

# Designing a Wellness-Based Tourism Model for Sustainable Rural Development

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## Research Article

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# Abstract

Wellness tourism, which is a fast-growing sector in the tourism industry, is a sub-branch of health tourism. In this type of tourism, tourists travel to get rid of the stresses of their daily life and rejuvenate without medical intervention and supervision. These tourists usually have no specific physical illness; rather, they are interested in enjoying the healing nature of other areas. These people travel to use the natural facilities available at the destination. These facilities, which may include favorable climate, hot springs, pristine nature of rural areas, and so on, are provided to tourists so that they can relax. The present study is a non-experimental survey in which the structural equation modeling method (AMOS22) is used to analyze the data. The statistical population was composed of the tourists visiting the natural attractions of Sarab County, Iran. The data collection instrument was a questionnaire whose validity was confirmed by a panel of experts. To measure the reliability of the research instrument, 30 copies of the questionnaire were completed by some wellness tourists in Sarein Township, Ardabil province in Iran. The results confirmed the good reliability of the questionnaire. Also, the average variance extracted (AVE) and composite reliability (CR) calculated for the studied variables were greater than 0.5 and 0.7, respectively. The results showed that among the studied factors, the location of the place had the greatest impact on choosing a wellness-based tourism destination. Also, among the different dimensions of wellness, the physical aspect was the most prominent dimension in choosing this kind of tourism. The research contributes approaches to developing wellness tourism in Iran in particular and in the world in general. Based on these approaches and strategies, effective steps would be taken to reduce life stress and move towards improving quality of life in the COVID-19 conditions.

## 1. Introduction

Nowadays, the increasing development of technology, the rapid rate of industrialization, and the rapid expansion of urbanization and machinery life have posed lots of problems in most countries, especially developing countries. People, who are tired of the modern life, who have to take a marginal role in the industry and work like a machine for a more comfortable life without showing their tiredness, may look satisfied and happy, but they suffer from boredom and depression more than ever. It is obvious that society will benefit from dynamism and vitality if its citizens have good physical and mental health. But, the current century whose roots are in technology and industry and has been called the century of anxiety, stress, and nervous disorders has had the opposite effect on human health and has brought new social, health, and medical issues (Zabihkhah & Afshar, 2015). The World Health Organization (WHO)'s main goal is to coordinate and improve the state of public health worldwide. According to WHO (2018), health is a state of physical, mental, and social well-being and is not just about the absence of disease or disability. Some researchers are trying to promote health tourism with two subsets, mostly defined as medical tourism and wellness tourism, while others consider health tourism with three sub-categories of curative tourism, medical tourism, and wellness tourism (Charak, 2019). However, neither of these two definitions is incorrect. Nonetheless, most analytical documents and most industry analysts in most countries tend to use the term "health tourism" as an umbrella for the concepts of medical tourism and wellness tourism (Lim et al., 2015). Wellness tourism, in which wellness is a continuous spectrum spreading from the disease to the desired state of health, guarantees the complete physical, mental, and social well-being of people. It is worth mentioning that in this type of tourism, tourists do not have a specific physical illness, but they are more interested in enjoying the healing nature of

health-prone areas (Global Wellness Institute, 2018). In wellness tourism, a balance is made between mind, body, soul, and biological health in general (Koncul, 2012). In particular, wellness services that use special features of hydrotherapy and healthy lifestyles (related to physical exercise and relaxation, high-quality food, and enjoyment of nature, landscapes, and local cultures) have attracted a lot of attention in recent years (Cohen & Bodeker, 2008). This new sector of the tourism market provides good opportunities for the development of rural areas (Atun et al, 2019) (Hoang et al, 2020) where there is great potential for attracting this type of travelers (Romão et al., 2018) (Deng et al., 2020).

According to a survey in 2017, wellness tourism had a global market of USD 639 billion and it has grown twice as fast as the public tourism. Wellness tourism is a part of the fast-growing tourism that grew by 5.6 percent annually from 2015 to 2017. Wellness tourists made 830 million trips in 2017, which was 139 million times more than that in 2015. This growth is driven by an increase in consumers' desire to adopt a wellness-base lifestyle, increased interest in exploratory travels, and visiting pristine nature (Global Wellness Institute, 2018). As for the number of tourists in Iran, the tourist population showed an increase from 2013 to 2015 according to the World Tourism Organization, followed by a declining trend from 2015 to 2017 (Figure 1). This trend is worth considering versus global statistics (World Tourism Organization, 2019).

East Azerbaijan province in Iran is located on the Iran-Europe route with various tourist attractions, so it can be considered a part of Iran's tourism potential due to its seasonal and favorable weather conditions. Meanwhile, Sarab County is one of the 20 counties in this province with an area of 3452 km<sup>2</sup>, which is located in the center of the province and accounts for 7.59% of the total province area. In this regard, it is ranked third. The distance of this city from the capital city of the province is 134 km. Sarab has great potential for tourist attraction thanks to its favorable climate and geography, its location between Mount Sabalan and Mount Bozqush, and its beautiful nature (Management and Planning Organization of Iran, 2015). According to statistics (Figure2), the rural population in Sarab County has decreased from 131,366 in 1986 to 66,033 people in 2016 due to a rising rate of unemployment and low incomes in rural areas of this county. In other words, the county is suffering from the depopulation of its villages despite its great natural potentials (Statistics Center of Iran, 2019).

In addition, the unemployment rate in the rural areas of the studied county has increased sharply since 2011 (Figure 3). The official statistics show that the figure has risen from 2.69 percent to 6.90 percent from 2011 to 2016, whereas it is usually underestimated. Field surveys show much higher percentages.

East Azerbaijan province has 26 hot and mineral springs among which the most important ones are located in Sarab County where there are six springs (Asem Asl, 2008). In addition, the county has rich pastures with a wide variety of plant species, especially medicinal plants, high levels of agricultural and livestock production (potato, red and white meat, dairy, and honey), and natural tourist attractions (mineral hot springs and the slopes of Sabalan and Bozqush), making it a potential destination for wellness tourists. Given the special position that wellness tourism has found in the world and the high potential in the villages of Iran, especially in Sarab, wellness tourism can be a big step towards realizing macro policies based on the 20-Year Perspective Document for Iran and the development envisaged for the cultural heritage and tourism sector. According to the 20-Year Tourism Document, Iran will have 20 million foreign tourists by 2025 (20-Year Vision

Document, 2003), while the figures show that only about 5 million foreign tourists visited Iran in 2017 (World Tourism Organization, 2019).

However the COVID-19 pandemic has caused an unpredictable crisis in the tourism sector, given the immediate and immense shock to the sector. Studied OECD estimates on the COVID-19 effect fact to 60% decrease in international tourism in 2020. This might increase to 80% if the remedy is not found. National tourism, which accounts for about 75% of the tourism sector in OECDs, is anticipated to improve more rapidly (OECD, 2020). It proposes the highest possibility for driving retrieval, mostly in nations, areas and metropolises where the tourism provisions many occupations and jobs. Iran is no exception to this rule and these COVID-19 conditions have affected more than 80% of the tourism industry. Now, this type of tourism (wellness tourism) which is more focused on the domestic attractions of countries and due to the use of nature and lack of congestion, can be a very effective solution in Corona and Post-Corona conditions.

The corona virus has indeed seriously attacked the body of the international economy and, of course, the country's economy and trade. Now, we are faced with a body that is not safe from injuries and threats, and we must find and implement the best method and solution to deal with it by carefully analyzing the existing conditions while benefiting from past experiences. Considering that wellness tourism, which is related to the health and morale of tourists, in the current situation can be a good solution to create suitable job opportunities for residents of the territories and help the economic prosperity of the regions. In this regard, identifying the capabilities and attractions of wellness tourism in the regions and recognizing the factors affecting the selection of wellness tourism destinations can be very helpful, that has not been considered so far. Another innovation of this research is the improvement of the tourism industry in rural areas, which would in turn help alleviate deprivation in these areas and boost rural development. The development of the wellness tourism industry can create jobs in regions around hot and mineral springs and promote business and income for the rural population. According to the studies, no research has ever addressed wellness tourism in rural areas, so the present research aims to answer the following questions:

1. What are the components of wellness tourism?
2. What is the status of the components of wellness tourism?
3. What factors affect the choice of wellness tourism destination?

