

ANALYSIS OF THE DEGREE OF KNOWLEDGE AND PERCEPTION REGARDING THE DEVELOPMENT OF TOURIST ROUTES IN LUNCASPRIE DESTINATION, ROMANIA

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Abstract: Tourism is one of the most dynamic activities locally and globally with unpredictable and often unknown effects on the environment. In this context, the present study aims to evaluate the degree of knowledge and perception, regarding the opportunity of setting up tourist routes in the tourist destination of Luncașprie, Romania, of the main factors involved in the development of tourism. Using the survey method, 55 peoples were consulted, of which 50.9% were tourists, 23.6% were locals, 18.2% were local public authority representatives and 7.3% were tourist service providers. The results obtained by using the methodology developed in the present study highlighted the degree of knowledge and perception in general and by category of respondents, as well as the relationships between the degree of knowledge and the perception regarding the insertion of tourist infrastructure elements, in the present case, of some tourist routes. Therefore, the study aims to evaluate the degree of acceptance of tourism by the local community in the destination of Luncașprie, Romania.

Keywords: tourist knowledge and perception, tourist routes, tourist destination, factors involved in the development of tourism

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INTRODUCTION

Tourism represents an essential pillar for worldwide social, ecological and economic development (Lopes et al., 2019; Kordha et al., 2019). It can represent a driving force for the development of local economies (Wong et al., 2024; Guala et al., 2024) in rural environments where the agricultural economy prevails, but which have a series of assets such as: the existence of a significant quantitative and qualitative tourist heritage (Ilieș et al., 2014; Dehornee et al., 2019; Yan et al., 2017; Zhang et al., 2024); the proximity of large tourist emission centers (Shoval, 2018; Herman et al., 2020); the existence of specific demands (Song and Li, 2008; Song et al., 2023; Aygün Oğur and Baycan, 2023); the existence of a local community prepared to accept tourism integration (Mason and Cheyne, 2000; Chen and Chen, 2010; Olivar et al., 2024) etc.

Within tourism, ecological tourism and agritourism have been standing out more and more recently. Tourism is an essential aspect of

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sustainable development (Shang et al., 2024; Matlovič & Matlovičová, 2024) with beneficial effects on society, amongst which the decrease of carbon dioxide emissions and the exhaustion of natural resources (Koçak et al., 2020; Gössling et al., 2023), the improvement of public health and greater satisfaction of life (Afzal et al., 2022; Campos et al., 2022; Wang et al., 2023), while agritourism is a form of rural tourism with economic effects on local economies (Fleischer and Tchetchik, 2005; Medina-Muñoz et al., 2016; Ma et al., 2024) which provides the local people with the possibility to get involved in preserving the local resources and the cultural heritage (Axinte et al., 2020; Matlovičová, 2024; Quaranta et al., 2016; Tolstad, 2014; Susila et al., 2024).

The necessity to diversify the tourist offer in Bihor led to the identification and assertion of new areas in which tourism can be inserted and developed (Herman and Blaga, 2022). Knowing the impact and risks must be a defining coordinate for tourism. Thus, identifying the degree of perception and that of knowledge regarding the opportunity to develop tourist routes in a given area, may represent an essential indicator providing data about accepting tourism or not accepting it by a local community, seen from the perspective of the main beneficiary of tourism.

Globally, the conflicts between tourists and local population have recently become a subject intensely discussed in mass-media and academic literature (Al Haija, 2011; Concu and Atzeni, 2012; Rêgo and Almeida, 2022; Pai et al., 2023). Considering the opportunity provided by the proximity of Oradea City, which is only 40 km away from Luncasprie destination, as well as by the variety and uniqueness of the tourist offer, it is necessary to know the perception regarding the role and importance of developing tourist routes in this area. Therefore, the purpose of the current study is to identify, quantify and analyze the degree of perception and that of knowledge regarding the opportunity to develop tourist routes in Luncasprie destination, Bihor County, Romania.

