higher quality of life scores than women (Lee et al., 2020: 3). In another study conducted in 28 member states of the European Union, men were found to have a better subjective quality of life than women (Arechavala ve Espina, 2019: 186). It has also been stated that there is a positive relationship between education level and quality of life, and the quality of life increases as the education level increases (Altuğ et al., 2009: 53; Campos et al., 2014: 1; Villas-Boas et al., 2019: 42).

The quality of life may differ between cultures and lifestyles. Studies show that the quality of life in Eastern European countries is lower than in Middle and Western European countries. When comparing the subjective well-being indicators in Latvia against the European Union average, it was found that the Latvians rated their well-being lower than the European Union countries in total both in 2016 and 2011 (Kristapsone & Bruna, 2019: 456). Pre-pandemic research showed that Estonia had a high quality of life compared to other Eastern European countries (Eurofound, 2017). In a study conducted by Knurowski et al. (2005), it was found that the health status and quality of life of elderly individuals living in rural areas of Poland were lower than those living in urban areas. According to Çağlar (2020), the quality of life in the provinces of western Turkey is higher than in the eastern provinces. In a study conducted in Slovakia in the pre-pandemic period, it was found that regions with improved economic and social opportunities had higher quality of life scores (Oláh et al., 2020: 10).

The COVID-19 pandemic has deeply affected societies. Oláh et al. (2020) stated that quality of life is affected by crises. The pandemic has adversely affected the economic status (Gössling et al., 2020: 6; Nicola et al., 2020: 186-190), social relations (Balanz' a-Martínez et al., 2020: 399), and health status (Choi et al., 2020: 4; Li et al., 2020: 1734) of individuals worldwide. It was determined that the quality of life of individuals decreased in this period (Park et al., 2021: 3-7; Samlani et al., 2020: 130). It is known that most global epidemics significantly reduce economic production and increase unemployment worldwide. The COVID-19 epidemic is recognized as the biggest health crisis since the Spanish flu in 1918 (Eurofound, 2020), together with global travel restrictions and curfews, it is the event that caused the most serious deterioration in the global economy since the Second World War (Gössling et al., 2020: 1). In this process, it was observed that the inability to find workers for some business lines and the interruption of production negatively affected employees and institutions (Tisdell, 2020: 22). In a study conducted in Slovakia, it was found that the unemployment rate increased faster during the pandemic (Svabova et al., 2021: 262). Especially low and middle-income countries needed technical and financial support during this period (Bedford et al., 2020: 1016). Income is an



important indicator of the quality of life, especially for young adults and older adults, and the higher the income level of individuals, the higher the subjective quality of life (Arechavala & Espina, 2019: 193; Kabasakal & Baş, 2013: 31). Income levels of some individuals have been substantially affected and some of them lost their jobs and their quality of life has been degraded dramatically (Arechavala & Espina, 2019: 193). Ivanova (2015) stated that Latvia is one of the lowest-income countries in the European Union compared to other countries. Nandori (2019) found that low income and unemployment were directly related to poverty and subjective well-being in Hungarian. The pandemic has affected the social life of communities as well as economic life.

There have been changes in the social lives of individuals during the pandemic. Humans are inherently social beings and need to interact with their environment to continue their existence. The COVID-19 pandemic has become a global threat to public health due to individual and societal fear, stress, and anxiety, and has affected the health-related quality of life of individuals (Tsamakis et al., 2020: 159-162). Accordingly, the role of social support becomes even more important, especially in cases of disability, pain, anxiety, and loss of income (Datta et al., 2017: 290).

The health status of individuals is another factor that affects the quality of life. Healthy societies are possible with healthy people. Belief in being individually healthy increases the subjective quality of life significantly (Arechavala & Espina, 2019: 192). Factors that pose a threat to the health of people negatively affect the quality of life. Campos et al. (2014) found that the quality of life of individuals with good health status was higher. Altuğ et al. (2020) found that the quality of life of the elderly with chronic diseases and low mobility was lower. Lee et al. (2020) stated that the quality of life of patients with comorbidities was lower during the pandemic. Zahra et al. (2020) found that health-related quality of life scores of single women during the pandemic were associated with depression, anxiety, and poor general health status. In a study conducted in Estonia, it was also stated that individuals' health-related quality of life decreased during the pandemic (Tamson et al., 2022: 6). In a study examining the health-related quality of life of individuals in the pre-pandemic period in Hungary, it was found that more than 60% of the population over 60 years of age suffered from pain or discomfort, and anxiety and depression had a high prevalence when compared to other developed countries (Szende and Németh, 2003: 1667). COVID-19 had serious psychological effects along with physical problems (Li et al., 2020: 1736). Additionally, restrictive precautions such as quarantine and isolation have negative effects on the daily lives of individuals (Altena et al., 2020: 1; Ammar et al., 2020: 13). In a study conducted in Hungary, it was determined that 34.1% of participants were depressed and 36.2% were anxious (Szabó et al., 2020: 1). Kralova et al. (2022) conducted an extensive study of a large population in Slovakia. They found that 19.32% of participants showed symptoms of anxiety and 24.65% showed depression. In another study conducted in Portugal, it was found that 7.6% of the participants had severe depression, 9.1% had severe anxiety, 9.3% had severe stress and 12.4% had severe obsessive-compulsive symptoms. Healthy lifestyles have been strongly recommended to prevent depression and improve quality of life during the COVID-19 pandemic (Nguyen et al., 2020: 14).

Evaluating the quality of life in different countries during the pandemic could be important, especially for taking necessary precautions and proactive measures against possible pandemics in the future. This

study aims to comparatively evaluate the effects of the COVID-19 pandemic on the quality of life of individuals living in Hungary, Slovakia, Latvia, Poland, Estonia, and Turkey and, accordingly, to make recommendations to policymakers based on the study results. Therefore, the genuine value of the study is high.

The main research questions of this paper are:

Has the COVID-19 Pandemic affected the societies' quality of life economically, socially, and psychologically?

Do the economic, social, and psychological effects of the pandemic differ between Turkey, Hungary, Slovakia, Latvia, Poland, and Estonia?

Method

Study design

The results of the "Living, Working and COVID-19 Survey" conducted online by Eurofound in April 2020 on volunteers over the age of 18 covering European countries, Hungary, Slovakia, Latvia, Poland, and Estonia were compared with Turkey. These nations were chosen for comparison because they have comparable rates of unemployment, gross domestic product shares devoted to health and per capita health spending, as well as social assistance to household income ratios and adult education levels (Table 1). In the study, satisfaction, happiness, trust in the government, trust in the country's health system, trust in the news media, trust in the police, trust in the European Union, optimism about the future, feelings of sadness and depression, losing one's job, economic situation, and health status were discussed as the quality of life variables. Ethical principles were taken into consideration during the data collection. This study was approved by the Istinye University Social and Human Sciences Research Ethics Committee (September 23, 2021/14).

Table 1: Country selection criteria*

Country	Share of GDP allocated to health (%)	Health expenditure per capita (\$)	Unemployment rate (%)	Ratio of social assistance to households in gross domestic product (%)	Adult education level (%)
Hungary	6.4	2222	3.5	10.7	25.9
Slovakia	6.9	2354	5.8	13.4	13.4
Latvia	6.8	1973	6.3	10.7	43.1
Poland	6.2	2230	3.3	15.4	32
Estonia	6.8	2579	4.4	11.5	41.4
Turkey	4.4	1337	13.7	9.7	19.7

*OECD (2019)

Participants

The sample of the study consists of the data from Hungary, Slovakia, Latvia, Poland, and Estonia, which includes the Eurofound data-set and the survey data applied to 364 volunteers in Turkey over the age of 18, at a 95% trust level and 5% margin of error. Survey participants were recruited using online snowball sampling methods and social media advertisements. The lower number of participants in Turkey compared to other countries was accepted as a limitation of the study.

