

Article

Pandemic Boosts Prospects for Recovery of Rural Tourism in Serbia

Tamara Gajić ^{1,2,3,*} , Filip Đoković ⁴ , Ivana Blešić ^{2,5} , Marko D. Petrović ^{1,2} , Milan M. Radovanović ^{1,2},
Dragan Vukolić ^{3,6} , Marija Mandarić ³ , Goran Dašić ⁷, Julia A. Syromiatnikova ² and Andrej Mićović ³

- ¹ Geographical Institute “Jovan Cvijić” SASA, 11000 Belgrade, Serbia
 - ² Institute of Sports, Tourism and Service, South Ural State University, 454080 Chelyabinsk, Russia
 - ³ Faculty of Hotel Management and Tourism, University of Kragujevac, 36210 Vrnjačka Banja, Serbia
 - ⁴ College of Organizational Studies—EDUKA, 11000 Belgrade, Serbia
 - ⁵ Department of Geography, Tourism and Hotel Management, Faculty of Sciences, University of Novi Sad, 21000 Novi Sad, Serbia
 - ⁶ Faculty of Tourism and Hotel Management, University of Business Studies, 78000 Banja Luka, Bosnia and Herzegovina
 - ⁷ Modern Business School, 11000 Belgrade, Serbia
- * Correspondence: tamara.gajic.1977@gmail.com

Abstract: Rural tourism in Serbia had its chance to shine with the advent of the COVID-19 pandemic. The aim of this study was to determine to what extent the quality of rural service can contribute to improving rural tourism, and predictions for the continuation of the trend in terms of increasing the number of overnight stays in rural households. The obtained results show a small number of services in the sector could be improved, but that all elements except price value can influence the future development of rural tourism and that the number of overnight stays is expected to continue to grow. The importance and innovativeness of the research is reflected in the specific methodology that was applied, and the results complement those of previous research. It has been shown that villages in Serbia can create a barrier against COVID-19 through tourism.

Keywords: rural tourism; COVID-19; service quality; predictions; Serbia



Citation: Gajić, T.; Đoković, F.; Blešić, I.; Petrović, M.D.; Radovanović, M.M.; Vukolić, D.; Mandarić, M.; Dašić, G.; Syromiatnikova, J.A.; Mićović, A. Pandemic Boosts Prospects for Recovery of Rural Tourism in Serbia. *Land* **2023**, *12*, 624. <https://doi.org/10.3390/land12030624>

Academic Editor: Hossein Azadi

Received: 16 February 2023

Revised: 1 March 2023

Accepted: 3 March 2023

Published: 6 March 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Tourism is the branch of the economy most affected by the COVID-19 pandemic, whose effects will be felt for a long time. Many countries have managed to return to normal flows of tourist traffic with the help of state donations, especially countries that recognize tourism as an economic mainstay. Measures that have been relaxed but are unfortunately still in effect in some countries, such as doing business online, keeping a distance, and developing and applying modern technology in all sectors, will definitely help in the recovery. However, the question is whether this will be possible within the framework of the development of tourism activities, and it will be of key importance to observe the measures necessary for the recovery of tourism, but that will not undermine security. Each country will find its own solutions as it re-enters the market and seeks to be ready for other similar unpredictable situations.

In Serbia, all sectors of the economy and all forms of tourism collapsed due to COVID-19, except for rural and mountain tourism. The pandemic threatened the tourism industry all over the world, completely disrupting all types of traffic and border crossings [1]. In the first five months of 2020, the total number of tourist arrivals in Serbia recorded a drop of 52.8% compared to the same period in 2019 [2]. In May 2020, the total number of tourist arrivals decreased by 87.6% compared to May 2019, and for foreign tourists, this decrease was 97.8% [2]. Rural tourism is considered a form of tourism with high potential, due to increased demand for more sustainable travel based on nature, and which can contribute to the resilience of the territory to contingencies such as the pandemic.

First of all, there has been an increase in the number of travelers who opt for an active holiday in nature and rural households. Rural tourism in Serbia has had a chance that it did not hope for, because from the beginning of the pandemic, trips outside the country's borders were banned. Today, the owners of such households point out that the isolation caused by lockdowns was not felt in the villages, and many took the opportunity to develop local tourism, which can now seriously compete with its offering. Many authors believe that the quality of service will be key in attracting tourists, and that over time, all the consequences that countries have suffered, and even the negative image certain destinations developed thanks to the pandemic, will be discussed.

Given that statistical data show that tourist traffic has increased in rural areas in Serbia, and that foreign tourists have influenced the increased tourist traffic, the authors tried to investigate the attitude of foreign tourists to the quality of services they received in rural households. The aim of this study was to determine whether the elements of service quality in rural households, if they are at a satisfactory level, can boost the recovery of rural tourism in Serbia, and what are the predictions of overnight stays in rural households in the coming period. We answered these questions by researching the opinions of foreign tourists about their expectations and evaluation of the services they received at the end of their stay. It was shown that foreign tourists were satisfied with the quality of the offer in rural households, and that each quality factor can boost the recovery of tourism, except for the price expectations of tourists. It is expected that the trend of increased rural tourism will continue to grow.

The innovative and academic contribution of this study is reflected in the fact that, perhaps for the first time in research, it can be said that in Serbia the countryside has contributed more to the recovery of tourism and economy compared to other sectors in the period after the pandemic. Previous research did indicate the future potential of rural tourism, but expectations were low. The pandemic has proven that this type of tourism can play the role of a booster, perhaps not only in tourism, but also in complementary activities. This study creates a more realistic, holistic thinking and a picture of the possibilities that the Serbian countryside can provide in the future. It sheds light on the hidden values of this form of tourism in Serbia. Certainly, the importance of the study is in supplementing the already insufficiently covered existing theory on rural tourism. This study first briefly explores the concept of the overall experience of rural tourism during the pandemic period, then presents similar research in the world and in Serbia, and finally reveals the results of the research study and the implications for the future in the development of marketing management strategies, and possible better market positioning beyond the period of crisis situations.

2. Literature Review and Hypotheses Development

2.1. A Theoretical Approach to the Relationship between the Pandemic and the Rural Environment

Tourism is sensitive to all kinds of crises caused by natural disasters: infectious diseases, conflicts, energy losses, economic and political instability, etc. [3,4]. There is a large number of studies that deal with the negative consequences that the pandemic has had on tourism, and destruction of large tourist centers, but few of them have recorded the opposite effect or the importance of the expansion of visits to villages in that period, or saw the rural setting as an advantage to encourage investing in the quality of rural services recovery [5]. The search for solutions to overcome the crisis in the tourism sector is an acute problem and focuses on changing the direction of tourism and its sustainable approach, and also focuses on mutual benefits for non-agricultural activities [6].

In the period of the pandemic, rural and mountainous environments proved to be best suited as an escape from the disease's catastrophic impact and negative consequences. Apart from travel to those destinations, demand for other types of tourism such as free and independent travel, luxury travel and health or medical tourism were observed [7], including sports tourism and smart tourism [8]. Most studies have shown that destinations in nature, which can be called units of internal tourism, were less affected than urban

and coastal ones [9], and that being isolated gave them an advantage over other forms of tourism, because they reduced the risk of infections by offering unpolluted air, low population density, reduced interaction between people, easy social distancing and smaller-scale accommodation [10].

Many studies also debate the importance of rural areas, claiming that a rural area is not necessarily a tourist destination. However, it certainly becomes one when agricultural companies diversify economic activities by investing in rural tourism, and local actors provide active support and co-participation [11], and that rural tourism is characterized by key aspects: safety location, sustainable development, and community-based characteristics and experiences [12]. The reasons that rural areas are perceived as the opposite of urban ones [13] are precisely why they are suitable for health protection: they offer isolation, relaxation, outdoor activities and proximity to nature [14–16]. In the period of COVID-19, people's recreational behavior also changed: they turned to unexplored natural regions, and had more contact with natural elements [17] because urban areas did not offer the best chance for survival during the crisis. The pandemic, in a certain way, led to an economic, social and cultural rural revitalization [18].

The situation that befell the world, followed by security measures and border closures, encouraged many countries to change their strategies in tourism and to turn to the less visited hidden natural areas [19], and this increased demand led to the strengthening of the market position of rural households [20]. However, the sudden shift to rural areas and staying in them for a long period of time led to the disclosure of numerous deficiencies within rural tourism businesses and their provision of services in terms of quality, thus providing new opportunities for the reorganization and future development of villages with the aim of better strategic planning [21]. In many countries, more than 70% of tourism resources are distributed in the countryside [21], which indicates that the tendency towards tourism in rural areas has increased significantly and that destinations that had the possibility of providing quality rural services experienced stronger and more permanent recovery of domestic demand [22]. The trend of going to rural areas has continued even during the waning of the pandemic [22], but the problems that were observed demand a solution, especially in terms of quality [23], and such a new orientation requires investment in infrastructure, marketing and regional cooperation, in order to draw both domestic and foreign tourists to natural, gastronomic and local attractions [24].

2.2. The Quality of Service in Rural Households as a Booster for the Recovery of Tourism

Although the number of tourists in some rural areas has increased, the rural tourism market has not fully recovered and is struggling to grow significantly after the pandemic [25]. Apart from the key strategic steps of recovery such as enhancing the local area's self-governance ability, boosting rural social networks and skills, promoting innovation of development mechanisms and persistence in cultivating resilience [26], it is necessary to thoroughly investigate the level of service quality and determine strategic measures for its improvement [27].

The recovery of rural tourism in the era after COVID-19 should not mean only a temporary escape during crisis, but should also consolidate achievements in reducing poverty and promote rural revitalization and the return of youth to live and work in the countryside [28]. Furthermore, the controlled accelerated development of rural areas after the pandemic, with a focus on service quality, can contribute to higher incomes for rural households and rural enterprises in all sectors of Europe's diverse rural economies, as well as to charities and social organizations, as previous crises have also highlighted the resilience and adaptability of rural economies [29].

