



Factors that affect perceptions of tourism resources' value: the case of the Caminito del Rey

factores que influyen en la percepción de valor de un recurso turístico: el caso del Caminito del Rey

Ismael P. Soler

University of Malaga, Department of Applied Economics, Spain, ipsoler@uma.es

German Gemar

University of Malaga, Department of Economics and Business Administration, Spain, ggemar@uma.es

Abstract

This study's primary objective was to analyse the factors influencing overall customer satisfaction with tourism resources by applying two similar techniques with different approaches. A survey was conducted between June and December 2017, producing a total of 171 valid forms. Importance performance analysis (IPA) and asymmetric impact-performance analysis (AIPA) were used to process the data. The results suggest that El Caminito managers give low priority to generating tourist information about and satisfaction with this resource's features. In addition, managers need to concentrate on improving signposting. IPA highlighted that the environment's assessment is an overexploited factor, but AIPA suggested that this factor can still contribute to shaping customer satisfaction. The AIPA's results also show that environmental cleanliness and El Caminito's regular cleaning are fundamental factors in visitors' high general satisfaction. This study's systematic use of these analytical tools facilitated the identification of factors that add to or reduce the value of tourism resources, thereby helping to improve these resources' quality and sustainability. The findings' application could ultimately enhance this destination's competitiveness and its overall success.

Keywords: asymmetric impact-performance analysis, Caminito del Rey, importance performance analysis, overall customer satisfaction, tourist resource.

Resumo

Este artículo tiene como objetivo analizar la formación de la satisfacción general del consumidor hacia un recurso turístico aplicando dos técnicas similares con diferentes enfoques. El Análisis de Importancia-Rendimiento (IPA) y el Análisis Asimétrico de Importancia-Rendimiento (AIPA) se utilizaron para procesar los datos. Para cumplir con el objetivo, se realizó una encuesta, entre los meses de junio y diciembre de 2017, con un total de 171 encuestas válidas. Los resultados tanto del IPA como del AIPA sugieren que los gestores del Caminito deberían concentrarse en mejorar la señalización del lugar. En cambio, deberían darle poca prioridad a la generación de información turística y a la satisfacción con el entorno urbano. Sin embargo, mientras que el IPA considera la valoración del entorno medioambiental como un factor sobreexplotado el AIPA sugiere que aún puede contribuir. Asimismo, el AIPA coloca la limpieza medioambiental y la limpieza del caminito como factores fundamentales para alcanzar cifras altas en la satisfacción general de los usuarios. El uso sistemático de estas herramientas permite conocer qué factores añaden o merman valor a un recurso turístico, ayudando a mejorar la calidad y la sostenibilidad del recurso, mejorando finalmente la competitividad del destino y su éxito global. Además, estas herramientas pueden ayudar a trazar una estrategia de comunicación y diferenciación de marca del

Palabras clave: Análisis de Importancia-Rendimiento, Caminito del Rey, modelo Asimétrico de Análisis de Importancia-Rendimiento, recurso turístico, satisfacción general del consumidor.

1. Introduction

Tourism is a fundamental engine of progress, but its development without control can lead to serious and irreversible damage to the environment by which it is nourished (Romeril, 1989). Tourism is highly dependent on environmental resources (Bull, 1995), and in the case of mass tourism, this exploitation is intensive and can lead to deterioration at the environmental, economic and tourist levels. Any agent can exploit such resources and appropriate part of the income derived from them, as they are considered common resources, resulting in their susceptibility to overexploitation and a lack of incentives to improve productivity (Healy, 1994). This overexploitation of the tourist resources of a destination is not due, however, at least not in its entirety, to selfish or noncollaborative behaviour among the agents involved, although this may emerge even when they all seek the preservation of such resources (Bimonte, 2008).

Economic damage resulting from environmental deterioration is not visible in the short term (Bowen, 2000; Hutchinson, 1996; Kirk, 1995; 1998), but there are already destinations where the economic effects of such degradation are patent (Díaz, 1996; Gutierrez & García, 2001). This degradation means that some tourist resources are being spoiled by restrictions or withdrawal from use for reasons of sustainability (McKercher, 1993). It is therefore necessary to establish a method for avoids the degradation and allows the planning and management of a tourist resource to be improved, as well as meeting the needs of restoration (Priskin, 2001). Whether due to the awakening of environmental awareness or mere survival, the tourism and hotel sectors have become more aware of the importance of environmental responsibility (Cordente-Rodríguez, Mondéjar-Jiménez, & Villanueva-Álvaro, 2014), seeking to implement proper planning and management in the use and development of such tourism resources in order to allow both exploitation and conservation (Ning & Hoon, 2011).

Destinations have thus experienced profuse changes in their configuration in the transition from a Fordist to a post-Fordist vision (i Baidal, Sánchez, & Rebollo, 2013). Among the most significant changes of this new stage, we find, on the one hand, the promotion of rural tourism in multiple regions of southern Europe as an alternative to traditional mass tourism (Hernández, Suárez-Vega, & Santana-Jiménez, 2016), reducing dependence on the Fordist model in the case of Spain, helping to revive old destinations and solving some of the serious environmental problems of overcrowded destinations (Garcia, 2014). This has brought with it an increase in the number of destinations which compete in attracting tourists, as they are products that have to be positioned in the market (Sainaghi, 2006), increasing competitiveness between destinations by attracting tourists. The competitiveness of a destination depends to a large extent on its geographical and regional qualities (Smith, 1987). Destinations must develop a marketing campaign that is able to identify tourist profiles in order to attract and communicate the value of tourism resources compared to the competition (Chon & Olsen, 1990). Similarly, each destination must plan the correct combination of tourist resources, infrastructure, and processes in a strategic approach to the continuous improvement of the quality of the services provided to visitors (Crouch & Ritchie, 1999; Yoon, Gursoy, & Chen, 2001). A destination can thus be defined as the sum of its inherent, created and accessory tourist resources (Chen, Chen, Lee, & Tsai, 2016) or by the sum of the different agents that provide both public and private services (Camison, 1998; Hu & Ritchie, 1993).

