

Exploring motivations and satisfaction of ecolodge patrons in desert areas of Iran

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Abstract

Purpose – This paper explores travel motivations and characteristics of European ecotourists who visit ecolodges in desert areas of Iran. It also evaluates 26 ecolodge attributes from the perspective of the European patrons.

Design/methodology/approach – Different methods were adopted for the aim of this study, comprising the importance-performance analysis technique and a questionnaire survey.

Findings – A survey of 386 patrons in 12 selected ecolodges found that most European ecotourists were middle-aged to old adults (36–65 years old) and highly educated who traveled with their spouses or friends. Ecotourists generally stayed in ecolodges for 2–5 days to learn and explore nature and be in the wilderness and undisturbed nature. This study also showed that the ecolodges are successful to a large extent, yet they need to focus more on their services and facilities.

Practical implications – Due to the significance of international tourists for the economy, decision-makers and managers must learn about tourists' motivations and travel satisfaction to be able to compete against their rivals in the marketplace. The result of this study may help the owners and managers of ecolodges in desert areas understand the needs and priorities of European tourists.

Originality/value – This study expanded the existing literature of motivations and satisfaction of tourists in the ecolodge industry.

Keywords Ecolodge, Desert areas, Travel motives, Importance-performance analysis, Ecotourist characteristics

Paper type Research paper

Introduction

The idea of desert areas as desirable for ecotourism is becoming popular (Rand *et al.*, 2016; Atkinson, 2016). Usually, people travel to these areas because they want to visit unusual places and explore spots where their friends have not gone yet (Atkinson, 2016). These tourists travel to desert areas around the world, such as Australia, Africa and the Middle East, annually to see historical sites, geological structures and magnificent landscapes. Desert tourism has also caused a new appreciation of spiritual aspects of exploring remote areas, making concepts of “sacred spaces” or “nature religion” (Narayanan and Macbeth, 2009). Deserts provide an opportunity for a person to be alone, searching for self-actualization, regeneration, spirituality and self-reliance (Atkinson, 2016). Desert tourism has become so prevalent that the United Nations Environmental Programme has issued a guide for governments and their partners concerning sustainable desert tourism development and desert tourism management (UNEP, 2006). This organization asserts that desert tourism can hinder desertification and poverty while protecting and improving desert heritage, especially in developing countries. These aims will be achieved through proper planning and

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Conflict of Interest: The author declares that there is no conflict of interest.



development, studying tourism impacts and consumer behavior, enhancing the value of cultural heritage, and providing business and career opportunities for local community.

Ecolodges are considered one of the main ecotourism facilities and provide related products and experiences for visitors (Mafi *et al.*, 2019; Ban and Ramsaran, 2016). This kind of accommodation is an environmentally friendly and small-scale type of accommodation that engages visitors, specifically ecotourists, in nature-based and cultural activities, as well as protecting natural and cultural heritage as tourism assets (Kwan *et al.*, 2010; Chan and Baum, 2007). The ecolodge business appeared in the 1980s and expanded worldwide over the next decades when the negative effects of mass tourism became apparent. Although there is not any unanimous definition for ecolodges, many researchers have accepted the concepts provided by Russell *et al.* (1995), who described ecolodge as an accommodation that relies on the environment and in line with philosophy and principles of ecotourism (Sumanapala *et al.*, 2017; Kwan *et al.*, 2008). Ecolodges are the integral parts of ecotourism and enrich the ecotourists' experience by additional services such as activities, programs, interpretation and sense of place (Chan, 2010). Therefore, both ecolodge and its services are significant to the ecotourists' experience and their degree of satisfaction. Ecolodges, by and large, provide ecotourists a noble opportunity to visit nature and fulfill standards of sustainability (Kwan *et al.*, 2008).

Europe is a large and growing source market for tourism. According to the World Tourism Organization (UNWTO) data, about 70.5 m Europeans traveled to developing countries' destinations in 2018 (UNWTO, 2018). Compared to other parts of the world, the Middle East and Africa receive most tourists from Europe. In 2018, European arrivals to these areas grew by 25.8% (CBI, 2020). Europeans are aware of their probable impact on the environment. Therefore, Europe is the largest market for sustainable tourism, including ecotourism, and is even expected to have a 51% market share in the segment (International Trade Centre, 2019). Since developing countries' destinations for European tourists are diverse, offering unique ecotourism experiences can be an opportunity (CBI, 2020). Consequently, it is necessary to research European tourists' motivations and expectations.

This paper explored European ecotourists' travel characteristics and motivations in visiting the ecolodges located in Iran's desert areas. More than one-fifth of Iran comprises desert areas, which have a variety of natural and cultural attractions. Therefore, desert tourism can be expanded for visitors in this country, especially European ecotourists whose countries lack this kind of natural biome. Several studies have assessed ecotourists' characteristics and motivations, but few of them, if any, explored tourists visiting ecolodges in desert areas. Finding these characteristics and motivational factors would help managers and decision-makers improve marketing strategies and promote accommodations in this ecosystem more effectively. Ecolodge patrons were also asked to rank different kinds of attributes provided by an ecolodge. This information helps ecolodge operators and owners to enhance tourists' experiences and satisfaction.

