"Assessment of the population's quality of life in Kazakhstan during COVID-19: The effectiveness of public policy"

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ASSESSMENT OF THE POPULATION'S QUALITY OF LIFE IN KAZAKHSTAN DURING COVID-19: THE EFFECTIVENESS OF PUBLIC POLICY

Abstract

This study aims to determine the effectiveness of Kazakhstan's public policy during the pandemic related to healthcare, education, and the financial situation of the population by assessing the population's quality of life (QoL). The study proceeded from the assumption that the effectiveness of state measures can be assessed through the manifestation of citizens' reaction to the ongoing public policy, i.e., satisfaction with its results. The source base was the Bureau of National Statistics and the Adilet information and legal base covering 2020–2021. During the pandemic, the population's satisfaction with their material provision, health, education, and living conditions decreased but not critically. The population's QoL in Kazakhstan is satisfactory. Satisfaction among rural residents with their life (70.7%) and conditions (63.7%) is higher than among urban residents (56.1% and 49.8%, respectively). One-third of the population reported improved well-being and only 6.5% reported a deterioration. The high number of citizens satisfied with their QoL indicates the effectiveness of Kazakhstani public policy. It is the result not only of the implementation of temporary anti-crisis measures of government through program, organizational, and economic mechanisms during the pandemic but systematic work on modernization of the social, medical, and educational systems from 2019. The practical value of the study is the development of recommendations for the development of public policy in the field of improving QoL and the development of anti-crisis management in Kazakhstan.

Keywords

life satisfaction, health, education, financial situation, anti-crisis management, government

JEL Classification E21, I38, R23

INTRODUCTION

Improving the quality of life (QoL) for a country's population is one of the most important strategic tasks for societal development. It becomes particularly significant during times of crisis: for example, the COVID-19 pandemic exacerbated pre-existing social and economic problems, such as poverty, inequality, or unemployment (Alfani et al., 2021). COVID-19 has changed the production process, society interaction, and quality of life worldwide (Moyer et al., 2021). The related morbidity and mortality have led to a deterioration of the population's quality of life; for example, education started to take place remotely at all levels and purchases were made online.

Different measures were taken to improve the conditions and increase the population's quality of life. Measures to combat coronavirus (quarantine, self-isolation, and social distancing) have strongly impacted people's well-being (Poudel & Subedi, 2020), especially among vulnerable groups. State measures were aimed not only at everyday problems of the country's livelihood but also at solving problems in education, healthcare, entrepreneurship, and production in new crisis conditions. It is forecasted that the COVID-19 pandemic will lower the level and quality of life of all humankind for a long time and increase inequality (Blundell et al., 2020). The consequences of the social and economic crisis associated with the pandemic may be more severe. Thus, this requires an analysis of the population's quality of life to make informed social and economic policy decisions. Today, the solution to QoL problems, especially those exacerbated during the pandemic, is hindered by insufficiently developed regulatory and legal space in assessing quality of life and weak assessment of goals and directions of public policy development.

1. LITERATURE REVIEW

To implement an effective public policy to improve the population's quality of life, defining the components of quality of life and the factors that affect it becomes crucial. Kravets and Didenko (2021) consider the population's quality of life based on the development of economic status, education, health, and population size. Tvaronavičienė et al. (2022), studying the quality of life of young people, identify the influence of economic, social, political, and environmental factors. Based on available resources for each country, the quality of life is determined by its own parameters, with economic parameters being largely determinative. The population's quality of life is determined by the level of economic growth (GDP) or economic development in a country (Torres & Domínguez-Menchero, 2006; Baikova & Vardiashvili, 2015), as more developed countries have more opportunities to create a greater number of affordable goods and services for the population than less developed countries.

The quality of life depends on the income level of the population (Leow & Tan, 2019; Seubert et al., 2021; Yang et al., 2023), which can come from wages, entrepreneurship, and transfers from the government. A high-income population allows a person to satisfy his/her needs and makes it possible to expand and improve the quality of life. Thus, income is a parameter of the QoL and, simultaneously, one factor that determines the QoL (Rosser, 1993; Kangalakova & Sabden, 2017; Seubert et al., 2021). High wages result in a person's ability to afford quality education, medical services, and leisure (Rosser, 1993). Business development also positively affects the population's QoL because it creates additional income and forms a middle class (Kangalakova & Sabden, 2017). High levels

of income allow for meeting more people's needs. Thus, it is possible to positively influence the population's quality of life by creating jobs, improving the quality of the labor market, and developing entrepreneurship.

