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Rural and Urban Spaces in Romania: Statistical Analysis of Cultural and Artistic Units, Cultural Consumption (During and After the COVID-19 Pandemic) and the Current Degree of Digitization

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ABSTRACT

We live and work in an increasingly technologically connected society, where the cultural consumption has changed. Some of the most obvious consequences of this digitization could be seen in terms of new forms of presentation and promotion of cultural heritage. Despite all the damage it has created, the COVID-19 pandemic has also produced a boost in the digitization of the tourism and cultural industry. The pandemic has demonstrated how important digital tools are for tourism and culture, alongside basic digital skills. Therefore, analyzing the digital transformations in cultural tourism by residence environments (urban and rural) is a must-do activity given the constant expansion of digital tools. This article investigates the impact of the COVID-19 pandemic on rural and urban areas of Romania, from a statistical perspective. In order to identify cultural trends, carried out both in the rural and urban environments, we will use the statistical information at the national level to analyze these phenomena, through comparative analyses, which will highlight the differences registered in the two residential environments, during and after the COVID-19 pandemic. The article will also include an analysis of the current degree of digitization by residential environment, in order to comparatively research the digital inequalities between urban and rural environments in Romania, the main results showing that rural areas had lower internet connectivity compared to urban areas during the analyzed period, a smaller number of cultural units, as

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1. Introduction

The last decade has seen an increase in the number of digital projects taking place at different institutional levels and through different technological tools (Obadă, 2021). All of this has led to tourism's increasingly significant dependence on modern technological tools (Cooper, cited in Maiorescu et al., 2016). Technology is no longer just a means of disseminating and promoting cultural products but is now also a factor of attraction (Poulaki et al., 2021). In the context of the COVID-19 period, we could observe that the opportunities and the possibilities offered by digital technologies were used much more than in the past. The tourism and cultural sectors were among the most affected by COVID-19, one of the consequences being the increased attention to digital transformations and the ways of using digital technologies in these two sectors.

Even though the COVID-19 pandemic has accelerated digital transformation processes, the access to cultural and digital resources is uneven at national level, in both urban and rural areas. That is why research is needed on how this gap has affected rural areas in particular—this has been the scope of developing the current paper and the reason for writing it.

In order to establish the territorial and administrative divisions that will be analyzed in this study, we emphasize—from the beginning—that we deemed rural areas more disadvantaged than urban areas, given the obvious differences between living standards in urban and rural areas, at the national level. Rural areas are still lagging behind urban areas in terms of economic development and well-being. There are disadvantages from several points of view in the case of rural areas (in terms of socio-economic development, structural characteristics, and geographical position). The disparities between the urban and rural areas have also created inequalities in terms of income—there are clear imbalances and gaps depending on the area of residence—starting from differences in level and structure, between urban and rural households, and up to the degree of socio-demographic, economic, and cultural development, but also when it comes to the level of digitalization.

In order to analyze the proportions of cultural disparities between urban and rural areas at the national level, we analyzed the most recent statistical indicators available at the National Institute of Statistics, an institute that conducts surveys regarding the analysis of cultural-artistic units in rural and urban areas (through indicators such as: the number of libraries, the number of museums and public

collections, the number of institutions hosting performing arts or concerts), the analysis of cultural consumption in rural and urban areas (through indicators such as: the number of active readers enrolled in libraries, the number of visitors to museums and public collections, the number of spectators and listeners attending artistic performances), as well as the current degree of digitalization in rural and urban areas.

2. Literature Review

In the context of the realities of the pandemic crisis, Beaunoyer et al. (cited in Matei, 2020), noted that digital technologies have represented a vector of economic and social activities, as well as a support for leisure activities and social interactions. The situation during the COVID-19 pandemic has demonstrated how important digitalization has become in the society we live in, a fact that was also reported in the study on the post-pandemic economic recovery, published by the European Institute of Romania (Miron et al., 2022). Porter and Heppelmann (cited in Ammirato et al., 2022) stated that numerous studies have highlighted how digital technologies have positively affected the attractiveness of cultural destinations, through the new opportunities offered, the exchange of information and the addition of new values.