Measurement

A questionnaire composed of four main sections - well-being, work and telework, living conditions and financial situation of Europeans, socio-demographic, and the household composition of the respondent - was developed, consisting of 34 questions. Most of the questions are based on Eurofound's European



Quality of Life Survey (EQLS) and European Working Conditions Survey (EWCS), while other questions are new or adapted from other sources, such as the EU Statistics on Income and Living Conditions (EU-SILC) (Eurofound, 2020). The questionnaire includes a range of questions relevant to people across various age groups and life situations. Expert opinions were taken and factor analyzes were conducted in the translation of the questionnaire into Turkish.

Analysis

Epi Info 7 statistical program was used in data analysis and statistical significance was evaluated at a $p < 0.05$ level. The conformity of the data to the normal distribution was examined by the One-Sample Kolmogorov-Smirnov Test, plotting the Histogram, skewness ($= < 3$), and kurtosis coefficients for multiple variables.

Results

The findings obtained within the scope of the study are given below. Table 2 shows the sociodemographic characteristics of the participants.

Table 2: Sociodemographic characteristics of the participants

Variables	Country							Total
	Turkey	Estonia	Hungary	Latvia	Poland	Slovakia		
Age	n	100	61	393	284	261	121	1220
	%	27.9	6.9	5.7	8.9	12.4	8.2	8.2
18-27	n	121	148	810	501	450	230	2260
	%	33.7	16.7	11.7	15.7	21.4	15.5	15.1
28-37	n	108	172	948	812	437	293	2770
	%	30.1	19.4	13.6	25.5	20.8	19.8	18.5
38-47	n	19	201	1613	780	375	370	3358
	%	5.3	22.7	23.2	24.5	17.8	25.0	22.4
48-57	n	10	212	2089	696	420	352	3779
	%	2.8	2.5	30.0	21.8	20.0	23.8	25.2
58-67	n	1	92	1099	113	162	115	1582
	%	0.3	10.4	15.8	3.5	7.7	7.8	10.6
68 and older	n	1	92	1099	113	162	115	1582
	%	0.3	10.4	15.8	3.5	7.7	7.8	10.6
Total	n	359	886	6952	3186	2105	1481	14969
	%	100	100	100	100	100	100	100
Education level								
Primary education	n	40	37	253	32	28	30	420
	%	11.3	4.4	3.9	1.1	1.5	2.2	3.0
Secondary education	n	70	272	2806	393	591	744	4876
	%	19.7	32.6	43.4	13.3	30.6	54.0	35.0
Tertiary education	n	245	526	3405	2527	1311	605	8619
	%	69.0	63.0	52.7	85.6	67.9	43.9	61.9
Total	n	355	835	6464	2952	1930	1379	13915
	%	100	100	100	100	100	100	100
Working status								
Employee	n	235	554	3164	2327	1116	802	8198
	%	64.6	63.2	45.8	73.7	53.6	54.2	55.1
Self-employed with employees	n	13	21	168	71	82	43	398
	%	3.6	2.4	2.4	2.2	3.9	2.9	2.7
	n	21	31	456	179	179	139	1005

Self-employed without employees	%	5.8	3.5	6.6	5,7	8.6	9.4	6.8
Unemployed	n	20	38	379	132	81	69	719
	%	5.5	4.3	5.5	4,2	3.9	4.7	4.8
Unable to work due to long-term illness or disability	n	0	41	153	48	44	4	331
	%	0.0	4.7	2.2	1,5	2.1	3.0	2.2
Retired	n	13	140	2223	229	355	276	3236
	%	3.6	16.0	32.2	7,3	17.1	18.6	21.8
Full-time homemaker / fulfilling domestic tasks	n	21	31	227	85	92	59	515
	%	5.8	3.5	3.3	2,7	4.4	4.0	3.5
Student	n	29	21	142	87	132	48	459
	%	8.0	2.4	2.1	2,8	6.3	3.2	3.1
Other	n	12	0	0	0	0	0	12
	%	3.3	0.0	0.0	0,0	0.0	0.0	0.1
Total	n	364	877	6912	3158	2081	1481	14873
	%	100	100	100	100	100	100	100

In general, it has been determined that 25.2% of the participants are between the ages of 58 and 67, 61.9% are higher education graduates, and 55.1% are working.

As a response to the first research question, the social and psychological findings are given in Table 3 and Table 4 below, respectively.

Table 3: Social effects of the pandemic (1 lowest, 10 highest)

Variables		Country					Total	
		Turkey	Estonia	Hungary	Latvia	Poland		Slovakia
Satisfaction status	n	364	883	6911	3165	2083	1469	14875
	Mean	5.44	6.44	5.86	6.36	6.18	5.85	6.04
	SD	2.18	2.07	2.21	2.20	2.27	2.35	2.23
	F	37.222						
	P	0.000						
Trust your country's government	n	364	871	6821	3155	2076	1467	14754
	Mean	3.91	6.13	3.21	5.10	2.50	4.98	3.88
	SD	2.75	2.55	2.93	2.50	2.36	2.95	2.95
	F	473.305						
	P	0.000						
Trust your country's health system	n	364	876	6892	3149	2083	1475	14839
	Mean	6.16	6.81	3.80	6.26	4.14	4.99	4.73
	SD	2.63	2.40	2.47	2.30	2.23	2.29	2.63
	F	654.401						
	P	0.000						
Trust news media	n	364	879	6905	3166	2082	1481	14877
	Mean	2.79	5.38	3.51	4.98	4.17	4.37	4.09
	SD	1.82	2.26	2.03	2.22	2.19	2.30	2.24
	F	306.206						
	P	0.000						
Trust the police	n	364	874	6860	3146	2073	1470	14787
	Mean	4.17	7.61	5.41	6.93	4.53	5.66	5.73
	SD	2.74	2.09	2.44	2.16	2.40	2.30	2.52



	F	438.960						
	P	0.000						
Trust The European Union	n	364	850	6811	3080	2066	1461	14632
	Mean	4.03	5.41	5.22	5.67	5.29	4.29	5.21
	SD	2.55	2.52	2.50	2.43	2.60	2.73	2.56
	F	77.113						
	P	0.000						

SD: Standard deviation

Table 3 shows the social effects of the pandemic on society. According to the country they live in, a statistically significant difference was found between the mean scores of satisfaction with their lives, trust in government institutions - health system - news media - police institutions, and the European Union during the pandemic ($p < 0.05$). It was determined that Estonia had the highest satisfaction score with an average of 6.44 (± 2.07) and Turkey had the lowest satisfaction score with an average of 5.44 (± 2.18). The countries with the highest mean scores of trust in government institutions were Estonia (6.13 (± 2.55)) and Latvia (5.10 (± 2.50)), while the countries with the lowest mean scores were Poland (2.50 (± 2.36)) and Hungary (3.21 (± 2.93)). Estonia, Latvia, and Turkey had the highest mean scores of trust in the health system, while Hungary and Poland had the lowest mean scores. In the study, the countries with the lowest trust in the news media were Turkey (2.79 (± 1.82)) and Hungary (3.51 (± 2.03)), and the countries with the highest trust were Estonia (5.38 (± 2.26)) and Latvia (4.98 (± 2.22)). A statistically significant difference was found between the participants' mean scores of personal trust in the European Union ($p < 0.05$). In the advanced analysis, there was no difference between Turkey-Slovakia, Estonia-Hungary, Estonia-Poland, or Hungary-Poland, while a difference was found between other countries. It was found that the countries with the lowest trust mean scores in the European Union were Turkey and Slovakia, and the countries with the highest mean scores were Latvia, Estonia, and Poland.

Table 4: Psychological effects of the pandemic (1 lowest, 10 highest)

Variables	Country							Total
	Turkey	Estonia	Hungary	Latvia	Poland	Slovakia		
	n	364	881	6911	3152	2082	1468	14858
	Mean	5.46	6.50	5.96	7.20	6.18	6.32	6.31
Happiness status	SD	2.14	2.08	2.21	1.98	2.22	2.24	2.22
	F	155.343						
	P	0.000						

SD: Standard deviation

Table 4 shows the psychological effects of the pandemic on society. According to the country they live in, a statistically significant difference was found between the mean scores of happiness during the pandemic ($p < 0.05$). It was determined that the countries with the highest happiness mean scores were Latvia and Estonia, and the countries with the lowest happiness mean scores were Turkey and Hungary. As a response to the second research question, the economic, social, and psychological effects of the pandemic on countries are given in the tables below, comparatively.