Literature review

Motivations and characteristics of ecotourists

Motivation is described as the psychological needs and desires that cause, guide, and incorporate behavior and activity (Pearce, 2013; Carvache-Franco *et al.*, 2019). Studying motivation is essential since it is a primary stimulator of human actions (Shi *et al.*, 2019). This subject is a central principle in the study of tourism behavior and some aspects of tourism, including the purpose for travel, choice of a particular destination and overall satisfaction. Therefore, motivation has been studied widely in the tourism literature since the middle of the 20th century, and some theoretical approaches have been developed (Carvache-Franco *et al.*, 2019). Each tourist has different preferences and motivations when deciding to travel

(Bansal and Eiselt 2004). Recognizing these motivations for selecting a specific destination and enthusiasm for experience allows managers and planners to enhance the visitor's experiences and satisfaction (Chan and Baum, 2007)

Concerning ecotourism, travelers' motivations have a considerable interest to many researchers (Chan and Baum, 2007). Dorobantu and Nistoreanu (2012) stated that appreciation and observation of nature and related cultural values are the main motivations of ecotourists to travel. While relaxation is considered an essential need for travelers, some studies show that some ecotourists look for learning something new in specific fields (Jamrozy and Lawonk, 2017). Tangeland *et al.* (2013) indicated that ecotourists' purposes were learning about nature, being active and finding friends with similar interests. Other motivations in the literature include experiencing wilderness, participating in adventure activities, interacting with local people and learning about culture (Kwan *et al.*, 2010). Considering the literature, it is crystal clear that ecotourists' motivations vary due to various needs and perceptions, different environments and ecotourists' characteristics (age, preference, educational background), which raises the difficulty of specifying ecotourists' motivations (Carvache-Franco *et al.*, 2019).

In the Iranian context, Aligholizadeh *et al.* (2015) researched the motivations of tourists who traveled to desert areas of Iran. They surveyed 200 tourists and divided the motivations into nine groups: historical attractions, natural attractions, health tourism attractions, socio-cultural attractions, educational and scientific attractions, relaxing, sport tourism attractions, adventure tourism attractions and other attractions. "Other attractions" group included amateur astronomy, hiking and seeing unusual landscapes. This study showed that socio-cultural aspects and historical attractions were the most significant motivations for respondents and asserted that Iran's desert areas have great potentials to attract international and domestic tourists.

Chan and Baum (2007) conducted in-depth interviews with European patrons of two ecolodges in Sukau, Malaysia. They concluded that ecotourists were more interested in the destination characteristics and ecolodges surrounding attractions, such as local lifestyle, wildlife and natural attractions, than in ecolodge accommodation attributes. Using the push-pull framework, they explained tourists' motivations by "seeking" and "escaping" behavior dimensions, in which ecotourists tend to escape from their routine life and seek natural attractions and eco-activities by using ecolodges. This study suggested that ecolodge marketing strategies should emphasize the unique environment and attractions around the ecolodges. In another study, Kwan *et al.* (2010) examined the motivations and characteristics of tourists staying at ecolodges in Belize and found that tourists' primary motivations were exploring nature and experiencing a new culture and country. They stated that tourists who stayed at ecolodges were more interested in attraction attributes than social ones. This study also showed that most patrons of ecolodges were middle-aged and had high levels of income. Sumanapala *et al.* (2017) compared non-Asian and Asian ecotourists' characteristics staying at ecolodges in Sri Lanka. They argued that these two types of ecotourists differed in terms of perceptions of ecolodges attributes, trip characteristics and motivations. The main motivations of non-Asian were "friendliness of the people of the host country" and "visiting nature and learning customs," while Asian ecotourists' motivation was "seeking a new experience." The authors learned non-Asian patrons stayed longer at ecolodges compared to Asian ecotourists. This study also showed that the age group and education level of both Asian and non-Asian travelers were comparable.

Most studies on ecolodge patrons have been carried out in America, Australia and Asia. Few studies have been conducted in the Middle East and have considered ecolodges in desert areas. This study aimed to identify the motivations and characteristics of ecolodge visitors and determine ecolodges' performance in desert areas. More specifically, this study addressed the following research questions:

RQ1. What are the characteristics and motivational factors of European patrons in desert ecolodges?

RQ2. How well are these ecolodges managed to satisfy their customers?

Ecologue accommodation in Iran and the study area

The first ecolodges in Iran are not more than 15 years old, though their numbers have proliferated in the last decade. According to Iran's Ministry of Cultural Heritage, Handicraft, and Tourism (MCHT), the numbers of ecolodges were about 1500 in 2019, while only 30 existed in 2013 (MCHT, 2019). This growth has two main reasons; first, tourist demand is high for ecolodges, and second, the Iranian government supports the development of this type of accommodation, especially in rural areas where there is a need for improving living standards, job creation and economic growth (Salehi Esfahani and Majbouri, 2013; Torabi *et al.*, 2020).

Ecologes in Iran focus on activities in nature, and their development is based on the local environment and cultural assets. Most of them are managed and owned by individuals or families, and their locations, quality of the environment, local food and specific activities are the key attractions. Although Iran has various ecosystem zones, such as coastal areas, highland, lowland and islands, most ecolodges have been developed in provinces known for their desert ecosystem (MCHT, 2019). Isfahan, located in the center of Iran, has more ecolodges than any other province. These ecolodges are mainly located in villages, towns and small cities near deserts. Distinctive climate and natural resources, such as seasonal wetlands, mountains, caves and desert animals, along with historical memories, and human and cultural resources, make deserts one of the most demanding places for ecotourists in this area. The ecolodges usually offer facilities for activities such as off-roading, camel riding, amateur astronomy, hiking and visiting water reservoirs. These ecolodges also provide experienced guides for tourists, who typically travel in small groups. Tourism in desert areas of Isfahan can benefit local communities and protect human and natural resources. Khur va Biabanak county, one of 24 Isfahan's County, was selected for this study since some well-known ecolodges, including the first ecolodge in Iran, are located in this area (Figure 1).