On the other hand, we have gone from destinations with undifferentiated offers, which mainly market sun and the beach, and focused on achieving economies of scale, therefore overcrowding destinations as a result of mass tourism (Aguiló & Juaneda, 2000), to destinations that are characterized by the planning, control and quality of infrastructure, aimed at offering tourists a differential value and focused on raising standards in accommodation (Claver-Cortés, Molina-Azorín, & Pereira-Moliner, 2007). This last point is fundamental, since it has brought about changes in the way of assessing the success of a destination. In this new post-Fordist era, we have gone from measuring the success of a destination only through the number of tourists and tourist spending (Archer & Fletcher, 1996) to incorporating measures of consumer satisfaction (Fuchs & Weiermair, 2004; Kozak, 2002; Ritchie & Crouch, 2003). These measures aim to assess the quality of the destinations perceived by the client, due to the existing association between customer satisfaction and perceived quality constructs, which are occasionally used interchangeably (lacobucci, Ostrom, & Grayson, 1995), although the general view is that satisfaction is dependent on perceived quality, which is a more inclusive construct (Chen & Chen, 2010; Chen & Tsai, 2007; Soutar, 2001). This is intended to provide useful information with which to improve the management and planning on which this new stage is based, in order to develop a combination of tourism resources that improve the competitiveness and the perceived quality of the destination, understanding the final perceived quality of destination as the weighted sum of the perceived qualities of the agents involved (Soler & Gemar, 2017).

Some authors identify the management of tourist resources as the main engine of the tourist destination (e.g. Ellerbrock & Hite, 1980; Yang, Lin, & Han, 2010). Soler and Gemar (2017), on the other hand, identify the tourist companies in the interior of the province of Malaga as the most influential element in the perceived final quality, and placing tourism resource management second position. Yang and Fik (2014) identify tourism resources as one of the determining factors in local tourism growth. Tourist resources with a diverse nature, such as landscaping, gastronomy, or culture, among others (Uchiyama & Kohsaka, 2016), and that are usually categorized as natural, sociocultural and those created directly by the action of mankind (Healy, 1994). The management of tourism resources falls to destination management organizations, whose fundamental mission is to coordinate the tourist activities of the different agents and promote destinations through a differentiated image (Prideaux & Cooper, 2003).

Knowing what factors add to or diminish the value of a tourism resource is not easy, and requires a systematic analysis of its potential (Priskin, 2001). Managers must therefore know how to determine where an increase in the allocation of resources will be more efficient (Albayrak & Caber, 2015) and also the best method of management (Uchiyama & Kohsaka, 2016). The purpose of this article is to show how it is possible to analyse the perceived quality of a tourism resource using different techniques in order to improve control and planning in terms of the effective and sustainable exploitation of the resource, using a specific case. The Caminito del Rey is the most visited tourist resort, together with the city of Ronda, in the interior of Málaga province. This mountain trail has received prestigious national and international awards, including the Europa Nostra Award, the Bienal España de Arquitectura y Urbanismo and the Andalucía de Turismo Award (Celiento, 2017; El Mundo, 2016) and has become an example of how a tourism-depressed area can be transformed, with a relatively small investment, into an emerging destination in record time, with a huge positive impact on the surrounding area (Gemar, 2016).

This paper is structured as follows. After this introduction, the literature on methods of quality assessment and consumer satisfaction will be reviewed in Section Two. The methodology used will be explained in Section Three. In Section Four, the main empirical results will be presented, and these will be discussed in Section Six. Finally, the main conclusions of this work, its possible limitations as well as future lines of research will be described in Section Six.

2. Literature Review

The most well-known analyses with which to measure the impact of tourism attributes on consumer satisfaction, is probably the importance performance analysis (IPA) developed by Martilla and James (1977), mainly due to its ease of use and interpretation (Bruyere, Rodriguez, & Vaske, 2002). It is based on evaluating the performance evaluations of the attributes that make up the product separately and relating them through



correlation coefficients obtained by regression analysis with the general satisfaction of said service. These correlations constitute an assessment of the importance that the consumer gives to each attribute (Albayrak & Caber, 2015) showing the strengths and weaknesses of the attribute and its contribution to overall satisfaction with the product (Martin, 1995), which in this case is a tourist resource.

The method is common in both the lodging industry and tourism research (Chu & Choi, 2000; Qu & Sit, 2007). In the latter case, the product is usually the tourist destination itself. This method has been used, for example, in investigating the key factors of ski resorts in North Carolina, USA (Uysal, Howard, & Jamrozy, 1991), the city of Toronto, Canada (Joppe, Martin, & Waalen, 2001), Serbia (Dwyer, Dragićević, Armenski, Mihalič, & Knežević Cvelbar, 2016) and Slovenia (Mihalič, 2013) in Europe. Once the performance and importance values have been obtained for each attribute, they are positioned in a bidimensional matrix that identifies the strategic actions to be carried out for each attribute (Martilla & James, 1977).

The relationship between attribute performance and satisfaction does not, however, necessarily have to follow a linear function (Slevitch & Oh, 2010) and in fact there is evidence for a nonlinear relationship between performance and customer satisfaction (Tontini, dos Santos Bento, Milbratz, Volles, & Ferrari, 2017), including user ratings online (Fong, Lei, & Law, 2017; Park & Nicolau, 2015). The improvement in an attribute can progressively decrease its marginal contribution to the final quality perceived by tourists (Soler, Gémar, & Sánchez-Ollero, 2016). The importance performance analysis model has thus been criticised both for its theoretical framework and for the possible validity of its results (Sever, 2015). The main problem with this valuation method is that it do not take into account the different types of quality attributes and their different ways of impacting according to their potential to generate satisfaction or dissatisfaction (Matzler, Bailom, Hinterhuber, Renzl, & Pichler, 2004). This theory classifies the factors into three categories (basic, excitement and performance) and assumes that the effect of an attribute on the general satisfaction of the client varies according to its performance (Wong & Lai, 2018). The theory of the three factors has been used to analyse the structure of factors in sun and beach destinations such as the Balearic Islands (Alegre & Garau, 2011).