## 2. Research Background

Many studies have already addressed wellness tourism, some of which are summarized in Table 1. Sharma & Nayak, (2018) focused on the effective factors on choosing wellness destination which satisfaction was one of the most important factors. Dillette et al., (2018) found that wellness is consist of positive emotions, interaction, relationships, meaning, and success; in this research physical dimension has not been addressed, whereas it is one of the main pillars of wellness. Romão et al., (2018) in their research wellness tourism has been measured by the variables of pleasure, meaningful experiences, and community participation. Services offered for tourism include spa and beauty, bath, massage, beauty care, medical treatments, healthy eating, local food, community heritage, education, museums, zoo, aquarium, natural parks, sports walking, golf, gym, and yoga. In this research physical dimension has been ignored, too. In Global Wellness Institute, (2018); the core dimensions of wellness include physical, spiritual, emotional, mental, psychological, social and

environmental are well describes, however the factors affecting choosing wellness tourism destination is not considered.

**Table 1. A brief review of the literature on wellness tourism**

Title	References	Research variables	Limitations
<p><b>“Testing the role of tourists’ emotional experiences in predicting destination image, satisfaction, and behavioral intentions: A case of wellness tourism”</b></p>	<p>(Sharma &amp; Nayak, 2018)</p>	<p>The interaction of tourists’ emotional reactions (happiness, love, and positive feeling), the overall picture of the destination, the satisfaction, and behavioral intentions of tourists (intention to visit again and recommend to others)</p>	<p>In addition to the emotional dimension, which is considered to be one of the factors influencing the overall image of the destination and satisfaction, this model has ignored the interaction and physical dimension in the model.</p>
<p><b>“Do Vacations Really Make Us Happier? Exploring the Relationships between Wellness Tourism, Happiness and Quality of Life”</b></p>	<p>(Dillette et al., 2018)</p>	<p>Research variables include the five main areas of the PERMA model developed by Seligman (positive emotions, interaction, relationships, meaning, and success). Health, happiness, and negative emotions form the mediators. The length of stay is considered to be the adjustment variable.</p>	<p>In the PERMA wellness model, physical dimension has not been addressed, whereas it is one of the main pillars of wellness.</p>
<p><b>“Integrative diversification of wellness tourism services in rural areas—an operational framework model applied to east Hokkaido (Japan)”</b></p>	<p>(Romão et al., 2018)</p>	<p>Wellness tourism has been measured by the variables of pleasure, meaningful experiences, and community participation. Services offered for tourism include spa and beauty, bath, massage, beauty care, medical treatments, healthy eating, local food, community heritage, education, museums, zoo, aquarium, natural parks, sports walking, golf, gym, and yoga.</p>	<p>In this model, in addition to the meaningful pleasures and experiences that make up an individual dimension, and the participation of communities that consider interaction in the region, the physical dimension could also be measured as a part of wellness tourism.</p>
<p><b>“Global Wellness Tourism Economy”</b></p>	<p>(Global Wellness Institute, 2018)</p>	<p>In this study, the core dimensions of wellness include physical, spiritual, emotional, mental, psychological, social and environmental.</p>	<p>This model has well described the wellness structure; however, it has not measured the factors affecting choosing wellness tourism destination.</p>
<p><b>“Investigating wellness tourists’ motivation, engagement, and loyalty: in search of the missing link”</b></p>	<p>(Kim et al., 2017)</p>	<p>In this model, factors such as the luxury destination, being new, individual development, and escape from bad past experiences were identified as motivators of destination selection behaviors (independent variables). The purpose of the model was to investigate the motivation of tourists and its relationship with loyalty in wellness tourism areas.</p>	<p>In this model, the physical dimension, which is one of the most important dimensions of wellness tourism, has not been considered.</p>
<p><b>“International trends in recreational</b></p>	<p>(Csirmaz &amp; Pető, 2015)</p>	<p>Three different categories of wellness tourism providers are identified as</p>	<p>The main focus of the model is on centers, and social communication and interaction</p>

<p><b>and wellness tourism”</b></p>		<ol style="list-style-type: none"> <li>1. Beauty-focused hotels and resorts</li> <li>2. Lifestyle change resorts</li> <li>3. Spiritual centers</li> </ol>	<p>of individuals have not been considered.</p>
<p><b>“A comprehensive model for development of sustainable health and wellness tourism destination at Monipal”</b></p>	<p>(Tharakan, 2014)</p>	<p>Independent variables of research (location and proximity, facilities, quality, marketing, and potential customers) that have examined the awareness of wellness and sensitivity to health.</p>	<p>In the proposed program, in this model, policy is placed in the third stage. But, it should be considered before any action.</p> <p>How to plan marketing; validation and standardization of the destination before planning and policy making.</p>
<p><b>“Lake wellness: a practical example of a new service development (NSD) concept in tourism industries”</b></p>	<p>(Konu et al., 2010)</p>	<ul style="list-style-type: none"> <li>• Spiritual activities and individual development;</li> <li>• Health promotion services;</li> <li>• healthy foods; local and fresh ingredients;</li> <li>• Proper accommodation;</li> <li>• Beauty treatment and services;</li> <li>• Activities aimed at peace and comfort;</li> <li>• Fitness activities.</li> </ul>	<p>This model has considered the wellness tourism cycle as the basis of its research, but some of its dimensions could not be measured in the study area of this research and has considered the appropriate places as part of the wellness cycle, which is one of the factors affecting choosing wellness destination.</p>
<p><b>“Wellness tourism: Market analysis of a special health tourism segment and implications for the hotel industry”</b></p>	<p>(Mueller &amp; Kaufmann, 2001)</p>	<p>In this model, external variables includes social communication and environmental sensitivity.</p> <p>Wellness was considered a state of health with the coordination of body, mind and soul with its responsibility. This model includes the following comprehensive service package:</p> <ul style="list-style-type: none"> <li>• Mind: mental activity or training;</li> <li>• Physical: Physical fitness or beauty care;</li> <li>• Health: nutrition / diet;</li> <li>• Relaxation: rest / meditation</li> </ul>	<p>This model lacks the factors influencing choosing wellness tourism destination.</p>

According to the study of the theories, review of researchers' opinions, models of wellness tourism cycle (Mueller & Kaufmann, 2001), field studies and implementation of wellness tourism model in East Hokkaido (Romão et al., 2018), the model of attractions and activities in Global Wellness Institute (2018), the loyalty model of wellness tourism (Kim et al., 2017), and the wellness lake model (Konu et al., 2010); the components

of wellness tourism were identified as interaction (social-communication), physical (physical fitness, healthy nutrition), and individual (emotional, spiritual and mental). Also, from the implementation of the model of attracting medical tourism (marketing, price, capacities; NajafiNasab et al., 2018) and health and wellness tourism model in Manipal (location, facilities, quality, and marketing; Tharakan, 2014), external factors affecting choosing wellness tourism destination were identified as: place, marketing-price, and quality-facilities. In addition, the satisfaction of tourists with the received services can be an effective and influential factor (Sharma & Nayak, 2018) (Choi et al., 2015) on choosing wellness tourism destination. Although satisfaction is of great importance, it has been overlooked in most models, in this research it was included in the presented model (Figure 4).

Figure 4, shows the components of wellness consist of: Physical, Interaction, and Individual; also it shows external factors that affects choosing the destination consist of: Location, Quality-Facilities, Tourism satisfaction with the services and Marketing-Price.