Importance-performance analysis (IPA)

IPA was first introduced by Martilla and James (1997) and had been extensively used in various contexts, including marketing, healthcare, education, e-business, transportation, information technology and banking (Bi *et al.*, 2019). Bi *et al.* (2019) asserted that IPA is a simple and effective tool that assesses attributes on two dimensions of importance and performance to discover fields to develop or reduce when resources are limited. Moreover, the technique can reveal a business's strengths and weaknesses. IPA's visual results also assist managers and scholars in discern gaps between the importance of an attribute and the business's actual performance on managing that particular attribute (Boley *et al.*, 2017). The IPA's graphic representation consists of four quadrants where the performance scores are marked on the horizontal axis, and importance scores are marked on the vertical axis (Figure 2). Attributes in quadrant 1 (keep up the good work) have higher importance to respondents, and their performance is pretty high. Therefore, the attributes positioned here are the major strengths of a business. Attributes in quadrant 2 (concentrate here) perceived to be very important, but they have low performance. Thus, these attributes are considered as the major weakness of a business. Quadrant 3 (low priority) has attributes with low importance and low performance. Attributes in this quadrant are considered as the weakness of a business, but managers do not need to be concerned due to the low importance of the attributes. Quadrant 4 (possible overkill) contains low importance attributes, but the business

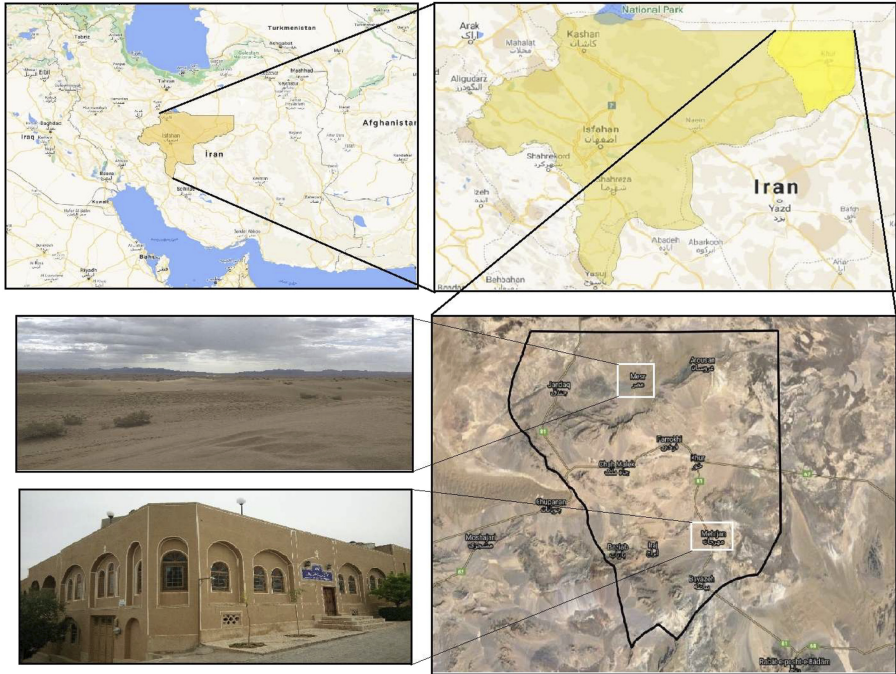
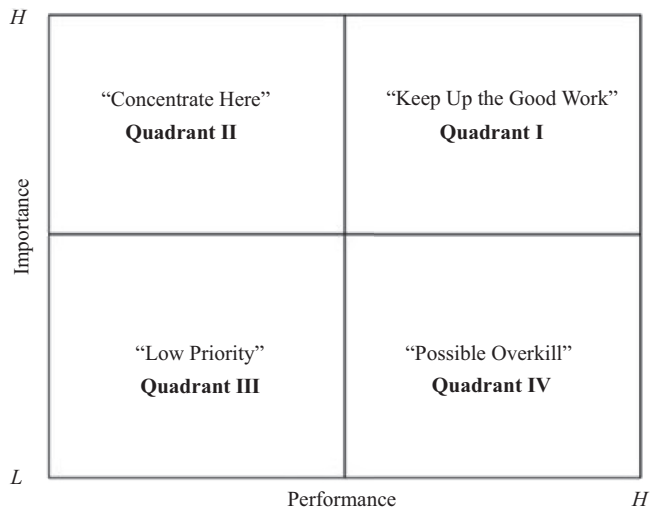


Figure 1.
Study area



Source(s): Deng, 2007

Figure 2.
Importance-
performance analysis

seems to have pretty high performance on these attributes. It means that respondents are pleased with the performance, but the business may waste the limited resources by focusing too much on these attributes (Bi *et al.*, 2019; Sörensson and Friedrichs, 2013).

IPA is a popular methodological tool in the tourism and hospitality literature. [Lai and Hitchcock \(2015\)](#) reviewed 59 studies that applied the technique. They expressed the flexibility and adaptability of IPA, as it has been used in various topics such as destination ([Caber et al., 2012](#); [Murdy and Pike, 2012](#); [Lee et al., 2013](#); [Sörensson and Friedrichs, 2013](#)), hotel ([Deng, 2008](#); [Deng and Pei, 2009](#); [Chen, 2014](#)), park and zoo ([Milman et al., 2012](#); [Taplin, 2012](#); [Cheng et al., 2013](#); [Sheng et al., 2014](#)), exhibition ([Kuo et al., 2010](#); [Whitfield and Webber, 2011](#)), travel agency ([Perl and Israeli, 2011](#)) and food service ([Obonya et al., 2012](#)). This method is a tool to identify and explain the factors that determine tourists' destination as well as their satisfaction ([Simon et al., 2020](#)); Therefore, it helps managers to recognize and evaluate tourists' expectations (importance) and satisfaction (performance). In the context of the accommodations, specifically ecolodges, IPA technique helps managers and owners identify tourists' expectations and adjust the environment, facilities and services at their properties to the potential and current guests ([Kwan et al., 2010](#)).

Methods

Sampling frame

The sample for this study was selected from European travelers who stayed at one of 12 selected ecolodges in Khur va Biabanak county from March 2018 to March 2019. The ecolodges were chosen based on the fact that they accepted international tourists. Other ecolodges did not accept foreign tourists because (1) they did not have specific facilities (e.g. Western-style toilet, Wi-Fi Internet) for foreign travelers, (2) the staff did not have English language skills to communicate with tourists and (3) incoming tour operators did not work with them. Nevertheless, the chosen ecolodges varied in terms of nature-based activities, dining, price level and lodging style.