Other models have tried to capture the asymmetric nature of this relationship, such as the penalty–reward contrast analysis (PRCA) (Brandt, 1987). This model uses a reward index and a penalty index generated by a multiple regression analysis with two sets of dummy variables (Wong & Lai, 2018). Researchers such as Matzler and Sauerwein (2002), have compared the results of the IPA and PRCA models. The main advantage of PRCA is that it can discriminate between attributes in terms of relative importance (Mikulić & Prebežac, 2011a). Another model, the asymmetric impact-performance analysis (AIPA), combines the PRCA and the IPA, uses the theory of three factors

of consumer satisfaction to analyse these patterns (Albayrak & Caber, 2013) and presents, through a simple visual technique, an evaluation of the key attributes to increase the user's overall satisfaction (Caber, Albayrak, & Loiacono, 2013).

3. Methodology

A face-to-face survey was conducted between the months of June and December 2017. A total of 171 valid surveys were completed and used in the subsequent analysis.

The structured questionnaire was divided into two parts. Items associated with demographic or personal parameters (i.e. age, nationality, gender and all the variables associated with the type of trip) were included in this first part, and those associated with satisfaction with respect to specific aspects of tourism were collected in the second part. We used a scale with values between 1 and 10, which included the assessment of their satisfaction with each of the elements. In this way, together with a general assessment with the Caminito, respondents expressed their satisfaction level with the environment, differentiating between natural and urban environment, in line with suggestions by Kirillova, Fu and Cai (2014). Ratings were also collected regarding the leisure activities present in the destination, the security, the quality of the tourist information presented and satisfaction with the signposting, in line with Kim, Guo and Agrusa (2005) and the general vision of the literature. Satisfaction with cleaning was specifically introduced as it is one of the aspects most aligned with negative reviews (e.g. Banerjee & Chua, 2016; Barreda & Bilgihan, 2013). However, in order to differentiate between what can or cannot control the managers of the Caminito, the Caminito cleanliness and the environmental cleanliness were differentiated. Table 1 includes the variables used in the subsequent analysis and their corresponding descriptive statistics.

Table 1 - Descriptive statistics for satisfaction ratings

Table 1 Descriptive statistics for satisfaction ratings						
	Mean	Standard Deviation				
OVERALL SATISFACTION	9.23	0.988				
LEISURE	8.19	1.121				
NATURAL ENVIRONMENT	9.14	0.807				
URBAN ENVIRONMENT	7.78	0.704				
COURTESY	8.99	0.679				
TOURIST INFORMATION	7.01	1.577				
SIGNPOSTING	5.28	2.056				
SECURITY	8.71	1.092				
ENVIRONMENTAL CLEANLINESS	8.89	0.901				
CAMINITO CLEANLINESS	9.27	0.661				
Grand Mean	8.13					

In order to contrast the results for the general satisfaction aligned with the assumption of the symmetric or asymmetric influences of the attributes studied, two procedures were carried out. A description of these procedures is given below.

A linear analysis was first carried out under the assumption of symmetry, by means of regression using ordinary least squares, to analyse the influence of each individual satisfactions in the general satisfaction of the consumers. The influence of each

variable was extracted from the results of the regression, and compared graphically in a two-dimensional matrix. Values of standardized beta coefficients occupied the y-axis in this matrix, representing the dimension of importance and using the great mean or general average of the standardized betas as axis fixator. The valuation averages were plotted on the x-axis to represent the performance dimension, again using the grand mean as the axis reference point.

The second procedure, related to the analysis of asymmetry, aims to decompose and analyse the effects that the high and low valuations of each attribute have on the general satisfaction of consumers (Matzler & Sauerwein, 2002). In line with Albayrak and Caber (2015) the satisfaction ratings of each attribute were therefore recoded asymmetrically into two dichotomous variables each, representing high and low valuations. In our case, valuations of six out of ten or less were quantified as low valuations, and valuations of nine out of ten or more were categorised as high valuations. This asymmetry in recoding is common and used in several studies (e.g. Alegre & Garau, 2011; Mikulić & Prebežac, 2011b; among others) in order to combat positive asymmetry in the distribution of the data. Once the variables were recoded, another regression was carried out to determine the effect on the general satisfaction of the consumers of all the dichotomous variables of the previous step. As a result, two coefficients, high and low, were obtained for each attribute.

Based on such values and in line with the statement by Caber et al. (2013), the asymmetrical impact (AI) value was calculated for each attribute:

$$AI_i = SGP_i - DGP_i \tag{1}$$

This index measures the level of asymmetry of the impact of an attribute on the general satisfaction of the user (Mikulić & Prebežac, 2008). The range of possible values for the index ranges between -1 and 1, which are the values used to classify the attributes between basic, excitement or performance established in the three factors theory of Matzler et al. (2004). If the asymmetric impact value of the factor is between -1 and -0.1, it is a basic factor; between - 0.1 and 0.1 it would be classified as a performance factor; or between 0.1 and 1, it would be classified as an excitement factor (Albayrak & Caber, 2015; Caber et al., 2013; Mikulić & Prebežac 2008).

As shown in Equation (1), this index is calculated for each attribute as the difference between the satisfaction-generating potential (SGP) and the dissatisfaction-generating potential (DGP), both values calculated as follows from Equation (2) and Equation (3) respectively.

$$SGP_i = \frac{r_i}{RIOCS_i} \tag{2}$$

$$DGP_i = \frac{p_i}{RIOCS_i} \tag{3}$$

In these equations r_i represents the reward index for the attribute i and p_i is the penalty index for the attribute i. Both were extracted from the standardised coefficient of the regression of fictitious variables. The standardised betas of the dichotomous variables of high valuations are associated with

the reward indices and the standardised betas of the low variables with the penalisation indexes. $RIOCS_i$ is the range of impacts on customer satisfaction for the attribute i, calculated as expressed in equation (4).

$$RIOCS_I = |p_i| + |r_i| \tag{4}$$

The values were then represented in a two-dimensional matrix. as According to Mikulić and Prebežac (2008), among others, the asymmetrical impact values were positioned on the y-axis and the means of satisfaction ratings were reflected on the horizontal axis. As in the previous graph, the large mean was used to subdivide the x axis between low and high performance, and in this case, the values -0.1 and 0.1 were used as a reference point on the vertical axis, as reference for the asymmetric impact value.