Besides economic parameters, education and health are important to assess the quality of life (Pedro et al., 2021). According to Makarova et al. (2021), the population's quality of life improves the quality of human capital development and an improvement in the quality of human capital results in an improvement in the quality of life. The main components of human capital are education and health, which, in turn, are influenced by the quality of food consumed, the infrastructure of life, or ecology. There are more comfortable living conditions compared to countries where access to water or energy is considered a luxury in countries where digitalization, technology, including ICT, and innovation are more developed (Barlybaev et al., 2021; Zhan et al., 2022; Thives et al., 2022). Innovations and technologies create opportunities for people that have less time-consuming, labor-intensive, and energy-intensive characteristics and improve the quality of service for the population, but they also come at a high cost (Fan et al., 2016; Barlybaev et al., 2021; Zhan et al., 2022). Thus, technology, innovation, and digitalization create comfortable conditions in the social life of the population, improving their QoL.

The main infrastructure of life (heat, water, and electricity) is required to create comfortable conditions for the development of the population. Thus, electricity supply problems negatively affect the population's QoL (Thives et al., 2022). There is a direct relationship between the quality of life and the quality of food consumed (Praskova et al., 2019). The ecological state also directly affects

the population's QoL (Evans, 1994; Yagudin et al., 2014). Thus, countries face the challenge of upgrading basic infrastructure, improving the environment, and raising food security and product quality.

Besides economic, technological, and environmental factors, social factors and the cultural industry greatly influence the QoL (Tereshchenko & Zhelnina, 2019). Thus, social problems play a huge role in the country's development. However, social problems are heterogeneous. Many countries develop and implement social policies to maintain and improve the population's QoL. At the same time, social policy directly depends on budget payments to the state (Mardan & Stimmelmayr, 2018; Zhang, 2023).

The socio-economic policy has gained particular importance during the COVID-19 pandemic, especially concerning state support for socially vulnerable segments of the population in order to improve their QoL. Many measures concern education (Torres-Toukoumidis et al., 2021) and medicine (DiSantostefano & Terris-Prestholt, 2021). Some of them, including quarantine ones, have received a negative response from the population (Sukhwal & Kankanhalli, 2022). In this connection, issues of public trust in the policies concerning the improvement of life during a pandemic (Vu, 2021) and the efficiency of management decisions during a crisis (Prinja & Pandav, 2020; Profeta, 2020) become important. There are two directions to assess the efficiency of public policy during a pandemic. The first direction says that the measures taken by the state are ineffective (Shih, 2021). In comparison, the second direction says that the measures taken by the state created the conditions for containing the disease and saved people's lives (Maunder, 2021).

According to Abisheva and Dulambayeva (2020), there was a bias toward local and targeted responses during the pandemic in Kazakhstan. In their opinion, the number of events of a prolonged or program nature was less than the situational regulation measures. They argue that the efficiency of anti-crisis regulation measures in terms of systematicity, periodicity, and even distribution across management areas could have been higher; there was a gap associated with social regu-

lation measures and support for the population. The pandemic has exacerbated corruption, especially in healthcare, law enforcement, and public services. The low efficiency of state power during the pandemic is also mentioned by Zhanabekova et al. (2021), who stated that the funding aimed to combat the pandemic was insufficient and inefficiently distributed: "somewhere expenses were unrequired, somewhere opaque, somewhere too voluminous, and somewhere untimely." All this has led to a shortage of protective equipment, medicines, tests, ventilators, and the inaccessibility of free medical care. The study also gives a low assessment of the efficiency of distance education, especially in primary and secondary schools. Thus, the main state policy measures aimed to maintain employment, help low-income families, and provide financial assistance to enterprises.

The state and its policy are important factors affecting the population's quality of life. That is what becomes paramount in times of crisis. It becomes vital to determine the components of the quality of life and the factors that affect it to implement an effective state policy in improving the population's quality of life. Therefore, in order to improve the quality of life or maintain it at the pre-crisis level, it is required to pay attention to the implementation of state policy in the field of improvement of the welfare of the population, ensuring the availability and quality of educational and medical services, as well as improving the living conditions of the population, including access to new technologies and digitalization. This study aims to determine the effectiveness of Kazakhstan's public policy carried out during the pandemic related to healthcare, education, and financial situation by assessing the quality of life. The research assumption is that during the pandemic, the number of Kazakhstanis dissatisfied with their financial situation, health, education, and the activities of state organizations increased significantly, which indicates the low effectiveness of state policy during this period.