According to the latest report of the European Committee of Regions (2024), the differences between urban and rural areas are a major challenge in many parts of the European Union.

Rodrigues et al. (2023) argued that this lagging behind of rural areas in the last years was caused by the lack of a strategic approach regarding the inclusion of innovation in the various activities associated with rural spaces (agriculture, tourism, food production, etc.).

Proietti et al. (2022) investigated in a study carried out for the European Commission the differences existing between rural and urban areas in terms of high-speed internet connection (over 100 Mbps) in the countries of the European Union, highlighting this gap that exists between the two spatial categories. Thus, the population living in urban areas has access to broadband internet over 30 Mbps, registering significant percentages in the over 100 Mbps category as well. In contrast, in rural areas of the European Union countries the situation is quite different, since most of them have access to medium-speed internet (30-100 Mbps), only few countries having high-speed internet over 100 Mbps in rural areas (and those are Luxembourg, Hungary, the Netherlands, Bulgaria, Denmark, Sweden). In Romania there are extremely few rural areas connected to high-speed internet, while in cities the coverage rate is just over half of the total.

The European Parliament Resolution of 13 December 2022 drew attention to the fact that the lack of digital skills in rural areas can prevent rural communities from benefiting from the opportunities offered by digitalisation and can stop the development of small and medium-sized enterprises. The adoption of new technologies, and in particular the use of the internet, is seen as a vital part of strategies to combat rural decline (Komorowski, 2024).

Ferrari et al. (2022) interviewed 30 experts/specialists in the digitalization of rural areas in the European Union and their results showed that the main obstacles to the adoption of digital solutions in rural areas were the poor internet connectivity in rural areas, as well as the lack of trust towards new technologies.

Andreopoulou et al. (2014) considered that tourism businesses in rural areas need to improve the presentation of tourism offers through websites, in order to become more attractive, profitable and efficient. The same idea was supported by de Luca et al. (2020), who similarly argued that in rural areas there is a need to develop local capacities and skills in terms of digital tools for tourism promotion.

It must be mentioned that, although digitalization has generally been viewed and considered as an opportunity for development in tourism by most of the cited authors, it also has its limitations. For example, de Luca et al. (2020) highlighted that by promoting cultural objectives online, there is a risk of creating an exclusive product, especially in rural areas, where internet access is lower and where the elderly population is not yet sufficiently prepared to use new technologies. Dredge et al. (2018) identified certain difficulties encountered by small and medium-sized enterprises operating in the tourism sector when implementing digital projects (which may apply to rural areas), the most pressing problem being the need for training to use new digital technologies. Digitalization will be an effective model only if it contributes to the complete comfort of tourists, who need multiple services (transportation, accommodation, car rental, tourist attractions, food, trip planning), which can be offered through so-called intelligent digital platforms (Maquera et al., 2022).

At the national level, the authors of the Report produced in 2019 by the World Economic Forum (Menon & Wolff, 2019) considered that disparities between urban and rural areas affect the development of Romania's economy and digital society, thereby reducing the country's competitiveness.

Regarding the delimitation of rural and urban areas in Romania, this was achieved at the national level via Law no. 351/2001 (Law approving the National Land Use Planning Plan – Section IV – The Network of Localities), according to which the

national network of localities is composed of urban localities and rural localities, ranked according to their distinctive characteristics and the share of the dominant economic activity taking place within each, their number of inhabitants, their peculiar built fund, the density of their population and its structure of housing, the level of social-cultural endowment, and the technical equipment they feature.

Moreover, according to Law no. 351/2001, the administrative and territorial divisions are classified as: communes, cities, and counties. Cities and communes are considered basic administrative and territorial divisions and may include one or more localities. The commune is a basic administrative and territorial division comprising the rural population united by common interests and traditions, made up of one or more villages, depending on specific economic, social-cultural, geographical, and demographic conditions.