4. Results

The results of the linear regression have been collected in Table 2. This regression yields a globally significant model and a R squared of 60.4%. Several points draw particular attention. The first is the non-significance of the constant term. Despite this, and due to the different properties of the model with and without a constant term, and the intention to compare the values of symmetric and asymmetric models, it has been decided to maintain the constant term. Secondly, the lack of significance in the two cleanliness assessments is notable: neither the cleanliness of the environment nor the cleaning of the Caminito affects the general satisfaction of the consumers. This could be due to an imbalance in the importance of some of the extremes of such valuations in the general satisfaction of the consumers, that is, in the existence of asymmetry in said factor. Thirdly, the negative sign that some coefficients present as regards their effect on satisfaction, such as the valuation of the natural and urban environment, and the valuation of tourist information, is noteworthy.

Table 2 - Linear regression for the general satisfaction of consumers

	B (Standard Deviation)	Beta Standard		
(Constant)	4396 (3.157)			
LEISURE	0.428** (0.163)	0.310		
NATURAL ENVIRONMENT	-0.802* (0.466)	-0.413		
URBAN ENVIRONMENT	-1.396*** (0.289)	-0.687		
COURTESY	0.419 (0.410)	0.219		
TOURIST INFORMATION	-0.308** (0.150)	-0.324		
SIGNPOSTING	0.355** (0.163)	0.371		
SECURITY	1.066*** (0.299)	0.513		
ENVIRONMENTAL CLEANLINESS	0.380 (0.273)	0.223		
CAMINITO CLEANLINESS	0.424 (0.301)	0.256		
R	0.777			
R square	0.604			
Adjusted R Square	0.536			
F	8.822			
Sig	0.000			
Durbin-Watson	1.861			
Grand Mean	0.075			



The importance performance analysis is shown in Figure 1. The results present the signposting as the only factor in the region 'Concentrate Here' to which it is recommended to allocate resources. In the same way, only the assessment of the natural environment is in the 'Possible overkill' region of the matrix. In contrast, the most populated region of the matrix is 'Keep up

the good work', in which the factors of safety, environmental cleanliness, leisure, courtesy and the cleanliness of the Caminito are positioned. Finally, the factors to which the IPA gives low priority are tourism information and assessment of the urban environment.

Concentrate here

O,5

SIGNPOSTING

O,5

ENVIRONMENTAL
CLEANLINESS

O,1

COURTESY

AAMINITO CLEANLINESS

O,1

TOURIST INFORMATION

NATURAL ENVIRONMENT

O,5

PERFORMANCE

O,7

POSSIBLE OVERNITE

O,7

POSSIBLE OVERNITE

O,7

Figure 1 - IPA Results

Source: Authors.

The results of the regression with dichotomous variables which analyses the asymmetric relationship between

general satisfaction and specific attributes is shown in Table $\ensuremath{\mathtt{3}}$

Table 3 - Results of the asymmetric regression

	Beta (Standard Deviation)				
	Low	High			
Constant	8.490*** (0.282)				
LEISURE	0.887*** (0.237)	0.996*** (0.159)			
NATURAL ENVIRONMENT	-2.377*** (0.846)	-0.317* (0.171)			
URBAN ENVIRONMENT		-0.931*** (0.253)			
COURTESY		-0.429*** (0.157)			
TOURIST INFORMATION	0.560*** (0.177)	0.015 (0.208)			
SIGNPOSTING	-0.479* (0.278)	-0.042 (0.270)			
SECURITY	-1.277 (0.826)	0.642*** (0.144)			
ENVIRONMENTAL CLEANLINESS		0.091 (0.175)			
CAMINITO CLEANLINESS		0.697*** (0.229)			
R	0.653				
R square	0.426				
Adjusted R Square	0.375				
F	8.280				
Sig	0.000				
Durbin-Watson	1.774				

The resulting model is significant and its predictive value, although inferior to that of the previous model, is good if we take into account the dichotomous nature of the explanatory variables. In this model, the constant, unlike the first, is significant. Similarly, due to the differences in the significance

for the same attribute, the results suggest an asymmetry in the importance of the evaluations. In this sense we can find significant values in their low values and non-significant values in the high ones, e.g. tourist information and signage. In the same way we can find high values that are significant while their



counterparts are not, as in the case of security. In other cases, both symbols have significance, and there are no values to compare. In this regression, Caminito cleaning is significant and positive as it receives high ratings from users.

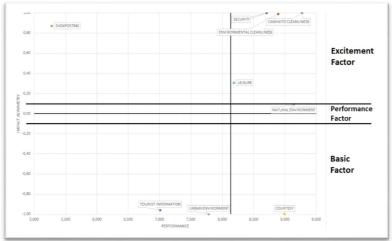
Table 4 includes the calculation of the values needed for the calculation of the satisfaction indexes and the asymmetry index, as well as the classification of each attribute based on this last index.