Table 5: Comparison of countries according to economic variables affecting the quality of life

Variables Status of losing your job		Country						
		Turkey	Estonia	Hungary	Latvia	Poland	Slovakia	Total
Yes, permanently	n	16	21	250	90	87	35	499
	%	4.7	3.3	6.1	3.4	6.1	3.3	4.9
Yes, temporarily	n	101	85	608	396	270	181	1641
	%	30.0	13.3	14.8	14.8	18.8	17.3	16.0
No	n	220	533	3249	2192	1080	830	8104
	%	65.3	83.4	79.1	81.9	75.2	79.3	79.1
Total	n	337	639	4107	2678	1437	1046	10244
	%	100	100	100	100	100	100	100

$\chi^2:110.646$ $p=0.000$

Variables Probability of losing your job in the next three months		Country						
		Turkey	Estonia	Hungary	Latvia	Poland	Slovakia	Total
Very likely	n	34	22	187	136	72	67	518
	%	10.9	4.0	5.2	5.7	5.7	7.2	5.7
Rather likely	n	33	45	203	200	133	97	711
	%	10.6	8.2	5.6	8.4	10.6	10.5	7.9
Neither likely nor unlikely	n	80	64	1028	507	327	210	2216
	%	25.6	11.6	28.5	21.2	26.0	22.7	24.5
Rather unlikely	n	72	215	912	568	531	306	2604
	%	23.1	38.9	25.3	23.8	42.2	33.1	28.8
Very unlikely	n	93	206	1281	978	196	245	2999
	%	29.8	37.3	35.5	40.9	15.6	26.5	33.1
Total	n	312	552	3611	2389	1259	925	9048
	%	100	100	100	100	100	100	100

$\chi^2:471.035$ $p=0.000$

Variables Economic livelihood situation		Country						
		Turkey	Estonia	Hungary	Latvia	Poland	Slovakia	Total
With great difficulty	n	40	52	621	265	196	211	1385
	%	11.2	6.1	9.3	8.8	9.9	14.7	9.7
With difficulty	n	53	77	1143	345	216	294	2128
	%	14.9	9.0	17.1	11.5	10.9	20.5	14.9
With some difficulty	n	69	263	2430	933	455	487	4637
	%	19.4	30.9	36.3	31.1	23.0	33.9	32.4
Fairly easily	n	141	239	1543	777	585	199	3484
	%	39.6	28.1	23.1	25.9	29.6	13.8	24.3
Easily	n	45	140	710	444	332	179	1850
	%	12.6	16.4	10.6	14.8	16.8	12.5	12.9
Very easily	n	8	81	241	240	193	67	830
	%	2.2	9.5	3.6	8.0	9.8	4.7	5.8
Total	n	356	852	6688	3004	1977	1437	14314
	%	100	100	100	100	100	100	100

$\chi^2:641.715$ $p=0.000$

χ^2 : Chi-squared test

A statistically significant difference was found between the participants losing their service contract in the COVID-19 epidemic according to the country they live in ($p < 0.05$). While 6.1% of the people living in Hungary and Poland stated that they lost their service contract permanently, 30% of those living in Turkey temporarily lost their service contract. In the study, 35.2% of the people living in Slovakia stated that income barely covers expenses, while 36.3% of the people living in Hungary stated that it is somewhat difficult.

Table 6: Comparison of countries according to social variables affecting the quality of life

Variables I am optimistic about my future		Country						
		Turkey	Estonia	Hungary	Latvia	Poland	Slovakia	Total
Strongly disagree	n	56	35	533	75	143	57	899
	%	15.4	4.0	7.7	2.4	6.9	3.9	6.1
Disagree	n	69	87	1082	236	445	210	2129
	%	19.0	10.0	15.7	7.5	21.5	14.5	14.4
Neither agree nor disagree	n	135	235	2223	868	633	445	4539
	%	37.1	26.9	32.3	27.6	30.6	30.8	30.7
Agree	n	82	431	2641	1457	691	598	5900
	%	22.5	49.4	38.3	46.3	33.4	41.4	39.9



Strongly agree	n	22	84	411	514	155	136	1322
	%	6.0	9.6	6.0	16.3	7.5	9.4	8.9
Total	n	364	872	6890	3150	2067	1446	14789
	%	100	100	100	100	100	100	100
$\chi^2:775.327$ p=0.000								
In general, how is your health?								
Very bad	n	2	4	68	21	9	12	116
	%	0.6	0.5	1.0	0.7	0.4	0.8	0.8
Bad	n	15	68	568	242	142	116	1151
	%	4.1	7.7	8.2	7.6	6.8	7.9	7.7
Fair	n	108	323	2830	1243	731	559	5794
	%	29.8	36.6	40.8	39.2	34.9	37.9	38.8
Good	n	19	374	3014	1355	954	593	6488
	%	54.5	42.4	43.4	42.7	45.5	40.2	43.5
Very good	n	40	114	458	309	261	195	1377
	%	11.0	12.9	6.6	9.7	12.4	13.2	9.2
Total	n	363	883	6938	3170	2097	1475	14926
	%	100	100	100	100	100	100	100
$\chi^2:176.724$ p=0.000								
The most important support when you are ill								
A member of your family / relative	n	271	688	5291	2473	1464	1164	11351
	%	74.7	82.3	80.8	83.2	75.7	83.2	80.8
A friend, neighbour, or someone else	n	64	59	497	227	209	107	1163
	%	17.6	7.1	7.6	7.6	10.8	7.6	8.3
A service provider, institution or organization	n	11	21	111	41	32	21	237
	%	3.0	2.5	1.7	1.4	1.7	1.5	1.7
Nobody	n	17	68	646	230	230	107	1298
	%	4.7	8.1	9.9	7.7	11.9	7.6	9.2
Total	n	363	836	6545	2971	1935	1399	14049
	%	100	100	100	100	100	100	100
$\chi^2:275.950$ p=0.000								

χ^2 : Chi-squared test

A statistically significant difference was found between the participants being optimistic about their future, according to the country they live in ($p < 0.05$). Approximately 48.8% of the participants stated that they were optimistic about their future. Those living in Latvia and Estonia were 60% optimistic, while those living in Turkey and Poland were 40% or less optimistic.

A statistically significant difference was found between the health status of the participants during the pandemic according to the country they live in ($p < 0.05$). While 8.5% of the participants stated that their health status was bad or very bad in general, this rate was highest at 9.2% in Hungary and it was lowest at 4.7% in Turkey. While 83.2% of those living in Slovakia and Latvia and 82.3% of those living in Estonia stated that the most important source of support was their family member or relative when they were sick and needed help at home, 17.6% of those living in Turkey stated as someone other than friends, neighbors or family/relatives.

Table 7: Comparison of countries according to psychological variables affecting the quality of life

Variables I have felt downhearted and depressed		Country						Total
		Turkey	Estonia	Hungary	Latvia	Poland	Slovakia	
All of the time	n	20	26	166	78	90	41	421
	%	5.5	3.0	2.4	2.5	4.3	2.8	2.8
Most of the time	n	65	62	567	274	300	107	1375
	%	17.9	7.1	8.2	8.6	14.3	7.3	9.7
	n	50	80	878 ^c	305	305	132	1750

More than half of the time	%	13.7	9.1	12.6	9.6	14.5	9.0	11.7
Less than half of the time	n	52	62	1055	415	248 ^a	138	1970
	%	14.3	7.1	15.2	13.1	11.8	9.4	13.2
Some of the time	n	131	397	3284	1486	899	663	6860
	%	36.0	45.2	47.3	46.8	42.8	45.0	46.0
At no time	n	46	251	991	615	259	391	2553
	%	12.6	28.6	14.3	19.4	12.3	26.6	17.1
Total	n	364	878	6941	3173	2101	1472	14929
	%	100	100	100	100	100	100	100

$\chi^2: 487.253$ $p=0.000$

χ^2 : Chi-squared test

A statistically significant difference was found between the participants' feelings of sadness and depression during the last two weeks of the COVID-19 epidemic according to the country they live in ($p < 0.05$). While 17.9% of the participants living in Turkey stated that they felt sad and depressed most of the time during the last two weeks, 14.5% of those living in Poland felt sad and depressed more than half the time.