The statistical analyses from this article will be carried out at the level of administrative-territorial units for which information and statistical data are collected and then published by the National Institute of Statistics from Romania (municipalities and cities are associated with urban space and communes are associated with rural space).

3. Methodology

The statistical analyses in this paper will be carried out at the level of the administrative and territorial divisions in relation with which information and statistical data are collected and then published. More specifically, the National Institute of Statistics uses the classifications from the Nomenclature of administrative-territorial units, in accordance with the provisions of Decree-Law nr. 38/199 (on the abrogation of Law no. 2/1989 on the administrative organization of the country's territory) of the National Salvation Front Council—decree establishing that Romania's territory is structured into municipalities, cities and communes. Therefore, in this study, municipalities and cities will be treated as urban spaces, and communes, as rural spaces.

Based on a process of identification, collection and analysis of statistical data, this paper aims at researching the evolution of the cultural activity in the national rural area (to highlight the effects of the difficult period associated with the COVID-19 pandemic, which took its toll on the cultural consumption in the rural area of Romania), between 2019 and 2024. From the cultural data and statistics available at the National Institute of Statistics, only those statistical indicators that are relevant to cultural tourism were selected and analyzed (those referring to museums, public

collections, institutions hosting performing arts or concerts). The libraries were also included in the analysis, because this year a special funding was launched for them, in order to transform the libraries in hubs for the development of digital skills (for certain communities, especially the marginalized ones, to be able to access technology and to benefit from educational opportunities through modern equipment and spaces), a topic that aligns with the theme of this article.

At the same time, we wanted to analyze the current degree of digitization of the rural areas at the national level. The statistical analyses related to the rural area drew a parallel between the rural and the urban area. We used a series of data and frequent indicators to build a picture of the cultural activity (based on the data contained in databases and on the research conducted by the National Institute of Statistics and by the European Commission). Before being presented in this paper, the data and the information obtained were centralized and processed using Excel.

4. Results and Discussion

4.1. The analysis of the cultural and artistic units in rural and urban areas

Depending on the environment in which the phenomena take place, the cultural market can be an urban or a rural one. First of all, with the help of specific indicators put forth by the National Institute of Statistics, we can make a diagnosis of the public cultural institutions in rural areas, compared to those in urban areas.

According to the classifications made available by the National Institute of Statistics, the public cultural institutions fall into three categories: libraries; museums and public art collections; and institutions hosting performing arts or concerts (all representing the basic units granting access to the national cultural offer).

4.1.1. Number of libraries

At the national level, regarding the evolution of the total number of libraries between 2019 and 2024, the data provided by the National Institute of Statistics presented in Table 1 show that it registered a downward trend starting with the first analyzed year (2019), a trend that continued, with small variations, until 2024. This represented a decrease of 13.4%, from 9,222 libraries in 2019 to 7,983 libraries in 2024. Libraries represented the most numerous types of public cultural institutions out of the three analyzed, as, in 2024, they had a share of 94.1% of all of the institutions located in rural areas and 81.4% of those in urban areas.

Table 1. Total number of libraries between 2019 and 2024 in the rural area versus the urban area

Number of libraries	2019	2020	2021	2022	2023	2024
Total, of which:	9.222	8.829	8.458	8.372	8.150	7.983
» in the rural area	5.770	5.457	5.198	5.101	4.914	4.753
» in the urban area	3.452	3.372	3.260	3.271	3.236	3.230

Source: Author's calculations using information from the TEMPO-Online database of the National Institute of Statistics

Primary data: <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

If we consider the area of residence of the population, our calculations (based on data published by the National Institute of Statistics) showed that the number of libraries in rural areas decreased by 17.6% in 2024, compared to 2019. The number of libraries in urban areas also witnessed a decrease, namely 6.4%, but it was less pronounced than those in rural areas. At the same time, we note that, in 2024, almost 60% of the total number of libraries was distributed in rural areas.