2. METHOD

This study is based on the definition of quality of life as "individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns" (The WHOQOL Group, 1995). The population's QoL was analyzed based on a subjective assessment of satisfaction, including financial situation, health, and education. The study proceeded from the assumption that the effectiveness and efficiency of state measures can be assessed through the manifestation of citizens' trust and their reaction to the ongoing state policy, i.e., satisfaction with its results. That is, a significant increase in the number of citizens dissatisfied with their financial situation, health, education, and the activities of state organizations will indicate the low effectiveness of state policy in these areas.

The study was performed by the desk method in two stages:

- analysis of the state policy in the field of improvement of the population's QoL, performed in Kazakhstan during the pandemic;
- assessment of the population's QoL in Kazakhstan by analyzing the satisfaction of Kazakhstanis with their financial situation, health, education, and the activities of state organizations.

The source base of the study was regulatory legal acts from the Adilet legal information system of Kazakhstan and statistical data of the Bureau of National Statistics of Kazakhstan, namely, the "Population's quality of life in the Republic of Kazakhstan" survey conducted annually in March ("Statistics of life" bulletins, Series 26) for the period from 2020 to 2021. Selected secondary data were taken through a survey of 12,000 random households in Kazakhstan, 0.3% of the general population (it provides results with an error of not more than 4% at the republican level and not more than 7% at the regional level). The criterion for representativeness was the territorial feature, including distribution by urban and rural areas. A satisfaction scale was used as an option for answering questions (from 1 to 10), where scales 1-3 were "not satisfied," scales 4-7 were "partially satisfied," and scales 8-10 were "satisfied." Also, there was an answer option "difficult to answer."

Based on the essence of the concept of QoL and its main components, data were selected on the sub-

jective assessment of respondents showing their satisfaction with their welfare, health, education, and the activities of state organizations (Table 1).

Table 1. Parameters used to describe

 respondents' opinions about their quality of life

QoL parameter	Respondents' opinions about	
Satisfaction in general	1. Satisfaction with lives	
	2. Satisfaction with living conditions	
	3. A promising future	
	4. The degree of confidence in one's own safety	
Welfare	1. Satisfaction with financial situation	
	2. Financial difficulties (last 12 months)	
	3. The level of material support (prosperity)	
	4. Changes in welfare	
	5. Food security (last 12 months)	
	6. The use of the Internet	
	7. Satisfaction with the situation in their place of residence	
Health	1. Satisfaction with overall health	
	2. Satisfaction with healthcare services	
	3. The use of health services	
Education	1. Satisfaction with the availability of services in the field of education	
	2. Satisfaction with the quality of services in the field of education	
Public policy	1. Satisfaction with the quality of public services	

The data analysis period from 2020 to 2021 was chosen to identify the impact of public policy during the pandemic (2020-2021). 2020 was used as the base year for comparison, and 2021 was the resulting one, which indirectly reflected the impact of state policy on the main parameters of the population's QoL. This choice is justified by the survey period among the population - March of each year. In Kazakhstan, the first case of coronavirus detection occurred in March 2020, which can be a starting point for analysis. Whereas 2022 was not taken as the resulting year, as there were mass protests across the country in January 2022 (Kudaibergenova & Laruelle, 2022), which could have substantially affected respondents. The primary method intended to study the selected parameters (opinions) was economic and statistical analysis based on a comparative approach. A horizontal and vertical analysis was performed, including a breakdown by location type. The main public policy analysis method was a qualitative context analysis. A search was made for regulatory legal acts in 2020 on state policy in the improvement of the population's QoL.

3. RESULTS

A state of emergency was introduced in Kazakhstan on March 16, 2020, for 60 days in order to contain the epidemic, and sanitary and epidemiological control was strengthened. In July 2020, a lockdown was announced. It lasted until mid-August. Many organizations were transferred to a remote work format, except for government agencies, law enforcement agencies, healthcare organizations, the media, grocery stores, pharmacies, and life support organizations.

According to seven educational programs, 5,200 teachers improved their qualifications, and 30,000 teachers completed courses on IT competencies. Particular attention was paid to the healthcare system. Sixty-three outpatient clinics were operated, sixteen modular hospitals were built, and three infectious diseases hospitals were reconstructed. The "QazVac" vaccine was developed. Medical workers involved in anti-epidemic measures were provided with a monthly fixed salary increase and lump-sum payments in case of illness or death of a medical worker (Abisheva & Dulambayeva, 2020).