Table 4 - Index of impact on satisfaction

	PI	RI	RIOCS	SGP	DGP	IA	Classification
LEISURE	0.262	0.493	0.755	0.653	0.347	0.306	Excitement
NATURAL ENVIRONMENT	-0.184	-0.153	0.337	-0.455	-0.545	0.091	Performance
URBAN ENVIRONMENT	0.000	-0.250	0.251	-0.999	0.001	-1.000	Basic
COURTESY	0.000	-0.209	0.209	-0.999	0.001	-1.000	Basic
TOURIST INFORMATION	0.282	0.006	0.288	0.020	0.980	-0.959	Basic
SIGNPOSTING	-0.204	-0.014	0.218	-0.065	-0.935	0.870	Excitement
SECURITY	-0.099	0.325	0.424	0.767	-0.233	1.000	Excitement
ENVIRONMENTAL CLEANLINESS	0.000	0.046	0.046	0.994	0.006	0.989	Excitement
CAMINITO CLEANLINESS	0.000	0.237	0.237	0.999	0.001	0.998	Excitement

Figure 2 is based on the results of the previous table, and reflects the results of the AIPA. It shows very polarized values. In some cases this is due to the absence of low values. In others, however, asymmetry significantly affects one side or the other. In this sense, the results classify a single factor as performance, as responding to a behaviour in its relationship with general satisfaction that approximates a linear function. In the same way, three factors are categorised as basic: tourist information, the urban environment and courtesy. An absence of these factors would cause strong dissatisfaction, but their presence does not produce satisfaction in the client. On the contrary, there are more emotion factors, which include leisure, signaling, safety, cleanliness of the environment and cleaning of Caminito.

Figure 2 - AIPA Results



Source: Authors.

5. Discussion

The systematic use of these tools allows us to identify which factors add or reduce value to a tourism resource (Priskin, 2001) favouring satisfaction, and by extension the quality perceived by the client. This type of technique can be very useful in hospitality management (e.g. Albayrak & Caber, 2015), destinations management (e.g. Mihalič, 2013) and the specific management of tourist resources, making them equally valid for all tourism agents. The validity of these techniques as management analysis tools therefore seems unquestionable. Although the tools differ in the symmetrical and asymmetric approach, the results of both methodologies seem

complementary, that is, commitment to one does not necessarily imply the abandonment of the other. It is also true, however, that the results under the presumption of asymmetry suggest that the impact of some attributes on final satisfaction is extremely susceptible to extreme valuations, at one and/or the other end of the scale. While it is true that the asymmetric nature of some attributes has been widely contrasted in the literature (e.g. Anderson & Mittal, 2000; Chen, 2014; 2015; Slevitch & Oh, 2010), it is possible that other factors such as cultural distance or type of trip act as asymmetric moderators in satisfaction (Radojevic, Stanisic, & Stanic, 2017) and should be taken into account when planning the role of the tourist resource in the final offer of the destination.



Similarly, this work allows a comparison of the results for symmetric and asymmetric techniques for a specific tourist resource, such as Caminito del Rey, similar to the research of Matzler and Sauerwein (2002) in hospitals or Albayrak and Caber (2015) in hotels. It is thus possible to contrast the importance of different attributes in the generation of the general satisfaction of the clients, as well as the effects produced by the asymmetric nature of such attributes. In this sense, the results of IPA suggest that the Caminito's managers should give little priority to the generation of tourist information and satisfaction with the urban environment. Instead, they should concentrate on improving the signposting of the place. In the first case, it is possible that potential customers of the Caminito seek information in other media or channels, such as greater independence, such as comments from other consumers. It is also possible that the generation of information by the destination conditions expectations, in turn conditioning intentions in the destination (Arsal, Backman, & Baldwin, 2008), customer ratings (Engler, Winter, & Schulz, 2015) or even satisfaction with the brand itself (Lee & Back, 2008) and as result of the relationship between satisfaction and quality, mentioned above and widely accepted in the literature (e.g. Anderson, Fornell, & Lehmann, 1994; Baker & Crompton, 2000; Chen & Chen, 2010; Chen & Tsai, 2007; Cronin & Taylor, 1992; Soutar, 2001; among others) generating the final perceived quality by confronting expectations and performance (Manhas & Tukamushaba, 2015).

The AIPA results highlight the investment required to generate better signposting, as do the IPA results. This must be taken into account by the managers who must necessarily prioritize measures with which to improve this sometimes forgotten aspect within their development plans. The AIPA also places emphasis on other aspects that may cause dissatisfaction. Unlike the IPA, which placed little priority on tourist information or assessment of the urban environment, the AIPA shows that these attributes have the potential to cause dissatisfaction in a client. Managers must pay attention to improving the assessment of tourism information and the urban environment and avoiding dissatisfaction at this point. Ultimately, the holistic management of a customer's brand experience in the destination, is, according to Barnes, Mattsson and Sørensen (2014), a key factor in customer satisfaction with the destination, and in the intention to return and recommend.

The AIPA also emphasizes the condition as a performance factor for the assessment of the environmental environment and as a basic good, the courtesy. In the first case, the IPA considered this a possible factor in overexploitation, however, according to the AIPA this factor can continue to contribute to the overall satisfaction of users in a linear manner. In the case of courtesy, the IPA suggested maintaining effort in this aspect but the AIPA suggests that this dimension does not require an additional effort with which to improve the valuation of the users. Similarly, the AIPA places environmental cleanliness and the

cleaning of the Caminito as emotional factors, and they are therefore fundamental in reaching high figures in the general satisfaction of the users. This classification is completed by elements such as security and the valuation of leisure activities. In all these cases, any improvement that is possible will mean a significantly greater increase in the general satisfaction of users, and therefore managing the quality of these factors can be useful in finding workable processes without a significant increase in resources: resources that, as mentioned above, are necessary to improve signposting.

Managers should be aware that it would be a mistake to base the brand strategy on a differential value such as courtesy, which is a basic factor whose impact on final satisfaction is limited once a certain value is reached. Managers, on the other hand, should support their brand strengths for differentiation in emotion characteristics, including those with significantly high values (e.g. security, cleanliness and leisure). If necessary, managers should use factors whose nature is performance, and only use the basic factors to differentiate themselves from a competitor by comparison.

5. Conclusions

The purpose of this work was to determine what factors add to, or reduce the value of a tourist resource applying different techniques that took into consideration or not its asymmetric capacity to generate satisfaction and dissatisfaction. Focusing on the Caminito del Rey, a core tourism resource for the interior of the province of Malaga, this research used easily implemented two tools, and the results are easily comprehended, and for which development cost is tremendously reduced. There are many techniques to analyse the customer satisfaction and the perceived quality, and one of the limitations of this work is to have focused exclusively on two. The intention was to look for two techniques, symmetric and asymmetric, that share certain similarities, and it is proposed that future research incorporates and compares a greater number of techniques.