The research questions for which answers are required after our endeavor are: Which is the perception and knowledge degree of the target group regarding the opportunity to develop tourist routes in Luncasprie destination, Bihor County, Romania? Are there relationships between knowledge and perception? Are there perception differences according to categories of respondents? Which is the perception according to categories of respondents?

The work hypothesis, from which the research started, is that good perception may be a guaranty of accepting tourism and of the sustainability of eventual tourist development, while a weak perception may emphasize the existence of certain limitations regarding the insertion of tourism in this area. Another work hypothesis is that there are some perception differences between the various respondent categories according to their knowledge degree, interests and preoccupations. Thus, the tourist services providers and the tourists will have a better perception compared to the local population and local public authorities. The novelty of the study is represented by its purpose and objectives, studied area, used research methodology, consulted respondents and obtained results.

MATERIALS AND METHODS

1. Study Area

Luncasprie is a rural locality, situated in Dobrești commune, Bihor County, Romania (Figure 1), which stands out through some tourist attraction of local and regional importance such as: Vida gorge, Toplița cave, Toplița de Vida karst spring, Vida Lake, „Sf. Archangels Mihail and Gavril” from Luncasprie, the traditional peasant houses from Luncasprie, etc.



Figure 1. The synthetic values of knowledge

They are the expression of evolution and working together of the natural and human-made environmental elements which are specific to the studied area. The natural component is represented by a hilly relief with altitudes oscillating between 465 m in the northern part of the locality, in Sclavu Hill, and 180 m, along Vida Valley. From hydrographic viewpoint, the analyzed area belongs to the Crișuri water catchment, being crossed from north to south by Vida River (upstream of Copăceni locality, its name is Holod River), tributary on the right side of Crișul Negru River (Ujvari, 1972). In the north side of Luncasprie locality, there is the human-made Vida Lake which stands out from tourist viewpoint by the picturesque landscape and the unusual way of overflowing through a funnel-type system (Herman and Blaga, 2022). This area, evolving in time in a temperate-continental climate with western influences, characterized by annual average temperatures of 11°C and precipitations between 700 and 900 mm, features a vegetation which is specific to the hill-mountain contact area, where the vegetal associations prevail, specific to the deciduous forests (Herman, 2012), and their phytocoenoses belong to the following classes: *Carpino-Fagetum*, *Quercus robori-Carpinetum*, *Quercus petraeae-Carpinetum*, *Carpino-Quercetum cerris*, *Quercetum robori-petraeae* etc. From the species, the following stand out: Hornbeam (*Carpinus betulus*), Beech (*Fagus sylvatica*), Oak (*Quercus robur*), Sessile oak (*Quercus petraea*), Turkey oak (*Quercus cerris*), Silver linden (*Tilia tomentosa*), etc. The fauna features tourist and entertainment interest due to the species which present interest for hunting, amongst which: the wild boar (*Sus scrofa*), the deer (*Capreolus capreolus*), the fox (*Vulpes vulpes*), the hare (*Lepus europaeus*), the pheasant (*Phasianus colchicus*), etc.

Regarding the human component, it is represented by 937 inhabitants, out of which 467 men and 470 women, respectively 295 households and their specific activities (INSEE, 2021). As a result of human continuity and living together in this heterogeneous and diversified area, the people created a specific settlement, characterized by a hearth with an uneven street network configuration, with households and annexes unevenly spread in the spatial profile according to the advantages and restrictions imposed by natural environment configuration, especially relief, hydrographic network and vegetation. In addition to the households, some of them with relict elements (stable, barn, etc.), certain attractions of common interest also stand out, such as: three churches (the wooden church “St. Archangels Mihail and Gavriil”, the Orthodox Church and the Luncasprie Betania Pentecostal Church), two forestries, six accommodation units, three of them being functional (Candy Pension, Luca Pension House, Gulescu Pension), three being about to be finished (The Mayor Pension, 13 Rooms Pension, Pension in progress) (Herman and Blaga, 2022).