Decrees "On measures to ensure social and economic stability" (No. 286, March 16, 2020) and "On further measures to stabilize the economy" (No. 287, March 16, 2020) were adopted as part of state support for the population in Kazakhstan. A comprehensive plan was developed and adopted to restore economic growth, consisting of 10 areas and 172 systemic and sectoral measures to stimulate business activity, support employment, and increase household incomes. Improvement of the population's QoL through the implementation of infrastructure projects in the social and cultural sphere, engineering and transport, production (industrial) infrastructure, and housing and communal services was designated as one of the four directions of the "Employment Roadmap for 2020-2021" (Decree of the Prime Minister, No. 55r, March 27, 2020). 45 billion tenges was allocated for 325 infrastructure projects with the creation of 11.3 thousand temporary and 441 permanent jobs to ensure employment within the framework of this program. The opportunity was organized for the unemployed registered in employment centers to take courses in various subjects online on the Coursera platform.

2,492 projects were approved for 603 billion tenges, and 2,192 projects were subsidized for 364.5 billion tenges under the program of concessional lending, "Economy of Simple Things." In order to support entrepreneurs, the accrual and payment of taxes and other payments from the wage fund were canceled for six months; a moratorium was introduced on the verification of SMEs (Government Decree, No. 126, March 20, 2020, and No. 141, March 27, 2020), as well as 600 billion tenge was allocated through the placement of conditional deposits in second-tier banks (Decision of the Board of the National Bank, No. 39, March 18, 2020). Second-tier banks were provided with preferential loans to replenish working capital for SMEs, individual entrepreneurs affected by the state of emergency, for up to 12 months at a rate of not more than 8% per annum. 0.9 billion tenge has been allocated to support entrepreneurship under the "Business Roadmap 2025" (Abisheva & Dulambayeva, 2020; Maltseva, 2021).

Besides the provision of employment and support of the population's entrepreneurial activity, the measures taken to avoid a sharp decline in the level and population's QoL include:

- cash payments to the population who lost their jobs due to the pandemic and the quarantine measures introduced, in the amount of one minimum wage – 42,500 tenge (March-May 2020);
- compensation for those who lost their jobs due to the state of emergency in the amount of 40% of their previous salary for up to six months, depending on the duration of their participation in the compulsory social insurance system and their income for the last 24 months;
- distribution of food and household packages to low-income families and people with disabilities, as well as the subsequent expansion of the list of categories of citizens who should be provided with free food and household packages;
- provision of schoolchildren from a socially vulnerable category with laptops;

- 5) non-disconnection of consumers with debts from water, electricity, heat, gas, and telephone communications during the quarantine, deferred payments for all utilities, including an elevator and garbage collection, as well as compensation to representatives of socially vulnerable groups of utility payments for April-May 15,000 tenge each;
- provision and extension of the right of uninsured citizens to receive medical care in the system of compulsory social health insurance until July 1;
- provision of the opportunity to freeze payments on bank loans at the discretion of banks (90-day moratorium), etc.

In 2020, there was an increase in the monthly calculated parameter up to 2,778 tenge. Pensions and state benefits, including targeted social assistance, were indexed by 10% annually. The work begun in 2019 to reform the pension, social, medical, and educational systems continued (Maltseva, 2021). In 2021, the following national projects were approved: "Quality and affordable healthcare for every citizen "Healthy nation," "Quality education "Educated nation," "National spiritual revival," "Technological breakthrough through digitalization, science and innovation," a national project on the development of entrepreneurship, "Strong regions - the driver of the country's development," "Sustainable economic growth aimed at improving the well-being of Kazakhstanis," "Green Kazakhstan," the national project for the development of the agro-industrial complex, "Safe country" (Decree of the President, No. 670, October 7, 2021).

The population's QoL in Kazakhstan can be assessed as satisfactory and sufficient. From 2020 to 2021, the satisfaction of Kazakhstanis with their lives and living conditions was at a high level and changed insignificantly. At the same time, before the pandemic, 63.5% and 58.1%, respectively, were satisfied with their lives and conditions; a year later – 61.3% and 54.7%. The number of partially satisfied has increased (Figure 1).

This trend continued at the urban-rural level. At the same time, satisfaction among rural residents with their life (70.7%) and their conditions (63.7%) is higher than among urban residents (56.1% and 49.8%, respectively).

