
DRY SPA AS A FACTOR OF RURAL DESTINATION DEVELOPMENT

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ABSTRACT

If we look at the energy as something that is all around us, then it is clear that energy as such can be used even for the purpose of tourism. Sofia's springs is the dry spa which is located in the national park and the fields with the strongest positive radiation in the world are the phenomenon. Whether this is a placebo effect or a real effect of bio energy circles, this location has the potential to attract "health tourists" from all over the world. The research took the whole 7 years, during which we analyzed motives and views of 687 foreign visitors of these springs who came to the springs by bicycles from 6 European countries. The analysis showed that the visitors believe that the dry spa helps them in solving health problems, including Covid-19, which invites medical science to examine it in detail and confirm or reject it. Anyways, that represents a backbone of health tourism development and can directly influence the rural destination development.

Introduction

Health tourism represents such a movement in which the essence of movement is in fulfilling the need for health (Oh, 2000; Conell, 2006; Reed, 2008; Conell, 2013; Chuang et al., 2014). Living in the modern world means fighting with stress and other everyday problems, so this need became fundamental, and motives based on the term "health" also became attractive and desirable (Crooks et al., 2011).

Health tourism, thus, becomes growing segment of the economy of many countries, which nurture, assert and promote health as something of great importance, which health most certainly is (Garcia-Altes, 2005; Ghosh, Mandal, 2019).

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The term dry spa is of a recent date. It refers to the areas where body heals, rehabilitates and manifests positive effects of spa and wellness treatments, but it is an area without water. When it comes to “Sofia’s springs”, they represent such a place where positive radiation is noticed, which is very beneficial for human health. Therefore, Sofia’s springs are dry spa. The energy which is felt there helps curing many illnesses, as well as preventing several of them.

Whether this is a placebo effect or a real electromagnetic force, one is for sure, this place becomes more and more popular among people and they gladly return to the geosite. Having all in mind, we need to state that this is a type of health tourism which is becoming more and more present in the global market. We have been witnessing the Covid-19 virus situation which has emerged during 2021 and which still lasts. There are numerous destinations which promote their post-COVID treatments and the positive effects of these treatments on people’s recovery after they have suffered this difficult illness. People cross hundreds of miles and pay a lot of money to recover and regain state they were in before the illness.

Unfortunately, many of them still feel bad after those treatments. However, this virus is just one of the many vicious diseases which humanity has faced. Health tourism, thus, becomes indispensable type of movement in three directions: healing, rehabilitation and prevention (Heung et al., 2011; Han, 2013). From these three, “prevention” is one of the most powerful tools which is at the disposal of health tourism, and the destinations classified as wellness and spa destinations, are becoming even more popular and visited. (Lu et al., 2016). Also, local inhabitants become more aware of the potential which certain geosites have and of how to use them adequately. (Vujko et al., 2021). In this regard, the authors of the paper came to the idea to conduct surveys among the visitors of the geosite Sofia’s springs.

The main hypothesis of the paper is set, that this geosite, so called “dry spa”, has a potential to provide development of a rural area.

Overview of the Sofia’s springs

According to Oschman (2005) “healing energy” represents such energy which, if directed towards a certain problem, has “the power” to heal even the largest of the problems. It is enough to believe and keep to certain “rules”. We are referring to bio radiation which influences human health if one stands for long enough in energy circle.

Elerian et al. (2021) claims that this is electricity of a specific bio structure which comes from the Earth centre and spreads out several km above its surface, thus creating an impact on human immune system and on the recovery of many diseases.

Sofia’s springs are located in the national park Fruška gora in Serbia. It is located on the road Ležimir – Sviloš, which is also called “Partisan Road (Partizanski put)”, near the crossroads, so the accessibility is really good. Sofia’s sources still do not have a scientific foundation in medicine about benefits for health.

“Dry spa” represents the unique phenomenon in the nature (Pralong, 2005), and according to Elerian et al. (2021), such energetic phenomena are very popular destinations of health tourism nowadays. People are grasping at straws when health is at stake, and are ready to cross miles to find cure se (Wang, 2012; Pantić et al., 2021; Yu & Ko, 2012; Bogavac et al., 2021; Wongkit & McKercher, 2013). Plitvice National Park, Croatia; Lake Neusiedl, Austria; Delphi, Greece etc. are just some of the locations where ‘healing energy’ of magnetic field is recorded. In the paper we used modified GAM/M-GAM model, based on health component which was the initial hypothesis of the paper, as a statement that exactly this dry spa, has a potential to provide development of a rural area.