Discussion

The COVID-19 pandemic has affected the quality of life of people in different ways in countries around the World. One of the factors affecting the quality of life of individuals is economic variables. This research shows that participants living in Turkey, Slovakia, and Poland expressed a higher probability of losing their job compared to participants living in Estonia, Hungary, and Latvia. The results of the study show that the monthly income of the participants barely covers their expenses (Table 5). It is thought that this situation may be related to the higher unemployment rates for Turkey and Slovakia compared to other countries. According to World Bank data, the unemployment rates in Latvia, Slovakia, Poland, Hungary, and Estonia increased during the pandemic between 2019 and 2021. However, it was determined that there was a 0.3 decrease in the unemployment rate in Turkey (World Bank Data, 2021). It has been determined that the risk of losing a job during the pandemic can have serious effects on people's mental health along with uncertainty (Oliveira & Fernandes, 2020: 536-538). Income allows people to purchase materials essential for life, access health-promoting resources, and participate in community activities (Douglas et al., 2020: 2). Having a job is a protective factor against general psychiatric disorders and loneliness. It is seen that there is a strong positive relationship between income level and quality of life, and socioeconomic status has a significant effect on the quality of life and healthy lifestyle behaviors (Li & Wang, 2020: 2-5). The higher the income level of individuals, the higher the subjective quality of life, and low income increases psychosocial stress (Arechavala & Espina, 2019: 193; Douglas et al., 2020: 2; Purba et al., 2021: 1). While Purba et al. (2021) found that the financial situation of nearly half of the participants remained stable during the pandemic, another study showed that nearly a quarter of participants experienced financial stress caused by the pandemic (Zhang & Ma, 2020: 2). In a study conducted in Turkey, it was found that there is a positive relationship between income level, quality of life, and life satisfaction (Karagöz et al., 2016: 169). Tamson et al. (2022) found that being unemployed, economically inactive, and facing financial difficulties reduces Estonians' quality of life. The results of the study generally show that the participants were concerned about how their economic lives would continue during the pandemic. Governments need to develop policies that will protect their citizens financially to improve their quality of life.



One of the important variables in terms of quality of life is social support. In the study, the majority of the participants stated that the most important source of support was a family member/relative, and the second most important source of support was a friend/neighbor when they were sick and needed help at home. It has been determined that social interaction during the pandemic helps individuals to overcome their loneliness, improves their mental health, and helps to improve the quality of life of individuals by sharing their feelings (Datta et al., 2015: 292). It has been stated that restrictions in daily life and social activities during the pandemic may cause mental health problems (Dziedzic et al., 2021: 4-5; Reine, 2021: iii379; Wang et al., 2021: 13). In a study of individuals over 50 years of age in Estonia and Latvia, it was found that the main predictors of increased loneliness in Latvia were increased irritability and decreased contact with children, while in Estonia financial difficulties and interrupted communication with parents (Reine, 2021: iii379). It was determined that during the quarantine period, the majority of individuals spent time chatting with their friends online, consulting on social networks, watching television, and tidying the house (Ferreira et al., 2021: 1394). It may be beneficial to develop social support mechanisms, especially for individuals living alone during the pandemic.

In the study, it was found that the countries with the highest trust in government institutions were Estonia, Latvia, Slovakia, and Turkey, and the countries with the lowest trust were Poland and Hungary (Table 3). Studies have shown that a high level of trust in the government is generally associated with greater compliance for the successful containment of the COVID-19 pandemic (Goldstein & Wiedemann, 2020; Murphy et al., 2020: 10-12; Shanka & Menebo, 2022: 1279). According to the pre-pandemic OECD 2010-2018 data, the average trust in the government score of people living in Turkey, Estonia, and Hungary was higher than people living in Poland, Latvia, and Slovakia (OECD, 2022). Studies showed that while the level of public trust in the government was high in some countries during the pandemic, the level of trust in some countries was found to be low (Nielsen & Lindvall, 2021: 1192; Robinson et al., 2021). This situation can be explained as the policies implemented by countries with high levels of trust being more widely adopted by the public. The Hungarian and Polish governments need to research the factors that reduce the public's trust level during the pandemic in order to develop appropriate policies.

This research shows that the countries with the highest trust in the health system were Estonia, Latvia, Turkey, and Slovakia, while the countries with the lowest trust in the health system were Hungary and Poland (Table 3). In the research, it is noticeable that the countries with a high average of trust in the state also have a high average of trust in the health system. In a study conducted during the pandemic, it was determined that the level of trust in the health system of Eastern European countries was lower compared to other European countries (Beller et al., 2022: 3). Societies, that trust the health system of the country, follow the doctor's recommendations and believe that effective health policies are being implemented (Gille et al., 2021: 2). Low trust in the health system was found to be associated with poor health outcomes and inadequate use of health services (Antinyan et al., 2021; Mohseni & Lindstrom, 2007; Radin, 2013;). In countries with low levels of trust, such as Hungary and Poland, it may be beneficial to determine the causes and conduct further studies in this direction to ensure the adaptation

of the public to the health system. At this point, it is important to involve the public in the policy-making process.

In the study, a statistically significant difference was found between the health status of the participants during the pandemic according to the country they live in. In the study, it was seen that the majority of the participants who express their health status as bad are living in Hungary, and the majority of the participants who express their health status as good are those who live in Turkey and Estonia (Table 5). In the study, it is seen that the health status perceptions of individuals living in countries with high levels of trust and health systems are also high. It has been stated that a person's belief that he/she is healthy significantly improves his/her subjective quality of life (Arechavala & Espina, 2019: 192). Studies show that, it was determined that the health-related quality of life scores of individuals in quarantine during the pandemic were low (Ferreira et al., 2021: 1389). In order for people to take use of primary health care services during the pandemic, it is important to offer remote health services like telemedicine. Individuals who are in quarantine at home, living alone, or suffering from chronic diseases can thus feel safer.

Another factor affecting the quality of life of individuals is their psychological situation. It was discovered in the study that participants from Turkey, Poland, and Hungary felt more sad and depressed than participants from Estonia, Latvia, and Slovakia (Table 7). According to the study, people who live in countries with high happiness levels are less sad and depressed. Studies show that, during the pandemic, the incidence of stress, anxiety, and depression in individuals increases, and the quality of life of individuals decreases (Bostan et al., 2020: 60; Chodkiewicz et al, 2021: 6-8; Park et al., 2021: 7; Pieh et al., 2020: 5; Tamson et sl. 2022: 6; Wang et al., 2020: 5-20). It is thought that, for public health and quality of life during the pandemic, policymakers need to develop mechanisms to monitor and support the mental health of individuals at the country level. This research shows that the countries with the highest happiness mean scores were Latvia and Estonia, and the countries with the lowest score were Turkey and Hungary (Table 4). Studies on happiness and COVID-19 have shown that the happiness of individuals decreased during the pandemic (Greyling et al., 2021a: 1; Greyling et al., 2021b: 1; Rossouw et al., 2021a: 20; Rossouw et al., 2021b: 15). According to the 2020 pandemic period data of the World Happiness Report, the countries with the highest average happiness score were Estonia, Slovakia, and Latvia, and the lowest countries were Turkey and Hungary (Helliwell et al., 2021: 19-24). When the pre-pandemic data of the same countries were evaluated, it was seen that there was no significant difference in terms of pre-and post-pandemic happiness rankings, and countries with high pre-pandemic happiness scores also had higher post-pandemic happiness scores. According to a study conducted in 23 states of the OECD countries, the level of development of the countries affected the happiness of individuals during the pandemic (Puertas et al., 2020: 1). It is critical to create mechanisms that will provide psychological support to individuals during the pandemic.