2. Implementation of Analyses

The data necessary for the elaboration of this study were obtained in July, 2023, by using the pole method based on a sociological questionnaire, after consulting a number of 55 people, out of which 28 tourists (50.9%), 13 locals (26.6%), 10 local public authority representatives (18.2%), 4 tourist service providers (7.3%), regarding the „Perception of the importance of tourist routes development” in Luncasprie, Bihor County, Romania.

The questionnaire was made up of 12 items, five regarding the knowledge about the role and importance of developing tourist routes (Items X1 to X5), seven items referring to the perception about developing tourist routes (Y1 to Y7). There were used both binary questions (0-No, 1-Yes) and questions which implied answers in the Likert scale format (1 to 10, where 1 means not at all and 10 means to a great extent) (Table 1). Thus, 55 people were consulted, out of which 49% were females, 51% males and their ages were between 18 and 82 years. Regarding ethnicity, 91% were Romanians, followed by Hungarians (17%) and other ethnicities (2%). The analysis on age groups emphasized the high percentage of respondents aged between 49 and 58 years (29.1%), followed by those with ages between 59 and 68 years (23.6%), then 39 and 48 years (20%), 18 and 28 years (14.5%), 29 and 38 years (10.9%) and over 69 years (1.8%).

Table 1. The selected variables for the studied criteria

Criterion	Sub criterion	Variable	Data	Type of Data
X. Degree of knowledge	X1. Knowing the Luncasprie tourist destination	To what extent do you know the Luncasprie tourist destination?	55	Quantitative
	X2. Knowing the role and importance of tourist routes	Do you know which is the role and importance of tourist routes in a tourist destination area?	55	Quantitative
	X3. Knowing the tourist resources	Natural	55	Quantitative
		Human-made	55	Quantitative
	X4. Knowing the mechanisms by which tourist routes development contributes to the improvement of the tourist destination image	Interconnection of tourist attractions	55	Quantitative
		Facilitation of knowledge	55	Quantitative
Others		55	Quantitative	
X5. Knowing the optimum dimension of tourist groups on the Luncasprie routes	Which do you consider that should be the optimum dimension of tourist groups on the Luncasprie routes, to avoid the disturbance of the social and ecological balance?	55	Quantitative	
Y. Tourist perception	Y1. The roles and importance of tourist routes	Interconnect tourist attractions;	55	Quantitative
		Direct tourist flows on the established routes;	55	Quantitative
		Facilitate knowledge;	55	Quantitative
		Contribute to the increase of tourist retention degree;	55	Quantitative
		Contribute to the tourist destination image improvement;	55	Quantitative
		Contribute to economic efficiency increase;	55	Quantitative
		Contribute to social efficiency increase;	55	Quantitative
Contribute to ecological efficiency increase;	55	Quantitative		

	Y2. The persons responsible with providing the information necessary to carrying on tourism	Public authorities;	55	Quantitative
		Tourist services providers;	55	Quantitative
		Local population;	55	Quantitative
		Local guides;	55	Quantitative
		ONG;	55	Quantitative
		Someone else	55	Quantitative
	Y3. Ways to present the information	Information billboards;	55	Quantitative
		Information signs;	55	Quantitative
		Orientation signs;	55	Quantitative
		Word of mouth, local guides;	55	Quantitative
		On-line environment;	55	Quantitative
		Other ways	55	Quantitative
	Y4. The timespan for which Luncașprie destination provides alternatives for spending free time	8. For how many days do you consider that Luncașprie destination provides alternatives for spending free time?	55	Quantitative
	Y5. The responsibility to propose tourist routes development	Public authorities;	55	Quantitative
		Tourist services providers;	55	Quantitative
Local population;		55	Quantitative	
Local guides.		55	Quantitative	
ONG-s		55	Quantitative	
Y6. Financing sources for the tourist routes	Someone else	55	Quantitative	
	Public funds;	55	Quantitative	
	Private funds;	55	Quantitative	
	Other categories	55	Quantitative	
Y7. The prerogatives of developing and maintaining tourist routes), with their defining features	Public authorities;	55	Quantitative	
	Tourist services providers;	55	Quantitative	
	Local population;	55	Quantitative	
	Local guides.	55	Quantitative	
	ONG-s	55	Quantitative	
	Someone else	55	Quantitative	

