Intrinsic and extrinsic values of destinations

Engin Bayraktaroğlu^{1*} and Nazmi Kozak²

¹ Anadolu University Faculty of Tourism, Yunus Emre Campus, 26470, Eskişehir, Turkey. E-mail: enginbayraktaroglu@anadolu.edu.tr

² Anadolu University Faculty of Tourism, Yunus Emre Campus, 26470, Eskişehir, Turkey. E-mail: nkozak@anadolu.edu.tr

*Corresponding author

Abstract

This study re-evaluates the concept of destination value to develop and propose a solution to the theoretical dilemmas encountered in tourism research. For this purpose, a hierarchical structure including the intrinsic and extrinsic values of destinations was developed first. A mixed methodology was adopted to achieve the research objectives. In the qualitative part of the study, data was gathered through literature review and document analysis. In the quantitative part, data was collected from field experts. Then importance weights for the themes and sub-themes forming destination value were measured by fuzzy criteria weighting using pairwise comparisons technique. The key results obtained with this study supported the validity of the distinction between the intrinsic and extrinsic values of destinations. Analysis revealed that any approach based on intrinsic and extrinsic destination values is suitable when dealing with the information from a range of disciplines.

Keywords: Destination value, intrinsic value, extrinsic value, fuzzy logic, weighted pairwise comparisons

Citation: Bayraktaroğlu, E. and Kozak, N. (2022). Intrinsic and extrinsic values of destinations. *European Journal of Tourism Research* 31, 3104.

© 2022 The Author(s)

This work is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0). To view a copy of this license, visit <https://creativecommons.org/licenses/by/4.0/>

Introduction

The concept of value is frequently examined in the fields of economics, anthropology, sociology, moral philosophy, theology and mathematics. For example in social sciences, Kluckhohn (1951, p. 395) described value as the “perception of desirable” that plays a role in influencing the individuals’ choices. In this respect, the value associated with the *desirable* is related to the ideas shaped by individuals’ previous experiences. From this point of view, value is the criteria of individuals’ judgements about legitimacy of their desires and if they are logical, useful or worth making an effort for.

The main concepts about the value in this paper were taken from the research conducted in the fields of marketing and management. The approaches used in the examination of these concepts can be summarized as follows: (1) social, economic and environmental values (Minnaert, Maitland, & Miller, 2009; Mitchell, 1969; Vujičić *et al.*, 2019); (2) value chain analysis at destination level (Georgantzas, 2003; van der Merwe & Saayman, 2003; Yilmaz & Bititci, 2006); (3) perceived value (Boksberger Philipp & Melsen, 2011; Dedeoğlu, 2019; Petrick & Backman, 2002; Ryu, Han, & Kim, 2008; Sánchez, Callarisa, Rodríguez, & Moliner, 2006); (4) experiential value (Fan, Hsu, & Lin, 2020; Hung, Peng, & Chen, 2019); (5) psychological value (Jewell & Crotts, 2002; van Rekom, 1995); (6) consumer value in tourism (Gallarza & Gil, 2008; Pechlaner, Smeral, & Matzier, 2002); (7) economic and social value of the recreational sites (Carlsen & Wood, 2004; Eagles, McLean, & Stabler, 2000; Gios, Goio, Notaro, & Raffaelli, 2006; Turpie & Joubert, 2001); (8) value creation (Braun, 2005; Calveras, 2019; Flagestad & Hope, 2001); (9) brand value (Carlbäck, 2019). These value-related conceptions encountered in tourism research also reflect the dominant paradigm in the field. The basic suggestion of this dominant paradigm is: *providing a competitive advantage for destinations by increasing the perceived and the experiential value through value creation*.

However, accepting that a tourist destination can be examined in the same way as an enterprise, or a product could prevent us from realizing the problems. Treating tourist destinations as packaged product is synonymous to accepting them *unsustainable at the outset*. On the other hand, to consider a tourist destination as a kind of enterprise means that its primary purpose is to make and increase profits. It should not be forgotten that what is defined as a destination does not desire to make a profit, to increase profit or to have a competitive advantage over other destinations.