The International Labor Organization has stated that there is a need for rapid and coordinated policies at the national and global levels, together with strong, multilateral leadership, to mitigate the effects of COVID-19 on workers and their families and mitigate the slump in the global economy. While determining the policies, the protection of health, economy, and social balance, providing the best possible support to the vulnerable and most affected groups, and the importance of international



cooperation and solidarity for developing countries were emphasized (Foddai et al., 2020: 1-2; Goniewicz et al., 2020). It was also stated that it is important to invest in strong, resilient, and inclusive national health systems, to create an environment that encourages investment in health, and to improve health governance at the global level (Pan-European Commission, 2021).

Conclusions and Recommendations

The results of the study show that the factors affecting people's quality of life during the pandemic vary by country, and the pandemic generally has a negative impact on people's quality of life. Policymakers need to have information about the factors affecting societal quality of life in order to be prepared for pandemics, in terms of developing policies for health-related, economic, and social aspects. The following recommendations can be made based on the study's findings,

- During the pandemic, studies should be carried out on the level of public trust in the government and the factors affecting it at the level of countries.
- Policies should be developed to increase the general satisfaction, happiness of the people, and support individuals psychologically during the pandemic, especially for people who live alone.
- Government support should be provided to individuals and institutions that are in poor economic and financial condition during the pandemic.
- Policies should be developed to ensure the continuity of social interaction during the pandemic.
- Telemedicine applications should be developed to enable individuals to receive primary health care services during the pandemic.
- Public participation should be encouraged in the policy development process.
- Policies should be developed to address countries' low average happiness levels, such as Turkey and Hungary.
- Individuals in countries such as Turkey and Poland, where people feel depressed and sad during pandemics should be given psychological support.
- People should be economically supported in countries such as Slovakia and Hungary, where people struggled to maintain the income-expense balance during the pandemic.
- Policies should be developed to economically protect individuals in countries such as Hungary, Poland, and Turkey who are at high risk of losing their jobs permanently or temporarily.
- To increase public trust, the governments of Hungary and Poland must develop appropriate policies.

Author Contributions

1. Author: 60% 2. Author: 40% contributed to the study.

Conflict of Interest Statement

There is no financial conflict of interest with any institution, organization or person related to our article titled "A General Assessment of Life Quality in Turkey and Several East European Countries During the COVID-19 Pandemic".

References

- Altena, E., Baglioni, C., Espie, C. A., Ellis, J., Gavriloff, D., Holzinger, B., et al. (2020). Dealing with sleep problems during home confinement due to the COVID-19 Outbreak: Practical recommendations from a task force of the European CBT-I Academy. *Journal of Sleep Research*, 29, e13052. <https://doi.org/10.1111/jsr.13052>
- Altuğ, F., Yağcı, N., Kitiş, A., Büker, N., & Cavlak, U. (2009). Analyzing of factors affecting the quality of life in elderly at home. *Elderly Issues Research Journal*, 2(1), 48-60.
- Ammar, A., Chtourou, H., Boukhris, O., Trabelsi, K., Masmoudi, L., Brach, M. et al. (2020). Social participation and life satisfaction of peoples during the COVID-19 home confinement: The ECLB-COVID19 multicenter study. *MedRxiv*, 1-23 <https://doi.org/10.1101/2020.05.05.20091066>
- Antinyan, A., Bassetti, T., Corazzini, L., & Pavesi, F. (2021). Trust in the health system and COVID-19 treatment. *Frontiers in Psychology*, 12, 643758. <https://doi.org/10.3389/fpsyg.2021.643758>
- Arechavala, N. S., & Espina, P. Z. (2019). Quality of life in the European Union: An econometric analysis from a gender perspective. *Social Indicators Research*, 142, 179-200. <https://doi.org/10.1007/s11205-018-1913-4>
- Bakar, N. (2012). *Depression, quality of life, and influential factors in the elderly*. (Publication No. 304498) [Master Thesis, Erzincan University].
- Balanç'a-Martínez, V., Atienza-Carbonell, B., Kapczinski, F., & De Boni, R. B. (2020). Lifestyle behaviours during the COVID-19 - time to connect. *Acta Psychiatrica Scandinavica*, 141(5), 399-400. <https://doi.org/10.1111/acps.13177>
- Bedford, J., Enria, D., Giesecke, J., Heymann, D. L., Ihekweazu, C., Kobinger, G., et al. (2020). COVID-19: Towards controlling of a pandemic. *Lancet*, 395(10229), 1015-1018. [https://doi.org/10.1016/S0140-6736\(20\)30673-5](https://doi.org/10.1016/S0140-6736(20)30673-5)
- Beller, J., Schäfers, J., Haier, J., Geyer, S., & Epping, J. (2022). Trust in healthcare during COVID-19 in Europe: vulnerable groups trust the least. *Journal of Public Health (Berl.)*. <https://doi.org/10.1007/s10389-022-01705-3>
- Bostan, S., Kaya, A., Güneş, D., & Usta, İ. (2020). Anxiety caused by the COVID-19 pandemic in the individual and escape from the hospital. *Journal of International Health Sciences and Management*, 6, 60-71.
- Bottomley, A., Reijneveld, J. C., Koller, M., Flechtner, H., Tomaszewski, K. A., & Greimel, E. (2019). Current state of quality of life and patient-reported outcomes research. *European Journal of Cancer*, 121, 55-63. <https://doi.org/10.1016/j.ejca.2019.08.016>
- Campos, A. C. V., Ferreira, E. F., Vargas, A. M. D. & Albala, C. (2014). Aging, gender and quality of life (AGEQOL) study: Factors associated with good quality of life in older Brazilian community-dwelling adults. *Health and Quality of Life Outcomes*, 12, 166. <https://doi.org/10.1186/s12955-014-0166-4>



- Chodkiewicz, J., Miniszewska, J., Krajewska, E., & Biliński, P. (2021). Mental health during the second wave of the COVID-19 Pandemic-Polish studies. *International Journal of Environmental Research and Public Health*, 18, 3423. <https://doi.org/10.3390/ijerph18073423>
- Choi, E. P. H., Hui, B. P. H., & Wan, E. Y. F. Depression and anxiety in Hong Kong during COVID-19. *International Journal of Environmental Research and Public Health*, 17(10), 3740. <https://doi.org/10.3390/ijerph17103740>
- Çağlar, A. (2020). Quality of life of the provinces: An index based on data envelopment analysis with Turkish Statistical Institute data. *Eskişehir Osmangazi Üniversitesi İİBF Dergisi*, 15(3), 875 – 902.
- Datta, D., Datta, P. P., & Majumdar, K. K. (2015). Role of social interaction on quality of life. *National Journal of Medical Research*, 5(4), 290-292.
- Douglas, M., Katikireddi, S. V., Taulbut, M., McKee, M., & McCartney, G. (2020). Mitigating the wider health effects of COVID-19 pandemic response. *BMJ*, 369, m1557. <https://doi.org/10.1136/bmj.m1557>
- Dziedzic, B., Idzik, A., Kobos, E., Sienkiewicz, Z., Kryczka, T., Fidecki, W., et al. (2021). Loneliness and mental health among the elderly in Poland during the COVID-19 pandemic. *BMC Public Health*, 21, 1976. <https://doi.org/10.1186/s12889-021-12029-4>
- Eurofound. (2020, November 6). *COVID-19, living, working and COVID-19. COVID-19 Series. Research Report 2020*. Luxembourg: Publications Office of the European Union. <https://www.eurofound.europa.eu/publications/report/2020/living-working-and-COVID-19/>
- Eurofound. (2017). *European quality of life survey 2016: Quality of life, quality of public services, and quality of society*. Publications Office of the European Union, Luxembourg.
- Ferreira, L. N., Pereira, L. N., Fé Brás, M., & Ilchuk, K. (2021). Quality of life under the COVID-19 quarantine. *Quality of Life Research*, 30(5), 1389-1405. <https://doi.org/10.1007/s11136-020-02724-x>
- Foddai, A., Lindberg, A., Lubroth, J., & Ellis-Iversen, J. (2020). Surveillance to improve evidence for community control decisions during the COVID-19 pandemic—opening the animal epidemic toolbox for public health. *One Health*, 9, 100130. <https://doi.org/10.1016/j.onehlt.2020.100130>
- Gille, F., Smith, S., & Mays, N. (2021). What is public trust in the healthcare system? A new conceptual framework developed from qualitative data in England. *Social Theory & Health*, 19(1), 1-20. <https://doi.org/10.1057/s41285-020-00129-x>
- Goldstein, D. A. N., & Wiedemann, J. (2021, April 16). *Who do you trust? The consequences of political and social trust for public responsiveness to COVID-19 orders*. <https://www.cambridge.org/core/journals/perspectives-on-politics/article/who-do-you-trust-the-consequences-of-partisanship-and-trust-for-public-responsiveness-to-covid19-orders/466134E376AD87F52441F26F3BE7D653>