Most of the population considers themselves to be middle class. Over the period from 2020 to 2021, the percentage increased from 63.8% to 65.6% against the backdrop of a decrease in the number of those who classified the level of well-being as above average (18.1% to 17.0%) and low (5.5% to 4.6%) (Figure 2).

According to the data of 2021, 60.5% of Kazakhstanis noted that their well-being has not changed, 33.0% – improved, and 6.5% – worsened. Among urban residents, 26.2% believe their well-being has improved, and 8.0% – worsened. While among rural residents, the distribution is as follows: 45.3% and 3.8%, respectively.

Kazakhstanis are primarily satisfied with their financial situation and the economic situation of the family (Figure 3). Among rural residents, the percentage of those satisfied with their financial and economic situation (49.3% and 53.1%, respectively) was higher than among urban residents (35.1% and 39.1%, respectively).

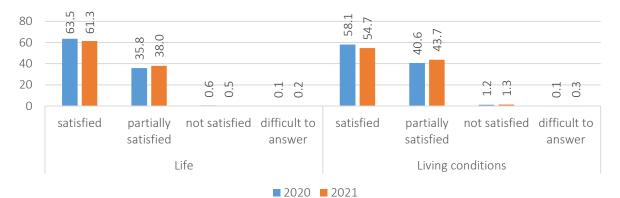


Figure 1. Kazakhstanis' satisfaction with their life and its conditions, %, 2020–2021

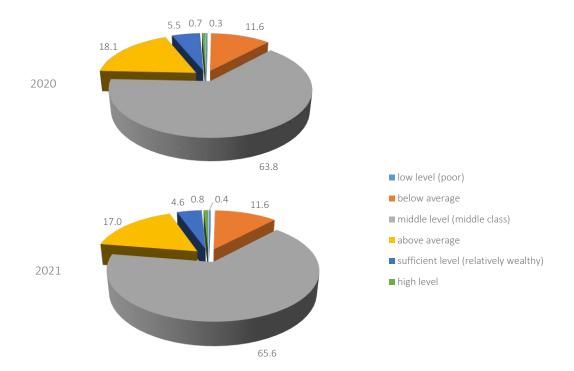


Figure 2. Kazakhstanis' assessment of their level of material support, %, 2020–2021

Over the period from 2020 to 2021, the percentage of respondents who had financial difficulties increased, especially in villages. In 2021, over the past 12 months, 5.6% of respondents experienced a lack of money or inability to pay rent or mortgage payments, 10.3% of respondents – to pay interest payments and loan debt, and 16.1% – to pay utility bills. The number of Kazakhstanis who faced food security problems due to lack of money or other resources decreased during the period under review but not significantly. In 2021, 6.6% of those surveyed were worried that they would not have enough food, 4.5% – did not have the opportunity

to eat healthy and nutritious food, 5.4% – ate only a few types of food, 1.1% – had to skip meals, 2.0% – ate less than they thought they should, 1.3% – ran out of food in the household, 0.6% – were hungry but could not eat, and 0.5% – did not eat all day.

During the pandemic, the satisfaction of Kazakhstanis with the quality of their housing decreased from 54.2% in 2020 to 51.8% in 2021. Among rural residents, satisfaction with the quality of their housing (60.7%) was higher than among urban residents (46.8%). At the same time, most Kazakhstanis were satisfied or partially satisfied

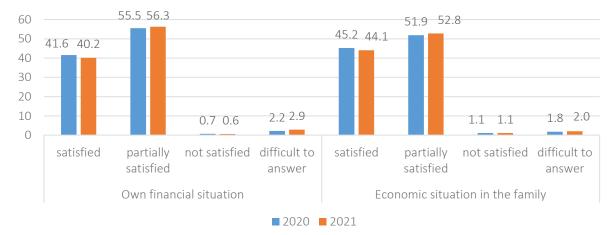


Figure 3. Kazakhstanis' satisfaction with their financial situation and economic situation in the family, %, 2020–2021

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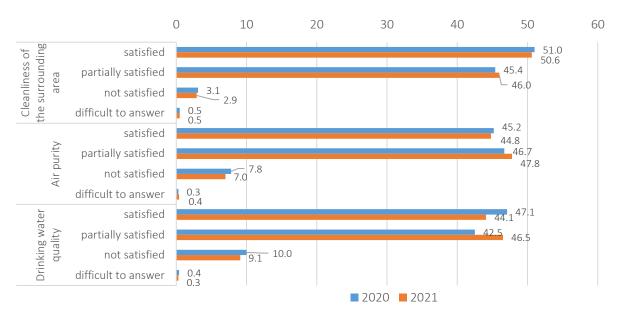


Figure 4. Kazakhstanis' satisfaction with the situation in their place of residence, %, 2020–2021

with the cleanliness of the territory adjacent to the house, the air's purity, and the drinking water quality (Figure 4). There was a slight decrease in the percentage of dissatisfied respondents with these parameters.