Besides, in a recent study (Kunst & Ivandić, 2021), contradictions were identified between the destination competitiveness theory and measuring destination competitiveness. This study highlights that the stated contradictions were caused by the deficiencies of the measurement tool. However, these contradictions may also stem from the gaps in the destination competitiveness theory. For instance, increasing the number of tourists and tourism revenues through competitive advantage seems to have positive contributions to the economy. However, at some point, the costs of such actions make their economic benefits of destination insignificant. This may be solved with additions such as sustainability. This example regards destination competitiveness one of the theoretical dilemmas in tourism research. The main reason for this is the incompatibilities between theories dealing with geographical structures such as destinations, social structures such as societies or economic structures such as enterprises and individual theories dealing with tourists’ behaviours.

Considering these, the term *destination value*, as defined within the scope of this study, refers to all of elements that will make a tourist destination worth visiting. The reason for such a conceptualization is to develop and propose a solution to the theoretical dilemmas that are considered relevant to the current tourism research.

In accordance with the above stated goal, this paper is structured under six interrelated parts. After the introduction, the second part, literature review, provides a definition of destination value concept and, sub-concepts of intrinsic and extrinsic values. The third part explains the methodology of the study. In this respect, methodology section was tailored under two stages, as qualitative and quantitative research. The destination value model was also presented in the qualitative stage. Whereas the fourth part discusses the results of the conducted analysis, it also mentions about the distinction between intrinsic and extrinsic values of destinations. The fifth part of the paper summarizes the findings and proposes solutions to the mentioned shortcomings of tourism research. Finally, the sixth part of the paper presents limitations of the study and makes some suggestions for future research.

Literature Review

The Concept of Destination Value

According to Adler (1956, p. 272), value insights in sociology can be classified into four basic types and certain mixed types. These are; a) values as independent truths, eternal ideas, and dogmas; b) values considered to be in objects, materials or non-materials; c) values within man himself, originating in his biological needs or his mind; and d) values equated with actions. In this respect, *destination value*, as defined in the scope of this study, is considered to be the types b and d values, out of the ones listed above.

One of the assumptions of the *destination value* approach developed within the scope of this study has similar aspects with the proposition that tourists participate in this mobility *to absorb* destination value (Bayraktaroğlu, 2019). When we accept that the value is a kind of information and define memory as “a permanent record of a prior experience” (Braun-LaTour, Grinley, & Loftus, 2006); it could be claimed that value of a destination for a tourist is a recorded travel experience. In one aspect, this assumption evokes MacCannell’s (1973) idea claiming that tourists are the kind of people seeking authenticity. When it is accepted that an authentic entity is worthy, it could also be accepted that this entity is a carrier of value and acts as a mediator in an individual’s value adoption process. By taking this approach one step further, it could also be concluded that authenticity-seeking tourists are also seeking value.

In addition, Willams and Zelinsky’s (1970) proposal of ‘heliotropic’ or Gray’s (1970) synonymous proposal of ‘sun lust’ assert that tourists “are more motivated by the desire to experience different or better amenities for a specific purpose than those available in their living environment”. In the same way, Gray also proposes to take ‘wanderlust’ cultural motives into account. These new horizon opening ideas in the early stages of tourism research contain traces of value. Another further assumption implied that tourists want to absorb the presumed value of the things mentioned above. It is also possible to accept the value as the information that involves “push and pull factors” (Dann, 1977) or “seeking and escaping” (Iso-Ahola, 1982). In addition to this, traces of destinations regarding value could be found in the definitions regarding “destination attributes” used by researchers such as Litvin and Ng Sok Ling (2001) and, Klenosky (2002). Within the scope of this study, the destination value is accepted basically as a kind of information that takes place in entities, things, experiences and also ideas.