Countries that saw a higher degree of economic crisis looked positively at investing in the quality of rural service development and generally in services of all forms of tourism, supporting its development [30]. Rural tourism with high-quality service is considered as a positive for the development of the entire tourism industry, and as offering an additional source of income that fits well with the existing sustainable means of living [31].

Furthermore, earlier research has shown that the pandemic had a positive impact on rural households and mountain tourism [32], and that rural tourism, by developing quality service in accordance with consumer demands, can influence the revitalization of rural areas and the entire local economy, especially in crisis conditions [33,34]. After the pandemic, the quality of services in rural areas becomes more and more important [35], because the strength rural tourism will have in stimulating economic development depends on the level of quality achieved [36].

The specificity of rural services is reflected in traditional and rustic accommodation, which is different from that of standard city hotels. It is increasingly difficult to achieve a high level of quality that satisfies modern consumers [37], but investment in quality is certainly of key importance because of the multiple benefits for local society and tourists [38,39]. A different arrangement of space and services, as well as a multifunctional prior village environment with the use of agricultural land and a tendency towards sustainable development, is a characteristic of areas that are far from urban centers and whose quality is very often difficult to determine [40–42]. Many rural areas have numerous natural resources needed to attract tourists, but there are other factors at play that serve to satisfy the needs of visitors, and they must attract them exclusively with quality, which is confirmed by numerous studies [43–47].

The evaluation of the current state of rural service quality depends on the fulfillment of visitors' expectations [48], and the smallest gap between expected and received service [49,50]. This means that quality must be achieved in each of the stages of providing services to tourists [51]. Furthermore, there are studies that claim that more attention should be paid to the material elements of service quality, but in order to improve the overall tourist experience in the future, everything should be consolidated with the intangible elements of service quality [52].

In researching the quality of rural service, the main components are the examination of the difference in the expected and received responses from the visitor, and the task is to make the gap as small as possible [53]. Most studies use the SERVQUAL model [53], which has been adapted to rural service quality in the form of the RURALQUAL model [54]. When analyzing quality attributes, the IPA grid is most often used, where all attributes are divided into two dimensions: performance and importance [55]. The combination of the IPA grid and the gap between the expected and received rural service contributes to a better understanding of the position of the service and to finding key factors for success in providing quality services [56,57].

There are several issues of service quality in the literature. Parasuraman et al. [53] highlight several elements of quality: tangible elements, reliability, response capability, assurance, and empathy, while Babakus and Boller [58] claim that the elements of quality adapt to the type of service and do not have predetermined elements applicable everywhere, adding to that the elements of cost and convenience. Zhou et al. [59] distinguished the following elements of rural service quality: functional elements, satisfaction elements, emotional elements and price value. Additionally, they used the IPA network to investigate the importance-performance relationship between the mentioned quality elements. Functional elements refer to the basic objects and equipment of the household, emotional elements to the relationship of the host to the guests [60]. Elements of satisfaction also play a key role in creating a quality offering in rural households [61]. However, price value is often considered as a special element of quality that greatly influences the attitude and perception of tourists [59].

Agrarian cooperatives can play an active role in the development of quality rural tourism offerings, especially in Serbia [62]. Rural tourism in Serbia has flourished since the pandemic period, and some authors believe that these areas will become the very center of tourism in Serbia [35]. During the pandemic, more than 80% of all tourist movements took place within rural and mountain destinations [3]. In 2019, the authors of this study also conducted a similar survey of the quality of services in rural households on a smaller sample. It was observed that, comparing a repeated survey after the pandemic, the quality

of the rural offering did not decline [35]. However, despite these data and the fact that the great importance of rural tourism in Serbia can be seen, there is very little literature and a small number of research studies on the topic and issues of service quality, especially after the pandemic [63]. Based on all of the above, the authors made these initial hypotheses (Figure 1):

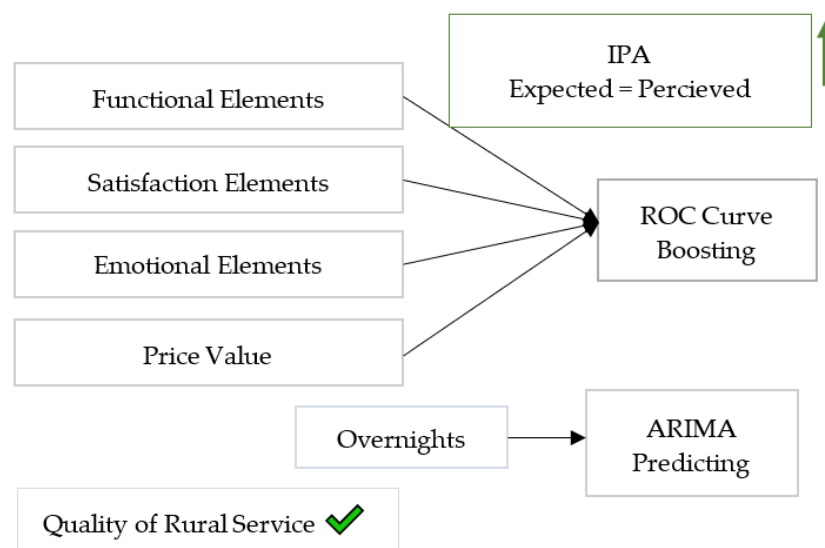


Figure 1. Conceptual framework.

H1a: Foreign tourists positively evaluated the quality of rural service.

H1b: There is a low degree of gap between expected and perceived values of service quality.

H1c: All services, considering the increase in attendance, are rated in the quadrant of well-done managerial work and do not require a greater concentration of effort.

H2a: The quality factor (functional elements) can play the role of a booster for the future positive prediction of the development of rural tourism in Serbia.

H2b: The quality factor (satisfaction elements) can act as a booster for the future positive prediction of the development of rural tourism in Serbia.

H2c: The quality factor (emotional elements) can act as a booster for the future positive prediction of the development of rural tourism in Serbia.

H2d: The quality factor (price value) can act as a booster for the future positive prediction of the development of rural tourism in Serbia.

H3: There is a positive prediction of the continuation of the growing trend of overnight stays in rural households for the next two-year period.

3. Methodology

This study represents field research with the aim of determining the current quality of service in rural households after the pandemic, as assessed by adult foreign visitors. The goal was also to establish whether quality service can be a kind of help and predictor of the future development of rural tourism in Serbia. The research is part of a larger research project related not only to the quality of the complete rural service, but also to the quality of the gastronomic offering in the villages of Serbia, the results of which have not yet been translated into a manuscript. The relevance of research in the field was confirmed by Cohen [64], emphasizing that the analysis of the tourist experience is the best way to obtain a true picture of the destination and the quality of the service, as well as consumer behavior.

3.1. Choice of Methodological Approach and Measurements

For the purposes of achieving the research objective in this study, the authors used a modified RURALQUAL questionnaire model from the authors Choi et al. [37] and Zhou et al. [59], which proved to be the most suitable for researching the quality of services of rural households in Serbia. The RURALQUAL model for measuring the service quality in rural tourism has been developed based on the SERVQUAL model [65], but according to some authors, the SERVQUAL model is suitable for researching large subject areas [37]. Grönroos [66] emphasizes the importance of the technical quality of the service (what the consumer receives) and the functional quality of the service (what the consumer expects). According to Parasuraman et al. [67], service quality is the difference between what the consumer expects and what he or she receives during a stay.

Changes to the questionnaire included adjusting the items due to the specificity of rural tourism in Serbia. In order to investigate the differences between the expected and obtained values of the quality of rural service, a total of 23 questions were used in this study, the reliability of which was shown with a Cronbach alpha value for the entire questionnaire of $\alpha = 0.818$. The values for all questions are given in Table 1. A five-point Likert scale was used to assess the dimensions (1 = strongly disagree, 5 = strongly agree). The following measures were evaluated: Q1—the expertise of the owner ($\alpha = 0.817$), Q2—homestay is close to the scenic spot ($\alpha = 0.807$), Q3—the homestay room is large ($\alpha = 0.809$), Q4—the decoration style of the homestay room ($\alpha = 0.806$), Q5—sanitary conditions of bed and breakfast rooms ($\alpha = 0.820$), Q6—the bathroom is clean and tidy ($\alpha = 0.825$), Q7—the comfort of the bed and furniture ($\alpha = 0.827$), Q8—homestay hot water supply is stable ($\alpha = 0.812$), Q9—normal use of room air conditioning ($\alpha = 0.809$), Q10—the Wi-Fi in the room is fast ($\alpha = 0.841$), Q11—the room has a balcony ($\alpha = 0.802$), Q12—the room is well-insulated ($\alpha = 0.794$), Q13—there are experiential activities and spaces for adults and children (various rural village events) ($\alpha = 0.797$), Q14—the overall decoration style of the homestay ($\alpha = 0.798$), Q15—normal charges for homestay service ($\alpha = 0.798$), Q16—the homestay service staff's attitude, including reservation system ($\alpha = 0.795$), Q17—the homestay room service is very thoughtful and fast ($\alpha = 0.801$), Q18—the host provides warm service ($\alpha = 0.805$), Q19—local food is available ($\alpha = 0.805$), Q20—the variety of excellent choices ($\alpha = 0.797$), Q21—the homestay price is economic and practical ($\alpha = 0.802$), Q22—prices of food are high ($\alpha = 0.825$), Q23—prices of additional activities and excursions are high ($\alpha = 0.830$).

Table 1. Sociodemographic description of the respondents.

Gender		Frequency of Traveling	
Female	40.80%	I travel abroad several times a year	37.11%
		I travel abroad once a year	21.03%
Male	59.92%	I have traveled abroad several times in my life	41.86%
Education		Earning	
High school	39%	Low (≤ 400 *)	1.22%
Faculty	40.80%	Average (400–700 *)	34.04%
MSc, PhD	19.30%	High (> 700 *)	64.74%
Age		Country of Residence	
18–35	28.09%	North Macedonia	2.11%
		Austria	7.30%
36–60	33.20%	Germany	2.01%
		Romania	4.80%
		Bosnia and Herzegovina	31.20%
		Montenegro	12%
>61	38.71%	Hungary	3.90%
		Croatia	11.70%
		Bulgaria	15.18%
		Slovenia	6.70%
		Australia	3.10%

* Euro.