Kazakhstanis were satisfied with their health. In 2021, the distribution of respondents' opinions was as follows: satisfied – 48.7%, partially satisfied – 47.7%, dissatisfied – 3.4%, and undecided – 0.2%. Among rural residents, the percentage of satisfaction with their health was higher. Notably,

the number of cases when Kazakhstanis could not use health care services decreased from 17.2% to 13.7%. The main reasons are as follows: self-treatment (40.0%), lack of specialists (22.2%), long queues (18.8%), expensive medicines (12.1%), high cost of services (10.8%), and an expectation that the disease will go away by itself (7.6%).

The number of Kazakhstanis satisfied with healthcare cost, quality, and availability has decreased. There was a slight increase in the number of Kazakhstanis who were dissatisfied with the cost and availability

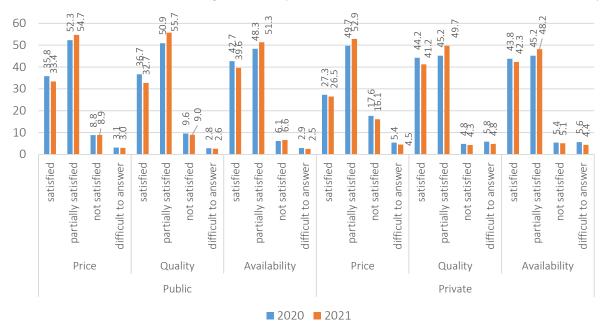
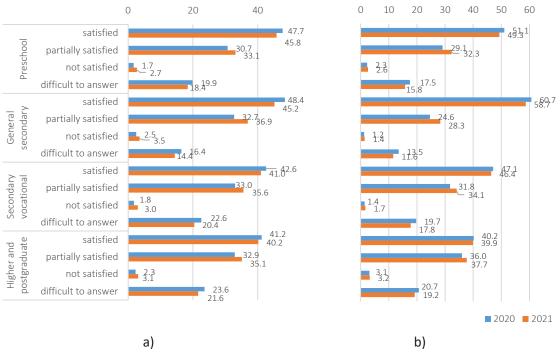


Figure 5. Kazakhstanis' satisfaction with healthcare services, %, 2020–2021



Note: a) quality, b) availability.

Figure 6. Kazakhstanis' satisfaction with education services, %, 2020–2021

of public health services. When public and private medical services are compared, the percentage of respondents who are satisfied with the cost of public health services but the quality and accessibility of private ones is higher (Figure 5).

The population in Kazakhstan switched to a distance learning format. Satisfaction with the quality and accessibility of educational services decreased (Figure 6).

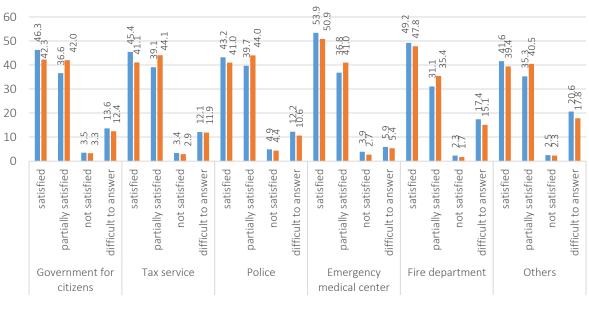
Kazakhstanis' satisfaction with the availability of secondary general and preschool education was higher than that of secondary vocational, higher, and postgraduate education. At the same time, satisfaction with the availability of educational services was higher among the rural population, while satisfaction with the quality was higher among the urban population. When the population's satisfaction with education services was assessed, a significant percentage found it difficult to answer, especially when their quality was assessed. It should be noted that the number of Kazakhstanis dissatisfied with the quality and accessibility of educational services increased.

The accessibility and quality of education during a pandemic may be related to the accessibility of the

Internet and related ICT, equipment, and infrastructure. The number of households with personal Internet access increased in 2021; their share was 63.0% of those surveyed, which is an increase of 4.2 percentage points compared to 2020. In 2021, 33.2% of urban residents and 43.8% of rural residents did not have access to the Internet. Compared to 2020, this figure decreased from 36.3% and 49.7%, respectively. The percentage of households that used Internet services during the last 12 months increased from 78.1% to 83.0%, while 91.0% and 93.1% of respondents used the Internet at least once a day in 2020 and 2021, respectively.