### 3. Research Methods

The present study is a non-experimental, practical, cross-sectional survey. The statistical population included 237,415 tourists visiting natural attractions in Sarab County (East Azerbaijan Tourism Department, 2019). The sample size was 384 according to Krejcie and Morgan's (1970) table. The data collection instrument was a questionnaire and the data was gathered before January 2020. Simple random sampling was used to collect data. The content and face validity of the research instrument was checked by a panel of experts. To measure the reliability of the designed questionnaire, initially 30 copies of the questionnaire were completed in a pilot test by wellness tourists in Sarein, Ardabil province. Cronbach's alpha coefficient was calculated for the completed questionnaires using SPSS23 software. Based on the obtained coefficients, it was determined that the questionnaire had high reliability. Because Cronbach's alpha value of all sections of the questionnaire was 0.7 or more, composite reliability (CR) was also calculated (Tables 2 and 3; Bagozzi et al., 1998). In addition to determining the discriminant validity, average variance extracted (AVE) was used and all statistics were evaluated to be above the desired level.

To achieve the research goals, the tourists were asked, "Have you traveled for wellness purposes?" in the case of a positive answer, the questionnaire was given to them. In the present study, the dependent variable (wellness) was measured by calculating the interactive, physical, and individual dimensions using 5, 4, and 10 items, respectively. Also, 12, 7, 9, and 9 items were included to measure the independent variables, i.e. satisfaction, place, marketing-price, quality-facilities, respectively, each item was scored on a 5-point Likert scale (1 = very low, 2 = low, 3 = medium, 4 = high, 5 = very high) Tables 2 and 3.

**Table 2. Cronbach's alpha, CR and AVE of the dependent variable of the research**



Variables	Components	Items	References	Cronbach's alpha	Cronbach's alpha	CR	AVE
Wellness-base tourism	<b>Interaction</b>	Establishing friendly and supportive relationships	(Ballantyne et al., 2011; NWI, 2017)	0.758	0.825	0.742	0.502
		Feeling more connected to your compatriot	(NWI, 2017)				
		You can spend your free time with family / friends	(Li & Cai, 2012)				
		Meeting local people	(Mechinda et al., 2009; Li & Cai, 2012 )				
		Meeting new people	(Mechinda et al., 2009; Li & Cai, 2012)				
	<b>Physical</b>	Physical activity	(Voigt et al., 2011; NWI, 2017, Lee 2006)	0.710			
		Using fresh, healthy and local food	(Mechinda et al., 2009; NWI, 2017; Lee 2006)				
		Feeling refreshed and relieved of physical fatigue	(NWI, 2017; Lee 2006)				
		Feeling the relief of physical pain	(NWI, 2017; Kelly, 2012; Lee, 2006)				
	<b>Individual</b>	Feelings inner peace and stress relief	(Voigt et al., 2011; Li & Cai, 2012; Kelly, 2012; NWI, 2017; Bone, 2013 )	0.735			
		Improving individual skills and abilities	(Li & Cai, 2012; Bone, 2013)				
		Self-knowledge or	(Voigt et al., 2011; Li &				

self-thinking	Cai, 2012)
New experiences	(Prayag, 2009 ;Voigt et al., 2011; Li & Cai, 2012)
Familiarity with new ideas	(Ballantyne et al., 2011)
Getting new information	(Chi & Qu, 2008; Ballantyne et al., 2011)
Attractive and enjoyable experiences	(Ballantyne et al., 2011; Voigt et al., 2011)
Avoiding everyday tasks	(Voigt et al., 2011; Li & Cai, 2012)
Being free to act the way I want to be	(Li & Cai, 2012)
Rest and relaxation	(Voigt et al., 2011; Li & Cai, 2012; NWI, 2017; Bone, 2013)

**Table 3. Cronbach's alpha, CR and AVE of independent variables of the research**

Variables	Items	References	Cronbach's alpha	CR	AVE
Satisfaction with	Possibility to buy and supply daily necessities	(Soltani et al., 2015; Chi & Qu, 2008; Prayag, 2009; Li & Cai, 2012)	0.822	0.828	0.525
	Parking situation	(Soltani et al., 2015; Chi & Qu, 2008)			
	Access to clean rest rooms	(Soltani et al., 2015; Prayag, 2009)			
	Access to drinking water	(Soltani et al., 2015; Chi & Qu, 2008; Prayag, 2009)			
	Environmental cleanliness	(Soltani et al., 2015; Chi & Qu, 2008; Mechinda et al., 2009; Prayag, 2009)			
	Access to the city bus	(Soltani et al., 2015; Chi & Qu, 2008)			
	Taxi access	(Soltani et al., 2015; Chi & Qu, 2008)			
	The money paid for the residence	(Soltani et al., 2015; Chi & Qu, 2008)			
	Security of the environment	(Soltani et al., 2015; Chi & Qu, 2008; Prayag, 2009)			
	Expectations to be met	)Mechinda et al., 2009(			
	Spending time for visiting the area	)Mechinda et al., 2009(			
Services provided in spa complexes	)Chi & Qu, 2008(				
Place	Direct international and national flights to the nearest airport	(Tharakan, 2014)	0.790	0.821	0.516
	Connection to road and rail	(Tharakan, 2014)			
	The appearance of hot spring complexes and buildings (such as being new)	( Taghizadeh Yazdi & Barazandeh, 2016)			
	Location in terms of lack of congestion and traffic on the streets leading to the spa complexes	( Taghizadeh Yazdi & Barazandeh, 2016)			
	Proximity of spa complexes to accommodation	( Taghizadeh Yazdi & Barazandeh, 2016)			

	Natural attractions of the region	(Chi & Qu, 2008; Prayag, 2009)			
	Cultural and historical attractions of the region	(Chi & Qu, 2008; Prayag, 2009; Spector, 2020)			
Marketing - Price	Having a website and publishing a brochure by the desired spa complexes	(Tharakan, 2014) (Yin, 2020)			
	Competitive price suitable for various health facilities (Massage, etc.)	)Tharakan, 2014(			
M	Marketing of tourism-related organizations in attracting wellness tourists	)NajafiNasab at al., 2018( (Yin, 2020)			
	Active private sector participation in wellness tourism marketing	)NajafiNasab at al., 2018(			
	Use well-known sites to learn about the wellness potentials of the region	)NajafiNasab at al., 2018(			
	The presence of active representatives to attract wellness tourists	)NajafiNasab at al., 2018(			
	Providing recreational and wellness packages to tourists	(Tharakan, 2014) (Yin, 2020)	0.750	0.817	0.503
	Reasonable cost of accommodation	)NajafiNasab at al., 2018(			
	Appropriate cost of using the services provided	)NajafiNasab at al., 2018(			
Quality - Facilities	Optimal quality of equipment and facilities of hot springs according to standards	( Chi & Qu, 2008; Tharakan, 2014)			
	High quality of recreational and health services in accordance with international standards	(Tharakan, 2014; Fennell & Bowyer, 2020)			
	Providing various types of health and wellness services (yoga, relaxation, etc.)	(Voigt et al., 2011; Tharakan, 2014)			
	Wide variety of recreational and health facilities	(Tharakan, 2014; Fennell & Bowyer, 2020 )			
	Service personnel are aware of first aid when needed	)Chen et al, 2013(			
	Internet access with online	)Tharakan, 2014(			

booking facilities for various wellness services				
Appropriate transportation from the residence to the desired spa complexes	)Chen et al, 2013; Chi & Qu, 2008; Mechinda et al., 2009; Prayag, 2009(	0.765	0.826	0.515
Proper hiking trails	)Chen et al, 2013(			
The environment of the spa complex is clean and hygienic	)Mechinda et al., 2009; Chen et al, 2013(			

Source: Research Findings

## 4. Results

In total, 132 individuals of the 384 respondents were women (34.4%) and 252 (65.6%) were men. In terms of marital status, 131 respondents were single (34.1%) and 253 were married (65.9%). The highest frequency in family size was four (33.3%) and the lowest was seven (2.1%). In terms of employment status, those who worked full time had the highest number amounting to 176 people (45.8%) and retirees had the lowest frequency of 13 people (3.4%) (Table 4).