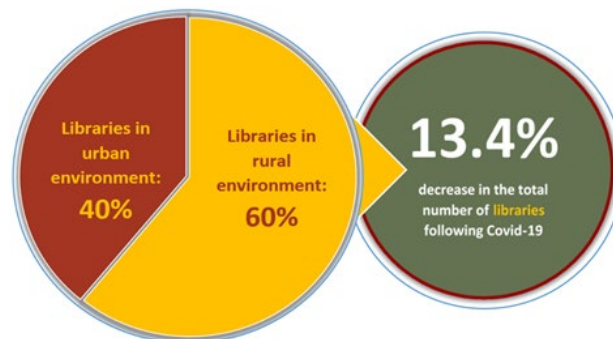


Fig. 1. The impact of COVID-19 on the total number of libraries in 2024 (compared to 2019), by area of residence

Source: Graphic representation made by the author, using information from the TEMPO-Online database of the National Institute of Statistics

Primary data: <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

4.1.2. Number of museums and public collections

Regarding the evolution of the total number of museums and public collections at the national level, between 2019 and 2024, we can see a decrease of 1.8%. The decrease is determined by the reason that some museums were forced to cease their activity during the pandemic, between 2020 and 2021, resulting in the fact that it was only in 2022 (when restrictions caused by the pandemic were reduced) that they began to gradually resume their service (there was even a 4.3% increase in 2023).

But 2024 brought a new national decrease (-5.8%) in the total number of museums and public collections compared to the previous year.

Table 2. Total number of museums and public collections between 2019 and 2024 in the rural area versus the urban area

Number of museums and public collections	2019	2020	2021	2022	2023	2024
Total, of which:	791	763	759	768	825	777
» in the rural area	310	295	291	296	348	293
» in the urban area	481	468	468	472	477	484

Source: Author's calculations using information from the TEMPO-Online database of the National Institute of Statistics

Primary data: <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

If we consider the area of residence of the population, we can see that the number of museums and public collections also decreased between 2019 and 2024, respectively by 5.5% in rural areas and 0.6% in urban areas. In 2024 (but also throughout the entire analyzed period), the number of museums and public collections in urban areas (62.3%) was higher than the number in rural areas (37.7%).

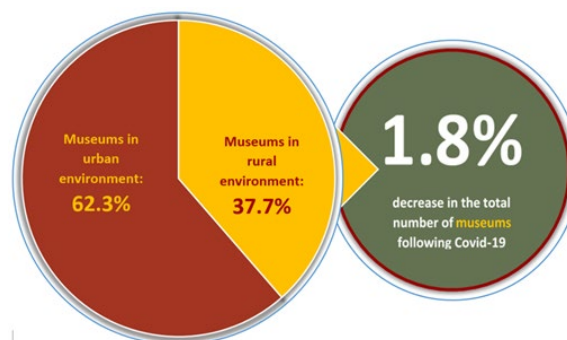


Fig. 2. The impact of COVID-19 on the total number of museums and public collections in 2024 (compared to 2019), by area of residence

Source: Graphic representation made by the author, using information from the TEMPO-Online database of the National Institute of Statistics

Primary data: <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

4.1.3. Number of institutions hosting performing arts or concerts

As for the total number of institutions hosting performing arts or concerts at the national level, it featured a slight, but continuous decrease between 2019 and 2021. In 2022 there was an increase of 3.5% compared to the previous year (2021), this upward trend continuing until 2024. Overall, in 2024 the number of performing

institutions and companies was by 6.6% higher than that in 2019. We also mention that the institutions hosting performing arts or concerts was the smallest, compared to the other two types of public cultural institutions included in the research (libraries and museums), in all the analyzed years.

Table 3. Total number of institutions hosting performing arts or concerts between 2019 and 2024 in the rural area versus the urban area

Number of institutions hosting performing arts or concerts	2019	2020	2021	2022	2023	2024
Total, of which:	242	235	229	237	242	258
» in the rural area	3	2	2	1	1	4
» in the urban area	239	233	227	236	241	254

Source: Author's calculations using information from the TEMPO-Online database of the National Institute of Statistics

Primary data: <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

If we consider the area of residence of the population, we can see that, in the evolution of the number of institutions hosting performing arts or concerts, there were increases in both rural areas (+33.3%) and urban areas (+6.3%), between 2019 and 2024. The extremely low number of these cultural units in rural areas was also observed. It should be noted that, in 2024 (but also in the other years analyzed), the gross majority of the institutions hosting performing events or concerts were concentrated in urban areas (98.4%).

