# The impact of the pandemic on the territory development in terms of the quality of life of the youth environment

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> Abstract. The impact of the Covid-19 pandemic on the national development processes is under study. The article considers methods for assessing changes that affect the territory development prepared by Russian and Polish researchers. A comparative characteristic of methodological approaches is given. The discussion made it possible to establish that the result of the development of any territory, of course, should be considered in terms of changes in the quality of life of the population. In this regard, the methodology developed by Russian authors, which provides for the gradation of influencing factors by groups of influence, was taken as the basis. In total, four special interest groups on changes in the quality of life of the population were identified, such as factors associated with the population itself; business structure development factors; infrastructural factors, which are the responsibility of the municipalities; and institutional factors providing for the activities of public institutions. The study presented in the article is based on the sociological survey data among young population conducted on the basis of several universities in the two countries of Russia and Poland in the prepandemic and pandemic periods, since the youth student environment determines the potential for future development of territories. The main changes (positive and negative) in the assessments of the impact of various factors on the quality of life of the population caused by the Covid-19 pandemic have been established.

> **Keywords:** social and economic development, life quality, Covid-19 pandemic, life quality of students, cross-country comparison, territory development factors

# **1** Introduction

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Studies aimed at analysing changes in the quality of life of the population have been of interest to researchers from different countries for many years, since significant changes in the quality of life of the population are used as an indicator of effective management of a territory. The influence of public and municipal authorities of a particular territory on qualitative changes in the level of development of territories, based on the influencing factors of development, is determined by changes in the quality of life of people in that territory. The key characteristics of the quality of life of the population is the degree of satisfaction of the material, cultural, spiritual, socio-economic and medical and environmental needs of a person.

At the international level, there are many approaches to assessing the level and quality of life of the population. The most well-known methods for assessing human potential, assessing the level of happiness and assessing belonging to the middle class. Discussions on the selection of factors, that characterise various aspects of the life of the population, the economic and mathematical substantiation of models and methods of analysis, since the quality of life is a multidimensional integrated indicator, are underway.

In Russia, these issues are primarily related to the studies of modern researchers S.A. Ayvazyan, S.D.N. Dagbaeva, E.V. Zarova, R.M. Kundakchyan, T.N. Larina, T.M. Maleva, L.A. Migranova, N.I. Morozova, N.M. Rimashevskaya.

Methodological, analytical and informative trends are also included in popular discussions about the quality of life in Poland and Russia. Polish researchers published their research on the quality of life of the population in the last century (Luszniewicz, 1972; Ryg, 1992). In the 1st and 2nd decades of the 21st century, publications on this topic in Polish literature are also very popular, especially in the fields of sociology, psychology and medicine (P. Czapliński, 2000 et al.; Klak et al., 2012; Petrevich-Grabovich, 2016; Kowalewska et al., 2017). Representatives of economic sciences also showed interest in this topic (Skrzypek, 2007; Mazur-Wierzbicka, 2018; Rosko-Voitovich, Grzhelak, 2018).

One of the most important areas of research by scientists in Russia and Poland was the study of the impact of the pandemic on the territory development in the context of the quality of life of the population of certain vulnerable social groups, including young people.

### 2 Materials and methods

Methodological approaches differ in the composition of indicators for assessing the quality of life of the population, methods for collecting information, constituent elements, technologies and methods for calculating the integral indicator, the economic and mathematical apparatus of the study, the list of factors influencing their change, and many other elements of the research.

Among Polish scientists, it is worth noting the research in the field of methodology for measuring the quality of life (Owsiński, Tarchalski, 2008; Senkevich, Sveboda, 2008; Szukiełojć-Bieńskuńska, 2015), as well as the research on various types of comparisons, both internationally and locally, (Czapliński, Panek, 2000 et al.; Petrevich-Grabovich, 2016; Kowalewska et al., 2017, Mazur-Wierzbicka, 2018).

The Central Statistical Office, which has become an element of the ESS (European Statistical System) structures, holds a prominent place in the study of the quality of life of the population in Poland. The results of research into the quality of life of Poles and the research results in related fields (for example, the European Income or Living Conditions Survey – EU-SILC or the Social Cohesion Study – BSS) are carried out within the framework of the general methodology recommended by the ESS since 2004 and are of a dynamic nature. The key criteria, that are taken into account when studying the level and quality of life in Poland by the Central Statistical Office, are shown in Figure 1 and are represented by a wide range of indicators.





For social diagnosis, an essential role was played by a research project led by professors J. Czaplinski and T. Panek (2000 et al.), within the framework of which an analysis of the conditions and quality of life of the Poles was carried out [1-5]. These studies represented an important alternative source of information on this issue for various institutions and researchers in Poland. The latest versions of the research results were released in 2015.

Similar studies are being carried out in Russia. One of the methods for assessing the factors affecting the change in the quality of life of the population is a factorial approach to managing the quality of life of the population (author Zakharova S.G.) (Fig. 2) [6]. In the presented research into the quality of life of Russian and Polish students, the methodology proposed by the Russian author was used.

This methodology for studying changes in the quality of life of the Russian population has been used by the authors since 2010. It should be noted that the research results indicate that until 2018 the quality of life in Russia changed in a positive direction, both in terms of tangible and intangible aspects.