In general, Kazakhstanis are satisfied with the level of public services, especially in rural areas. The percentage of respondents who were satisfied with the quality of public services decreased, however, slightly, and there was no increase among the dissatisfied. Kazakhstanis were most dissatisfied with the services of the police. A high percentage of those are satisfied with the services of emergency medical centers. At the same time, the percentage of those who found it difficult to answer was quite high for each organization (Figure 7).

The confidence of Kazakhstanis in their own security was at a sufficient level. The number of partial-



2020 2021

Figure 7. Kazakhstanis' satisfaction with the quality of public services, %, 2020–2021

ly confident in their safety has increased. The percentage of those unsure of their safety due to fraud and corruption has also increased. Confidence in one's safety from discrimination was the highest (Figure 8).

It should be noted that Kazakhstanis were optimistic about their future. In 2021, 40.5% of respondents showed their confidence that life would be better, 33.0% assumed some improvement, and 22.2% believed that life would be approximately at the achieved level of well-being. Only 4.3% of respondents had a negative attitude toward the future.

Thus, during the pandemic, public policy in Kazakhstan was primarily aimed at improving the material security of the population. Public policy measures were also aimed at increasing the availability and quality of medical and educational services to provide the population with food and decent living conditions. The population's QoL in Kazakhstan can be assessed as satisfactory and sufficient. At the same

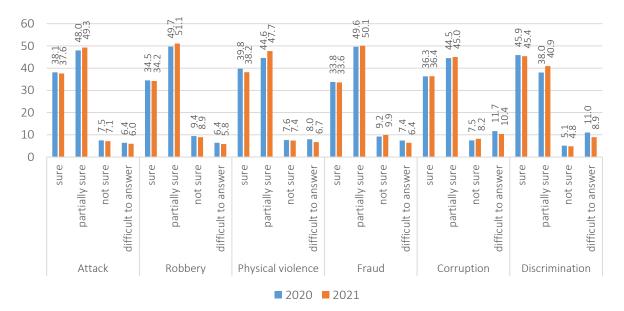


Figure 8. Confidence of Kazakhstanis in their own safety, %, 2020–2021

time, rural residents' satisfaction with the conditions and quality of life is higher than among urban residents. The confidence of Kazakhstanis in their own security is at a sufficient level. Kazakhstanis are optimistic about their future.

4. DISCUSSION

This study assessed the population's quality of life in Kazakhstan (Taspenova et al., 2019; Potluri et al., 2019). However, there were only few studies assessing the conditions and population's QoL (Tulegenova et al., 2022; CAREC Institute, 2023), as well as its components, such as education (Ibadildin et al., 2021; Kangalakova et al., 2023), health (Vinnikov et al., 2021), financial and economic situation (Sansyzbayeva et al., 2022) during the pandemic. Rakhmetova and Budeshov (2020) used QoL as a parameter of public management performance; the study used 45 macroeconomic development parameters. No studies of the subjective assessment of the population's QoL during the pandemic due to the policy performed during this period have been conducted.

The analysis shows that improving the QoL of the country's population was one of the critical tasks of public policy in Kazakhstan during the pandemic. At the same time, the work continued to modernize and reform the pension, social, medical, and educational systems in addition to temporary, anti-crisis measures of state support. Kazakhstan's social and economic policy aimed to improve the material security of the population through employment and support for entrepreneurial activities. It ensured that Kazakhstanis could maintain their level and QoL at the same level as before the pandemic and increase the availability and quality of medical and educational services to provide the population with food and decent living conditions. Particular attention was paid to socially vulnerable segments of the population.

The public policy of Kazakhstan, performed during the pandemic, concerning the population's QoL was ambiguous. According to Abisheva and Dulambayeva (2020) and Zhanabekova et al. (2021), Kazakhstan's public policy during the pandemic could have been more effective. At the same time, despite the relatively high level of Kazakhstanis' satisfaction with their lives and conditions during the pandemic, there was a widespread decrease in satisfaction in all components of the quality of life. However, there was no sharp increase in those dissatisfied with their housing conditions, education, health, safety, and other components of QoL. The number of Kazakhstanis dissatisfied with their financial situation, health, education, and the activities of state organizations remained the same. Kazakhstanis were confident in their security and optimistic about their future. The subjective nature of assessing the quality of life could influence this. It should be noted that the issues of the population's welfare and improvement of the population's QoL have become one of the priorities in public policy since 2021, decreasing the pandemic's negative impact.