Within the scope of this study, tourist destinations are defined as *condition-dependent spaces*. “*Being visited*” is accepted as the core condition to assess a space as a tourist destination. In this context, it is not difficult to claim for destinations that they can exist as long as they keep attracting new visitors. Thus, it could also be claimed that destinations have some characteristics making them worth visiting. From this point of view, the term *destination value* refers to all of the elements that make a tourist destination *worth visiting*.

In this respect, the concept of destination value can be regarded as a term that exposes the possibility of analysing the ongoing theoretical dilemmas, especially the difference between viewpoints that can be called *bottom-up* or *top-down*. It also offers an opportunity to overcome the differences “between theories that start from a certain notion of social structure, or social order, or some other totalizing notion, and theories that start from individual motivation” (Graeber, 2001, p. 20).

Intrinsic and Extrinsic Values of Destinations

Intrinsic value is a term with various similar meanings. Generally, two separate major views (subjective and objective views) are accepted regarding intrinsic value. One of these is “human valuing” and the other is not humanly conferred (Sandler, 2012). In this study, things with intrinsic value are considered have contain value on their own (O'Neill, 1992, p. 119). Naess (1984) thinks that the welfare of the life of non-human creatures in the world has a value in itself. This value is independent of the provision of any instrumental benefit for human being. From this perspective, it could be said that the term intrinsic value is used to refer to the value of an object due to “its merit”. In this context, intrinsic value is used synonymously with “*objective value*” (O'Neill, 1992, p. 120). It can be seen that definitions of intrinsic value include the value of something “in itself”, “as an end”, “for its own sake” (Kagan, 1998), “as such” or “on its own” (Ronnow-Rasmussen, 2015). Within the scope of this study, a similar approach was adopted for the *intrinsic values of a destination*. From this point of view, the intrinsic value of a destination refers to what is indispensable for a space in the context of the tourism phenomenon. In other words, the intrinsic values of a destination are the features that make a place worth visiting for all the values that it offers, even if there is no industrialized tourism activity.

There are also various definitions of *extrinsic value*. The fundamental definition of extrinsic value deals with the things which are not valuable for its own sake (Ronnow-Rasmussen, 2015). In this perspective “the values that need to be justified by other values” are accepted as extrinsic values (Harold, 2005). Another definition discussed in this study is “instrumental value” or instrumental feature of extrinsic value proposed by Lewis (1955). An instrumental feature of the extrinsic value and its bases on the “utilitarian benefits” (Shamim, Ghazali, & Jamak, 2015) are important for explaining the destination value defined in the study. For example, Seddighi and Theocharous (2002) reported that “acts of political instability” is playing an important role in the tourists' destination selection. In this perspective, political stability is seen as an extrinsic value of a destination. Simply, the *extrinsic value of a destination* is the type of *destination value* that plays a catalyser or an activator role in tourism and especially in industrialized tourism.

Methodology

A mixed methodology was adopted for achieving the objectives of the study. The approach used in this study could be summarized as an explanatory sequential design (Creswell, 2014; Ivankova, Creswell, & Stick, 2006). In the first part (qualitative) of the study, the destination value model was developed based on the relevant literature and document review. In the second part (quantitative) of the study, the model developed in the first part was tested through fuzzy criteria weighting by pairwise comparisons technique. The qualitative data (for the first part) and the quantitative data (for the second part) were both collected and analysed separately.

First Part - Modelling the Structure of Destination Value

Reviewed Literature

Within the scope of the study, a discussion was made on the literature of value. As a result, a definition of destination value is developed. In this direction, a hierarchical model was prepared due to the factors and sub-factors forming the destination value. Literature and document reviews were conducted to

create a hierarchical model. While determining the reviewed literature, studies that were discussed, defined or aimed to measure the concepts such as destination attractiveness, tourist attractions, tourism resources, travel motivations, tourist motives are taken into consideration (Table 1).