**Table 4. Distribution of wellness tourists in terms of gender, marital status, family size, and employment status**

Variables	Categories	Frequency	Percent	Mode
Gender	Male	252	65.6	Male
	Female	132	34.3	
Marital status	Married	253	65.9	Married
	Single	131	34.1	
Family size	1	20	5.2	4
	2	50	15.4	
	3	79	20.6	
	4	128	33.3	
	5	66	17.2	
	6	24	6.3	
	7	8	2.1	
Employment status	Full-time job	176	45.8	Full-time job
	Part-time job	50	13	
	Unemployed	25	6.5	
	Housewife	51	13.3	
	Retired	13	3.4	
	Student	69	18	

Source: Research Findings

According to the results, the average age of the tourists was about 35-36 years. Most tourists were younger than 34 years (54.2%). In terms of educational level, the highest frequency was 131 people (34.1%) in the period of 17-12 years of schooling. In terms of annual income, 243 people (63.3%) had an annual income of less than US\$ 2000 (Table 5).

**Table 5. Frequency distribution of health tourists in terms of age, level of education, and annual income**

Variables	Categories	Frequency	Percent	Cumulative Percent	Mean
Age	$34 \geq X$	208	54.2	54.2	35.47
Max:60	$34 < X \leq 52$	132	34.4	88.5	
Min:16	$X > 52$	44	11.5	100	
Years of schooling	$7 \geq X$	60	15.6	15.6	12.74
Max:22	$7 < X \leq 12$	126	32.8	48.4	
Min:2	$12 < X \leq 17$	131	34.1	82.6	
	$X > 17$	67	17.4	100	
Annual income (US\$)	$2000 \geq X$	243	63.3	63.3	1733.33\$
Max: 8000	$2000 < X \leq 4000$	85	22.1	85.4	
Min: 0	$4000 < X \leq 6000$	29	7.6	93	
	$X > 6000$	27	7	100	

Source: Research Findings

#### 4.1 Status of the wellness components

The means of physical, individual, and interaction components of wellness tourism were 4.13, 3.64, and 3.38, respectively. The Friedman test showed a significant difference among the different components of wellness tourism at the 1% level. It should be mentioned that among different items in physical components, “feeling refreshed and relieved of physical fatigue” and “feeling the relief of physical pain” had the highest scores. In the items of the individual component, “rest and relaxation” and “feeling of inner peace and stress relief” had the best status, and in the interaction component, “establishing friendly and supportive relationships” and “spending time with family/friends” had the greatest scores (Table 6; Figure 5).

**Table 6: The status of the wellness tourism components**

Components of Dependent variable	Mean rank	Mean	Sig
Physical	2.99	4.13	0.000
Individual	1.68	3.64	
Interaction	1.33	3.58	

Source: Research Findings

#### 4.2 Status of factors affecting choosing the wellness- base destination

The results revealed that among different factors affecting choosing the destination, satisfaction had the greatest score with a mean of 3.12 that is above the medium. In this component, “security of the environment” and “environmental cleanliness” were ranked first and second and “satisfaction with access to city buses and taxis” had the lowest rating. About the three remaining factors, place, marketing-price and quality-facilities, with averages of 2.92, 2.52 and 2.41, respectively, are below the medium, respectively. “Direct international and national flights to the nearest airport”, “providing recreational and wellness packages to tourists” and “a wide variety of recreational and health facilities” had the least scores in each component. Also, the results of the Friedman test showed a significant difference between the current statuses of various factors affecting wellness tourism at the 1% level (table 7 & figure6).

**Table 7: The status of factors affecting choosing the destination**

Independent variables	Mean	Mean	Sig
	rank		
Satisfaction	3.50	3.12	0.000
Place	3.01	2.94	
Marketing-price	1.93	2.52	
Quality -Facilities	1.56	2.41	

Source: Research Findings

#### 4.3 Correlation coefficients between variables

The results of the Pearson correlation test (Table 8) showed a positive and significant ( $P < 0.01$ ) relationship between place, satisfaction, marketing-price, and quality-facilities with wellness.

**Table 8: The Pearson correlation results between research variables**

Variable 1 (Independent )	Variable 2 (Dependent)	r	Sig
Place		0.569	0.000
Satisfaction	Wellness	0.379	0.000
Marketing-price		0.350	0.000
Quality-facilities		0.315	0.000

Source: Research Findings

#### 4.4 Structural equation model of the research



The structural model of the research, which is, in fact, the general model of the research, indicates causal relationships between latent internal and external variables and expresses causal effects and the extent of the explained variance. The general research model examined the effect of each of the independent variables (place, satisfaction, marketing-price, and quality-facilities) on the dependent variable (wellness). Given that the overall research model had good diagnostic validity and reliability, the general model was tested using the goodness of fit index (GFI), adjusted goodness of fit index (AGFI), normed fit index (NFI), the Tucker-Lewis index (TLI), the comparative fit index (CFI), and the root mean square error of approximation (RMSEA). Also, the results of the remaining covariance and variance analysis indicators in the data context, which include CMIN/D and GFI, show that the covariance and error variance are well controlled. Regarding the indicators of the alternative model review, including IFI, TLI, NFI, GFI, it was also shown that the values of these indicators for the model were higher than 0.9, which is an acceptable value. Eventually, the RMSEA index showed that the model had the goodness of fit. According to the fit indicators and the amount of variance explained by independent variables, it was determined that four external latent variables (satisfaction, place, marketing-price, and quality-facilities) accounted for 62% of the wellness variance (Table 9; Figure 7).

**Table 9: The results of the overall measurement model compliance with the fit indicators**

Fit index	Suggested criterion *	Results in research **	Result
CMIN/DF	Less than 3	2.171	Significant
CFI	> 0.9	0.988	Significant
GFI	> 0.9	0.982	Significant
NFI	> 0.9	0.987	Significant
TLI	> 0.9	0.982	Significant
IFI	> 0.9	0.982	Significant
RMSEA	$X \geq 0.08$	0.055	Significant

\* Source: (Kalantari, 2013; MacCallam et al., 1996)

\*\* Source: Research Findings

Table (10) shows the total effects of the independent variables on wellness, with the most significant effects being observed in place (0.825) and satisfaction (0.579), respectively. Other variables that affect destination choosing were marketing-price (0.545) and quality-facilities (0.391), respectively. In the following regression equation, all the variables that affect wellness destination choosing are included along with their path coefficients.

$$\text{Wellness} = 28.22 + 1.112 * \text{Place} + 0.280 * \text{Satisfaction} + 0.221 * \text{Marketing-Price} + 0.211 * \text{Quality-Facilities}$$

**Table 10: The total effect of independent variables on the dependent variable**

Independent variables	Dependent variable	Total effect
Place	<b>Wellness</b>	0.825
Satisfaction		0.579
Marketing-Price		0.545
Quality-Facilities		0.391