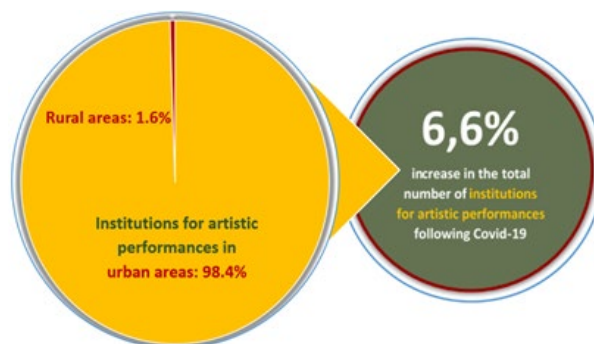


Fig. 3. The impact of COVID-19 on the total number of institutions hosting performing arts or concerts in 2024 (compared to 2019), by area of residence

Source: Graphic representation made by the author, using information from the TEMPO-Online database of the National Institute of Statistics

Primary data: <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

4.2. Analysis of the cultural consumption in rural and urban areas

The investigation of the culture-consuming public is an approach that can be researched through quantitative indicators. In order to monitor the participation in cultural activities in relation to the areas of residence of the public, its extent can be assessed according to the number of active readers enrolled in libraries, the number of visitors to museums and public collections, and the number of spectators and listeners attending artistic performances. These are indicators that can be found in the database of the National Institute of Statistics and that prove to be useful in our effort to illustrate the degree of cultural participation and consumption broken down by areas of residence (urban and rural).

4.2.1. Number of active readers enrolled in libraries

Regarding the evolution of the total number of active readers enrolled in libraries, at the national scale, the data provided by the National Institute of Statistics presented in Table 4 show that it recorded a decrease of 31.4% in 2021, compared to 2019. The decrease in the number of libraries has thus obviously had an impact on their activity as well, by causing a decrease in the number of active users. The pandemic year 2022 even brought an 11% increase in the number of readers, compared to the previous year. Overall, 22.6% more readers visited libraries in 2024, compared to 2019.

Table 4. Total number of active readers enrolled in libraries between 2019 and 2024 in the rural area versus the urban area

Number of active readers enrolled in libraries	2019	2020	2021	2022	2023	2024
Total, of which:	3.101.970	2.504.032	2.127.183	2.361.976	2.410.952	2.401.442
» in the rural area	903.011	711.875	633.395	654.720	639.181	614.829
» in the urban area	2.198.959	1.792.157	1.493.788	1.707.256	1.771.771	1.786.613

Source: Author's calculations using information from the TEMPO-Online database of the National Institute of Statistics

Primary data: <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

Structured by area of residence, the data presented in the Table 4 reflected a downward trend in the evolution of the number of active readers in libraries, which decreased between 2019 and 2024, respectively by 18.8% in the urban areas and 31.9% in the rural areas (where there was a steeper reduction than in the urban areas). 2022 was the year in which readers started to frequent libraries again in greater numbers than in the previous year, their number increasing more in urban areas (+14.3%),

compared to rural areas (+3.3%). In 2024 (but also throughout the entire analyzed period) the number of active readers enrolled in libraries in urban areas (74.4%) was higher than the number of those in rural areas (25.6%), even though there are more libraries in rural areas.

4.2.2. Number of visitors to museums and public collections

According to the information available in the database of the National Institute of Statistics and our calculations regarding the evolution of the total number of visitors to museums and public collections, at the national level, there was a decrease of 11.7% in 2024, compared to 2019. The largest decrease was recorded in the first pandemic year (2020) and, even if after this year the total number of visitors to museums began to increase, it did not reach the value it used to have before the pandemic (2019).