Table 1. *Core Literature Used for Modelling*

Author(s)	Title	Type	Related Section
Olalı (1963)	Turizm teorisi ve politikası [Tourism Theory and Policy]	Book	Turizmin Hammaddeleri [Raw Materials of Tourism] (pp. 46~)
Gearing, Swart, & Var (1974)	Establishing a measure of touristic attractiveness	Article	-
Var, Beck, & Loftus (1977)	Determination of touristic attractiveness of the touristic areas in British Columbia.	Article	-
Ritchie & Zins (1978)	Culture as a determinant of the attractiveness of tourism regions	Article	-
Ferrario (1979)	The evaluation of tourist resources: an applied methodology	Article	-
Backman, Uysal, & Backman (1991)	Regional analysis of tourism resources	Article	-
Hu & Ritchie (1993)	Measuring destination attractiveness: a contextual approach	Article	-
Spotts (1997)	Regional Analysis of Tourism Resources for Marketing Purposes	Article	-
Hong-bumm (1998)	Perceived attractiveness of Korean destinations	Article	-
Murphy, Pritchard, & Smith (2000)	The destination product and its impact on traveller perceptions	Article	-
Deng, King, & Bauer (2002)	Evaluating natural attractions for tourism	Article	-
Ritchie & Crouch (2003)	The competitive destination: a sustainable tourism perspective	Book	A Model of Destination Competitiveness (pp. 60~)
Formica & Uysal (2006)	Destination attractiveness based on supply and demand evaluations: an analytical framework	Article	-
Oliveira & Pereira (2008)	Who values what in a tourism destination? The case of Madeira Island	Article	-
Cracolici & Nijkamp (2009)	The attractiveness and competitiveness of tourist destinations: a study of southern Italian regions	Article	-
Goeldner & Ritchie (2009)	Tourism: principles, practices, philosophies	Book	Destination Attractiveness Factors (pp. 263~)
Lee, Huang, & Yeh (2010)	Developing an evaluation model for destination attractiveness: Sustainable forest recreation tourism in Taiwan	Article	-
Duman & Kozak (2010)	Turkish Tourism Product: Differentiation and Competitiveness	Article	-
Akis Roney (2011)	Turizm: Bir Sistemin Analizi [Tourism: Analysis of a System]	Book	Bir Endüstri ve Bir Sistem Olarak Turizm [Tourism as an Industry and a System] (pp. 6~)
Johnson (2017)	Millennials' perception of destination attractiveness	Master's Thesis	Destination Attractiveness Studies (pp. 28~)

Documents Analysed

The analysed documents were part of the deciphered interview texts of the *Oral History Project on the Tourism and Hospitality Industry in Turkey* (see Appendix 1). The Oral History Project on the Tourism and Hospitality Industry in Turkey was a scientific project supported by Anadolu University's Scientific Research Projects Commission (Project No: 1209E152). Within the scope of the project, 696 hour-long

audio and visual records of interviews with 522 tourism professionals were produced. Outputs from this project were published in a ten-volume book.

Modelling Procedures

In this qualitative part, thematic content analysis (Emmons & King, 1992; Winter, 1992) was adopted to reach the objectives of the study. An element pool was created from the items determined as a result of the literature review and document analysis. Subsequently, the items in this pool were subjected to a thematic classification. While making this classification, keeping the number of forming elements at the lowest level by interpreting the scope of the elements as broadly as possible was aimed. Thus, the hierarchical model was accomplished in four themes, two side-themes and 22 sub-themes (or forming elements).

The hierarchical model was changed in three steps (times of coding) from the beginning to the end of the qualitative stage of the study. These steps are the procedure followed to increase the trustworthiness of qualitative research via *intra-coder reliability*. Intra-coder reliability is a suitable alternative with member-check or participant validation, especially when a researcher working alone or dealing with complex and unstructured data (Morse, 1997; Saldaña, 2016). Intra-coder reliability allows a researcher to evaluate the consistency of data s/he is coding. In this technique, it is recommended to code and re-code the data at different times (Miles, Huberman, & Saldaña, 2014). It is suggested that the consistency between individual times of coding should be at least 85-90%, depending on the complexity of the data and structure (Morse, 1997). It is also recommended that the findings related to these times of coding with experts should be assessed. Thus, valuable feedback is obtained throughout the analytical processes executed and the trustworthiness of the results are increased (Austin & Sutton, 2014; Barbour, 2001).