3.2. Sample and Data Collection

The research was conducted on a total sample of 644 respondents who visited rural households in the period from June to December 2022. The respondents were foreign

tourists and the condition was that they were of legal age. Tourists were given survey questionnaires, which they answered before using the service and after using it. Additional explanatory questions were provided by the researchers. The planned number of the sample was 900; however, the authors estimated that due to the use of volunteers in research, this collected sample was quite sufficient, and the representativeness was confirmed by the G*power test. Taking into account that there was a total of 4 predictors and 1 criterion, the required effect size was set to $\eta^2 = 0.15$, with a statistical power of 0.95, and it was calculated that a sample size of 111 respondents may be appropriate for this research. Surveys were collected in rural households in Serbia: Vojvodina (162), Belgrade region (98), Southern and Eastern Serbia (58) and Šumadija and Western Serbia (326). The position of Serbia within Europe and the area of research in rural parts of Serbia are given in Figures 2 and 3.

Table 1 shows the demographic characteristics of the respondents. Out of the total number of respondents, the largest percentage was women over 61 years of age, and in the educational category with a university degree. When looking at the salary structure, most respondents had an average salary of more than EUR 700 per month, and were from Bosnia and Herzegovina, Croatia, Montenegro and Bulgaria.

3.3. Data Analysis

The obtained data were processed in the program software IBM SPSS version 23.00. After determining the arithmetic values and standard deviation, the authors proceeded to determine the ranks for each of the questions, based on the expected and obtained values of the RURALQUAL questionnaire model. Descriptive statistical analysis was used to obtain average scores for each of the questions, which determined their ranks, and exploratory factor analysis (EFA) (justified by KMO and Bartlett's test: KMO = 0.856, $X^2 = 4167.07$, $df = 136$, $p = 0.00$); 23 questions were extracted with a total of 4 factors.



Figure 2. Position of Serbia in Europe.

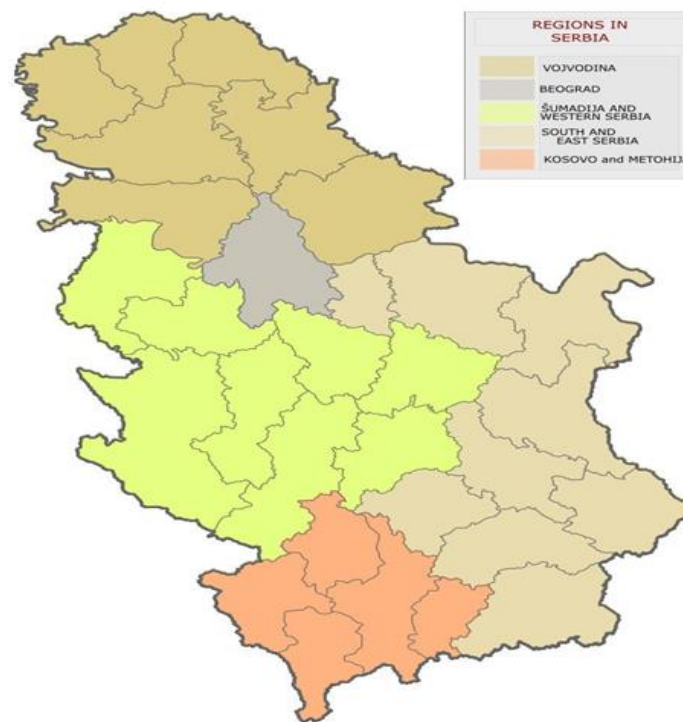


Figure 3. Research area in rural Serbia.

Given the normal distribution of the data, parametric statistical analysis, more precisely the *t*-test, was used in order to test statistically significant and accurate differences between expected and obtained values with paired samples. For a simple presentation of the quality of rural services, the authors used an IPA grid with four quadrants, where importance is placed on the vertical axis, and performance on the horizontal axis [68]. The IPA grid is a suitable model for managers and tourism development planners, because it gives them an accurate insight into good and bad items and a roadmap of where to direct their efforts [69–72]. The description of the meaning of the quadrant is as follows: The elements belonging to the first quadrant (Q1) require great concentration. They are important for tourists, but have lower performance ratings than the grand mean [70]. Quality elements that fall into quadrant two (Q2) are on the right path of organized work and are very important for tourists. They have both higher importance and performance scores than the grand mean, suggesting that these aspects are firm strengths. The recommendation is to continue the work [71]. The third quadrant (Q3) includes quality elements that are not highly prioritized, but their ratings are lower than average [70]. The fourth quadrant (Q4) includes elements that are less important, but very good work was done on their quality, and they do not require high efforts in the future [68,73,74]. In order to determine the possibility of a positive prediction of the future development of rural tourism in Serbia, the authors approached the receiver operating characteristic curve (ROC curve) analysis. It is a graphical plot used to show the diagnostic ability of binary classifiers, and is constructed by plotting the true positive rate-sensitivity (TPR) against the false positive rate-specificity (FPR). The farther the curve is from the diagonal (TPR = FPR), the better the performance [75]. Furthermore, by analyzing time series using the ARIMA model (Figure 4), with the help of statistical data, the future trend of rural tourism in the period for the next two years was established. The ARIMA (autoregressive integrated moving average) model is a mathematical and primarily statistical model of time series, the purpose of which is to better understand data and predict it [76]. The Box–Jenkins model is also generally best suited for short-term forecasting of 18 months or less. In this model, the assumption is that the current value of the series depends on the value of the previous members of the series. In the case of time series in which the influence of trends, cyclical

or seasonal components is observed, the application of these models implies the previous removal of their influence. To remove the influence of systematic components from the time series, the differentiation operator is used.

$$y_t^* = \Delta^d y_t$$

$$y_t^* = \mu + \underbrace{\sum_{i=1}^p \phi_i y_{t-i}^*}_{\text{AR}} + \underbrace{\sum_{i=1}^q \theta_i \epsilon_{t-i}}_{\text{MA}} + \epsilon_t$$

Figure 4. ARIMA model: ARIMA (p, d, q) represents an autoregressive moving average model for integrated time series where [68] p is the order of the autoregressive component, d is the level of integration of the time series, q is the order of the component of the moving averages [68].

The results indicate that all established model fitting parameters were suitable for further drawing graphs and forecasting the overnight trend for the next two years: $E = 6442.125$, $S.E = 1830.390$, $t = 3.520$, $p = 0.01$.

4. Results and Discussion

4.1. Results of IPA Analysis

The first analysis that was needed to reach the goal of the research was importance–performance analysis. According to the data from Table 2, it can be seen that the value of the gap in all elements was minimal, but in the element Price of performance it was greater than importance. The value of the t -test is given in the same table where significant differences between pairs of performance and importance can be seen. Statistical significance (p -value) was observed for all dimensions except dimensions Q11 (the room has a balcony) and Q21 (the homestay price is economical and practical).

Table 2. Importance–performance analysis of the primary indicators.

Indicators	Performance (m_p^*)	* Rp	Importance (m_i^*)	* Ri	Gap ($m_i - m_p$)	t-Value	* p-Value
F1-q1f1	3.97	17	2.00	23	−1.97	25.843	0.000
F1-q2f1	4.33	6	3.01	16	−1.32	18.018	0.000
F1-q3f1	5.49	1	2.25	20	−3.24	42.523	0.000
F1-q4f1	4.65	4	3.22	12	−1.43	15.577	0.000
F1-q5f1	4.99	3	2.92	18	−2.07	21.010	0.000
F1-q6f1	5.42	2	3.91	3	−1.51	20.268	0.000
F1-q7f1	4.22	10	3.32	11	−0.9	8.208	0.000
F1-q8f1	4.14	12	2.55	21	−1.59	17.411	0.000
F1-q9f1	4.03	15	2.15	22	−1.88	19.420	0.000
F1-q10f1	4.26	8	3.75	4	−0.51	4.678	0.000
F1-q11f1	3.96	18	3.94	1	−0.02	1.206	0.837
F1-q12f1	3.93	19	3.66	5	−0.3	2.523	0.012
F1-q13f1	3.82	20	3.13	14	−0.69	6.901	0.000
F1-q14f1	4.19	11	3.25	13	−0.94	9.059	0.000
F2-q1f2	4.51	5	3.93	2	−0.58	5.653	0.000
F2-q2f2	4.12	13	3.09	15	−1.03	9.615	0.000
F2-q3f2	4.03	14	3.50	9	−0.53	5.154	0.000
F3-q1f3	4.31	7	3.56	8	−0.75	6.854	0.000
F3-q2f3	3.99	16	3.40	10	−0.59	6.252	0.000
F3-q3f3	4.23	9	3.58	7	−0.65	5.951	0.000
F4-q1f4	2.82	21	2.77	19	−0.05	4.484	0.628
F4-q2f4	2.68	23	3.62	6	0.94	−9.483	0.000
F4-q3f4	2.75	22	2.98	17	0.23	−2.049	0.041

H1a: Foreign tourists positively assessed the quality of rural services ✓

H1b: There was a low degree of gap between expected and perceived values of service quality $\frac{1}{2}$ ✓

* f-factor; q-question; m_i —arithmetic mean of importance; m_p —arithmetic mean of performance; Rp—ranking performance, Ri—ranking importance; $p < 0.05$.

The first hypothesis was confirmed, that the quality was rated quite positively by the tourists, while the second hypothesis was only partially confirmed, considering that the last two questions, in factor F4, received a lower performance than importance. Tourists were much more satisfied with the price values of the service after their stay in rural households than they initially expected.

The results of exploratory factor analysis with promax rotation show that a total of four factors were extracted. The first factor, functional elements, gathered a total of 14 items and explains 29% of the variance of the questionnaire ($\alpha = 0.769$). The second factor, satisfaction elements, had around three items and explains a total of 8.7% of the variance ($\alpha = 0.788$), while the third factor, emotional values, also had three items and explains a total of 5.9% of the variance ($\alpha = 0.765$), and the last factor, price value, contained exactly three questions and explains 5.5% of the variance of the questionnaire ($\alpha = 0.840$).