Table 5. Total number of visitors to museums and public collections between 2019 and 2024 in the rural area versus the urban area

Number of visitors to museums and public collections	2019	2020	2021	2022	2023	2024
Total, of which:	18.197.586	7.939.266	11.405.458	16.024.507	16.638.226	16.063.039
» in the rural area	3.786.032	1.887.765	2.557.570	3.177.115	3.563.066	3.884.034
» in the urban area	14.411.554	6.051.501	8.847.888	12.847.392	13.075.160	12.179.005

Source: Author's calculations using information from the TEMPO-Online database of the National Institute of Statistics

Primary data: <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

If we consider the area of residence of the visitors to museums and public art collections, our calculations showed that it featured a decrease of 10.8% in urban areas, and of 16.1% in rural areas between 2019 and 2022. In 2022 (but also throughout the entire analyzed period) the number of visitors to museums and public art collections in urban areas (80.2%) was higher than the number of those in rural areas (19.8%), which can also be a consequence of the greater number of museums in urban areas. After the pandemic period, only in rural areas the number of visitors to museums exceed the values of 2019 (by 2.6% more in 2024), which didn't happen in the urban areas (where a decrease of 15.5% was recorded in 2024).

4.2.3. Number of spectators and listeners attending artistic performances

By analyzing the data provided by the National Institute of Statistics (exemplified in Table 6) regarding the evolution of the total number of spectators and listeners attending artistic performances, we noticed that it entered a downward trend with the onset of the COVID-19 pandemic, which further led to a dramatic decrease in the number of shows and concerts. The total number of spectators decreased from 8,074,487 in 2019 to 4,240,489 in 2022, which represents a decrease of 47.5%. Even if a rebound in the total number of spectators began in 2021 (an increase of almost 29% compared to 2020), in 2022 the total number of spectators was of almost half of the value reached before the pandemic (2019) and in 2024, the 2019 value had not yet been reached. Therefore, at the national level, the activity of institutions that host performances has been affected significantly more by the pandemic than that of libraries and museums.

Table 6. Total number of spectators and listeners attending artistic performances between 2019 and 2024 in the rural area versus the urban area

Number of spectators and listeners attending artistic performances	2019	2020	2021	2022	2023	2024
Total, of which:	8.074.487	1.506.244	1.940.084	4.240.489	6.147.665	6.888.633
» in the rural area	5.964	3.400	3.300	500	800	140.006
» in the urban area	8.068.523	1.502.844	1.936.784	4.239.989	6.146.865	6.748.627

Source: Author's calculations using information from the TEMPO-Online database of the National Institute of Statistics

Primary data: <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

Regarding the relation between the number of spectators and listeners attending artistic performances and their area of residence, our calculations presented in Table 6 (based on data obtained from the National Institute of Statistics) reflect the fact that it recorded significant decreases between 2019 and 2022, especially in rural areas (-91.6%, compared to -47.5% in urban areas). A spectacular revival in the number of spectators and listeners attending artistic performances in rural areas has been recorded since 2023. Since 2021, annual increases in this statistical indicator have been recorded in urban areas, but, despite this, the values from 2019 remained unmatched. Since most of the institutions hosting artistic performances operate in the urban area, most of the spectators originated in the urban area (97.9% in 2024, but also in the other analyzed years).

4.3. The current degree of digitalisation in rural and urban areas: Comparative aspects

Tourism and cultural demand will most likely also be driven by a higher level of digitalisation in the future. From a statistical point of view, the area of residence of the population can also be a criterion for analysis in terms of digitalization, given the significant differences in development between the urban and rural areas in our country in this regard. The increase in Internet access and the use of the Internet is directly related to the improvement of the local identity (which can be achieved through cultural tourism activities, related to crafts, history, traditions, historical monuments, various tourist, and cultural objectives).

As for the population's access to the Internet, according to data made available by the National Institute of Statistics (2023, p. 13), 88.6% of all households in Romania have access to the Internet in 2024. If we consider the area of residence of the population, we can see that 83.2% of all households in rural areas were connected to the Internet in 2024, an increase by almost 3.7% compared to 2023. In the same year (2024), in urban areas, 92.2% of households were connected to the Internet, which represents a difference of 10% compared to rural areas.