Research tool

A three-page questionnaire was the main research tool in this study. The first section comprised questions on motivations for traveling to desert areas and contained 17 attributes that induced travelers to stay at an ecolodge in Iran's desert areas. Each attribute consisted of two or more items; the examples for attraction motives were "visit historical house, castles and caravansaries," "see mountain dunes and sand pans," and "visit hot springs." "Festivals and events," "learn new traditions and lifestyle," "interact with other tourists" were some of the items in "social and cultural motives" category. Also, items in "other motives" category included "relax spiritually and physically," "participate in new activities," "shopping" and "have an enjoyable time." The attributes were chosen based on previous studies and were classified into three groups: (1) attraction motives ([Aligholizadeh et al., 2015](#); [Sumanapala et al., 2017](#)), (2) social and cultural motives ([Kwan et al., 2010](#); [Sumanapala et al., 2017](#)) and (3) other motives ([Kwan et al., 2010](#)). The respondents were asked to rate the significance of the attributes. This rating was based on the four-point Likert scale ranging from 1 (not at all important) to 4 (very important). The second section consisted of 26 ecolodge features that evaluated visitors' satisfaction. European respondents evaluated the importance of 26 attributes for ecolodges, which were measured by the five-point Likert scale ranging from 1(not at all important) to 5 (very important). Patrons also assessed the performance of the ecolodges on these attributes by the five-point Likert scale ranging from 1 (poor) to 5 (excellent). The final part consisted of questions on visitors' demographic information and trip characteristics. The questionnaire was prepared in Farsi, and then a native English speaker who was familiar with Farsi translated the questionnaire to English.

A draft questionnaire was prepared and presented to seven experts in the field for their feedback to verify the validity, from which some minor adjustments were made. Cronbach's

alpha value for each dimension was calculated to verify the reliability: 0.754 (social and cultural motives), 0.889 (attraction motives) and 0.826 (other motives). This range indicated that the formal questionnaire scales had reliability (Cronbach's alpha values for each dimension were greater than 0.7) (Nunnally, 1978).

Following the approach used in Sumanapala *et al.* (2017) and Kwan *et al.* (2008, 2010), the researcher briefed front-desk staff in advance about the study, and tourists were given a questionnaire at the time of arrival. If there were more than one guest in a room, only one questionnaire was given. The guests had the authority to decide who answered the questionnaire. The respondents were requested to return the completed questionnaire to the front desk. Of the 550 questionnaires, 386, which were distributed among the 12 ecolodges, were completed. After eliminating the invalid questionnaires, the response rate was at 70%. Data were analyzed by the Statistical Package for Social sciences (SPSS 26.0).

In order to measure the importance and performance of ecolodges, IPA was used. In the process of IPA, choosing attributes based on previous studies or personal interviews (Caber *et al.*, 2012; Griffin and Edwards, 2012) is a pivotal step (Caber *et al.*, 2012). The first step of IPA analysis is determining attributes from previous studies. Then, respondents score these attributes on the Likert scale. Finally, the mean performance and mean importance are calculated for each of the attributes and mapped on a two-dimensional graph (Taplin, 2012; Lai and Hitchcock, 2015). This method was adopted in this study.

Results

Demographic characteristics

As it is shown in Table 1, more than 26% of respondents were 46–55 years old, followed by the 56–65 age group (20.5%) and the 36–45 age group (14.5%). Most respondents traveled with their spouse (32.2%) and with friends (23.2%), respectively (Table 1). The least frequent category was visitors who traveled in organized groups (16.6%) or alone (9.4%). The results also revealed that 73.8% of ecolodge patrons had a bachelor's degree or above. When the patrons were asked about the duration of stay, about 84% of the answers were two to five nights. No respondent stayed at the ecolodges for more than seven days, which was relatively long for a desert area.

Travel motivation factors for desert areas

Table 2 shows that the most significant attractions were “wilderness and undisturbed nature,” “historical sites” and “amateur astronomy.” In social and cultural motives, “being with family or friends” was the top attribute. In the case of other motives, “learn and explore nature,” “relaxing” and “warm weather” were the most important attributes. To sum up, the top five attributes were “learn and explore nature” (mean = 3.62), “wilderness and undisturbed nature” (mean = 3.58), “being with family or friends” (mean = 3.24), “relaxing” (mean = 3.23) and “historical site” (mean = 3.22). These results properly addressed RQ1.

Importance and performance of ecolodge attributes

As it is shown in Table 2, the top five rated attributes were “friendliness of staff,” “decent sanitary condition,” “quality of environment and landscape,” “availability of local food” and “value for money.” Four of these attributes were related to service aspects: friendliness of staff, value for money, sanitary and availability of local food. Only one of the top importance values was concerned with the environmental aspect: quality of environment and landscape.

Twenty attributes ranked four or above, and the top five rated items were “value for money,” “friendliness of staff,” “availability of local food,” “quality of environment and

	Frequency	Total	%
<i>Age group</i>			
16–25	37		9.60
26–35	52		13.40
36–45	56		14.50
46–55	103		26.70
56–65	79		20.50
Above 66	47		12.20
n/a	12		3.10
<i>Party composition</i>			
Alone	36		9.4
Spouse	124		32.2
Family (adults or children)	72		18.6
Friends	90		23.2
Organized group	64		16.6
<i>Education level</i>			
High school or below	38		9.8
More than high school	56		14.5
Bachelor's Degree	174		45
Master's or Ph.D. Degree	111		28.9
N/A	7		1.8
<i>Number of nights</i>			
1	24		6.2
2	69		17.9
3	117		30.3
4	76		19.7
5	62		16
6	21		5.4
7	6		1.6
n/a	11		2.8

Table 1.
Demographic
characteristics

landscape,” and “staff provide efficient services” (Table 3). Like importance items, four of these attributes were related to service aspects, and one of them was related to the environmental aspects of the ecolodge.