Knowing the relationship between the degree of knowledge and that of perception of the respondents consulted within the study implied using 5 defining aspects for the knowledge degree (X1. Knowing the Luncașprie tourist destination; X2. Knowing the role and importance of tourist routes; X3. Knowing the tourist resources; X4. Knowing the mechanisms by which tourist routes development contributes to the improvement of the tourist destination image; X5. Knowing the optimum dimension of tourist groups on the Luncașprie routes), respectively 7 aspects for perception (Y1. The roles and importance of tourist routes; Y2. The persons responsible with providing the information necessary to carrying on tourism; Y3. Ways to present the information; Y4. The timespan for which Luncașprie destination provides alternatives for spending free time; Y5. The responsibility to propose tourist routes development; Y6. Financing sources for the tourist routes; Y7. The prerogatives of developing and maintaining tourist routes), with their defining features (Table 1).

To accomplish the study, the multi-criteria method (Kiselakova et al., 2020) and the Min-Max normalization or value mapping method (Patro and Sahu, 2015) were used to standardize the values of each variable to obtain an aggregate value for the degree of knowledge, respectively of perception (Deac et al., 2023; Herman et al., 2023, 2024). The obtained aggregate values were used to calculate the relationship index between the degree of knowledge and that of perception, based on which the respondents were classified according to the relationship type between their degrees of knowledge, respectively of perception. It used the Excel software (Microsoft Office 365) to process the information obtained through the sociological inquiry method.

RESULTS AND DISCUSSIONS

After analyzing the answers obtained from the applied questionnaire, the synthetic values obtained for the two criteria are positive, the respondents, irrespective of what category they belong to, know and/or have a certain perception regarding the role and importance of tourist routes development.

All these values range between 0.188 and 0.883, for the knowledge degree, and between 0.305 and 0.794 for perception. Smaller values (both minimum and maximum) were recorded for perception.

1. Degree of knowledge

Knowledge represents a defining coordinate of nowadays society and tourism makes no exception to it, regarded as an activity in full spatial, structural and relational expansion. The implications of tourism are reflected in all society components, including the economic, social and ecological ones. On this background, the current research, based on the previously described methodology, emphasized the degree of knowledge of all consulted respondents, as well as for each consulted type of category (tourists, local population, tourist services providers and representatives of local public authorities).

Thus, the synthetic values of the degree of knowledge regarding the role and importance of tourist routes development ranged between 0.188 and 0.883. For 35 (63.63%) of the 55 respondents, the obtained values were over 0.5, while for the other 20 (36.36%), the values were under 0.5. Out of the 35 respondents for whom the recorded values were over 0.5, 8 (out of the

total 10), 80% were represented by public authorities and 17 (out of 28), 60.71%, were tourists. The highest percentage was recorded in the case of the representatives of public authorities (80%), however, the other categories recorded a degree of knowledge of over 50%, the lowest percentage being recorded in the case of local people (53.84%) (Figure 2).