The gap between the urban and rural areas in Romania could also be observed in the case of persons who have never used the Internet. In 2024, according to the National Institute of Statistics (2023, p. 43), of the total number of persons aged 16-74 who had never used the Internet, 8.6% lived in rural areas compared to only 2.7% (the percentage of persons who lived in urban areas).

According to data of the National Institute of Statistics (2023, p. 43), in rural areas, of the total number of persons who have never used the Internet, in 2024, most belonged to the 55-74 age group (21.6%), followed by those belonging to the 35-54 age group (4%) and the 16-34 age group (1.9%). At the same time, the percentage of persons who have never used the Internet, in 2024, was higher as their level of education was lower. Therefore, the use of the Internet increases with the level of education of users (as most likely the educational level influenced the need for an Internet connection).

Regarding the interaction with public authorities or public services via the internet, in 2024 this was carried out predominantly in urban areas (23.8%), compared to only 13.5% in rural areas.

In 2024, the share of people who ordered online goods or services increased both in urban areas (+3.4%) and in rural areas (+5.9%), compared to 2023. However, in 2024, a significant difference (9.8%) remained between the two areas of residence.

An indicator where rural areas recorded higher percentages than urban areas in 2024 was the frequency of Internet use: 23.7% of the persons that use the Internet once a day or almost on a daily basis live in rural areas, while only 16.3% of persons in urban areas do the same. In contrast, 79.4% of the Internet users in urban areas access the Internet several times a day, compared to 66.8% in rural areas – according to data published by the National Institute of Statistics (2023, p. 47).

Thus, according to the data published by the European Commission in the Report for Romania on the Digital Economy and Society Index (European Commission, 2022), our country is characterized by a lack of basic digital skills among its population. In terms of the digital skills of the population depending on its area of residence, Romania features a large gap between the urban and the rural residents (European Commission, 2020).

4.4. Limitations

It needs to be mentioned that The National Institute of Statistics includes in its field of research all institutions that carry out a main or secondary economic activity corresponding to the cultural field, thus covering the entire territory of the country, in order to obtain a complete picture of cultural activities. The statistical data that have been analyzed in this article are obtained annually by the National Institute of Statistics, through its own statistical research and from administrative sources, collected on the basis of questionnaires, a process in which certain data entry errors (which are mostly minor and which are corrected during validation) and non-responses from data providers may occur.

On the official website of the National Institute of Statistics, quality reports of statistical surveys are available only for the year 2024, and according to them, the response rates of data providers were 98.2% for libraries, 95.8% for museums and 64.1% for institutions hosting performing arts or concerts. Thus, if the first two indicators benefited from a high response rate of respondents, the same cannot be said about the institutions hosting performing arts or concerts, which reported only a moderate percentage of the requested data, which affects the need for complete, accurate and relevant information. For this reason, the statistical data presented in this article regarding the activity of the institutions hosting performing arts or concerts must be seen with some caution, because they could not be measured completely, due to the limitation specified in the data collection. Despite this limitation, given the fact that there is no other institution at national level that collects and provides data relevant to the topic addressed in this article, the

information presented can still be useful to various types of stakeholders interested in the field of cultural tourism.

5. Conclusion

It is obvious, from the information presented above, that the decline (which is more acute in the rural area) of the number of cultural and artistic units represented by libraries, museums and institutions hosting artistic performances or concerts in the analyzed period is a significant one.

In terms of cultural consumption, significant differences emerged depending on the area of residence of the participants. Significant differences between urban and rural areas were found in the rate of participation in all three types of analyzed activities (number of readers enlisted in libraries, visitors to museums and spectators attending artistic performances).

During the pandemic, the number of visitors to museums and the number of spectators attending artistic performances were lower in rural areas, but this hierarchy changed and reversed after the end of the COVID-19 pandemic.