In order to quantify the difference between performance and importance of attributes, the importance-performance gap was used. As Kwan *et al.* (2010) stated, gap value demonstrates “the relative difference between how important an attribute is and how well the ecolodge performs with this attribute.” The positive gap value of an attribute, where the attribute’s performance surpasses its importance, implies that respondents are satisfied with it. However, it should be noted that some resources could be reallocated from specific attributes to avoid over-servicing. On the contrary, a negative gap value indicates that management action may be needed since an attribute’s performance is lower than its importance (Parker and Simpson, 2018; Simpson *et al.*, 2020). In this study, the only attribute with a negative IP gap value was “efficient reservation” (gap = -0.09).

The IP graph of 26 attributes of the ecolodges is also presented (Figure 3), which helped the research address RQ2. Most of the attributes fell in the “keep up the good work” quadrant: availability of astronomy facilities, availability of local food, availability of off-road facilities, availability of village cultural trip, availability of wildlife, cleanliness, sanitary condition, friendliness of staff, guided desert tours, high-quality food, knowledgeable guide, quality of

Table 2.
Travel motivation
factors for desert areas

	Mean	Total	St.Dev
<i>Attraction motives</i>			
Desert animals	3.13		0.99
Historical sites	3.22		0.79
Wilderness and undisturbed nature	3.58		0.89
Photography of landscape and Wildlife	2.87		1.01
Amateur astronomy	3.15		0.91
Off road/Desert driving	2.94		0.90
Sand bathing	2.76		0.90
<i>Social and cultural motives</i>			
Being with family or friends	3.24		0.91
Meet people with similar interests	2.55		0.95
Experience local food	3.07		0.96
Learning local customs	3.04		0.10
<i>Other motives</i>			
Learn and explore nature	3.61		0.85
Having fun and be entertained	2.98		0.94
Relaxing	3.23		0.98
Feel away from home	2.62		1.01
Warm weather	3.18		0.96
Be physically active	2.72		0.94

Table 3.
Importance and
performance rating of
attributes

Attribute	Importance	Performance	Gap
1. Availability of astronomy facilities	4.25	4.49	0.24
2. Availability of desert hiking facilities	3.52	3.90	0.38
3. Availability of desert trees and wildflowers	3.51	3.92	0.41
4. Availability of facilities for camel riding	3.98	4.11	0.13
5. Availability of local food	4.29	4.66	0.37
6. Availability of off-road facilities	3.97	4.45	0.48
7. Availability of onsite entertainment	2.55	3.18	0.63
8. Availability of security personnel	3.64	4.26	0.62
9. Availability of village cultural trip	4.22	4.41	0.19
10. Availability of wildlife	4.23	4.52	0.29
11. Cleanliness	4.16	4.48	0.32
12. Comfort of bed	4.01	4.18	0.17
13. Easy accessibility	3.33	3.45	0.12
14. Decent sanitary condition	4.37	4.42	0.05
15. Design with minimum negative impact on local environment	4.22	4.24	0.02
16. Efficient reservation	3.97	3.88	-0.09
17. Friendliness of staff	4.39	4.68	0.29
18. Guided desert tours	4.08	4.26	0.18
19. High quality food	4.21	4.43	0.22
20. Knowledgeable guide	4.12	4.37	0.25
21. Provide private room and washroom	4.07	4.16	0.09
22. Quality of environment and landscape	4.36	4.59	0.33
23. Reputation of ecolodge	3.61	3.88	0.27
24. Staff provide efficient services	4.24	4.53	0.29
25. Value for money	4.27	4.74	0.47
26. Variety of lodging styles	3.15	4.10	0.95

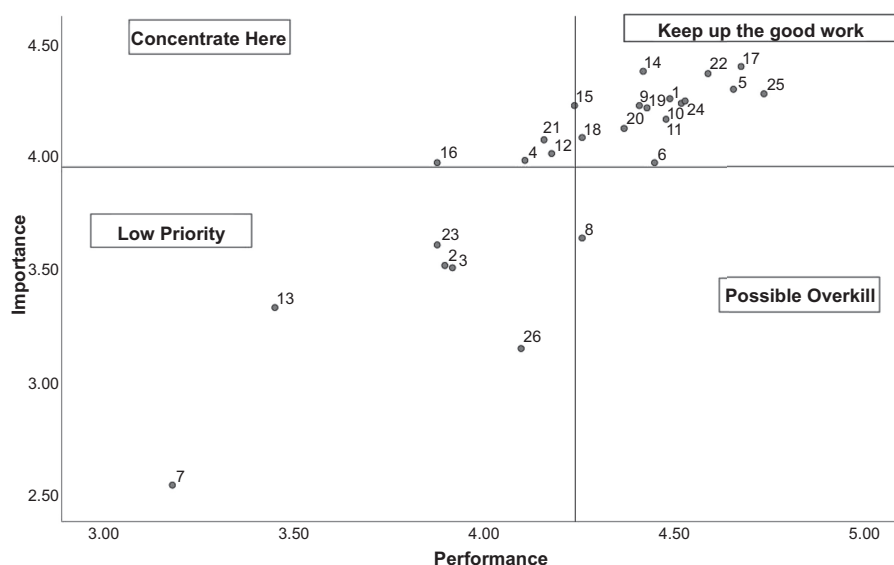


Figure 3. Respondent's importance and performance ranking

the environment, staff provide efficient service and value of money. These items had high performance and were considered the strength of ecolodges; thus, they need to be well-maintained.

The items in the “concentrate here” quadrant were the most important evaluation attributes with poor performance: availability of camel facilities, comfort of bed, design with negative impact on environment, efficient reservation, and provide private room and washroom. These attributes indicated the weakness of ecolodges and need further attention and investments.