What connects our model and health tourism is ‘healing energy’. Here it is the energy of the geosite Sofia’s springs. According to scientists ‘healing energy’ (Hamer, 1968; Macklis, 1993; Ho, 1997; Lin & Hopf, 2003) is such energy which directly influences human health, by improving it and by making people more healthy thanks to enhanced immunity.

The research methodology

The methodology of this study is based on the modified Geosite Assessment Model (GAM), introduced by Vujičić et al. (2011), and its modification M-GAM model, developed by Tomić and Božić (2014). Original GAM i.e. M-GAM model consists of 27 subindicators, with values from 0 to 1, while M-GAM model has the importance factor (Im) first introduced by Tomić (2011) in his research. Zero marks the lowest, and one the highest value of views.

The original model consisted of two types of values (Main and additional values). When it comes to Main values, they have three types of variables Protection (*VPr*), Scenic/Aesthetic values (*VSA*) and *Scientific/Educational value (VSE)*, with total of 12 indicators. Additional values have three sorts of variables Functional values (*VF_n*), Touristic values (*VTr*) with total of 15 indicators. The difference between the original GAM/M-GAM model and H-GAM model is perceived in the way we collect data. Namely, in GAM model, only experts are questioned (there are usually only few of them), while in M-GAM model, tourists are also questioned (geosite visitors), (Petrović et al., 2017).

In H-GAM model, only tourists are questioned. The authors of the paper consider that respondents’ views are very important and that in this way we in fact find the most relevant data about geosite potentials (Pereira et al., 2007). Furthermore, the difference between models is in additional Health values (VHt) which have 5 indicators: Illness recovery (Rehabilitation of various injuries), Place of power (Place where the power of faith is felt), Peace and quietness (Motive for which visitors choose the geosite), Healing (Place where the visitors can feel the healing energy) and Rehabilitation (Recovery from many conditions including Covid-19).

The research took 7 years, and during this time, we analyzed the motives and opinions of 687 foreign visitors of the springs, who got to the springs by bicycle from 6 European countries. In this paper, the answers of respondents in relation to indicator Rehabilitation

(Recovery from many conditions including Covid-19), we started with the supposition that the majority of visitors came to the destination with the exact reason to recover from certain illness, i.e. that spending time at the destination helps them.

That supposition was at the same time a second hypothesis of the paper. To elaborate on this, we discussed this in an interview with the respondents. The questions are grouped according to similarity and are represented as such in the paper.

Table 1. Overall

Country of origin		Frequency
Valid	Croatia	60
	Austria	224
	Germany	235
	Switzerland	72
	Slovenia	42
	Hungary	54
	Total	687
Education level		Frequency
Valid	Elementary	71
	Secondary	130
	Bachelor	276
	MSc	145
	PhD	20
	MD	45
	Total	687

Source: Authors' research

The obtained data were analyzed by appropriate statistical methods which were descriptive and comparative in nature, enabling the explication of the research results and the performance of certain conclusions. One form of the analysis of the data was the chi-square test (Pearson Chi-Square Test). It was used to determine whether a received (observed) frequency (responses in relation to gender, age and country of origin) deviated from the frequencies that were expected.

This test aimed to check if there is a connection among groups of participants and the probability of connection. In this paper, we assumed that there would be no difference in the responses regarding participants' gender, age structure and origin country. This test aimed to check if there is a connection among these six groups of participants and the probability of connection. Practice is to always start from the premise that there are certain values of the difference in responses.

In order to detect differences in the responses measured on the basis of statistically significant differences in the distribution of the dependent variable in relation to independent, statistically significant differences are taken for those having $p < 0,05$. The participants replied in Likert scale which is shown in Table 2. One (1) marks the highest values, while zero (0) marks the lowest.