Table 3 provides insight into the results of factor gap analysis. A statistically significant difference is observed in all pairs, and the correlation is strongest with the factor F3 in a direction that it is low and positive. For other couples, the correlation is low or insignificant, but positive, in the sense that the more emotional values were expressed, the better respondents perceived the quality of rural service. Factor F4 is negative and insignificant. This would mean that the lower the prices, the more positively respondents evaluated the quality of the rural offer.

Table 3. Comparative factor importance–performance analysis of factors.

Factors	AVE *	COMP *	Performance (m_p *)	Importance (m_i *)	Gap ($m_i - m_p$)	t-Value *	p-Value *	r *
F1-Functional elements	0.659	0.964	4.39	3.05	−1.34	33.227	0.000	0.146
F2-Satisfaction elements	0.640	0.842	4.22	3.50	−0.72	8.871	0.000	0.184
F3-Emotional elements	0.642	0.843	4.18	3.51	−0.67	8.729	0.000	0.219
F4-Price value	0.685	0.867	2.75	3.12	0.37	−5.992	0.000	−0.009

* AVE—average variance extracted; COMP—composite reliability; m_i —arithmetic mean of importance; m_p —arithmetic mean of performance; $p < 0.05$; t — t test value; r —correlation.

The IPA network was used to show the exact quality of all elements according to the modified RURALQUAL questionnaire (Figure 5). The importance scale and the performance scale used for this study have been shown to have high internal consistency and show good reliability as scales. Grand means of the importance and performance scales were used as the cutoff points on the IPA grid. All mean values are compared to the grand mean or central diagonals of the IPA grid. The questions related to the F1 factor—q11f1 (rank 1) the room has a balcony, q12f1 the room is well-insulated (rank 5) and question q2f4 from the group of Factor F4, prices of food are high (rank 6)—belong to the first quadrant **Q1**. These dimensions were important for visitors, but they had lower performance ratings than the high mean value, and all concentration and focus should be directed to improving these dimensions in the future.

Quadrant **Q2** includes the following questions: q1f2 (F2) normal charges for homestay service (rank 2), q6f1 (F1) the bathroom is clean and tidy (rank 3), q10f1 (F1) the Wi-Fi in the room is fast (rank 4), q3f3 (F3) the variety of excellent choices (rank 7), q1f3 (F3) the host provides warm service (rank 8), q3f2 (F2) the homestay room service is very thoughtful and fast (rank 9). These elements were quite well rated and it is recommended to continue in that direction. Quadrant **Q3** includes the following questions: q2f3 (F3) local food is available (rank10), q13f1 (F1) there are experiential activities and spaces for adults and children (rank 14), q3f4 (F4) prices of additional activities and excursions are high (rank 17), q1f4 (F4) the homestay price is economical and practical (rank 19). Quadrant **Q3** dimensions are low priority, and their scores were lower than average. A lot of investment is needed in these dimensions of quality. The last quadrant **Q4** includes: q7f1 (F1) the comfort of the bed and furniture (rank 11), q4f1 (F1) the decoration style of the homestay room (rank12), q14f1 (F1) the overall decoration style of the homestay (rank 13), q2f2 (F2) the homestay service

staff's attitude, including reservation system (rank 15), q2f1 (F1) homestay is close to the scenic spot (rank 16), q5f1 (F1) sanitary conditions of bed and breakfast rooms (rank 18), q3f1 (F1) the homestay room is large (rank 20), q8f1 (F1) homestay hot water supply is stable (rank 21), q9f1 (F1) normal use of room air conditioning (rank 22), q1f1 (F1) the expertise of the owner (rank 23). The elements of this quadrant related to arrangement, comfort, staff and sanitary conditions, which were highly rated, and regardless of their importance, they do not require any large investments.

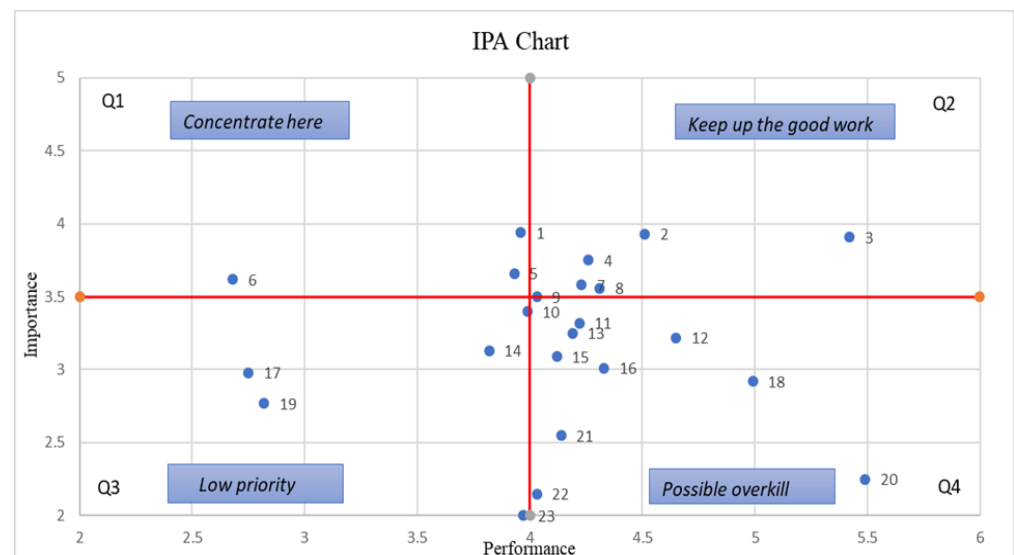


Figure 5. IPA results.

4.2. Results of Classification of Dimensions and Positive Prediction Based on Cutoff Scores

A statistical technique whose goal is to determine the threshold value of a test that gives the best ratio of specificity and sensitivity is called ROC curve analysis. The ROC curve is a graphic display of sensitivity and specificity for each possible cutoff score (test result) in a coordinate system where the ordinate (y) shows the sensitivity values (true positive rate TPR), and the abscissa (x) shows the specificity values subtracted from 1 (true false rate TFR). This diagonal is usually called the chance diagonal (Figure 6).

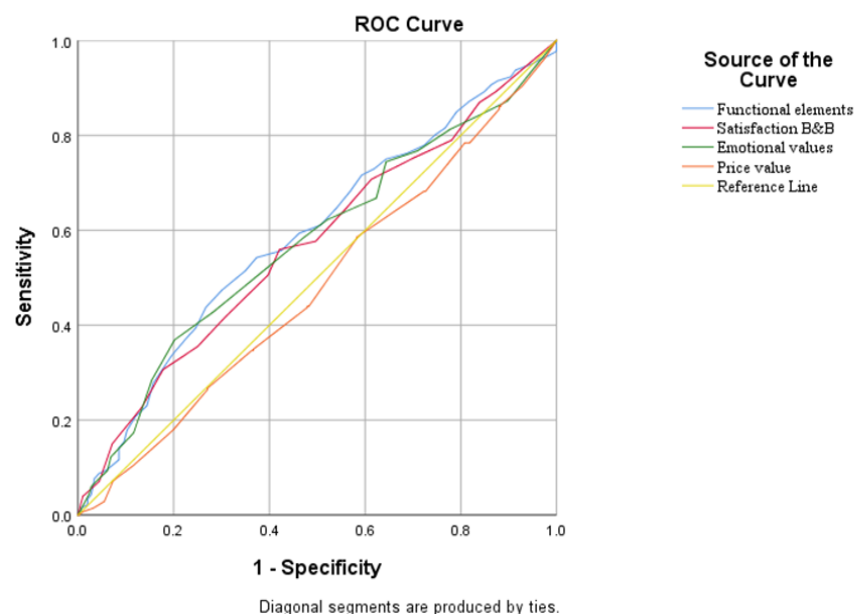


Figure 6. Results of ROC curve analysis.

Based on the calculation of sensitivity and specificity for each possible threshold score, a series of parallel values is obtained where the values of sensitivity and specificity can be seen. By comparing these with the diagonal of the random walk (central diagonal) and the curve that coincides with the axes of sensitivity and specificity, we could establish where the sensitivity was high enough, while the specificity was the lowest. The closer a curve is to the diagonal of a random walk, the less discriminative the test becomes, and the classified possibilities differ less from random guessing, while the larger the area covered by the ROC curve, the closer we are to prediction. The areas under each ROC curve are statistically significantly different from that under the reference line, which can be seen on Figure 7.

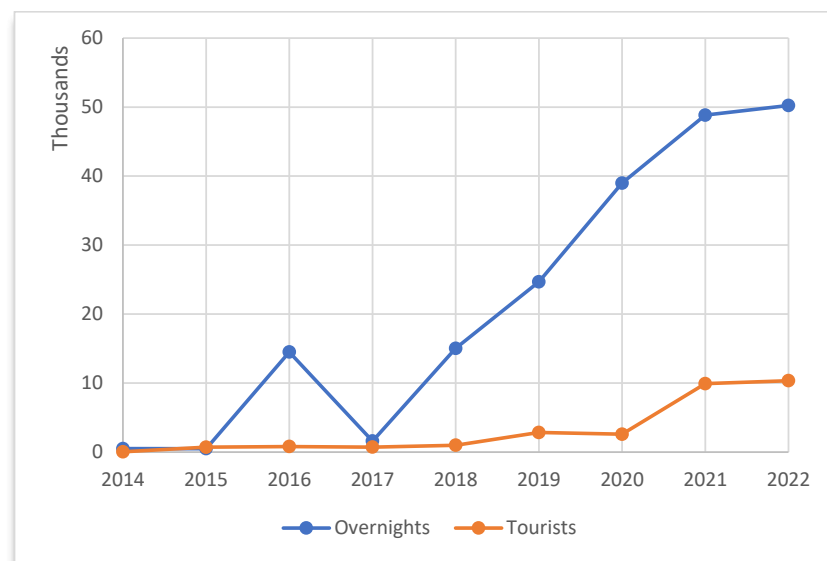


Figure 7. Trend of overnight stays and number of foreign tourists 2014–2022.