The items that fell in the “possible overkill” quadrant were not comparatively important, but ecolodges functioned well on them. The only attribute in this category was “availability of security personnel.” Resources dedicated to this attribute can be reallocated to rectify the failure of other attributes.

The attributes within the “low priority” quadrant included “availability of hiking facilities,” “availability of onsite entertainment,” “easy accessibility,” “availability of desert trees and wildflowers,” “reputation of ecolodge” and “variety of lodging styles.” These items may not get much attention because of their low importance.

Discussion and conclusion

The main objectives of this study were to identify travel motivations of European patrons in desert ecolodges of Khur va Biabanak, Iran, and to measure the importance and performance value of ecolodges' attributes. The result of this study helps managers and owners of desert ecolodges to provide or improve their services based on foreign tourists' preferences.

The result showed that the ecolodge visitors who responded to questionnaires were between 36 and 65 (61.70%). The ages of ecotourists in many studies were between 36 and 55 (Kwan *et al.*, 2010). In other studies, ecotourists were younger, aged between 26 and 55 (Sumanapala *et al.*, 2017). This study, therefore, found that ecotourists were relatively older (RQ1). Ecolodges' manager should pay attention to senior and older travelers since the purchasing power and their size in the tourism market are growing (Gabor, 2015).

They should provide specific services and use different marketing tools for targeting this age group. Hudson (2010) stated that older travelers are looking for convenience, authenticity and excellent customer service. He suggested that in order to attract them, marketers and managers should provide detailed information, show how to improve their lives, promote the experience, and use various media. Previous studies also found that some specific services and facilities, such as handy shower sets, shower grab bars, large-sized printed materials (Marvel, 1999), special dietary menus, small food portions and organized entertainment (Caber and Albayrak, 2014), were critical for older tourists. About 74% of ecotourists had a bachelor's degree or above; therefore, they were considered well-educated travelers (RQ1). In terms of travel characteristics, most of the respondents stayed two to five nights in Khur va Biabanak ecolodges (83.9%), and they preferred to travel with their spouses, followed by friends. These results were very similar to the study of Kwan *et al.* (2010).

This study also showed that the most significant motivations for traveling to desert areas and staying at desert ecolodges were "learn and explore nature," "visit wilderness and undisturbed nature," and "being with family" (RQ1). Accordingly, the attraction motivations for traveling to desert areas were more important than social motivations. Wood (2002) stated that observation of nature and cultural assets are the prime motivations for ecotourists. The study of Aligholizadeh *et al.* (2015) was considered to compare the European ecotourists' motivations to domestic ecotourists' motivations. The study revealed that social and cultural motives were the highest priority for domestic ecotourists. It appeared that learning about local customs is the most important motive for Iranian ecotourists. Also, visiting cultural and historical places was more important than visiting and learning about nature.

The top three ranked attributes for importance were "friendliness of staff," "sanitary condition" and "quality of environment," while respondents were most satisfied with "value of money," "friendliness of staff" and "availability of local food." The reason for satisfaction with the "value of money" is the devaluation of Iran's national currency (Rial). Due to the economic sanctions against Iran in recent years, the value of the Rial has dropped dramatically, which makes this country a cheap destination for international tourists (Pratt and Alizadeh, 2017). The comparatively low cost of accommodation, food and traveling to other Iran's neighbor countries can be regarded as a competitive advantage. The IP gaps were all positive for selected ecolodges, excluding efficient reservation, which meant that the performance of this attribute was less than its importance, and ecolodges were not doing well on this matter. One reason for that is the ban of financial transactions with Iranian banks, which negatively affects the foreign tourists' capability to use international credit cards while booking rooms or traveling in Iran (Pratt and Alizadeh, 2017). Overall, the ecolodges could satisfy their European ecotourists since most of the attributes were in the "keep up the good work" quadrant, and the gap values were positive for the majority of attributes (RQ2).

The results also revealed that the desert ecolodges in Khur va Biabanak should improve and invest in plans dealing with "comfort of bed," "provide private rooms and washrooms," "efficient reservation," "availability of camel facilities" and "design with minimum negative impact on environment." This aim can be achieved by standardization of the facilities and services. Creating an environmental-friendly design should also be a priority since the environment is significant to ecotourists. Moreover, these ecolodges pay more than enough attention to the "availability of security personnel" attribute and should reduce the resources on this matter and focus more on the attributes mentioned earlier.

Ecolodge owners of Khur va Biabanak should promote the uniqueness of the desert as a natural asset. They should also preserve the environment and cultural resources that are crucial to ecolodges' experiences and reputation. Ecolodge establishments continue to grow, and the market is competitive; if managers and owners want to compete and grow their

customers, they should diversify their products and ecotourism activities and improve service facilities' quality.

Limitations and future research

As with all research, this study has limitations. First, the items and scales used in this study were obtained from the literature review. There may be some other attributes concerning ecotourists' motivation that need to be considered. Future research may use a Delphi study with experts for validation of the concepts. Second, ecotourists and desert tourism have a close connection with the concept of sustainable tourism. Some ecotourists intend to take part in sustainable tourism activities. Therefore, future studies could investigate the relationship between these ecotourists' motivation and their level of satisfaction. Also, the sample of this research incorporated European ecotourists. Future research could examine ecotourists from a specific country to get better results and achieve a more precise understanding of ecotourists. Finally, this research studied the motivations and satisfaction of the ecotourist who visit desert ecologes. However, what might be equally important is that if ecotourists recommend or return to a specific destination or ecolodge. Future studies could consider a proper approach to research on this subject.