\*\* Source: Research Findings

## 5. Discussion

The study examined the components of wellness (physical, interaction, and individual) and the factors affecting in choosing the destination (place, satisfaction, marketing-price, quality-facilities) in Sarab County. In similar research, Najafi Nasab et al. (2018) and Tharakan (2014) also examined these factors. Najafi Nasab et al. (2018) addressed the factors affecting the development of medical tourism in Iran using structural equation modeling. Our results were in some cases similar to their results and in some cases inconsistent with their findings so that the capacity factor, which is equivalent to quality-facilities in our study, had the lowest status, which was consistent with our findings. However, in their study, the price factor was identified as the most effective factor that is inconsistent with the current study, which is due to the difference in the nature of these two studies. Also, our findings as to the prioritization of factors affecting choosing the wellness destination were inconsistent with the report of Tharakan (2014) in their study on the development of a comprehensive model of health tourism and sustainable health in Manipal. Unlike us, Tharakan (2014) reported that the facilities factor was identified as the most effective factor. This difference is due to the lack of proper facilities in Sarab County. The most effective reason for choosing the destination wellness was the location of the study area which is due to the natural, cultural, and historical attractions of the region. It is worth mentioning that the area suffers from the lack of facilities and it is only because of its special and pristine location that wellness tourists are attracted to the area. In addition, one of the limitations of the present study was the lack of tourists' knowledge about the concept of wellness tourism, that these people inherently chose this type of tourism and they did not have the knowledge in this regard, which needs more attention from those in charge. In addition, for future studies, it is suggested that the wellness cycle be discussed in more detail, and also, for cross-validation of the current model, it is suggested that this model be tested in another statistical population. Of course, it is worth mentioning that these data were collected before COVID 19 and for future research, it is suggested that wellness-base tourism in corona conditions be studied and the required protocols be designed under these conditions

## 6. Conclusion

Iran's hot and mineral springs can play a major role in the natural, geological and therapeutic tourism of the country and the world owing to their various features including geochemical diversity, type of sediments, natural landscapes around springs, algae coatings, and most importantly, their healing properties. Fortunately, these springs are highly diverse. They are relatively normally distributed throughout Iran. Also, these springs can be very interesting research topics for the scientists of earth science, water and environmental science,

chemistry, microbiology, and medicine. Despite many positive features, unfortunately, these God-given gifts have not been managed soundly enough. The fact that most of these springs have not been well introduced at an international and even national level has confined this utmost tourism feature of the region, i.e. the therapeutic activities of the hot and mineral springs, to local uses. One of the most overlooked aspects of Iran's tourism is wellness tourism.

Wellness tourists are usually from superior socio-economic groups and seek rest, relaxation, and rejuvenation and spend for their wellness more than other types of tourists. Based on the results of this study, the following programs can be provided for the wellness tourism expansion:

- Given that the physical dimension of wellness tourism was identified as the most important dimension and that the studied area is a center of honey and dairy production in the region, policy-making for the commercialization of local products and their branding should be considered.
- Since among the factors affecting choosing the destination, place had the highest relative importance, paving the way for attracting private sector investors based on wellness tourism activities in the region, especially areas related to the physical improvement of tourists, including the creation of a health village and sports tourism, should be considered. In addition, considering the strategic location of Sarab County, it has a very high potential for developing relationships with neighboring countries and can play an effective role in guiding development trends and interactions with neighboring countries. On the other hand, given that Iran is one of the 10 largest producers of greenhouse gases in the world and the use of renewable energy in Iran is less than one percent, the location and potential of these springs make them a good candidate source of geothermal energy in the region, which can be considered in the field of green tourism.
- Given that marketing in the studied area is in a very poor condition, the regulation of radio and television programs to describe the attractions and activities of tourism in the region and the importance of this type of tourism should be on the agenda of planners. In addition, to inform the local people about wellness tourism activities and its importance for the residents of the region, training on how to treat tourists and how to help them when necessary should be considered in local education and extension programs.
- Creating an investment opportunity in this area and using the capacity of the private sector and benefiting from the special situation of the area, can play an effective role in creating employment and preventing the migration of residents and by creating a rising growth in the tourism industry, it has led to the growth of regional development in various cultural, economic and social fields. On the other hand, the development of the tourism industry in the region with the development and activation of the city's mineral hot springs as a hub of the province's hot springs will lead to optimal protection of spiritual and cultural heritage, and their sustainability will be transferred to the future.
- In conclusion, however, Corona virus has affected tourism industry, but by observing health protocols; the most important dimension of this type of wellness tourism which is the physical wellness; can be easily achieved. In other words, wellness tourism is one of the limited types of tourism that can be attained in COVID-19 conditions by observing the new norms. In addition, people who have experienced physical and mental problems due to the Corona virus pandemic after the crisis can use this type of tourism to reduce stress and improve their health.

This type of tourism due to the focus on pristine nature and new and sparsely populated areas can be considered as one of the few types of tourism that can be promoted in the current situation. Let us not forget that the development of employment based on production, not only in critical conditions but also in normal conditions, is the most important possibility for the survival and prosperity of any society; therefore, it is expected that given the successive waves of damage to the economies of the countries, the level of employment with special measures be maintained. If this point is not taken seriously, the unemployment wave will lead to another crisis. Supporting the components of society means supporting the whole unit of society. This support will not be achieved without the integrated focus and solidarity of all organizations, decision makers and officials to prevent the spread of the damage caused by this global crisis.