- Goniewicz, K., Khorram-Manesh, A., Hertelendy, A. J., Goniewicz, M., Naylor, K., & Burkle, F. M. (2020). Current response and management decisions of the European Union to the COVID-19 outbreak: A review. *Sustainability*, 12(9), 3838. <https://doi.org/10.3390/su12093838>
- Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: A rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(1), 1-20. <https://doi.org/10.1080/09669582.2020.1758708>
- Greyling, T., Rossouw, S., & Adhikari, T. (2021a). A tale of three countries: How did Covid-19 lockdown impact happiness? *South African Journal of Economics*, 89, 25-43. DOI: 10.1111/saje.12284.
- Greyling, T., Rossouw, S., & Adhikari, T. (2021b). The good, the bad and the ugly of lockdowns during Covid-19. *PLoS ONE*, 16, e0245546. <https://doi.org/10.1371/journal.pone.0245546>
- Helliwell, J. F., Layard, R., Sachs, J. D., De Neve, J-E., Aknin, L. B., & Wang, S. (2022, May 20). *World happiness report 2021. WellBeing International WBI studies repository. Solutions for people, animals and environment.* https://www.wellbeingintlstudiesrepository.org/hw_happiness/5/
- Ivanova, S. (2015). Population income in the European Union and situation in Latvia. *Procedia - Social and Behavioral Sciences*, 213, 43-47. <https://doi:10.1016/j.sbspro.2015.11.401>
- Kabasakal, Z. & Baş, A. U. (2013). Problem solving skills of teacher candidates predicting of life satisfaction. *Journal of Research in Education and Teaching*, 2(1), 27-35.
- Karagöz, Y., Doğan, A., & Koçyiğit, S. (2016). The effect of income on quality of life and life satisfaction: An empirical application in the province of Sivas. *C.Ü. İktisadi ve İdari Bilimler Dergisi*, 17(1), 169-186.
- Knurowski, T., van Dijk, J. P., Geckova, A. M., Brzyski, P., Tobiasz-Adamczyk, B., & van den Heuvel, W. J. (2005). Socio-economic health differences among the elderly population in Krakow, Poland. *Sozial-und Präventivmedizin*, 50(3), 177-185. <https://doi.org/doi:10.1007/s00038-005-2051-8>.
- Kralova, M., Brazinova, A., Sivcova, V., & Izakova, L. (2022). Mental health of the Slovak population during COVID-19 pandemic: A cross-sectional survey. *World Journal of Clinical Cases*, 10(25), 8880-8892. <https://doi:10.12998/wjcc.v10.i25.8880>
- Kristapsone, S., & Bruna, S. (2019). Changes in the subjective assessment of quality of life in Latvia and the European Union: results of European quality of life survey 2016. *New Challenges of Economic and Business Development – 2019: Incentives for Sustainable Economic Growth*, 453-462.
- Lee, K. H., Xu, H. & Wu, B. (2020). Gender differences in quality of life among community-dwelling older adults in low and middle-income countries: results from the Study on global AGEing and adult health (SAGE). *BMC Public Health*, 20, 114. <https://doi.org/10.1186/s12889-020-8212-0>
- Li, L. Z., & Wang, S. (2020). Prevalence and predictors of general psychiatric disorders and loneliness during COVID-19 in the United Kingdom. *Psychiatry Research*, 291, 113267. <https://doi.org/10.1016/j.psychres.2020>



- Li, W., Yang, Y., Liu, Z. H., Zhao, Y. J., Zhang, Q., Zhang, L., et al. (2020). Progression of mental health services during the COVID-19 outbreak in China. *International Journal of Biological Sciences*, 16(10), 1732-1738.
- Ministry of Health of Turkey. General situation in Turkey. (2020). Available online at <https://covid19.saglik.gov.tr/TR-66935/genel-koronavirus-tablosu.html/>, checked on 06/21/2022.
- Mohseni, M., & Lindstrom, M. (2007). Social capital, trust in the health-care system and self-rated health: The role of access to health care in a population based study. *Social Science & Medicine*, 64(7), 1373-1383. <https://doi.org/10.1016/j.socscimed.2006.11.023>
- Murphy, K., Williamson, H., Sargeant, E., & McCarthy, M. (2020). Why people comply with COVID-19 social distancing restrictions: Self-interest or duty? *Australian & New Zealand Journal of Criminology*, 53 (4), 477-496. <https://doi.org/10.1177/0004865820954484>
- Nandori, S. E. (2016). How did subjective well-being change in Hungary due to the economic crisis? *Social Indicators Research*, 126(1), 241-256. <https://doi.org/10.1007/s11205-015-0878-9>
- Nguyen, H. C., Nguyen, M. H., Do, B. N., Tran, C. Q., Nguyen, T. T. P., Pham, K. M., et al. (2020). People with suspected COVID-19 symptoms were more likely depressed and had lower health-related quality of life: The potential benefit of health literacy. *Journal of Clinical Medicine*, 9(4), 965. <https://doi.org/10.3390/jcm9040965>
- Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., et al. (2020). The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *International Journal of Surgery*, 78, 185-193. <https://doi.org/10.1016/j.ijisu.2020.04.018>
- Nielsen, J. H., & Lindvall, J. (2021). Trust in government in Sweden and Denmark during the COVID-19 epidemic. *West European Politics*, 44(5-6), 1180-1204. <https://doi.org/10.1080/01402382.2021.1909964>
- OECD. (2022). Trust in government (indicator). <https://10.1787/1de9675e-en> (Accessed on 03 June 2022)
- Oláh, J., Hajduová, Z., Lacko, R., & Andrejovský, P. (2020). Quality of life regional differences: Case of self-governing regions of Slovakia. *Sustainability*, 12(7), 2924. ; <https://doi:10.3390/su12072924>
- Oliveira, M., & Fernandes, C. (2020). Managing the coronavirus pandemic in Portugal: A step-by-step adjustment of health and social services. *Psychological Trauma*, 12(5), 536-538. <https://doi.org/10.1037/tra0000879>
- Pan-European Commission. *Drawing light from the pandemic a new strategy for health and sustainable development. Report of the Pan-European Commission on Health and Sustainable Development*. Copenhagen, Denmark September, 2021.
- Park, K-H., Kim, A-R., Yang, M-A., Lim, S-J., & Park J-H. (2021). Impact of the COVID-19 pandemic on the lifestyle, mental health, and quality of life of adults in South Korea. *PLoS ONE*, 16 (2), e0247970. <https://doi.org/10.1371/journal.pone.0247970>