References

- Aligholizadeh, Firoozjahi, N., Ramezanzadeh, L. and Esmaeeli, M. (2015), "Factors affecting the motivations of tourists in choosing a tourist destination with emphasis on the attractions of villages in desert areas", *Geography (Scientific Journal of The Iranian Geographical Association)*, Vol. 46 No. 13, pp. 37-53, in Farsi.
- Atkinson, D. (2016), "Is South Africa's Great Karoo region becoming a tourism destination?", *Journal of Arid Environments*, Vol. 127, pp. 199-210.
- Ban, J. and Ramsaran, R.R. (2016), "An exploratory examination of service quality attributes in the ecotourism industry", *Journal of Travel and Tourism Marketing*, Vol. 34 No. 1, pp. 132-148.
- Bansal, H. and Eiselt, H. (2004), "Exploratory research of tourist motivations and planning", *Tourism Management*, Vol. 25 No. 3.
- Bi, J., Liu, Y., Fan, Z. and Zhang, J. (2019), "Wisdom of crowds: conducting importance-performance analysis (IPA) through online reviews", *Tourism Management*, Vol. 70, pp. 460-478.
- Boley, B., McGehee, N. and Tom Hammett, A. (2017), "Importance-performance analysis (IPA) of sustainable tourism initiatives: the resident perspective", *Tourism Management*, Vol. 58, pp. 66-77.
- Caber, M. and Albayrak, T. (2014), "Does the importance of hotel attributes differ for senior tourists?", *International Journal of Contemporary Hospitality Management*, Vol. 26 No. 4, pp. 610-628.
- Caber, M., Albayrak, T. and Matzler, K. (2012), "Classification of the destination attributes in the content of competitiveness (by revised importance-performance analysis)", *Journal of Vacation Marketing*, Vol. 18 No. 1, pp. 43-56.
- Carvache-Franco, M., Segarra-Oña, M. and Carrascosa-López, C. (2019), "Segmentation by motivation in ecotourism: application to protected areas in guayas, Ecuador", *Sustainability*, Vol. 11 No. 1, p. 240.
- cbi.eu (2020), "What is the demand for outbound tourism on the European market?", [online] available at: <https://www.cbi.eu/market-information/tourism/trade-statistics>.
- Chan, J.K.L. (2010), "Assessing key satisfiers and sustainable ecolodge experience management through profile accumulation techniques", *World Applied Sciences Journal*, Vol. 10 (Tourism and Hospitality), pp. 78-90.
- Chan, J.K.L. and Baum, T. (2007), "Ecotourists' perception of ecotourism experience in lower Kinabatangan, Sabah, Malaysia", *Journal of Sustainable Tourism*, Vol. 15 No. 5, pp. 574-590.

- Chan, J.K.L. and Baum, T. (2007), "Motivation factors of ecotourists in ecolodge accommodation: the push and pull factors", *Asia Pacific Journal of Tourism Research*, Vol. 12 No. 4, pp. 349-364.
- Chen, K. (2014), "Improving importance-performance analysis: the role of the zone of tolerance and competitor performance. The case of Taiwan's hot spring hotels", *Tourism Management*, Vol. 40, pp. 260-272.
- Cheng, Q., Guo, J. and Ling, S. (2013), "Fuzzy importance-performance analysis of visitor satisfaction for theme park: the case of Fantawild Adventure in Taiwan, China", *Current Issues in Tourism*, Vol. 19 No. 9, pp. 895-912.
- Deng, W. (2007), "Using a revised importance-performance analysis approach: the case of Taiwanese hot springs tourism", *Tourism Management*, Vol. 28 No. 5, pp. 1274-1284.
- Deng, W. (2008), "Fuzzy importance-performance analysis for determining critical service attributes", *International Journal of Service Industry Management*, Vol. 19 No. 2, pp. 252-270.
- Deng, W. and Pei, W. (2009), "Fuzzy neural based importance-performance analysis for determining critical service attributes", *Expert Systems with Applications*, Vol. 36 No. 2, pp. 3774-3784.
- Dorobantu, M.R. and Nistoreanu, P. (2012), *Rural Tourism and Ecotourism—The Main Priorities in Sustainable Development Orientations of Rural Local Communities in Romania*, MPRA Paper, University Library of Munich.
- Gabor, M. (2015), "A content analysis of rural tourism research", *Journal of Tourism, Heritage and Services Marketing*, Vol. 1 No. 1, pp. 25-29.
- Griffin, T. and Edwards, D. (2012), "Importance-performance analysis as a diagnostic tool for urban destination managers", *Anatolia*, Vol. 23 No. 1, pp. 32-48.
- Hudson, S. (2010), "Wooing zoomers: marketing to the mature traveler", *Marketing Intelligence and Planning*, Vol. 28 No. 4, pp. 444-461.
- International Trade Centre (2019), *The European Union Market for Sustainable Products. The Retail Perspective on Sourcing Policies and Consumer Demand*, ITC, Geneva.
- Jamroz, U. and Lawonk, K. (2017), "The multiple dimensions of consumption values in ecotourism", *International Journal of Culture, Tourism and Hospitality Research*, Vol. 11 No. 1, pp. 18-34.
- Kuo, C., Chen, L. and Lin, S. (2010), "Exploring the relationship between hotel-based service attribute importance and customer satisfaction at international conferences in Taiwan", *Journal of Convention and Event Tourism*, Vol. 11 No. 4, pp. 293-313.
- Kwan, P., Eagles, P.F. and Gebhardt, A. (2008), "A comparison of ecolodge patrons' characteristics and motivations based on price levels: a case study of Belize", *Journal of Sustainable Tourism*, Vol. 16 No. 6, pp. 698-718.
- Kwan, P., Eagles, P.F. and Gebhardt, A. (2010), "Ecolodge patrons' characteristics and motivations: a study of Belize", *Journal of Ecotourism*, Vol. 9 No. 1, pp. 1-20.
- Lai, I. and Hitchcock, M. (2015), "Importance-performance analysis in tourism: a framework for researchers", *Tourism Management*, Vol. 48, pp. 242-267.
- Lee, J., Choi, Y. and Breiter, D. (2013), "An exploratory study of convention destination competitiveness from the attendees' perspective", *Journal of Hospitality and Tourism Research*, Vol. 40 No. 5, pp. 589-610.
- Mafi, M., Pratt, S. and Trupp, A. (2019), "Determining ecotourism satisfaction attributes—a case study of an ecolodge in Fiji", *Journal of Ecotourism*, Vol. 19 No. 1, pp. 1-23.
- Martilla, J. and James, J. (1977), "Importance-performance analysis", *Journal of Marketing*, Vol. 41 No. 1, pp. 77-79.
- Marvel, M. (1999), "Competing in hotel services for seniors", *International Journal of Hospitality Management*, Vol. 18 No. 3, pp. 235-243.
- Milman, A., Li, X., Wang, Y. and Yu, Q. (2012), "Examining the guest experience in themed amusement parks", *Journal of Vacation Marketing*, Vol. 18 No. 4, pp. 313-325.