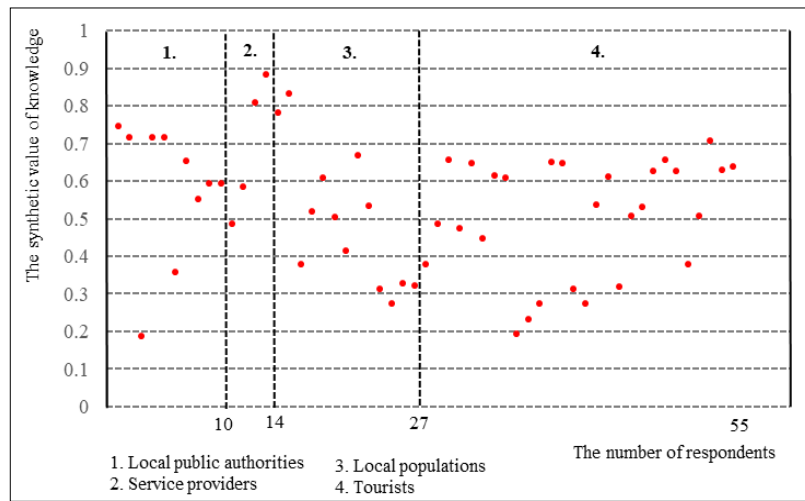


Figure 2. The synthetic values of knowledge

2. Perception

It is an important variable in tourist destination management and, indirectly, in planning and developing tourist routes as structural elements of a destination. A good perception of the role and importance of certain tourist infrastructure elements can provide valuable information regarding the acceptance or non-acceptance degree of tourism in a particular tourist destination. Thus, after quantifying the answers obtained from the applied questionnaire, the values regarding the perception of the role and importance of tourist routes development are within 0.289 and 0.794. In the case of 29 respondents (52.72% of the total), the values are over 0.5, while for the rest of 26 (47.27%), the values do not pass 0.5. In the category with values over 0.5, there are 3 out of 10 representatives of public authorities (30%), 3 (out of 4) services providers (75%), 6 out of 13 local people (46,15%) and 16 (out of 28) tourists (57.14%) (Figure 3).

3. Relationships between perception and knowledge

After calculating the synthetic values for the two criteria – degree of knowledge, respectively of perception, of the role and importance of tourist routes development, the relationship indicators were calculated for the criteria corresponding to each respondent. Although the work methodology established four types of relationships, according to the predominance of one criterion or another – negative and positive strong relationships, respectively negative and positive weak relationships – the quantitative analysis of relationship indexes revealed only two types of relationships: negative strong relationships – when the degree of perception was higher than the degree of knowledge, respectively, positive strong relationships when the degree of knowledge was higher than the degree of perception.

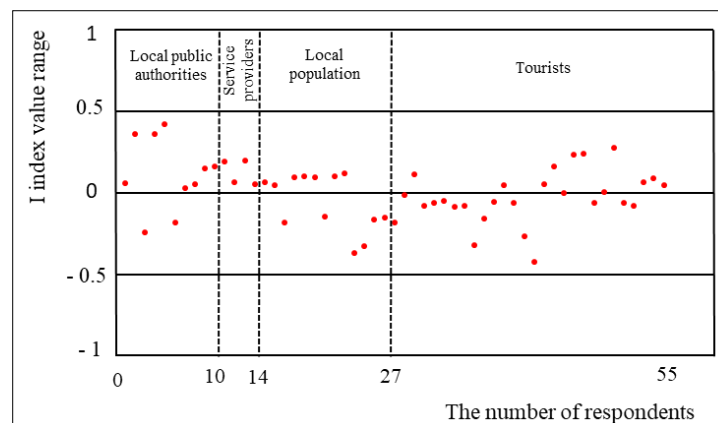


Figure 3. Distribution of types of relationships between knowledge and perception

For 30 respondents (of the total of 55), respectively 54.54%, the relationship index was positive, meaning that the degree of knowledge was higher than that of perception, while for the other 25 respondents (45.45%), the degree of perception was higher. This indicates that knowledge generally does not affect perception because “perception is autonomous with respect to thought” (Rock, 1985). The positive values of relationship indexes are in the range of -0.366 and -0.0007. The lowest positive index was recorded in the case of a tourist from Oradea, the synthetic values for

knowledge and perception being close, over 0.5 (0.655, respectively, 0.646), the degree of knowledge being slightly higher than that of perception. The highest positive value, 0.424, was recorded in the case of a representative of public authorities from Dobrești, whose degree of knowledge was significantly higher than that of perception (0.716 compared to 0.289). The minimum negative value of -0.366 was recorded in the case of a local person from Luncașprie, with significant difference between the two criteria, the degree of perception being higher (0.677), compared to the degree of knowledge (0.313). On the other hand, the maximum negative value (-0.0007) was recorded in the case of a tourist from Oradea who had similar values for the two criteria, both under 0.5 (0.3183 for knowledge and 0.8188 for perception).