Based on the subjective assessment of the population, the state kept the population's quality of life at a pre-pandemic level, which indicates the effectiveness of public policy during this period. At the same time, a high percentage of those who answered that they are "partially satisfied" in almost all components of the QoL indicates that there are problems in ensuring a decent level and quality of life in the country, which requires identifying the causes of dissatisfaction among the population. According to Tulegenova et al. (2022), the quality of life in the rural area could be much higher. There are low income, high unemployment, and the problem of drinking water and accessibility of medical services. In contrast, the subjective attitude of the population to these issues is different. Satisfaction of the rural population with their level and quality of life is higher than among urban ones.

The analysis results show an objective need for state intervention in social processes, especially in times of crisis. A set of practical measures is required to support various social groups, as well as a policy aimed at improving the population's welfare and reforming all social systems in Kazakhstan. One of these measures could be improving the methodology intended to determine the living wage and to update the composition of the consumer basket (Kazhyken & Satpayeva, 2019). The monthly minimum wage cannot be lower than the living wage, which, especially in a pandemic, does not ensure human development and a decent level and quality of life. Evidencebased policy and stakeholder approach should be introduced in Kazakhstan to implement effective socio-economic policy (Abisheva & Dulambayeva, 2020). The following priority areas of the public policy in Kazakhstan in the field of improvement of the population's QoL can be distinguished:

- improvement of the population's living conditions (quality of housing, utilities, financial literacy in the field of lending, food security);
- improvement of the quality and accessibility of medical services (training of medical specialists, development of management in medical organizations, including using ICT, development of a culture of a healthy lifestyle and trust in doctors and the healthcare system as a whole);
- increase in the availability of secondary vocational, higher, and postgraduate education, as well as the quality of educational services, especially in rural areas;

- 4) provision of the population with access to the Internet, especially in rural areas;
- 5) development of management and improvement of the efficiency of the government for citizens, tax authorities, police, emergency medical centers, and fire services, especially the police.

During the pandemic, the number of Kazakhstanis dissatisfied with their financial situation, health, education, and the activities of state organizations did not increase significantly. The government kept the population's quality of life at a pre-pandemic level, which indicates the effectiveness of public policy during this period. Thus, the research assumption was rejected. A promising area of research in this field can be a comprehensive survey of the population aimed to identify the reasons for the answers "partially satisfied," "dissatisfied," and "difficult to answer" since the answer "partially satisfied" can also be assessed as "dissatisfied." It will identify problems in improving the population's QoL, which should be prioritized by the government.

CONCLUSION

This study aims to determine the effectiveness of Kazakhstan's public policy carried out during the pandemic related to healthcare, education, and financial situation by assessing the population's quality of life. So, improvement of the population's quality of life was one of the critical tasks of Kazakhstan's public policy during the pandemic. The measures taken by the state during the pandemic were primarily aimed at ensuring employment, improving the accessibility and quality of medical and educational services, and providing the population with food and decent living conditions. The work was performed to modernize and reform the social, medical, and educational systems while implementing temporary anti-crisis support measures.

The assessment of the quality of life, based on macroeconomic parameters, indicates the inefficiency of the state policy implemented during the pandemic. However, the subjective assessment based on the analysis of the satisfaction with life and its conditions shows that the government managed to maintain the population's quality of life practically at the pre-pandemic level and did not result in a sharp decline, which indicates the effectiveness of state policy during this period. The quality of life in Kazakhstan can be assessed as satisfactory and sufficient. Satisfaction with living conditions and the quality of life is higher among rural residents than among urban residents. Kazakhstanis are optimistic when they assess the quality of life and its components. During the pandemic, satisfaction with the population's material well-being, health, education, and living conditions decreased. However, there was no increase in the percentage of those who reported being dissatisfied, except for assessing the quality and accessibility of educational services. Most of the population considers themselves to be middle class. During the pandemic, one-third of the population reported improved welfare, while 6.5% reported a decline. Kazakhstanis are also optimistic about their future, with two-thirds of the population believing life will improve.

The study offers several recommendations. First, evidence-based policy and stakeholder approach should be introduced in Kazakhstan to implement effective socio-economic policy. Next, science, healthcare, education, and social welfare should be the priority areas of Kazakhstan's public policy to improve the quality of life of its citizens.

AUTHOR CONTRIBUTIONS

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