- Ministry of Cultural Heritage, Handicraft and Tourism (2019), *Annual Tourism Statistics [Ebook]*, Research Institute of Iran Cultural Heritage & Tourism, Tehran, available at: <https://www.mcth.ir/>.
- Murdy, S. and Pike, S. (2012), "Perceptions of visitor relationship marketing opportunities by destination marketers: an importance-performance analysis", *Tourism Management*, Vol. 33 No. 5, pp. 1281-1285.
- Narayanan, Y. and Macbeth, J. (2009), "Deep in the desert: Merging the desert and the spiritual through 4WD tourism", *Tourism Geographies*, Vol. 11 No. 3, pp. 369-389.
- Nunnally, J.C. (1978), *Psychometric Theory*, McGraw-Hill, New York, NY.
- Obonyo, G., Ayieko, M. and Kambona, O. (2012), "An importance-performance analysis of food service attributes in gastro-tourism development in Western Tourist Circuit, Kenya", *Tourism and Hospitality Research*, Vol. 12 No. 4, pp. 188-200.
- Parker, J. and Simpson, G.D. (2018), "Visitor satisfaction with a public green infrastructure and urban nature space in Perth, Western Australia", *Land*, Vol. 7 No. 4, p. 159.
- Pearce, P. (2013), *The Social Psychology of Tourist Behaviour*, Elsevier, New York, NY.
- Perl, Y. and Israeli, A. (2011), "Crisis management in the travel agency sector: a case study", *Journal of Vacation Marketing*, Vol. 17 No. 2, pp. 115-125.
- Pratt, S. and Alizadeh, V. (2017), "The economic impact of the lifting of sanctions on tourism in Iran: a computable general equilibrium analysis", *Current Issues in Tourism*, Vol. 21 No. 11, pp. 1221-1238.
- Rand, G.E., Booyesen, I. and Atkison, D. (2016), "Culinary mapping and tourism development in South Africa's Karoo region", *African Journal of Hospitality, Tourism and Leisure*, Vol. 5 No. 4, pp. 1-22.
- Russell, D., Bottrill, C. and Meredith, G. (1995), *Introduction: International Ecotourism Survey*, The Ecotourism Society, North Bennington.
- Salehi-Isfahani, D. and Majbourni, M. (2013), "Mobility and the dynamics of poverty in Iran: evidence from the 1992-1995 panel survey", *The Quarterly Review of Economics and Finance*, Vol. 53 No. 3, pp. 257-267.
- Sheng, X., Simpson, P. and Siguaw, J. (2014), "US winter migrants' park community attributes: an importance-performance analysis", *Tourism Management*, Vol. 43, pp. 55-67.
- Shi, X., Day, J., Gordon, S., Cai, L. and Adler, H. (2019), "An exploratory study of visitors' motivations at a heritage destination", *Journal of Hospitality and Tourism Insights*, Vol. 2 No. 2, pp. 186-202.
- Simon, N., Saikim, F.H., Bagul, A.H.B.P. and Aziz, N.A.A. (2020), "Tourist satisfaction towards Kota Kinabalu, Sabah using importance-performance analysis (IPA) as a tool to determine urban ecotourism potential", *Journal of Tropical Biology and Conservation (JTBC)*, Vol. 17, pp. 187-202.
- Sörensson, A. and Friedrichs, Y. (2013), "An importance-performance analysis of sustainable tourism: a comparison between international and national tourists", *Journal of Destination Marketing and Management*, Vol. 2 No. 1, pp. 14-21.
- Sumanapala, H.D.P., Kotagama, S.W., Perera, P.K.P., Galahitiyawe, N.W.K. and Suranga, D.A.C.S. (2017), "Comparison of characteristics of Asian and Non-Asian tourists visiting eco lodges in Sri Lanka", *Sri Lanka Journal of Social Sciences*, Vol. 20 No. 2, pp. 119-126.
- Tangeland, T., Vennesland, B. and Nybakk, E. (2013), "Second-home owners' intention to purchase nature-based tourism activity products—A Norwegian case study", *Tourism Management*, Vol. 36, pp. 364-376.
- Taplin, R. (2012), "Competitive importance-performance analysis of an Australian wildlife park", *Tourism Management*, Vol. 33 No. 1, pp. 29-37.
- Torabi, Z.A., Rezvani, M.R. and Badri, S.A. (2020), "Tourism, poverty reduction and rentier state in Iran: a perspective from rural areas of Turan National Park", *Journal of Policy Research in Tourism, Leisure and Events*, Vol. 13 No. 2, pp. 1-16.

- United Nations Environmental Programme (UNEP) (2006), *Tourism and Deserts: A Practical Guide to Managing the Social and Environmental Impacts in the Desert Recreational Sector*, DTIE, Paris.
- Whitfield, J. and Webber, D. (2011), "Which exhibition attributes create repeat visitation?", *International Journal of Hospitality Management*, Vol. 30 No. 2, pp. 439-447.
- Wood, M. (2002), *Ecotourism: Principles, Practices and Policies for Sustainability*, The International Ecotourism Society, VT.
- World Tourism Organization (2018), *European Union Tourism Trends*, UNWTO, Madrid.

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