Table 2. Numerical indicators and their description

H-GAM Subindicators	Grades (0-1)				
	0	0.25	0.5	0.75	1
<i>VHt</i>	None	Low	Moderate	High	Utmost

Note: The grades of the subindicators are shown in details

Results and discussion

By analyzing Table 2, it can be concluded that there were more female respondents than male, aged 31 to 45 (326), and 16 to 30 years (282). All other age groups were present in lower percentage.

Table 3. Gender and age

Gender		Frequency
Valid	Male	292
	Female	395
	Total	687
Age		Frequency
Valid	Under 15	13
	16-30	282
	31-45	326
	46-60	43
	61-75	16
	Over 76	7
	Total	687

Source: Authors' research

Respondent's answers in relation to the country of origin have shown, in the highest number of cases, despite the country of origin, that respondents agreed that the geosite "Sofia's springs" enables recovery from various illnesses. It is interesting that the highest percentage of respondents gave highest mark to this opinion, exactly 220 of them from Germany, 212 from Austria and so on.

A very small percentage of respondents, only a few of them, answered that they were neutral in opinion, and none of them answered that they did not feel any healing energy at the geosite.. This means that a total number of 650 respondents (94.6%) gave the highest mark to this geosite, when it comes to the healing powers of this place, and despite the country of origin. It should be mentioned that exactly these two countries, Germany and Austria, are leading when it comes to sports and recreational tourism, travelling by bicycle, staying in rural areas and leading a healthy lifestyle. (Nicoletta, Servidio, 2012; Hudde, 2021).

Table 4. Respondent's Opinions about the Geosite Significance for the Recovery in Relation to the Country of Origin

			Recovery from many conditions including Covid-19			Total
			0.50	0.75	1	
Country of origin	Croatia	Count	0	1	59	60
		% of Total	,0%	,1%	8,6%	8,7%
	Austria	Count	3	9	212	224
		% of Total	,4%	1,3%	30,9%	32,6%
	Germany	Count	0	15	220	235
		% of Total	,0%	2,2%	32,0%	34,2%
	Switzerland	Count	2	3	67	72
		% of Total	,3%	,4%	9,8%	10,5%
	Slovenia	Count	0	1	41	42
		% of Total	,0%	,1%	6,0%	6,1%
	Hungary	Count	0	3	51	54
		% of Total	,0%	,4%	7,4%	7,9%
Total		Count	5	32	650	687
		% of Total	,7%	4,7%	94,6%	100,0%

Source: Authors' research

Referring the data from table 5, it can be concluded that there are no statistically significant difference in participants' responses depending on the country they come from, since $p=0.300$.

Table 5. Pearson Chi-Square

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11,774 ^a	10	0,300

When it comes to age groups, it is a similar situation to the previous answers, so both Table 6 and Table 7 show that there is no statistically significant difference in respondent's answers in relation to age, since $p=0,125$, i.e. the highest percentage of respondents, 94,6% gave the highest mark to the geosite, when it comes to the healing energy, and despite age.

Table 6. Respondent's Opinions about the Geosite Significance for the Recovery in Relation to Age

			Recovery from many conditions including Covid-19			Total
			0.50	0.75	1	
Age	Under 15	Count	0	0	13	13
		% of Total	,0%	,0%	1,9%	1,9%
	16-30	Count	3	10	269	282
		% of Total	,4%	1,5%	39,2%	41,0%
	31-45	Count	0	18	308	326
		% of Total	,0%	2,6%	44,8%	47,5%
	46-60	Count	2	3	38	43
		% of Total	,3%	,4%	5,5%	6,3%
	61-75	Count	0	1	15	16
		% of Total	,0%	,1%	2,2%	2,3%
	Over 76	Count	0	0	7	7
		% of Total	,0%	,0%	1,0%	1,0%

		Recovery from many conditions including Covid-19			Total
		0.50	0.75	1	
Total	Count	5	32	650	687
	% of Total	,7%	4,7%	94,6%	100,0%

Source: Authors' research

Table 7. Pearson Chi-Square

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15,210 ^a	10	0,125

Source: Authors' research

Also Table 9 confirms that there is no statistically significant difference in respondent's answers in relation to gender, i.e. that both male and female respondents have equal opinion when it comes to this geosite. (Tabela 8). By this we proved the initial hypothesis of the paper that the geosite "Sofia's springs", has a potential to provide development of a rural area.