In addition to the negative effect of the pandemic, the inequalities resulting from the calculations can be explained by the fact that there are more museums and institutions hosting artistic performance in the urban areas and by the obviously higher availability of the cultural infrastructure in these areas. However, in the case of rural libraries, which are more numerous (60%) than those in urban areas, they face lower readers involvement, attracting only about 28% of the total number of readers. Therefore, the area of residence is a factor that influences cultural consumption practices, especially when a pandemic occurs, with people living in urban areas carrying out activities related to going to the library, museums, and shows more often than those in rural areas (who have different practices, habits and lifestyles).

At the same time, based on the information presented in this paper, we can state that rural areas still face lower Internet connectivity compared to urban areas, and even if this aspect has improved in recent years, the adaptation of these areas to digital technologies has been lower.

At least from a cultural and digital perspective, rural areas still lag behind urban ones. As in any other field, there is no certainty that a rural area will quickly turn into a community developed with the help of digital technologies, as the success of the adoption of digital tools in cultural tourism can vary, depending on several factors. But, nowadays, rural areas have access to such tools, that can facilitate their development for the benefit of their inhabitants, but also of those who visit them.

The new forms of communication (Internet, social networks, applications that can be downloaded on smartphones or tablets, etc.) are very useful for improving visibility and better promoting tourist and cultural objectives in rural areas. The Internet and the digital technologies can help rural businesses gain access to new markets, develop new and creative tourism services, build innovative business models, and become a part of the current digital ecosystem. Rural areas must not rely exclusively on the new technologies, but the basic access of rural residents to a fast Internet network is important for the local development.

We must not forget that there are still gaps between the household incomes in urban versus rural areas. Therefore, a recovery in terms of tourism and cultural activities after the COVID-19 pandemic should also be correlated with a reduction of the poverty levels (as there are still persons in rural areas who cannot afford new goods or services such as those offered via the Internet, and, in this case, the barriers are not technological, but economic and social ones), but also with the improvement of the digital literacy level (by building the needed skills among the population).

Digital technologies have had an important influence on the development of cities, in many domains, as well as in tourism and culture. However, this development should not be limited only to cities, it should also be extended more in rural areas, where a significant part of the population lives (almost 45% of the Romania's population).

The disparities between the urban and rural areas identified in this article have led to the decrease of the country's tourism competitiveness and affected the development of the Romanian economy and digital society. The implementation of digital technologies is clearly slower in rural spaces of Romania and the gap between urban and rural areas will not be easy to handle. Integrating digitalization in rural areas raises economic, technological and cultural challenges. In this increasingly digitalized society, preserving local culture and traditions is important for rural communities – and digitalization could contribute to research, documentation and promotion of cultural objectives (through online platforms, virtual exhibitions, etc.).

At national level, in recent years, the government efforts have focused on the digitalization of certain electronic public services. For example, in the National Recovery and Resilience Plan, approximately 2 billion euros were allocated exclusively for the digitalization of public services, but these were more difficult to implement in rural areas, because some rural localities simply don't have human resources available and prepared to access these funds.

To reduce the effects of the gaps identified in this article, it is necessary to increase digital skills and allocate sufficient financial resources in rural areas. Considering the rapid evolution of digital tools, it is now essential that the workforce (especially in rural areas) can have digital skills. Having digital skills is an important condition for the rural tourism entrepreneurs (taking into account the growing importance of the online environment in holiday choice decisions). In the absence of digital literacy, digitalization will be an action with questionable results.

Considering the fact that in Romania certain smart-village type of solutions (based on digitalization) can be currently co-financed from the European and national funds, it can be concluded that the main barriers in the implementation of these types of solutions are related to the lack of digital skills and the lack of trust in the new technologies. Therefore, the main policies should focus on human resources (in the digital education of people living in the disadvantaged rural areas) and on specific activities in order to raise awareness of the advantages that digitalization can bring. A first step in this direction was taken in April 2025, when the national framework dedicated to digital skills for the Romanian citizens was approved (through the Government's Emergency Ordinance no. 27/2025), through which our country aligned itself with the European standards, with the help of this strategic tool, intended for planning the public digitization initiatives and policies.

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