## Declarations

### Conflicts of interest

No conflicts of interest to declare

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## Figures

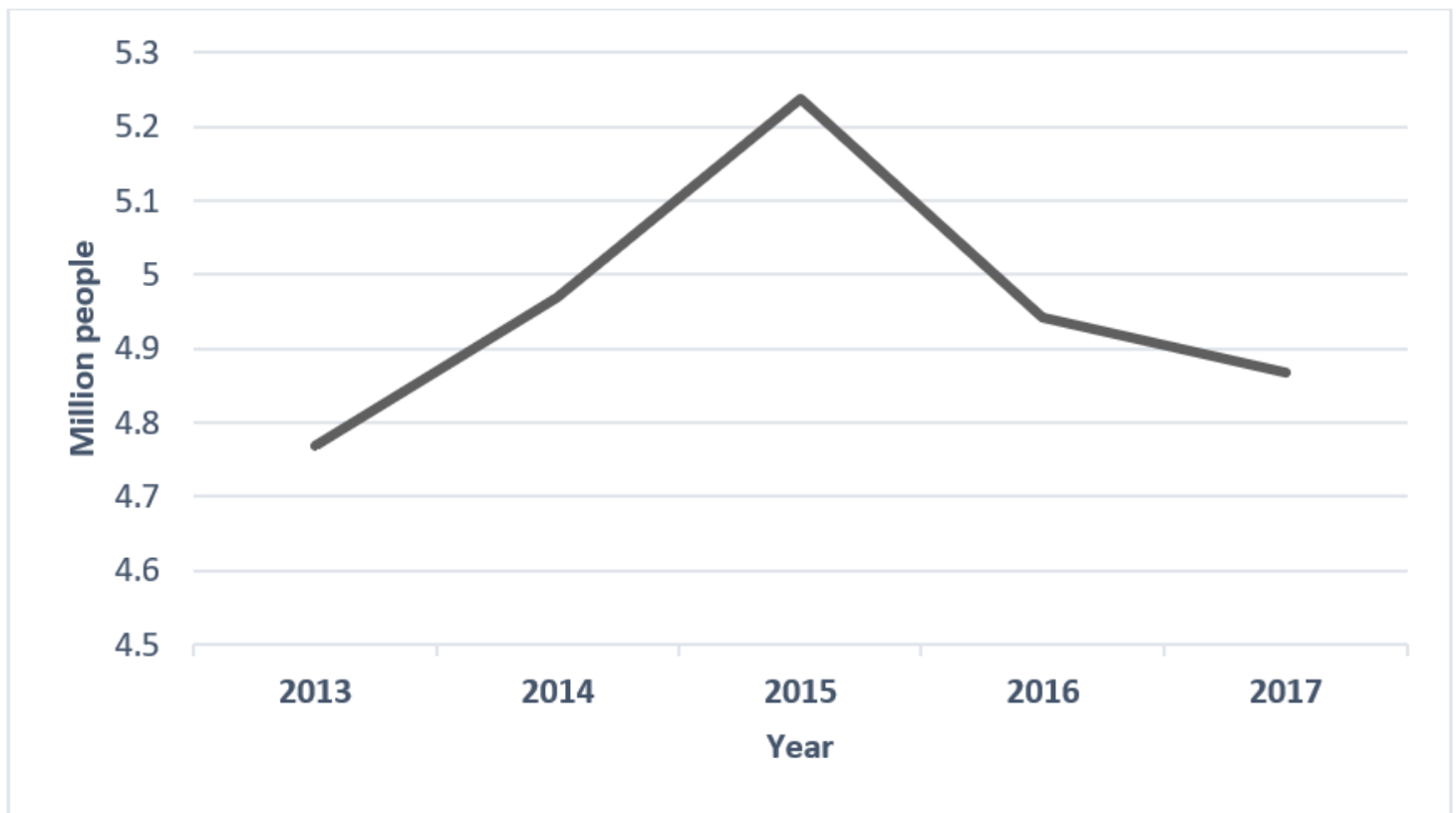


Figure 1

The number of tourists visiting Iran

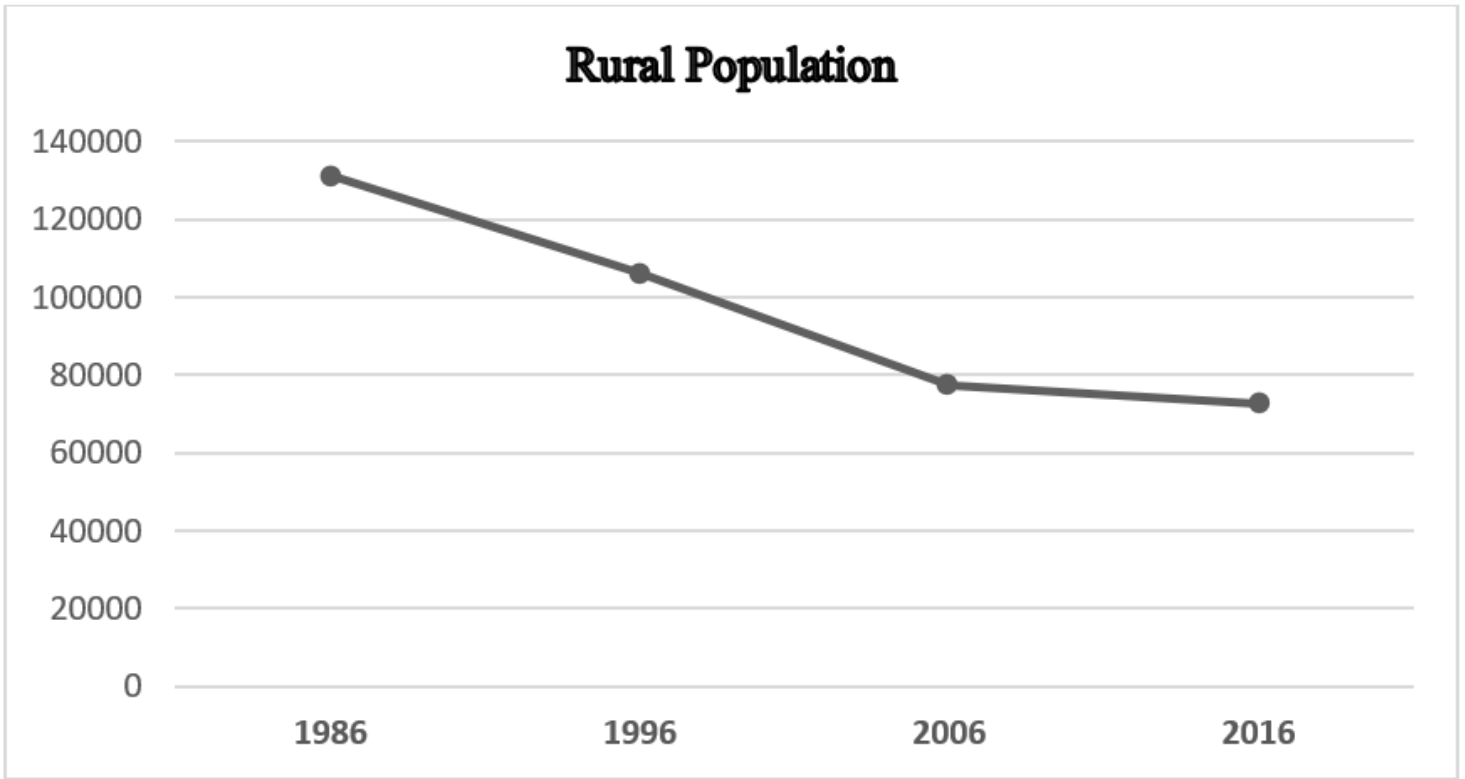


Figure 2