Based on the results of the area under the curve (AUC) in Table 4, it is observed based on the size of the AUC that the first three factors can positively predict rural development, and that the first factor will have a 59% chance of positively predicting future rural development (CIN = 95%, $p = 0.00$), while the smallest chance is factor 4, which is also observed from the value of statistical significance that moves outside the limits ($p = 0.3$).

Table 4. AUC results.

Area Under the Curve						
Test Result Variable(s)	Area	Std. Error	Asymptotic Sig.	Asymptotic 95% Confidence Interval		
				Lower Bound	Upper Bound	
F1-Functional elements	0.590	0.022	0.000	0.546	0.634	H2a ✓
F2-Satisfaction elements	0.570	0.022	0.002	0.526	0.614	H2b ✓
F3-Emotional value	0.574	0.023	0.001	0.530	0.618	H2c ✓
F4-Price value	0.480	0.023	0.384	0.435	0.525	H2d ✗

The hypotheses were confirmed that functional, satisfaction and emotional elements of quality can predict the future development of rural tourism, except for the price value factor, which in this case is a weak predictor. In the obtained set of cutoff scores for all factors, cutoff values were taken into account so that the sensitivity would be as high as possible, and the specificity would be disturbed as little as possible, but not be equated with the sensitivity in order to achieve as few correct negative rates as possible [76]. When looking at the first factor, the threshold score is at the value of the average score of 3.1 given by the respondents. In this limit score, there are the most accurate positive cases or answers

that predict future rural development. For factor 2, there is a similar example; the cutoff is at the value of 3.5, while for factor F3, the value of the average grade is 3.3. In the case of factor F4, the statistical significance of the prediction and relationship with future rural development was not shown. For all factors, the AUC value proved to be good because it exceeded 0.5, which is considered valid for random selection classifiers, and all below are values that have no chance in predicting the score.

4.3. ARIMA Model Results

In this study, the authors used the autoregressive integrated moving average to predict the trend of overnight stays of foreign tourists in the next two years. The first step of the ARIMA model is determining the stationarity of the model and finding the ideal model with the values of p , d , q . The ARIMA model is a good basis that can give us reliable limits (80% and 95% intervals) beyond which the actual value is very likely not to go out. Data on the number of overnight stays and the number of foreign tourists are given in Figure 7.

Growth has been observed since the beginning of recording data on tourist traffic in rural households, especially during the pandemic period when rural destinations became a trend. The model is quite non-stationary, and the goal is to work on a higher degree of stationarity and remove the influence of systematic components from the time series, and therefore the differentiation operator is used. Figure 8 shows autocorrelation and partial autocorrelation of the value of information on the number of overnight stays in rural households, which is very important for further analysis and creation of the ARIMA model.

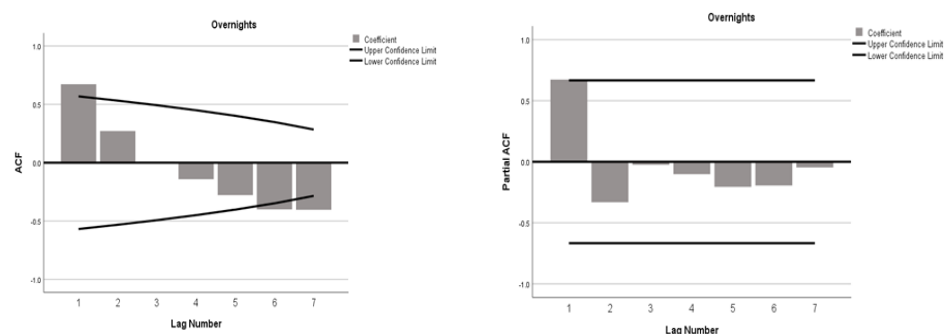


Figure 8. Correlogram of international overnights ACF I PACF.

The values of p , q and d were obtained based on the calculated values of ACF and PACF. It is observed that not all correlations at lag were statistically significant, except for correlation at lag 1, and then they dropped sharply. The model is non-stationary, so we set out to indicate whether the tourist overnight stay was a random phenomenon, and this was proven if the first differentiation gave a stationary series. Figure 9 indicates the first differentiation in order to create a stationary series.

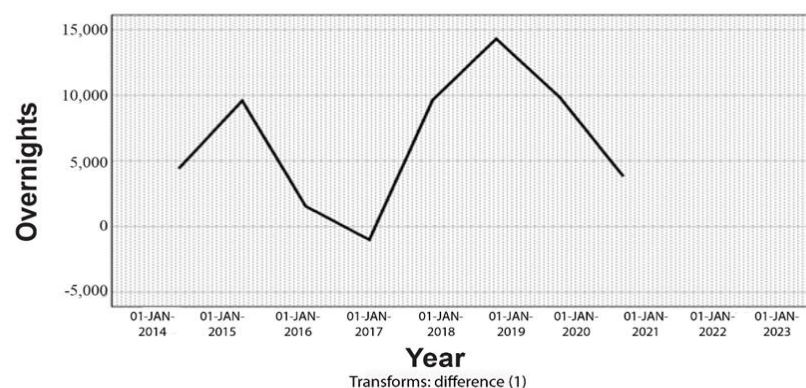


Figure 9. First difference model.

Figure 10 shows autocorrelation function (ACF) and partial autocorrelation function (PACF) plots. ACF and PACF assume stationarity of the first differenced time series. ACF explains how the present value of a given time series is correlated with past values. The PACF is a partial autocorrelation function that accounts for the partial correlation between the series and the lag itself.

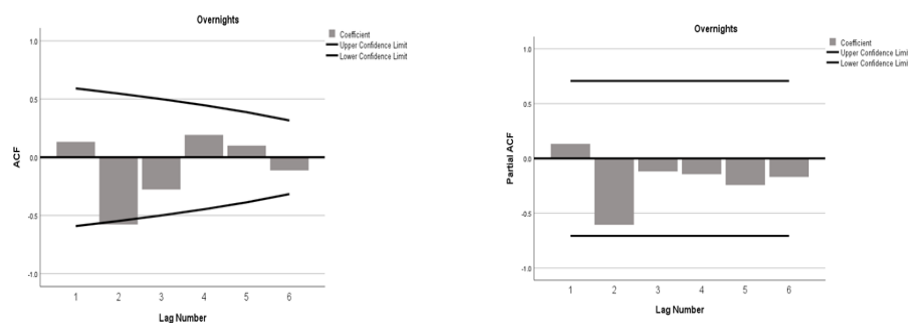


Figure 10. Correlogram of international overnights (first differences) ACF I PACF.

The results indicate the absence of partial correlation coefficients above the threshold of statistical significance and the absence of non-stationarity. In this case, the adequate model is AR (1), MA (0), ARIMA (1,1,1), where the parameters are $p = 1$, $d = 1$, $q = 1$. The ACF declines exponentially, while the PACF plot cuts off the lags sharply. The ARIMA model was accessed with the obtained suitability parameters and the verification of the random distribution of the residuals (Table 5). The adequacy and significant fit of the model is confirmed by the data in the table on best-fitting models, considering R-squared, MAPE and normalized BIC (larger R^2 , smaller MAPE and smaller normalized BIC indicates better fit).

Table 5. Results of basic model-fitting parameters ARIMA (1,1,1).

Model Fit Statistics				Ljung–Box Q (18)			
R^2	RMSE	MAPE	BIC	Statistics	df	Sig.	Number of Outliers
0.932	5925.398	16.303	18.414	26.633	17	0.10	0

The model explains 93.2% of the variance, while the Ljung–Box value is insignificant, which shows the feasibility of the prediction model. The adequacy of the first difference model is shown in Figure 11, and it can be seen that the diagrams of residuals ACF and PACF show random variations, so that all points below and above the zero value are uneven, so it is concluded that the model is adequate or reliable.

The dynamics of growth in the number of overnight stays in rural households in the future for the period of the next two years is given in Figure 12 and Table 6.

Hypothesis H3 was confirmed, which predicts a positive growth in the overnight stay trend of foreign tourists in the next two years (2023 and 2024).

Based on the presented results, it can be seen that the pandemic had the opposite effect when it comes to rural households. Namely, in the period from 2020 until 2022, there was a noticeable increase in overnight stays, and predictions are that the growth will continue in the next two years.

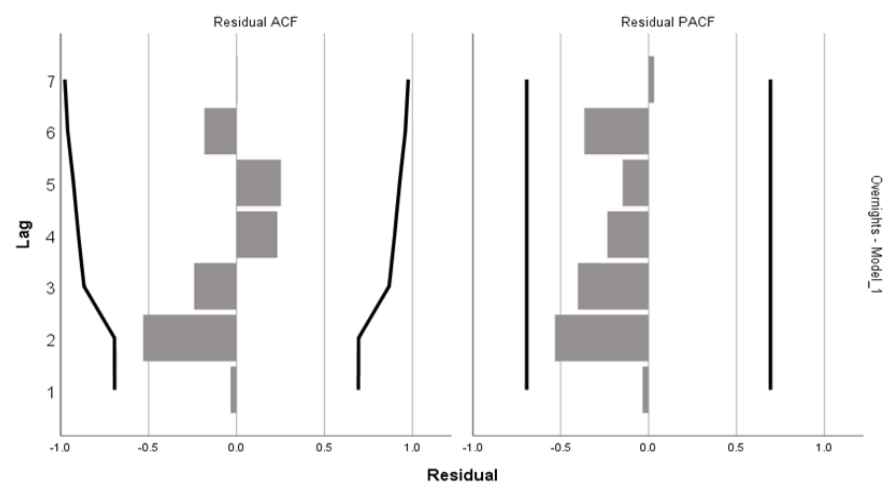


Figure 11. Residual ACF and PACF.