Similarly, the results discussed above cannot be extrapolated to other destinations or resources. However, we believe that all managers could benefit from the systematic application of this type of tools to improve the quality of the destination and the sustainability of the resources made available to the destination, finally improving the competitiveness of the destination and its global success. In addition to their use for the continuous improvement of the quality of the destination, these tools can be used by destination managers to trace a strategy of communication and brand differentiation for a destination. We propose that new research be conducted in other destinations with which to form a body of literature based on the impact of key attributes that tourism resources must have in order to contribute to the final satisfaction of tourists in destinations.

In the specific case of the management of Caminito del Rey, everything seems to indicate that it is not necessary to make efforts for its promotion. The resource should preferably be



promoted through visitors' word-of-mouth. The resources released should be dedicated, according to both tools, to the improvement of the Caminito signage. Finally, it is convenient to ensure the long-term success and sustainability of the destination and Caminito del Rey that managers maintain the link of the resource with an environmentally responsible management. This is clear from the importance that the results give to both the cleanliness of the Caminito and the cleanliness of the environment, to which must be added the importance of the final satisfaction of the tourist valuation of the natural environment.

Finally, this work joins those who try to evaluate the effects of the nature of attributes on satisfaction, showing the possible implications of the asymmetric nature of the attributes. In our case, some attributes are enormously sensitive to extreme evaluations, both positive and negative. We encourage future research that evaluates the effects of asymmetry on the final satisfaction of users in order to establish patterns of such influence. Such patterns could depend on the type of tourist resource, its life cycle, the attributes that make it up or other moderating attributes such as nationality, cultural distance or travel trip proposal.

Referencias

Aguiló, E., & Juaneda, S. C. (2000). Tourist expenditure for mass tourism markets. *Annals of Tourism Research*, *27*(3), 624–637.

Albayrak, T., & Caber, M. (2013). The symmetric and asymmetric influences of destination attributes on overall visitor satisfaction. *Current Issues in Tourism*, *16*(2), 149–166.

Albayrak, T., & Caber, M. (2015). Prioritisation of the hotel attributes according to their influence on satisfaction: A comparison of two techniques. *Tourism Management*, 46, 43–50.

Alegre, J., & Garau, J. (2011). The factor structure of tourist satisfaction at sun and sand destinations. *Journal of Travel Research*, *50*(1), 78–86.

Anderson, E. W., & Mittal, V. (2000). Strengthening the satisfaction-profit chain. *Journal of Service Research*, *3*(2), 107–120.

Anderson, E. W., Fornell, C., & Lehmann, D. R. (1994). Customer satisfaction, market share, and profitability: Findings from Sweden. *The Journal of Marketing*, *58*(3), 53–66.

Archer, B., & Fletcher, J. (1996). The economic impact of tourism in the Seychelles. *Annals of Tourism Research*, *23*(1), 23–47.

Arsal, I., Backman, S., & Baldwin, E. (2008). Influence of an Online Travel Community on Travel Decisions. En P. O'Connor, W. Höpken, & U. Gretzel (Edits.), *Information and Communication Technologies in Tourism 2008* (págs. 82–93). Vienna: Springer-Verlag.

Baker, D. A., & Crompton, J. L. (2000). Quality, satisfaction and behavioral intentions. *Annals of Tourism Research*, *27*(3), 785–804.

Banerjee, S., & Chua A, Y. (2016). In Search of Patterns Among Travellers' Hotel Ratings in TripAdvisor. *Tourism Management*, *53*, 125–131.

Barnes, S. J., Mattsson, J., & Sørensen, F. (2014). Destination Brand Experience and Visitor Behavior: Testing a Scale in the Tourism Context. *Annals of Tourism Research*, 48, 121–139.

Barreda, A., & Bilgihan, A. (2013). An Analysis of User-Generated An Analysis of User-Generated. *Journal of Hospitality and Tourism Technology*, 4(3), 263–280.

Bimonte, S. (2008). The "tragedy of tourism resources" as the outcome of a strategic game: a new analytical framework. *Ecological Economics*, *67*(3), 457–464.

Bowen, F. E. (2000). Environmental visibility: a trigger of green organizational response? *Business Strategy and the Environment*, *9*(2), 92-107.

Brandt, R. D. (1987). A procedure for identifying value-enhancing servicecomponents using customer satisfaction survey data. En C. Suprenant (Ed.), *Add Value to Your Service: The Key to Success* (págs. 61–65). Chicago: American Marketing Association.

Bruyere, B. L., Rodriguez, D. A., & Vaske, J. J. (2002). Enhancing importance-performance analysis through segmentation. *Journal of Travel & Tourism Marketing*, 12(1), 81–95.

Bull, A. O. (1995). *Economics of the Tourism Industry* (In Spanish ed.). Madrid: Alianza Economía.

Caber, M., Albayrak, T., & Loiacono, E. T. (2013). The classification of extranet attributes in terms of their asymmetric influences on overall user satisfaction: an introduction to asymmetric impact-performance analysis. *Journal of Travel Research*, 52(1), 106–116.

Camison, C. (1998). otal quality management and cultural change: a model of organisational development. *International Journal of Technology Management*, *16*(4-6), 479–493.

Celiento, I. (11 de October de 2017). *Platform Architettura and Design*. Recuperado el 14 de January de 2018, de http://www.platform-ad.com/renovation-of-the-caminito-del-rey-by-luis-machuca-asociados-arquitectos/

Chen, C. M., Chen, S. H., Lee, H. T., & Tsai, T. H. (2016). Exploring destination resources and competitiveness–A comparative analysis of tourists' perceptions and satisfaction toward an island of Taiwan. *Ocean & Coastal Management*, 119, 58–67.

Chen, C.-F., & Chen, F.-S. (2010). Experience quality, perceived value, satisfaction and behavioral intentions for heritage tourists. *Tourism Management*, *31*(1), 29–35.