Table 8 The Respondent's Opinion about Geosite Significance for the Recovery in Relation to Gender

			Recovery from many conditions including Covid-19			Total
			0.50	0.75	1	
Gender	Male	Count	4	20	268	292
		% of Total	,6%	2,9%	39,0%	42,5%
	Female	Count	1	12	382	395
		% of Total	,1%	1,7%	55,6%	57,5%
Total		Count	5	32	650	687
		% of Total	,7%	4,7%	94,6%	100,0%

Source: Authors' research

Table 9. Pearson Chi-Square

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8,543 ^a	2	0,014

Source: Authors' research

Table 10 shows respondent's answers, in a form of an interview, to the questions about the reasons for visiting the geosite "Sofia's springs". The questions are grouped according to the similarity, and here are the answers which could be grouped in the same way. The highest number of respondents answered that the reason for coming to the geosite is that they believe those visits will help them (110), furthermore, because they feel better even though they cannot explain it (85 respondents). A certain number of respondents claimed they are cured and recovered (67), and the equal number of respondents (51 each), answered that they "believe in miracles", i.e. that their recovery lasted less from the moment they started coming to the geosite.

Table 10. The Reasons for Participants Visit of the Geosite

		Frequency	Percent
Valid	I heard that the place has the power to heal	28	4,1
	I believe in miracles	51	7,4
	I have already visited the place, but I am coming back since I felt something which I cannot explain	21	3,1
	My health status is better from the moment I started coming here	38	5,5
	This is a place of faith	43	6,3
	This place is beneficial for my body	36	5,2
	From the moment I come here, I feel more positive, energetic and healthier	26	3,8
	I solved my health problems which I was not able to solve by conventional methods	18	2,6
	The surroundings are incredible and pleasant to my organism	29	4,2
	I am cured	10	1,5
	I feel overwhelmed while I am in the circle. I cannot explain it, but I feel better	85	12,4
	I am cured and recovered	67	9,8
	My recovery lasted less from the moment I started coming here	51	7,4
	I feel energy and it helps me	36	5,2
	I believe that this place has healing powers	38	5,5
	I am coming because I believe it will help me	110	16,0
	Total	687	100,0

Source: Authors' research

By summarizing responses of participants, it can be concluded that all of them came to the geosite because they believe that it has the energy which they feel here and which helps. This proves the sub-hypothesis 2, that the respondents came to the destination to recover from a certain illness, i.e. that staying at the destination helps them.

Conclusion

If we look at respondents' answers referring to *Health values* (Vht), we can conclude that the geosite Sofia's springs have a great potential to become one of a leading centre of health tourism. Special attention is given to Health values (Vht) which have 5 indicators.

One of the indicators refers to the current global issue i.e. Covid-19: "Recovery from many conditions including Covid-19". Even 650 respondents gave the highest grade to the geosite, while only 32 respondents answered 0.75. This means that the respondents, both those who are for the first time here and those who returned, felt positive effects of the healing powers of the geosite. Among the respondents there were those who came over Covid-19. They were talked to and they agreed that they felt that the geosite was helping them in rehabilitation, i.e. recovery from this difficult and complicated disease.

What made them come to the geosite are primarily the healing power and bio energy of the geosite, which is, in any case, indisputable. Good geo traffic connection of the

geosite, which is located on the territory of the national park Fruška Gora, having the important roads and the Dunube Cycle Path, as well as the vicinity of the most eminent and receptive centres of Serbia, Novi Sad and Belgrade, make this geosite a great resource for health tourism development. The fact that the energy felt on the geosite helps in solving post Covid-19 problems, is a basis from which it should be started when considering the further steps of health tourism development.

Also, it can be concluded that this issue really needs to be researched by medical science, in more details, in the future, because the respondents in this paper have expressed indeed quite a high degree of satisfaction in terms of health, which invites medical science to examine it in detail and confirm or reject it.

One thing is for certain, every potential should be used, and every “crisis” should be turned into competitive advantage. This research showed that also the pandemic can be used for the purpose of tourism, in the same way as other resources (Mathijssen, 2019; Vuković et al., 2019) i.e. that Dry spa has the power of rural destination development.

Conflict of interests

The authors declare no conflict of interest.

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