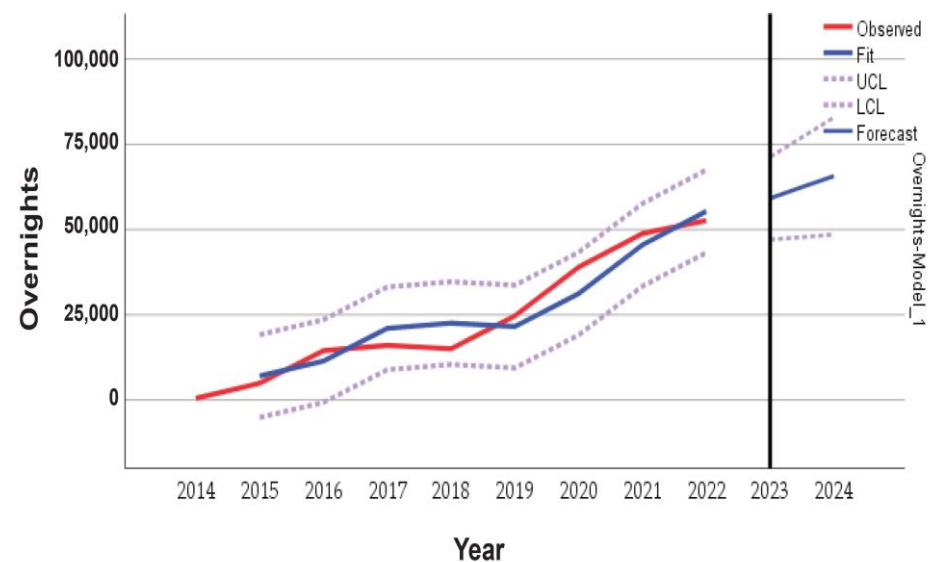


Figure 12. Estimated values of overnight stays for the period 2023 and 2024.

Table 6. Forecasting the number of overnight stays.

Model		2023	2024	Confirmation
Overnights-Model_1	Forecast	53,525	61,626	H3 ✓
	UCL	69,144	92,940	
	LCL	37,907	30,311	

5. Conclusion with Limitations and Future Implications

The pandemic, which disrupted economic, business and social life, determined new directions of tourist movement and encouraged the development of weaker tourist products, such as those based on nature. Some studies indicate that the increase in tourism in the summer season, by air and sea travel (especially in the form of mega-ship cruises) has been highlighted as one of the main causes of the rapid and global spread of the pandemic [77]. The results showed that environmental risk and awareness of physical and mental health are not significantly related to the intention to travel to ecological and rural destinations [78]. Bad conditions for the tourism sector resulted in the contraction of the tourism economy and created negative economic growth [79]. The epidemic certainly brought enormous consequences for the entire tourism industry, but on the other hand, it made the participants

aware of new tourist routes, and changes in the requirements in this way presented tourism opportunities in future unforeseen situations [80]. Farmaki [81] indicates that tourism crises are quickly forgotten due to the improvement of the strategy of management of tourism development after such situations. The pandemic has created an opportunity to direct movements towards ecological areas, with the principle of sustainable development, which also implies a shift to rural tourism [82]. In such situations, movements are directed towards rural tourism, which has an innovative and sustainable approach that preserves local identity and rural development [19,83]. The period of the pandemic has created a preference for inland domestic destinations located away from large urban areas [84]. Rural tourism is becoming a new market after the pandemic and the opposite of mass urban tourism [8]. Yang and Zhu [21] claim in their study that the pandemic highlighted all the shortcomings of villages and households, but also gave opportunities for their improvement, and that the implementation of relief measures in cooperation with the government and industrial associations is of key importance for the revitalization of villages, as well as a much stronger form of promotion. The impact of natural and unnatural crises on all sectors of tourism is very visible [85,86]. During 2020, 78% of people carried out rural or mountain tourism, knowing that these are destinations where they will be protected [87].

In Serbia, tourism by itself as an economic sector has never had priority, even though more than 85% of Serbia's territory is rural, especially if we are talking about the rural tourism product, which is at the lowest level of development. However, during the pandemic, when movements were only allowed within the state, rural tourism flourished. Statistical data confirm the fact that more than 80% of all movements took place towards mountain and natural tourist resources, including rural tourism. In this case, it can be said that this period has been about the revitalization of tourist destinations that certainly have great potential, but did not have priority importance. The trend continued even after the pandemic. The state encouraged internal movements by awarding vouchers for certain groups of tourists. The increased interest in these destinations influenced rural households to adapt their business to a certain extent to the new conditions, when security must be at a high level and when the demands of a wider range of tourists must be met. Now it is not only the older and poorer category but also younger, more educated visitors who are coming, and there is even an increase in foreign visitors. New business conditions dictate work on the quality of service in rural households, and the modernization of facilities, where some studies point to the danger of commercialization and departure from traditional rustic interiors and services.

Considering the continuation of the current trend towards rural destinations, the authors investigated the existing quality of service in rural households, and tried to establish to what extent quality factors can predict the future growth of tourism in rural settlements in Serbia. The goal was also to predict in some way the future movement of tourist traffic, more precisely, overnight stays. The results presented through the IPA grid indicate that the majority of services in rural households have a satisfactory level of quality, except for some special requests from tourists that need a lot of work in the direction of improvement. The IPA illustrated each hotel attribute in four different quadrants that allowed us to understand strengths and weaknesses. Furthermore, the receiver operating characteristic curve analysis established that all quality factors, except price value, can be predictors of future visits to rural households.

One of the limiting circumstances was the general lack of literature and research on rural tourism in Serbia even before the pandemic. Additionally, there is a lack of statistical data on the number of overnight stays in rural households before 2014. Until that year, rural households were not categorized. The lack of such data was a problem due to the difficulty in analyzing predictions based on a small amount of data. Foreign tourists often refused to cooperate due to their poor knowledge of the English language, so the researchers had to always be in the field to explain the essence of the issue.

5.1. Theoretical Implications

The innovativeness of the study is reflected in the addition of research that is very weak on the territory of Serbia, and in the fact that the research is only part of a large project research related to traditional gastronomy and the traditions of rural settlements in Serbia. The data obtained from this research can be of importance in a theoretical sense, as an informative basis for future research. Innovation is also reflected in the application of a methodology that is not used often for research regarding the quality of rural services in Serbia, and in the future, higher order constructions on the same issue can be added.

5.2. Practical Implications

The importance of this study is also reflected in the application aspect. Considering the growing trend of rural tourism, the data can indicate to managers in which direction to develop strategic plans and plans for the future development of not only rural tourism, but also the entire rural infrastructure and complementary activities. Following the demands of both traditional and modern views, they suggest the best strategy of non-commercialization of villages and sustainable development, but again an increase in the number of visits. Work is needed on the quality of services, especially those that have been shown by the IPA model to be the ones on which all attention should be focused and a lot of work should be done on improvement, which will further promote and improve tourist traffic. Quality of services is an important predictor for this construct in the fight against the pandemic and supporting the development of rural and sustainable tourism [88,89]. For practitioners, we show that an approach adapted only to certain categories of tourists who visited villages before the pandemic will no longer be sufficient for the future. Instead, tourism providers should address broad categories situationally and specifically. In terms of rural travel management in organizations, we see a need for new travel policies that move beyond management. The word 'boosting' in the development of tourism is rarely applied, but it can refer to the development of the ecological and rural environment in order to protect against pandemics, reducing the gap between the quality of the expected and received service, using the established strategic measures to face all kinds of risks, and work on the identified shortcomings.

Author Contributions: Conceptualization: T.G., F.Đ. and M.D.P.; methodology: I.B., T.G. and M.D.P.; software: M.M.R. and D.V.; validation, J.A.S.; formal analysis, M.M.; investigation, A.M., T.G., I.B. and M.D.P.; resources, A.M.; data curation, G.D.; writing—original draft preparation, T.G., F.Đ. and M.D.P.; writing—review and editing, I.B.; visualization, M.M.; supervision, M.M.R. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Data Availability Statement: Not applicable.

Acknowledgments: Ivana Blešić acknowledges the support of the Provincial Secretariat for Higher Education and Scientific Research of Vojvodina: grant agreements No. 142-451-3138/2022-02.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Baum, T.; Nguyen, H.T.T. Hospitality, tourism, human rights and the impact of COVID-19. *Int. J. Contemp. Hosp. Manag.* **2020**, *32*, 2397–2407. [CrossRef]
2. Ministry of Trade, Tourism and Telecommunications. Available online: <https://arhiva.mtt.gov.rs/en/> (accessed on 15 December 2022).
3. Gössling, S.; Scott, D.; Hall, C.M. Pandemics, tourism and global change: A rapid assessment. *J. Sustain. Tour.* **2020**, *29*, 1–20. [CrossRef]
4. Wu, T.M.; Xu, J.; Wong, S.M. Crisis management research (1985–2020) in the hospitality and tourism industry: A review and research agenda. *Tour. Manag.* **2021**, *85*, 104307. [CrossRef]
5. Yang, J.; Yang, R.; Chen, M.-H.; Su, C.-H.J.; Zhi, Y.; Xi, J. Effects of rural revitalization on rural tourism. *J. Hosp. Tour. Manag.* **2021**, *7*, 35–45. [CrossRef]