The trend of depopulation of rural areas in Sarab County from 1981 to 2021

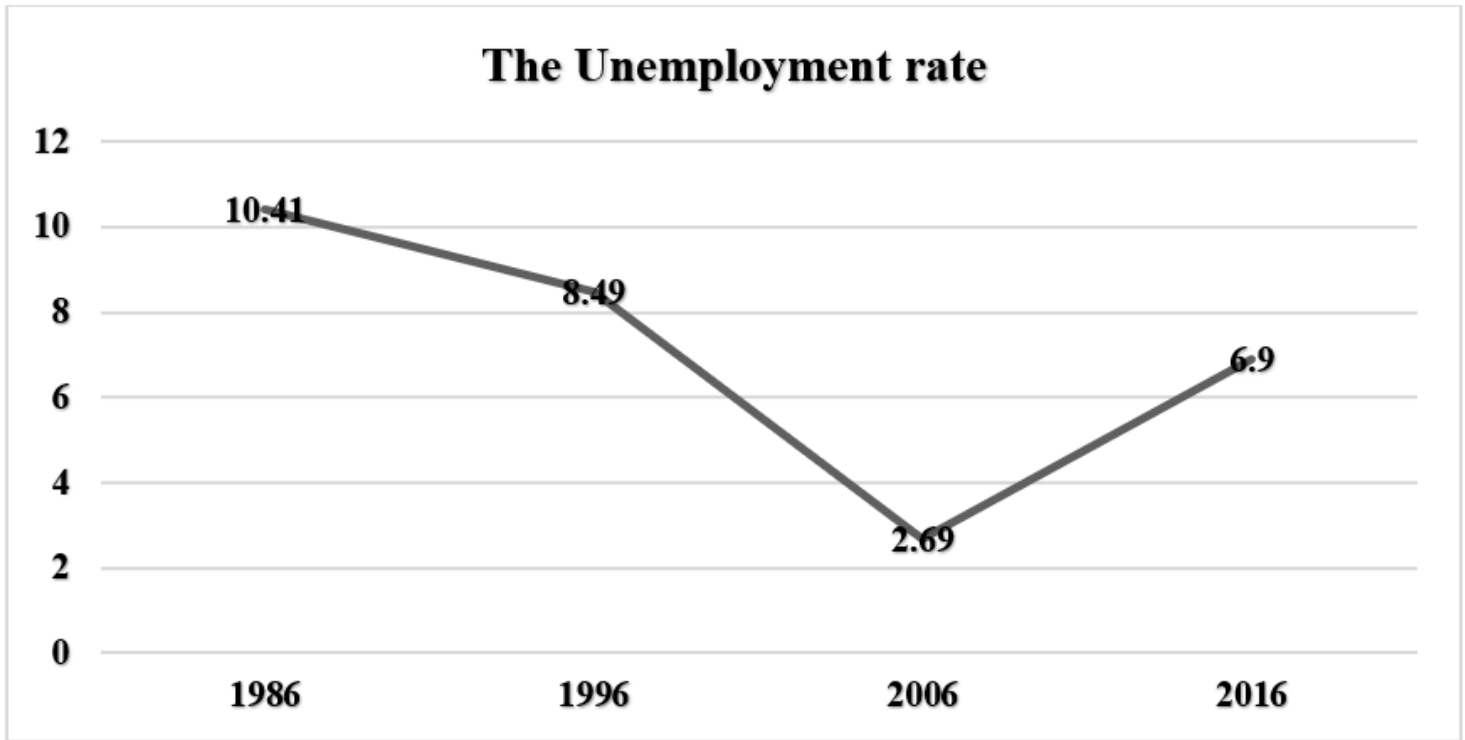


Figure 3

The unemployment percentage in the rural areas of Sarab County from 1986 to 2016



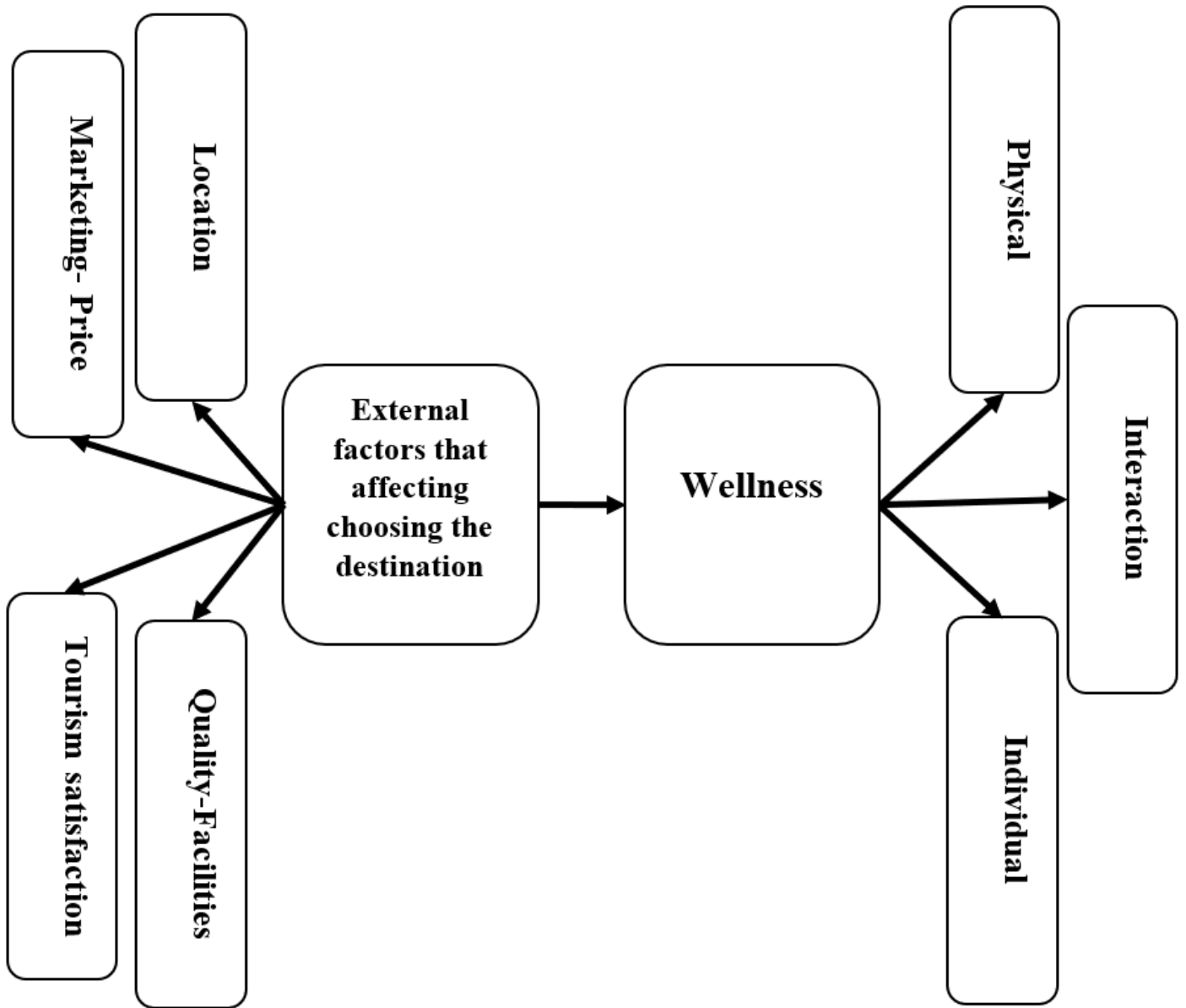
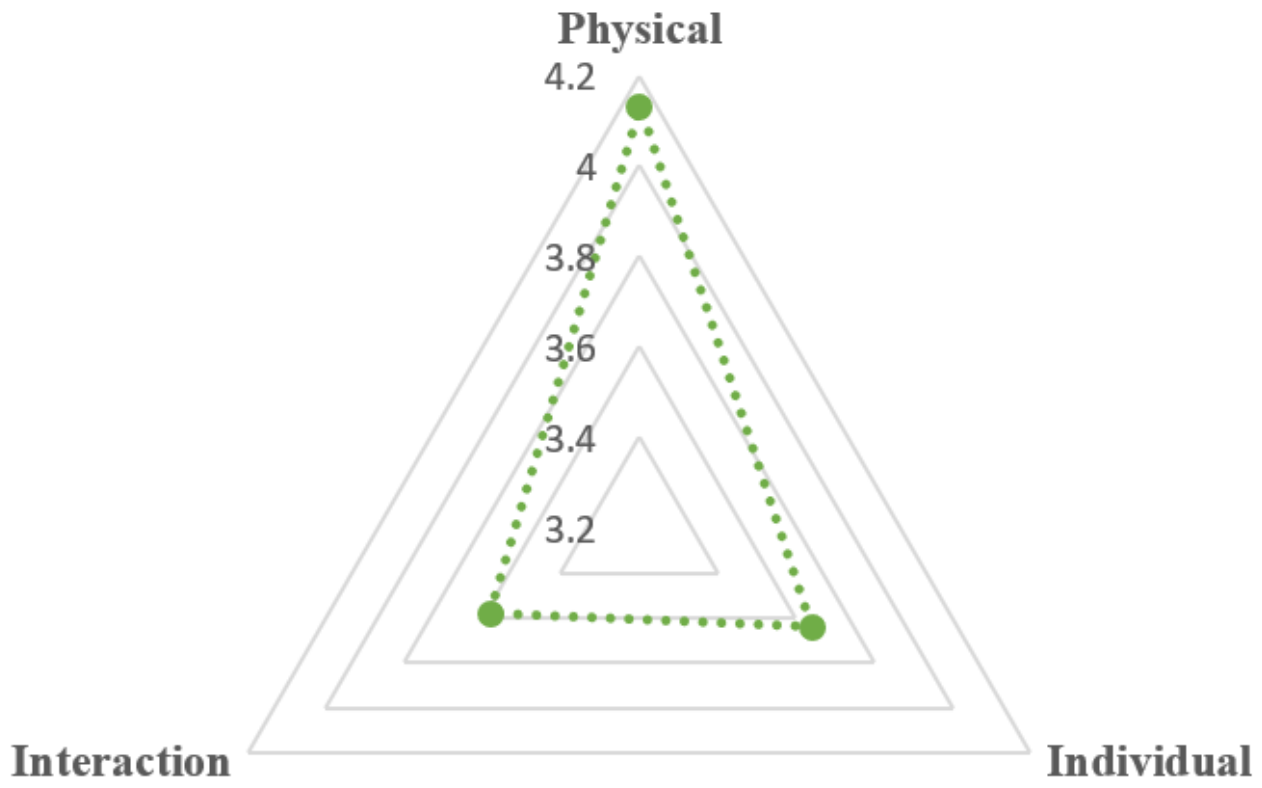