- Pieh, C., Budimir, S., & Probst, T. (2020). The effect of age, gender, income, work, and physical activity on mental health during coronavirus disease (COVID-19) lockdown in Austria. *Journal of Psychosomatic Research*, 136, 110186. <https://doi.org/10.1016/j.jpsychores.2020>
- Puertas, R., Marti, L., & Guaita-Martinez, J. M. (2020). Innovation, lifestyle, policy and socioeconomic factors: An analysis of European quality of life. *Technological Forecasting and Social Change*, 160, 120209. <https://doi.org/10.1016/j.techfore.2020.120209>
- Purba, F. D., Kumalasari, A. D., Novianti, L. E., Kendhawati, L., Noer, A. H., & Ninin, R. H. (2021). Marriage and quality of life during COVID-19 pandemic. *PLoS ONE*, 16(9), e0256643. <https://doi.org/10.1371/journal.pone.0256643>
- Radin, D. (2013). Does corruption undermine trust in health care? Results from public opinion polls in Croatia. *Social Science & Medicine*, 98, 46-53. <https://doi.org/10.1016/j.socscimed.2013.08.033>
- Reine, I. (2021). Factors predicting loneliness among ageing populations in the Baltic states during Covid-19. *European Journal of Public Health*, 31(3), iii379. <https://doi.org/10.1093/eurpub/ckab165.110>
- Ren, L. L., Wang, Y. M., Wu, Z. Q., Xiang, Z. C., Guo, L., Xu, T., et al. (2020). Identification of a novel coronavirus causing severe pneumonia in human: A descriptive study. *Chinese Medical Journal*, 133(9), 1015-1024. <https://doi.org/10.1097/CM9.0000000000000722>
- Robinson, S., Gupta, K., Ripberger, J., Ross, J., Fox, A., Jenkins-Smith, H., et al. (2021). *Trust in government agencies in the time of COVID-19*. (Elements in Public and Nonprofit Administration Series). Cambridge: Cambridge University Press 2021.
- Rossouw, S., Greyling, T., & Adhikari, T. (2021a). Happiness-lost: Did governments make the right decisions to combat Covid-19? *South African Journal of Economic and Management Sciences*, 24(1), a3795. <https://doi.org/10.4102/sajems.v24i1.3795>
- Rossouw, S., Greyling, T., & Adhikari, T. (2021b). The evolution of happiness pre and peri-COVID-19: A Markov Switching Dynamic Regression Model. *PLOS ONE*, 16(12), e0259579. <https://doi.org/10.1371/journal.pone.0259579>
- Samlani, Z., Lemfadli, Y., Errami, A. A., Oubaha, S., & Krati, K. (2020). The impact of the COVID-19 pandemic on quality of life and well-being in Morocco. *Preprints*, 6, 130-134. <https://doi.org/10.20944/preprints202006.0287.v1>
- Shanka, M. S., & Menebo, M. M. (2022). When and how trust in government leads to compliance with COVID-19 precautionary measures. *Journal of Business Research*, 139, 1275-1283. <https://doi.org/10.1016/j.jbusres.2021.10.036>
- Stoecklin, S. B., Rolland, P., Silue, Y., Mailles, A., Campese, C., Simondon, A., et al. (2020). First cases of coronavirus disease 2019 (COVID-19) in France: Surveillance, investigations and control measures, January 2020. *Eurosurveillance*, 25(6), 1-7. <https://doi.org/10.2807/1560-7917.ES.2020.25.6.2000094>
- Streimikiene, D. (1998). Quality of life and housing. *International Journal of Information and Education Technology*, 5(2), 140-145. <https://doi.org/10.7763/IJiet.2015.V5.491>



- Svabova, L., Tesarova, E. N., Durica, M., & Strakova, L. (2021). Evaluation of the impacts of the COVID-19 pandemic on the development of the unemployment rate in Slovakia: Counterfactual before-after comparison. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 16(2), 261-284. <https://doi.org/10.24136/eq.2021.010>
- Szabó, C., Pukánszky, J., & Kemény, L. (2020). Psychological effects of the COVID-19 pandemic on Hungarian adults. *International Journal of Environmental Research and Public Health*, 17(24), 9565. <https://doi:10.3390/ijerph17249565>
- Szende, A., & Németh, R. (2003). Health-related quality of life of the Hungarian population. *Orvosi Hetilap*, 144(34), 1667-74.
- Tamson, M., Reile, R., Sokurova, D., Innos, K., Nurk, E., Laidra, K., et al. (2022). Health-related quality of life and its socio-demographic and behavioural correlates during the COVID-19 Pandemic in Estonia. *International Journal of Environmental Research and Public Health*, 19(15), 9060. <https://doi: 10.3390/ijerph19159060>
- The WHOQOL Group. (1998). The World Health Organization quality of life assessment (WHOQOL): Development and general psychometric properties. *Social Science & Medicine*, 46(12), 1569-1585. [https://doi.org/10.1016/s0277-9536\(98\)00009-4](https://doi.org/10.1016/s0277-9536(98)00009-4)
- Tisdell, C. A. (2020). Economic, social and political issues raised by the COVID-19 pandemic. *Economic Analysis & Policy*, 68, 17-28. <https://doi.org/10.1016/j.eap.2020.08.002>
- Tsamakis, K., Triantafyllis, A. S., Tsiptsios, D., Spartalis, E., Mueller, C., Tsamakis, C., et al. (2020). COVID-19 related stress exacerbates common physical and mental pathologies and affects treatment (Review). *Experiment and Therapeutic Medicine*, 20, 159-162. <https://doi.org/10.3892/etm.2020.8671>
- Villas-Boas, S., Oliveira, A.L., Ramos, N. & Montero, I. (2019) Predictors of quality of life in different age groups across adulthood. *Journal of Intergenerational Relationships*, 17(1), 42-57. <https://doi.org/10.1080/15350770.2018.1500330>
- Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C. S., & Ho, R. C. (2020). Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *International Journal of Environmental Research and Public Health*, 17(5), 1729. <https://doi.org/10.3390/ijerph17051729>
- Wang, Y., Di, Y., Ye, J., & Wei, W. (2021). Study on the public psychological states and its related factors during the outbreak of coronavirus disease 2019 (COVID-19) in some regions of China. *Psychology, Health & Medicine*, 26(1), 13-22. <https://doi.org/10.1080/13548506.2020.1746817>
- World Bank Data. (2022, September 20). *Unemployment, total (% of total labor force) (modeled ILO estimate)*. <https://data.worldbank.org/indicator/SL.UEM.TOTL.ZS>
- World Health Organization (WHO). 2020. *WHOQOL: Measuring quality of life*. <https://www.who.int/toolkits/whoqol/>

- Zahra, D., Sadatmahalleh, S. J., Samaneh, Y., Mahnaz, B. K., & Anoshiravan, K. (2020). Influential factors on quality of life in married Iranian women during the COVID-19 Pandemic in 2020: A path analysis. *BMC Women's Health*, 21(1), 102. <https://doi.org/10.1186/s12905-020-01114-2>
- Zhang, Y., & Ma, Z. F. (2020). Impact of the COVID-19 pandemic on mental health and quality of life among local residents in Liaoning Province, China: A cross-sectional study. *International Journal of Environmental Research and Public Health*, 17(7), 2381. <https://doi.org/10.3390/ijerph17072381>

Genişletilmiş Özet

COVID-19 Pandemisi bireyleri ve toplumları ekonomik, sosyal ve psikolojik yönden etkilemiştir. Salgın haline gelen bulaşıcı hastalıklar, küresel ölçekte yaşanan sosyal ve çevresel dönüşümler nedeniyle, ciddi sağlık sorunlarına ve ekonomik problemlere neden olmaktadır. Pandemi sürecinde salgının kontrol altına alınması amacıyla Dünya Sağlık Örgütü'nün önerileri doğrultusunda; ülke içi ve uluslararası seyahat kısıtlamaları uygulanmış, bazı iş kolları kapatılmış, kamuya açık etkinlikler iptal edilmiş, riskli grupları korumaya yönelik önlemler alınmış, farklı temas seviyeleri için izolasyon ve karantina tedbirleri alınmıştır. Bu tür kısıtlamalar salgının kontrol altına alınmasında etkili olsa da, bireylerin psikolojik, ekonomik ve sosyal durumunu olumsuz yönde etkilemiş ve toplumsal yakınma ile sürdürülebilir refahın önemli göstergelerinden biri olan yaşam kalitesinin düşmesine neden olmuştur. Yaşam kalitesi, toplumların ulaşmayı hedeflediği en önemli evrensel değerlerden biridir ve uluslararası kalkınma, sağlık, çevre ve politika gibi çok çeşitli alanları kapsamaktadır. Yaşam kalitesinin nesnel boyutu ağırlıklı olarak bireylerin yaşam koşullarına dair faktörleri kapsarken, öznel boyutu bireylerin yaşam koşullarından aldığı doyumu, sağlıkla ilgili boyutu ise hastalığın bireylerin günlük yaşamının fiziksel, psikolojik ve sosyal yönlerini kapsayan oldukça geniş bir kavramdır.