6. Mugauina, R.; Rey, I.Y.; Sabirova, R.; Rakhisheva, A.B.; Berstembayeva, R.; Beketova, K.N.; Zhansagimova, A. Development of rural tourism after the coronavirus pandemic. *J. Environ. Manag. Tour.* **2020**, *11*, 2020–2027. Available online: <https://journals.aserspublishing.eu/jemt/article/view/5805> (accessed on 15 December 2022).
7. Seo, B.R.; Kim, K.L. The Post Pandemic Revitalization Plan for the Medical Tourism Sector in South Korea: A Brief Review. *Iran. J. Public Health* **2021**, *50*, 1766–1772. [\[CrossRef\]](#)
8. Wen, J.; Kozak, M.; Yang, S.; Liu, F. COVID-19: Potential effects on Chinese citizens' lifestyle and travel. *Tour. Rev.* **2020**, *76*, 74–87. [\[CrossRef\]](#)
9. Rebola, F.; Loures, L.; Ferreira, P.; Loures, A. Inland or Coastal: That's the Question! Different Impacts of COVID-19 on the Tourism Sector in Portugal. *Sustainability* **2022**, *14*, 16248. [\[CrossRef\]](#)
10. Coroş, M.M.; Bode, O.R.; Săvan, E.E.; Ciucioiu, T.A. Rural Tourism During the COVID-19 Pandemic: A Case Study from North-Western Transylvania. *Stud. Univ. Babeş-Bolyai Negot.* **2021**, *66*, 7–22. [\[CrossRef\]](#)
11. Peira, G.; Longo, D.; Pucciarelli, F.; Bonadonna, A. Rural tourism destination: The Ligurian Farmers' perspective. *Sustainability* **2021**, *13*, 13684. [\[CrossRef\]](#)
12. Rosalina, P.D.; Dupre, K.; Wang, Y. Rural tourism: A systematic literature review on definitions and challenges. *J. Hosp. Tour. Manag.* **2021**, *47*, 134–149. [\[CrossRef\]](#)
13. Lane, B. Sustainable rural tourism strategies: A tool for development and conservation. *J. Sustain. Tour.* **1994**, *2*, 102–111. [\[CrossRef\]](#)
14. Frochot, I. A benefit segmentation of tourists in rural areas: A Scottish perspective. *Tour. Manag.* **2005**, *26*, 335–346. [\[CrossRef\]](#)
15. Molera, L.; Albaladejo, P. Profiling segments of tourists in rural areas of south-eastern Spain. *Tour. Manag.* **2007**, *28*, 757–767. [\[CrossRef\]](#)
16. Park, D.; Yoon, Y. Segmentation by motivation in rural tourism: A Korean case study. *Tour. Manag.* **2009**, *30*, 99–108. [\[CrossRef\]](#)
17. Bielska, A.; Borkowski, A.S.; Czarnecka, D.M.; Malina, J.K.; Piotrkowska, M. Evaluating the potential of suburban and rural areas for tourism and recreation, including individual short-term tourism under pandemic conditions. *Sci. Rep.* **2022**, *12*, 20369. [\[CrossRef\]](#)
18. Wang, L.; Yotsumoto, Y. Conflict in tourism development in rural China. *Tour. Manag.* **2019**, *70*, 188–200. [\[CrossRef\]](#)
19. Shrestha, R.K.; L'Espoir Decosta, P. Developing dynamic capabilities for community collaboration and tourism product innovation in response to crisis: Nepal and COVID-19. *J. Sustain. Tour.* **2021**, *31*, 168–186. [\[CrossRef\]](#)
20. Silva, L. The impact of the COVID-19 pandemic on rural tourism: A case study from Portugal. *Anatolia* **2022**, *33*, 157–159. [\[CrossRef\]](#)
21. Yang, J.; Zhu, G. The Recovery Strategy of Rural Tourism in the Post-Epidemic Period. Advances in Social Science, Education and Humanities Research. In Proceedings of the 2021 International Conference on Social Sciences and Big Data Application (ICSSBDA 2021), Xi'an, China, 10–12 December 2021; Atlantis Press: Paris, France, 2021. [\[CrossRef\]](#)
22. Marques, C.P.; Guedes, A.; Bento, R. Rural tourism recovery between two COVID-19 waves: The case of Portugal. *Curr. Issues Tour.* **2021**, *25*, 857–863. [\[CrossRef\]](#)
23. Osman, Z.; Sentosa, I. Mediating Effect of Customer Satisfaction on Service Quality and Customer Loyalty Relationship in Malaysian Rural Tourism. *Int. J. Econ. Bus. Manag. Stud.* **2013**, *2*, 25–37. Available online: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2196815 (accessed on 20 November 2022).
24. Vaishar, A.; Št'astná, M. Impact of the COVID-19 pandemic on rural tourism in Czechia preliminary considerations. *Curr. Issues Tour.* **2020**, *25*, 187–191. [\[CrossRef\]](#)
25. Li, L.; Tao, Z.; Lu, L. Understanding differences in rural tourism recovery: A critical study from the mobility perspective. *Curr. Issues Tour.* **2022**, *1*, 1368–3500. [\[CrossRef\]](#)
26. Wang, J.; Wang, Y.; He, Y.; Zhu, Z. Exploring the Factors of Rural Tourism Recovery in the Post-COVID-19 Era Based on the Grounded Theory: A Case Study of Tianxi Village in Hunan Province, China. *Sustainability* **2022**, *14*, 5215. [\[CrossRef\]](#)
27. Cró, S.; Martins, A.M. Structural breaks in international tourism demand: Are they caused by crises or disasters? *Tour. Manag.* **2017**, *63*, 3–9. [\[CrossRef\]](#)
28. Aithal, R.; Anil, R.K.; Angmo, D. Rural tourism in India: Case studies of resilience during crisis. *Worldw. Hosp. Tour.* **2022**, *15*, 63–73. [\[CrossRef\]](#)
29. Phillipson, J.; Gorton, M.; Turner, R.; Shucksmith, M.; Aitken-cDermott, K.; Areal, F.; Cowie, P.; Hubbard, C.; Maioli, S.; McAreavey, R.; et al. The COVID-19 pandemic and its implications for rural economies. *Sustainability* **2020**, *12*, 3973. [\[CrossRef\]](#)
30. Chatzigeorgiou, C.; Simeli, I. Delegate Satisfaction. Service quality, satisfaction, future behavioural intentions. *J. Tour. Herit. Serv. Mark.* **2020**, *6*, 3–8. [\[CrossRef\]](#)
31. N'Drower, F.; Moscardo, G.; Murphy, L. Tourism brings good things: Tourism and community development in rural Papua New Guinea. *Tour. Rev. Int.* **2021**, *25*, 229–245. [\[CrossRef\]](#)
32. Seraphin, H.; Dosquet, F. Mountain tourism and second home tourism as post COVID-19 lockdown placebo? *Worldw. Hosp. Tour. Themes* **2020**, *12*, 485–500. [\[CrossRef\]](#)
33. Chuang, S.T. Residents' attitudes toward rural tourism in Taiwan: A comparative viewpoint. *Int. J. Tour. Res.* **2013**, *15*, 152–170. [\[CrossRef\]](#)
34. Hwang, J.; Lee, S. The effect of the rural tourism policy on non-farm income in South Korea. *Tour. Manag.* **2015**, *46*, 501–513. [\[CrossRef\]](#)