# **3 Results**

The impact of the pandemic on the development of territories in terms of the quality of life of young people is a very interesting and extensive topic, since in modern realities, serious hopes are placed on young people, because it is this segment of the population that maps out the social advancement as a whole.

To study the impact of the pandemic on the development of territories in terms of the quality of life of young people, a sociological survey was conducted among Russian and Polish students. The respondents included senior students of the Institute of Economics and Entrepreneurship of the Lobachevsky University (Nizhny Novgorod, Russian Federation) and Gdansk University (Poland). In total, more than 500 students were interviewed, which made it possible to obtain an overall picture of the current situation. As a part of the study, it was proposed to assess the factors affecting the quality of life of students in the pre-

pandemic period (2019) on a 10-point scale and assess the change in these indicators as of 1 December 2021.



Fig. 2. Factors affecting the change in the quality of life of the population.



**Fig. 3.** Evaluation of changes in the factors influencing the life quality of students. Authors' research. Individual quality of life indicators of the population in a pandemic is a topic of interest to many scientists.

Factors affecting the quality of life of students were assessed from the side of the impact of four subjects, such as the students themselves, business (enterprises and organisations), municipalities and public agencies. Each factor is represented by five indicators and distributed among the subjects of influence according to the functional areas. The research results in comparison of the changes in the quality of life of students of the Russian Federation and Poland are presented in Fig. 3.

### 4 Discussion

Researchers widely discuss the impact of the COVID-19 pandemic on the quality of life of young people, and also identify various trends that are typical of changes in living conditions and satisfaction with them. The works of researchers from Poland [7] focused on the impact of the pandemic on social groups, including young people, are very interesting. Comparative characteristics of the changes in the quality of life of students in the Russian Federation and Poland during the pandemic, based on the authors' research, are shown in Fig. 4.

The negative consequences of the pandemic for various social groups are analysed by many researchers. For the life of young people around the world, there is a negative impact, for example, as far as communication skills and thinking of students [8], the practical aspects of learning [9] are concerned. The issues of students' adaptation to new learning conditions during the COVID-19 period [10]; issues related to the research into youth employment and unemployment in a pandemic are analysed.

There are also positive aspects. The works of Russian authors analyse such positive changes noted by students as the opening of remote work opportunities, the active development of demanded digital competencies, the skills to receive and design digital content, and others [11], while their age becomes a natural resource that significantly increases the chances of adapting to pandemic-induced social transformations [12], and interaction difficulties are seen as challenges and emerging opportunities.

According to the International Labour Organisation (ILO), one in five young people have lost their jobs due to the COVID-19 pandemic; and those who continued to work saw a 23% reduction in employment. In this regard, articles by Russian authors on youth employment and unemployment in a pandemic are very interesting. For example, in his work, Martirosyan notes that the most important reason for the reduction in youth employment is the suspension of the activities of service providers and the provision of leisure services due to a reduction in staff [13].

The impact of youth employment problems during the pandemic also affected the development of territories.

Russian scientists of the Perm State National Research University dealt with the issues of the regional economy's robustness against the COVID-19 pandemic [14]. During the research into ample data for the period from March 2020 to July 2021, it was found that there is no direct dependence of the regional economy's robustness against COVID-19 on the level of social and economic development of the region.

Russian researchers are developing scientific approaches to assessing changes in the regional economy, in particular, assessing the region's budgetary potential taking into account the innovative development of high-tech industries [15]; the research uses the latest technologies, including the use of a multipurpose genetic algorithm (MGA), in order to increase the synergistic effects from the rational use of investments and resources [16]. The issues of evaluating the national project implementation as the main tool for increasing the economic growth of Russia and the quality of life of the population [17], as well as issues of the effectiveness of management institutions are considered [18].







**Fig. 4.** Comparative characteristics of the quality of life of students of the Russian Federation and Poland in 2019 and 2021, authors' research.

Polish scientists also conduct various types of research, including general research (Długosz, 2021; Milska et al. 2021) and within specific social groups (Płoszaj, Kochman, 2021; Pyzhalsky, 2021; Quality of life of older people, 2021; Skrabach, 2021). The key conclusions of these studies include the fact that during the lockdowns in Poland in 2020, the general psychophysical condition of citizens was deteriorated significantly and accompanied by a sharp drop in economic living conditions.

### **5** Conclusion

As a result of the COVID-19 pandemic, the quality of life of the population, including students, in both Russia and Poland, has noticeably decreased. In 2021, the living conditions have not yet recovered to pre-pandemic levels; and it is difficult to determine when a significant improvement will occur. The current economic and political situation in the world is not conducive to this either. As part of this line of research, an international research group attempted to compile a comparative description of the impact of the pandemic on the quality of life of students in Russia and Poland.

In summary, the pandemic has had a negative impact on the quality of life of students, many have lost their jobs, incomes have decreased, and there is a demographic decline. However, students directly related to the digital sector, on the contrary, note positive trends, and the pandemic also had a positive effect on the promotion of the digital economy, which is a prerequisite for the transition to an innovative stage in the territory development, and the environmental situation has also improved. The pandemic has become a serious test for the world community, showed the most vulnerable places, but at the same time, gave impetus to improvement and development.

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