Pandeminin toplumların yaşam kalitesi üzerindeki etkileri ülkeler düzeyinde farklılık gösterebilir. Bu çalışmanın amacı, COVID-19 pandemisi sürecinde Doğu Avrupa ülkelerinden Macaristan, Slovakya, Letonya, Polonya ve Estonya'nın yaşam kalitesini Türkiye ile karşılaştırmalı olarak değerlendirmek ve sonuçlar doğrultusunda politika yapıcılara önerilerde bulunmaktır. Karşılaştırma amacıyla bu ülkelerin seçilmesinin nedeni gayri safi yurt içi hasıladan sağlığa ayrılan payın, kişi başı sağlık harcamasının, işsizlik oranlarının, hanelere yapılan sosyal yardımların gayri safi yurt içi hasıla içindeki oranının ve yetişkin eğitim seviyesinin ülkeler arasında benzerlik göstermesidir.

Çalışma kapsamında Eurofound tarafından Avrupa ülkelerini kapsayan ve 18 yaş üstü gönüllü bireyler üzerinde Nisan 2020'de çevrimiçi olarak uygulanan "Yaşamak, Çalışmak ve COVID-19 Anketi"nin Macaristan, Slovakya, Letonya, Polonya ve Estonya sonuçları Türkiye ile karşılaştırılmıştır. Çalışmanın örneklemini Eurofound veri setini kapsayan Macaristan, Slovakya, Letonya, Polonya ve Estonya ülkelerinin verileri ile Türkiye'de 18 yaş üstü, gönüllü 364 kişiye uygulanan anket verileri oluşturmaktadır. Anketin Türkçeye çevirisinde uzman görüşleri alınmış ve faktör analizleri yapılmıştır. Çalışma için etik kurul izni ve Eurofound'dan anket ve veri seti kullanım izinleri alınmıştır.

Çalışma bulguları değerlendirildiğinde, genel olarak katılımcıların çoğunluğunun 58-67 yaş aralığında, yükseköğretim mezunu ve çalışan bireylerden oluştuğu tespit edilmiştir. Pandeminin toplumlar üzerindeki sosyal etkileri değerlendirildiğinde; katılımcıların yaşadıkları ülkeye göre pandemi sürecinde hayatlarından memnun olma durumu, devlet kurumları, sağlık sistemi, haber medyası, güvenlik güçleri ve Avrupa Birliği'ne güven puan ortalamaları arasında istatistiksel olarak anlamlı bir fark saptanmıştır ($p < 0.05$). Pandemi sürecinde memnuniyet puan ortalaması en yüksek ülkenin Estonya, en düşük ülkenin Türkiye olduğu; devlet kurumlarına güven puan ortalaması en yüksek ülkelerin Estonya ve Letonya, en düşük ülkelerin Polonya ve Macaristan



olduğu tespit edilmiştir. Sağlık sistemine güven puan ortalaması en yüksek ülkelerin Estonya, Letonya ve Türkiye, en düşük ülkelerin Macaristan ve Polonya olduğu görülmüştür. Buna ek olarak, Letonya ve Estonya'da yaşayanların geleceğe dair iyimserlik durumunun, Türkiye ve Polonya'da yaşayanlara nazaran daha yüksek olduğu bulunmuştur. Katılımcıların yaşadıkları ülkeye göre pandemi sürecinde sağlık durumları arasında istatistiksel olarak anlamlı bir fark saptanmıştır ($p < 0,05$). Katılımcıların %8,5'i sağlık durumunun genel olarak kötü ve çok kötü olduğunu belirtirken, bu oran Macaristan'da yaşayanlarda %9,2 ile en yüksek değeri, Türkiye'de %4,7 ile en düşük değeri almıştır.

Pandeminin toplumlar üzerindeki psikolojik etkileri değerlendirildiğinde, bireylerin yaşadıkları ülkeye göre pandemi sırasındaki mutluluk puan ortalamaları arasında istatistiksel olarak anlamlı bir fark saptanmıştır ($p < 0,05$). Mutluluk puan ortalaması en yüksek ülkelerin Letonya ve Estonya, en düşük ülkelerin Türkiye ve Macaristan olduğu bulunmuştur. Araştırmada, Türkiye, Polonya ve Macaristan'dan katılımcıların Estonya, Letonya ve Slovakya'dan katılımcılara göre daha üzgün ve depresif hissettikleri tespit edilmiştir.

Pandeminin ekonomik etkileri değerlendirildiğinde, bireylerin iş akdini kaybetme durumunun ülkelere göre farklılık gösterdiği, Macaristan ve Polonya'da yaşayanların %6,1'i hizmet akdini kalıcı olarak kaybettiğini belirtirken, Türkiye'de yaşayanların %30'u geçici olarak hizmet akdini kaybettiğini belirtmiş, Slovakya'da yaşayanların %35,2'si ise gelirlerinin giderlerini güçlükle karşıladığını ifade etmiştir.

Çalışma sonuçları, pandemi sırasında bireylerin yaşam kalitesini etkileyen faktörlerin ülkeler arasında farklılık gösterdiğini ve pandeminin genel olarak toplumların yaşam kalitesini olumsuz yönde etkilediğini göstermektedir. Devlet kurumuna ve sağlık sistemine güven puan ortalaması yüksek olan ülkelerin, memnuniyet ve mutluluk puan ortalamalarının da yüksek olduğu görülmektedir. Çalışma sonuçlarından hareketle pandemi döneminde bireylerin depresif ve üzgün hissettiği Türkiye ve Polonya gibi ülkelerde yaşayan bireylere psikolojik destek verilmesini sağlayacak düzenlemeler yapılması, salgın sürecinde bireylerin gelir-gider dengesini sağlamakta zorlandığı Slovakya ve Macaristan gibi ülkelerde yaşayan bireyleri ekonomik olarak destekleyecek politikalar geliştirilmesi, halkın devlet kurumlarına güven düzeyi düşük olan Macaristan ve Polonya gibi ülkelerde, güven düzeyini etkileyen faktörlerin tespit edilerek iyileştirilmesi yönünde çaba gösterilmesi önemlidir.

Pandemi sürecinde, halkın devlete olan güven düzeyini ve bunu etkileyen faktörleri belirlemeye yönelik çalışmalar yapılması, yalnız yaşayan bireyleri psikolojik olarak destekleyecek mekanizmalar geliştirilmesi, ekonomik zorluk yaşayan bireylerin ve kurumların finansal açıdan desteklenmesi, toplumda sosyal etkileşimin devamlılığını sağlayacak politikalar geliştirilmesi, temel sağlık hizmetlerinin sürdürülebilirliğini sağlamak amacıyla teletıp hizmetlerinden faydalanılması, politika geliştirme sürecine halkın katılımının sağlayacak düzenlemeler yapılması bireylerin ve toplumların yaşam kalitesinin artırılması için faydalı olabilir. Politika yapıcıların gelecek dönemlerde yaşanması muhtemel pandemilere hazırlıklı olmak amacıyla, toplumun yaşam kalitesini etkileyen ekonomik, sosyal ve psikolojik faktör hakkında bilgi sahibi olması önemlidir.