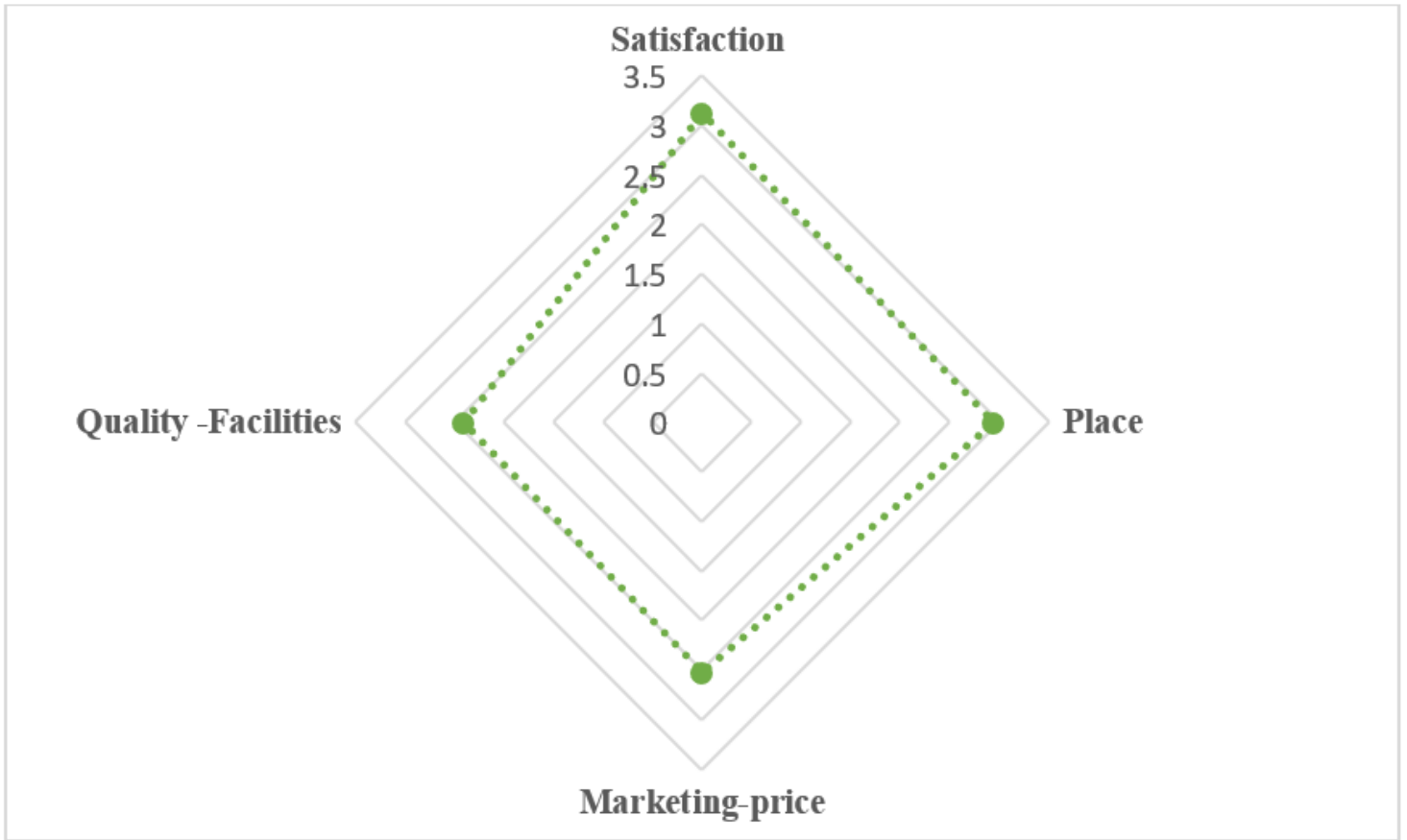
Figure 4

The conceptual model of wellness tourism (Source: Research Findings)



**Figure 5**

The status of the wellness tourism components Source: Research Findings



**Figure 6**

The status of external factors affecting choosing the destination Source: Research Findings

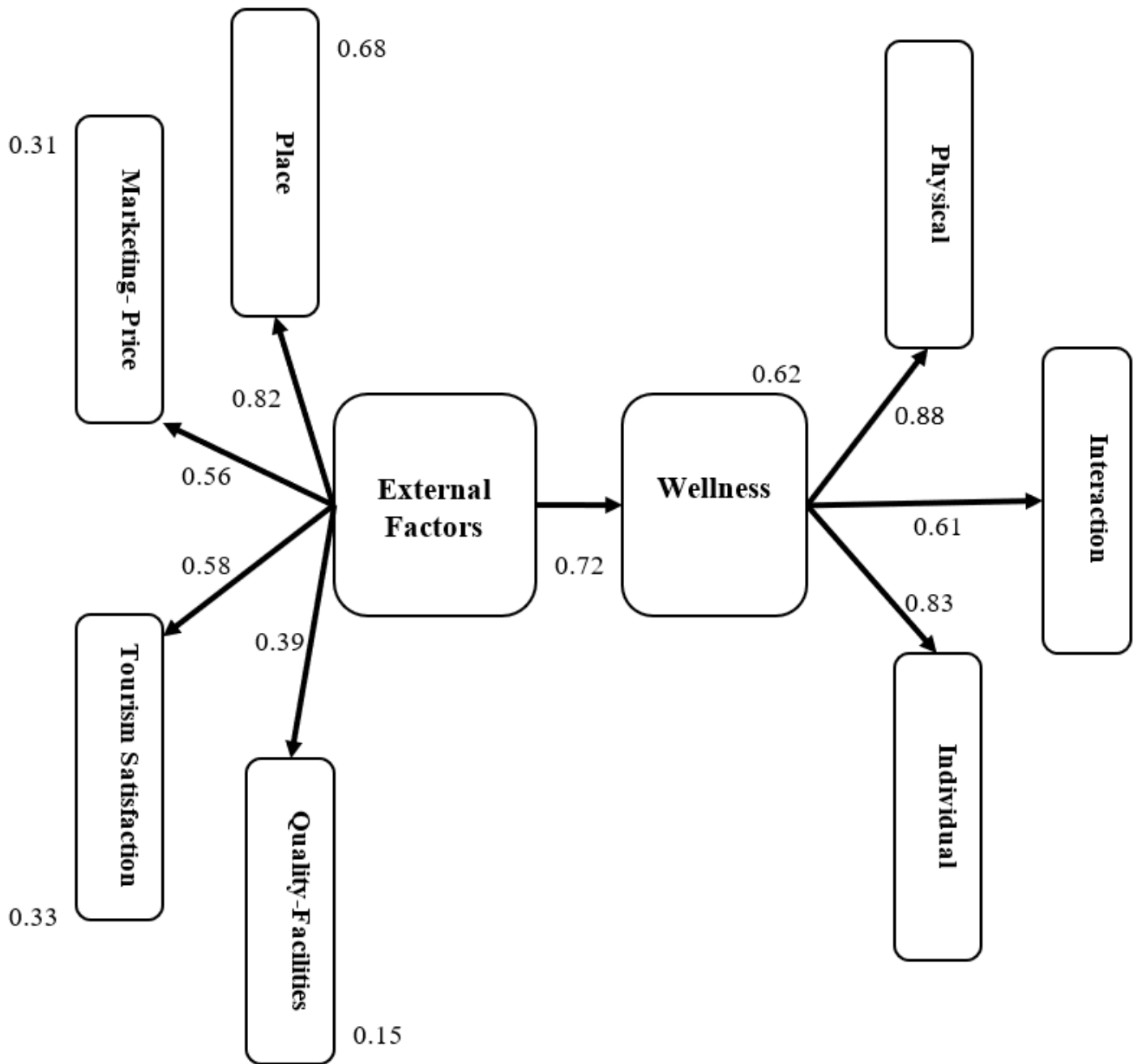


Figure 7

The structural model of the research Source: Research Findings