Chen, C.-F., & Tsai, D. (2007). How destination image and evaluative factors affect behavioral intentions? *Tourism Management*, 28(4), 1115–1122.

Chen, L. F. (2014). A novel framework for customer-driven service strategies: A case-study of a restaurant chain. *Tourism Management*, 41, 119–128.

Chen, L. F. (2015). Exploring asymetric effects of attribute performance on customer satisfaction using association rule method. *International Journal of Hospitality Management*, 47, 54–64.

Chon, K. S., & Olsen, M. D. (1990). Applying the strategic management process in the management of tourism organizations. *Tourism Management*, 11(3), 206–213.

Chu, R. K., & Choi, T. (2000). An importance-performance analysis of hotel selection factors in the Hong Kong hotel industry: a comparison of business and leisure travellers. *Tourism Management*, *21*(4), 363–377.

Claver-Cortés, E., Molina-Azorín, J. F., & Pereira-Moliner, J. (2007). Competitiveness in mass tourism. *Annals of Tourism Research*, 34(3), 727-745.

Cordente-Rodríguez, M., Mondéjar-Jiménez, J. A., & Villanueva-Álvaro, J. J. (2014). Sustainability of nature: the power of the type of visitors. *Environmental Engineering and Management Journal, 13*(10), 2437-2447.

Cronin, J. J., & Taylor, S. A. (1992). Measuring service quality: A reexamination and extension. *Journal of Marketing*, *56*(3), 55–68.

Crouch, G. I., & Ritchie, J. B. (1999). Tourism, competitiveness, and societal prosperity. *Journal of Business Research*, 44(3), 197–152.

Díaz, A. (1996). Tourism and the Environment: An Economic Analysis. En A. Pedreño, V. Monfort, & Eds. (Ed.), *Introduction to Tourism* (págs. 275-293). Madrid: Civitas.

Dwyer, L., Dragićević, V., Armenski, T., Mihalič, T., & Knežević Cvelbar, L. (2016). Achieving destination competitiveness: an importance–performance analysis of Serbia. *Current Issues in Tourism.*, 19(13), 1309–1336.

El Mundo. (25 de May de 2016). *El Mundo*. Recuperado el 14 de January de 2018, de



http://www.elmundo.es/andalucia/malaga/2016/05/25/5745e84cca4 74184788b4593.html

Ellerbrock, M. J., & Hite, J. C. (1980). Factors affecting regional employment in tourism in the United States. *Journal of Travel Research*, *18*(3), 26–32.

Engler, T. H., Winter, P., & Schulz, M. (2015). Understanding Online Product Ratings: A Customer Satisfaction Model. *Journal of Retailing and Consumer Services*, 27, 113–120.

Fong, L. H., Lei, S. S., & Law, R. (2017). Asymmetry of hotel ratings on TripAdvisor: Evidence from single-versus dual-valence reviews. *Journal of Hospitality Marketing & Management*, 26(1), 67–82.

Fuchs, M., & Weiermair, K. (2004). Destination benchmarking: An indicator-system's potential for exploring guest satisfaction. *Journal of Travel Research*, 42(3), 212–225.

Garcia, F. A. (2014). A comparative study of the evolution of tourism policy in Spain and Portugal. *Tourism Management Perspectives, 11,* 34–50

Gemar, G. (2016). Desarrollo local y turismo: un estudio de caso. *Tourism & Management Studies International Conference* (pág. 95). Olhão: Escola Superior de Gestão, Hotelaria e Turismo do Algarve.

Gutierrez, D., & García, F. (2001). Ecological segmentation in tourist destinations. *Revista Estudios Turísticos*, 149, 23-38.

Healy, R. G. (1994). The "common pool" problem in tourism landscapes. *Annals of Tourism Research*, 21(3), 596–611.

Hernández, J. M., Suárez-Vega, R., & Santana-Jiménez, Y. (2016). The inter-relationship between rural and mass tourism: The case of Catalonia, Spain. *Tourism Management*, *54*, 43–57.

Hu, Y., & Ritchie, B. (1993). Measuring destination attractiveness: A contextual approach. *Journal of Travel Research*, 32(2), 25–34.

Hutchinson, C. (1996). Integrating environmental policy with business strategy. *Long Range Planning*, *29*(1), 11-23.

i Baidal, J. A., Sánchez, I. R., & Rebollo, J. F. (2013). The evolution of mass tourism destinations: New approaches beyond deterministic models in Benidorm (Spain). *Tourism Management*, 184–195.

lacobucci, D., Ostrom, A., & Grayson, K. (1995). Distinguishing service quality and customer satisfaction: the voice of the consumer. *Journal of Consumer Psychology*, *4*(3), 227–303.

Joppe, M., Martin, D. W., & Waalen, J. (2001). Toronto's image as a destination: a comparative importance-satisfaction analysis by origin of visitor. *Journal of Travel Research*, 39(3), 252–260.

Kim, S. S., Guo, Y., & Agrusa, J. (2005). Preference and positioning analyses of overseas destinations by mainland Chinese outbound pleasure tourists. *Journal of Travel Research*, *44*, 212–220.

Kirillova, K., Fu, X., & Cai, L. (2014). What makes a destination beautiful? Dimensions of tourist aesthetic judgment. *Tourism Management, 42,* 282–293.

Kirk, D. (1995). Environmental management in hotels. *International journal of contemporary hospitality management*, 7(6), 3-8.

Kirk, D. (1998). Attitudes to environmental management held by a group of hotel managers in Edinburgh. *International Journal of Hospitality Management*, 17(1), 33-47.

Kozak, M. (2002). Destination benchmarking. *Annals of Tourism Research*, 29(2), 497–519.

Lee, J., & Back, K. (2008). Attendee-Based Brand Equity. Tourism Management, 29(2), 331-344.

Manhas, P. S., & Tukamushaba, E. K. (2015). Understanding Service Experience and its Impact on Brand Image in Hospitality Sector. *International Journal of Hospitality Management, 45*, 77–87.