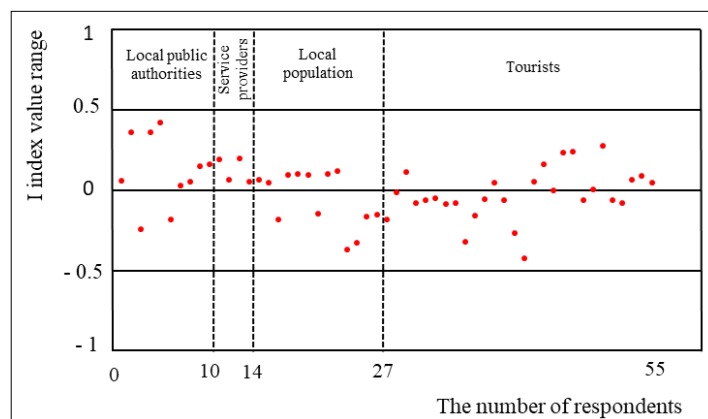


Figure 4. Distribution of types of relationships between knowledge and perception

The relationship index on categories of respondents emphasizes that for 8 of the representatives of public authorities, the degree of knowledge is slightly higher than that of perception, the relationship indexes indicating a positive strong relationship, while in the case of the other 2 representatives, the relationship is also strong, but negative, the degree of perception being slightly higher than that of knowledge (Figure 4). In the case of the 4 questioned services providers, the relationship indexes show positive strong relationships, with the degree of knowledge higher than the degree of perception (Figure 4). For 7 local people, out of the 13 questioned, the degree of knowledge was higher than that of perception, the relationship indexes showing positive strong relationships between criteria. In the case of the other 6, the relationships are negative and strong, the degree of perception being predominant (Figure 4). Out of the total number of 28 questioned tourists, the relationship index shows a positive strong relationship for 11 of them, while for the other 17, the relationship is negative and strong, indicating a degree of perception higher than that of knowledge (Figure 4).

CONCLUSIONS

The studied area is a rural one, relatively isolated from Oradea, 40 km away. However, due to its tourist resources, Luncașprie represents a complementary alternative of diversifying the tourist offer of Bihor destination. Considering what was mentioned above, the purpose of the study was to identify, quantify and analyze the degree of knowledge and that of perception of the factors involved in tourism development (tourist services providers, local population and tourists) in an area which was not tested from tourist viewpoint, but which has certain resources which make it eligible to a certain extent for tourism. The results obtained by this approach confirmed the research hypotheses, at the same time answering the asked research questions. Quantifying the degree of knowledge, respectively that of perception, regarding the role and importance of tourist routes development, of various participants to tourism, shows that the representatives of public authorities, services providers and most local people recorded a degree of knowledge higher than that of perception, with slight differences specific to each category of respondents. On the other hand, among tourists, the degree of perception is high, however, the degree of knowledge is significant as well.

Regarding the analysis of relationships established between knowledge and perception, they turned out to be positive and negative strong relationships (with minor differences on respondent category and respondents' level), there is no weak relationship, either positive or negative, which means that the two criteria do not exclude each other, but, on the contrary, complete each other. Among the limitations of the study, we mention the low percentage of respondents, especially of those from the local population category (13 people) and tourists (28 people), unlike those in the category of tourist services providers (100%) and of local public authorities (58.8%). Despite these shortcomings, the results obtained from the current study represent an important informational support, based on which all factors interested in inserting and developing tourism in Luncașprie destination, can make decisions correlated to the field realities. Thus, the current study represents a simple and efficient way to test of infirm the opportunity to implement and develop tourism in a given area.

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