35. Gajić, T.; Vukolić, D.; Petrović, M.; Blešić, I.; Zrnić, M.; Cvijanović, D.; Sekulić, D.; Spasojević, A.; Obradović, A.; Obradović, M.; et al. Risks in the Role of Co-Creating the Future of Tourism in “Stigmatized” Destinations. *Sustainability* **2022**, *14*, 15530. [CrossRef]
36. Albacete-Sáez, C.A.; Mar Fuentes-Fuentes, M.; Javier Lloréns-Montes, F. Service quality measurement in rural accommodation. *Ann. Tour. Res.* **2007**, *34*, 45–65. [CrossRef]
37. Choi, H.; Ann, S.; Lee, K.W.; Park, D.B. Measuring Service Quality of Rural Accommodations. *Sustainability* **2018**, *10*, 443. [CrossRef]
38. Augustyn, M.; Ho, S.K. Service quality and tourism. *J. Travel Res.* **1998**, *37*, 71–75. [CrossRef]
39. Sharpley, R. Rural tourism and the challenge of tourism diversification: The case of Cyprus. *Tour. Manag.* **2002**, *23*, 233–244. [CrossRef]
40. Wos, B.; Gawlik, A.; Drobek, W. Obiekty hotelarskie na terenach wiejskich—Nowa jakość usług (Hotel enterprises in rural areas—New quality of services). *Study Obsz. Wiej.* **2018**, *49*, 173–185. Available online: <https://rcin.org.pl/dlibra/publication/86996/edition/67966/obiekty-hotelarskie-na-terenach-wiejskich-nowa-jakosc-uslug-hotel-enterpri> (accessed on 20 November 2022). [CrossRef]
41. Št'astná, M.; Vaishar, A.; Brychta, J.; Tuzová, K.; Zloch, J.; Stodolová, V. Cultural tourism as a driver of rural development. case study: Southern Moravia. *Sustainability* **2020**, *12*, 9064. [CrossRef]
42. Fanelli, R.M.; Romagnoli, L. Customer satisfaction with farmhouse facilities and its implications for the promotion of agritourism resources in Italian municipalities. *Sustainability* **2020**, *12*, 1749. [CrossRef]
43. Blaine, T.; Golam, M.; Var, T. Demand for Rural Tourism: An Exploratory Study. *Ann. Tour. Res.* **1993**, *20*, 770–773. [CrossRef]
44. Fleischer, A.; Pizam, A. Rural Tourism in Israel. *Tour. Manag.* **1997**, *18*, 367–372. [CrossRef]
45. Yague, P.R. Rural Tourism in Spain. *Ann. Tour. Res.* **2002**, *29*, 1101–1110. [CrossRef]
46. Tian-Cole, S.; Crompton, J. A Conceptualization of the Relationships between Service Quality and Visitor Satisfaction, and their Links to Destination Selection. *Leis. Stud.* **2003**, *22*, 65–80. [CrossRef]
47. Wojciechowska-Solis, J.; Smiglak-Krajewska, M.; Viti, D. Identification of the Quality Gaps in the Services Offered in Accommodation Facilities in Rural Areas: The Case of the Lublin Region. *Sustainability* **2022**, *14*, 16873. [CrossRef]
48. Yoon, Y.; Uysal, M. An examination of the effects of motivation and satisfaction on destination loyalty: A structural model. *Tour. Manag.* **2003**, *26*, 45–56. [CrossRef]
49. Chi, C.G.-Q.; Qu, H. Examining the structural relationships of destination image, tourist satisfaction and destination loyalty: An integrated approach. *Tour. Manag.* **2008**, *29*, 624–663. [CrossRef]
50. Rahimzhan, S.; Avci, T.; Eluwole, K.K. A conceptual model development of the impact of higher education service quality in guaranteeing edu-tourists' satisfaction and behavioral intentions. *J. Public Aff.* **2020**, *20*, e2085. [CrossRef]
51. Puri, G.; Singh, K. The role of service quality and customer satisfaction in tourism industry: A review of SERVQUAL Model. *Int. J. Res. Anal. Rev.* **2018**, *5*, 745–751. Available online: http://ijrar.com/upload_issue/ijrar_issue_20542271.pdf (accessed on 20 November 2022).
52. Marković, S.; Kljaic Šebrek, J. Service Quality Measurement in Rural Tourism: Application of RURALQUAL Model. *Acad. Tur. Tour. Innov. J.* **2020**, *13*, 215–227. [CrossRef]
53. Parasuraman, A.; Zeithaml, V.A.; Berry, L.L. A conceptual model of service quality and its implications for future research. *J. Mark.* **1985**, *49*, 41–50. Available online: <https://www.jstor.org/stable/1251430> (accessed on 15 December 2022). [CrossRef]
54. Loureiro, S.M.C.; González, F.J.M. The importance of quality, satisfaction, trust, and image in relation to rural tourist loyalty. *J. Travel Tour. Mark.* **2008**, *25*, 117–136. [CrossRef]
55. Ennew, C.T.; Reed, G.V.; Binks, M.R. Importance-performance analysis and the measurement of service quality. *Eur. J. Mark.* **1993**, *27*, 59–70. [CrossRef]
56. Deng, W. Using a revised importance–performance analysis approach: The case of Taiwanese hot springs tourism. *Tour. Manag.* **2007**, *28*, 1274–1284. [CrossRef]
57. Hudson, S.; Shephard, G. Measuring service quality at tourist destinations: An application of importance performance analysis to an Alpine Ski Resort. *J. Travel Tour. Mark.* **1998**, *7*, 61–68. [CrossRef]
58. Babakus, E.; Boller, G.W. An empirical assessment of the SERVQUAL scale. *J. Bus. Res.* **1992**, *24*, 253–268. [CrossRef]
59. Zhou, B.; Qi, F.; Riaz, M.F.; Ali, T. An Analysis of the Factors behind Rural Residents' Satisfaction with Residential Waste Management in Jiangxi, China. *Int. J. Environ. Res. Public Health* **2022**, *19*, 14220. [CrossRef]
60. Jiang, X.; Sheng, X. A study on the development strategy of rural residential accommodation in Suzhou based on customer satisfaction. *J. Sha Chau Polytech.* **2020**, *23*, 18–23. [CrossRef]
61. Wang, G.-L.; Liu, C.-C.; Tseng, S.-R. An evaluation of Taiwanese B & B service quality using the IPA model. *J. Business Res. Turk* **2012**, *4*, 20–27. Available online: <https://isarder.org/index.php/isarder/article/view/76/73> (accessed on 20 November 2022).
62. Đoković, F.; Pejanović, R.; Mojsilović, M.; Đorđević Boljanović, J.; Plečić, K. Possibilities of revitalization of rural tourism in the functioning of agricultural cooperatives. *Econ. Agric.* **2017**, *64*, 1115–1132. [CrossRef]
63. Cvijanović, D.; Gajić, T. The Level of Engagement of the Female Workforce in the Rural Tourism Development of Serbia. *J. Tour. Leis. Hosp.* **2020**, *2*, 36–42. Available online: <https://dergipark.org.tr/en/pub/toleho/issue/53785/739476> (accessed on 20 November 2022).
64. Cohen, E. A phenomenology of tourist experiences. *Sociology* **1979**, *13*, 179–201. [CrossRef]

65. Loureiro, S.M.C.; González, F.J.M. Perceived quality in rural lodgings in Spain and Portugal: The RURALQUAL scale. *Port. J. Manag. Stud.* **2009**, *14*, 33–52. Available online: https://econpapers.repec.org/article/pjmjournal/v_3axiv_3ay_3a2009_3ai_3a1_3ap_3a33-52.htm (accessed on 15 December 2022).
66. Grönroos, C. A Service Quality Model and its Marketing Implications. *Eur. J. Mark.* **1984**, *18*, 36–44. [\[CrossRef\]](#)
67. Parasuraman, A.; Berry, L.L.; Zeithaml, V.A. Refinement and reassessment of the SERVQUAL scale. *J. Retail.* **1991**, *67*, 420. [\[CrossRef\]](#)
68. Taplin, R.H. Competitive importance-performance analysis of an Australian wildlife park. *Tour. Manag.* **2012**, *33*, 29–37. [\[CrossRef\]](#)
69. Oh, H. Revisiting importance-performance analysis. *Tour. Manag.* **2021**, *22*, 617–627. [\[CrossRef\]](#)
70. Bacon, D.R. A comparison of approaches to importance-performance analysis. *Int. J. Mark. Reserch* **2003**, *45*, 55–73. [\[CrossRef\]](#)
71. Sörensson, A.; Von Friedrichs, Y. An importance-performance analysis of sustainable tourism: A comparison between international and national tourists. *J. Destin. Mark. Manag.* **2013**, *2*, 14–21. [\[CrossRef\]](#)
72. Hu, M.L.M.; Yen, C.D.; Horng, J.S. Assessing students' low carbon literacy by Redit IPA approach. *J. Hosp. Leis. Sport Tour. Educ.* **2013**, *13*, 202–2012. [\[CrossRef\]](#)
73. Martilla, J.; James, J.C. Important-performance analysis. *J. Mark.* **1997**, *41*, 13–17. [\[CrossRef\]](#)
74. Zsóka, Á. Consistency and “awareness gaps” in the environmental behaviour of Hungarian companies. *J. Clean. Prod.* **2008**, *16*, 322–329. [\[CrossRef\]](#)
75. Fawcett, T. An Introduction to ROC Analysis. *Pattern Recognit. Lett.* **2008**, *27*, 861–874. [\[CrossRef\]](#)
76. Box, G.E.; Jenkins, G.M.; Reinsel, G.C. *Time Series Analysis: Forecasting and Control*, 3rd ed.; Prentice Hall: Hoboken, NJ, USA, 1994; ISBN 1001-3060-7746592. Available online: [https://www.scrip.org/\(S\(i43dyn45teexjx455qlt3d2q\)\)/reference/ReferencesPapers.aspx?ReferenceID=1936224](https://www.scrip.org/(S(i43dyn45teexjx455qlt3d2q))/reference/ReferencesPapers.aspx?ReferenceID=1936224) (accessed on 20 November 2022).
77. Chinazzi, M.; Davis, J.T.; Ajelli, M.; Gioannini, C.; Litvinova, M.; Merler, S.; Viboud, C. The effect of travel restrictions on the spread of the 2019 novel coronavirus (COVID-19) outbreak. *Science* **2020**, *368*, 395–400. [\[CrossRef\]](#)
78. Tseng, K.C.; Lin, H.H.; Lin, J.W.; Chen, I.S.; Hsu, C.H. Under the COVID-19 Environment, Will Tourism Decision Making, Environmental Risks, and Epidemic Prevention Attitudes Affect the People's Firm Belief in Participating in Leisure Tourism Activities? *Int. J. Environ. Res. Public Health* **2021**, *18*, 7539. [\[CrossRef\]](#)
79. Newbery, R.; Bosworth, G. Home-based business sectors in the rural economy. *Soc. Bus. Rev.* **2010**, *5*, 183–197. [\[CrossRef\]](#)
80. Brouder, P. Reset redux: Possible evolutionary pathways towards the transformation of tourism in a COVID-19 world. *Tour. Geogr.* **2020**, *22*, 484–490. [\[CrossRef\]](#)
81. Farmaki, A. Memory and forgetfulness in tourism crisis research. *Tour. Manag.* **2021**, *83*, 104210. [\[CrossRef\]](#)
82. Higgins-Desbiolles, F. Socialising tourism for social and ecological justice after COVID-19. *Tour. Geogr.* **2020**, *22*, 610–623. [\[CrossRef\]](#)
83. Akgün, A.A.; Baycan, T.; Nijkamp, P. Rethinking on sustainable rural development. *Eur. Plan. Stud.* **2015**, *23*, 678–692. [\[CrossRef\]](#)
84. Kürüm Varolüne, F.; Çelik, F.; Del Río-Rama, M.C.; Álvarez-García, J. Reassessment of sustainable rural tourism strategies after COVID-19. *Front. Psychol.* **2022**, *13*, 944412. [\[CrossRef\]](#) [\[PubMed\]](#)
85. Aliperti, G.; Sandholz, S.; Hagenlocher, M.; Rizzi, F.; Frey, M.; Garschagen, M. Tourism, crisis, disaster: An interdisciplinary approach. *Ann. Tour. Res.* **2019**, *79*, 102808. [\[CrossRef\]](#)
86. Song, H.; Livat, F.; Ye, S. Effects of terrorist attacks on tourist flows to France: Is wine tourism a substitute for urban tourism? *J. Destin. Mark. Manag.* **2019**, *14*, 100385. [\[CrossRef\]](#)
87. Zawadka, J.; Jęczyk, A.; Uglis, J.; Wojcieszak-Zbierska, M.M. Plany turystyczne mieszkańców miast w dobie pandemii COVID-19. *Warsztaty Z Geogr. Turyzmu* **2021**, *11*, 13–34. [\[CrossRef\]](#)
88. Vinerean, S.; Opreana, A.; Tileaga, C.; Popsa, R.E. The impact of COVID-19 pandemic on residents' support for sustainable tourism development. *Sustainability* **2021**, *13*, 12541. [\[CrossRef\]](#)
89. Vuković, D.B.; Zobov, A.M.; Degtereva, E.A. The Nexus Between Tourism and Regional Real Growth: Dynamic Panel Threshold Testing. *J. Geogr. Inst. “Jovan Cvijić” SASA* **2022**, *71*, 111–116. [\[CrossRef\]](#)

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.