Martilla, J. A., & James, J. C. (1977). Importance-performance analysis. *Journal of Marketing*, 41(1), 77–99.

Martin, D. W. (1995). An importance/performance analysis of service providers' perception of quality service in the hotel industry. *Journal of Hospitality & Leisure Marketing*, *3*(1), 5–17.

Matzler, K., & Sauerwein, E. (2002). The factor structure of customer satisfaction: an empirical test of the importance grid and penalty-reward-contrast analysis. *International Journal of Service Industry Management*, 13(4), 314–332.

Matzler, K., Bailom, F., Hinterhuber, H. H., Renzl, B., & Pichler, J. (2004). The asymmetric relationship between attribute-level performance and overall customer satisfaction: a reconsideration of the importance–performance analysis. *Industrial Marketing Management, 33*(4), 271–277

McKercher, B. (1993). The unrecognized threat to tourism: can tourism survive 'sustainability'? *Tourism Management*, 14(2), 131–136.

Mihalič, T. (2013). Performance of environmental resources of a tourist destination: concept and application. *Journal of Travel Research*, *52*(5), 614–630.

Mikulić, J., & Prebežac, D. (2008). Prioritizing improvement of service attributes using impact range-performance analysis and impact-asymmetry analysis. *Managing Service Quality*, 18(6), 559–576.

Mikulić, J., & Prebežac, D. (2011a). A critical review of techniques for classifying quality attributes in the Kano model. *Managing Service Quality: An International Journal*, 21(1), 46–66.

Mikulić, J., & Prebežac, D. (2011b). Evaluating hotel animation programs at Mediterranean sun-and-sea resorts: an impact-asymmetry analysis. *Tourism Management, 32*, 688–696.

Ning, C., & Hoon, O. D. (2011). Sustainable development strategy of tourism resources offered by regional advantage: Exploring the feasibility of developing an 'exotic culture' resource for Weihai City of China. *International Conference on Green Buildings and Sustainable Cities*. 21, págs. 543–552. Bologna, Italy: Procedia Engineering.

Park, S., & Nicolau, J. L. (2015). Asymmetric effects of online consumer reviews. *Annals of Tourism Research*, *50*, 67–83.

Prideaux, B., & Cooper, C. (2003). Marketing and destination growth: A symbiotic relationship or simple coincidence? *Journal of Vacation Marketing*, *9*(1), 35-51.

Priskin, J. (2001). Assessment of natural resources for nature-based tourism: the case of the Central Coast Region of Western Australia. *Tourism Management, 22*(6), 637–648.

Qu, H., & Sit, C. Y. (2007). Hotel service quality in Hong Kong: An importance and performance analysis. *International Journal of Hospitality & Tourism Administration*, 8(3), 49–72.

Radojevic, T., Stanisic, N., & Stanic, N. (2017). Inside the Rating Scores: A Multilevel Analysis of the Factors Influencing Customer Satisfaction in the Hotel Industry. *Cornell Hospitality Quarterly*, *58*(2), 134–164.

Ritchie, J. B., & Crouch, G. I. (2003). *The competitive destination: A sustainable tourism perspective.* Wallingford:: Cabi.

Romeril, M. (1989). Tourism and the environment—accord or discord? *Tourism Management*, 10(3), 204–208.

Sainaghi, R. (2006). From contents to processes: Versus a dynamic destination management model (DDMM). *Tourism Management,* 27(5), 1053-1063.

Sever, I. (2015). Importance-performance analysis: A valid management tool? *Tourism Management*, 48, 43–53.

Slevitch, L., & Oh, H. (2010). Asymmetric relationship between attribute performance and customer satisfaction: A new perspective. *International Journal of Hospitality Management, 29*(4), 559–569.

Smith, S. L. (1987). Regional analysis of tourism resources. *Annals of Tourism Research*, 14, 254–273.

Soler, I. P., & Gemar, G. (2017). A measure of tourist experience quality: the case of inland tourism in Malaga. *Total Quality Management & Business Excellence*, 1–14. doi:10.1080/14783363.2017.1372185

Soler, I. P., Gémar, G., & Sánchez-Ollero, J. L. (2016). Are green hotels expensive? The impact of eco-friendly policies on hotel prices in spanish cities. *Environmental Engineering and Management Journal*, 15(7), 1511-1517.

Soutar, J. N. (2001). Service quality, customer satisfaction and value: An examination of their relationships. En J. Kandampuly, C. Mok, & B.



Sparks (Edits.), Service quality management in hospitality, tourism and leisure (págs. 97–110). New York: The Haworth Press.

Tontini, G., dos Santos Bento, G., Milbratz, T. C., Volles, B. K., & Ferrari, D. (2017). Exploring the nonlinear impact of critical incidents on customers' general evaluation of hospitality services. *International Journal of Hospitality Management*, 66, 106–116.

Uchiyama, Y., & Kohsaka, R. (2016). Cognitive value of tourism resources and their relationship with accessibility: A case of Noto region, Japan. *Tourism Management Perspectives*, 19, 61–68.

Uysal, M., Howard, G., & Jamrozy, U. (1991). An application of importance-performance analysis to a ski resort: a case study in North Carolina. *Visions in Leisure and Business, 10*(1), 16–25.

Wong, J. W., & Lai, I. K. (2018). Evaluating value co-creation activities in exhibitions: An impact-asymmetry analysis. *International Journal of Hospitality Management*, 72, 118–131.

Yang, C. H., Lin, H. L., & Han, C. C. (2010). Analysis of international tourist arrivals in China: The role of World Heritage Sites. *Tourism Management*, *31*(6), 827–837.

Yang, Y., & Fik, T. (2014). Spatial effects in regional tourism growth. *Annals of Tourism Research, 46,* 114–162.

Yoon, Y., Gursoy, D., & Chen, J. S. (2001). Validating a tourism development theory with structural equation modeling. *Tourism Management*, 22(4), 363–372.

Received: 16.09.2018

Revisions required: 20.12.2018

Accepted: 15.02.2019