The findings of the first coding (coding time 1) were discussed with an expert panel consisting of two professors and one associate professor owning more than 25 years of professional experience in their field. This expert panel concluded that a simpler model could be possible by combining some of the elements and interpreting some others more broadly.

The findings of the second coding (coding time 2) were discussed with the same expert panel. As a result, some changes were made. As an example, *traditions* which were considered as a sub-element of *community and culture-based value*, was expanded and named as lifestyles. The name of the *industrial value* theme was changed to *industry based value* to avoid misunderstanding. Another change was made by subtracting the prices factor handled under *industry based value*. As discussed in the previous titles, prices were accepted as a measurement unit of the value. Therefore, it was not considered as an element forming the destination value. After the third coding (coding time 3) which started for such purposes, the themes and the forming elements (sub-themes) of the model were formed as follows (numbers= themes, letters= forming elements or sub-themes), (changes are highlighted in *italics*);

- (1) Nature-based value consisting of (a) *climate and weather*, (b) physical geography, (c) biodiversity, (d) environmental liveability and (e) environmental protection and landscaping;
- (2) community and culture-based value consisting of (a) narratives, (b) artefacts, (c) food and beverage culture, (d) religion and beliefs, (e) traditions, (f) special events;
- (3) political value consisting of (a) political will, (b) international relations, (c) safety and security, (d) local political atmosphere, (e) legal system, (f) education and research;
- (4) *industry-based value* consisting of (a) infrastructure, (b) *hospitality*, (c) *transportation*, (d) human resources, (e) popularity.

Destination Value Model

As a result of the above-mentioned procedures, *destination value* was divided into two as the *intrinsic* and *extrinsic value of a destination*. *Nature-based values* and *community & culture-based values* were defined as the values that affect the *intrinsic value of a destination*, while *political values* and *industry-based values* were defined as the values that affect the *extrinsic value of a destination*.

Figure 1. *Destination Value Model*

Figure 1 illustrates the intrinsic and extrinsic value distinction. This illustration was inspired by the atomic model of Rutherford (1911). With this model, it was emphasized that metaphorically, intrinsic values in the core have a more important role than extrinsic values in terms of destination value. For these reasons, we found the illustration to be metaphorically appropriate. This illustration also shows the distinction between intrinsic and extrinsic values. Thus, the final model was structured as follows (numbers= themes, letters= forming elements or sub-themes);

(1) Nature-based value consisting of (a) climate and weather, (b) physical geography, (c) biodiversity, (d) environmental liveability and (e) environmental protection and landscaping; (2) community and culture-based value consisting of (a) narratives, (b) artefacts, (c) food and beverage culture, (d) religion and beliefs, (e) traditions, (f) special events;	}	Intrinsic values
(3) political value consisting of (a) political will, (b) international relations, (c) safety and security, (d) local political atmosphere, (e) legal system, (f) education and research; (4) <i>industry-based value</i> consisting of (a) infrastructure, (b) <i>hospitality</i>, (c) <i>transportation</i>, (d) human resources, (e) popularity;	}	Extrinsic values

Second Part - Testing the Structure of Destination Value Model

Fuzzy Sets Theory

Fuzzy sets theory was developed by Zadeh (1965) to overcome this presumed “imprecision” and “vagueness” inherent in human judgements. Fuzzy sets are distinguished from traditional sets using crisp numerical values because they also rationalize the use of linguistic variables during the modelling.

In this study, a fuzzy set $\tilde{A}$ in a universe of discourse X is characterized by a membership function of $\mu_{\tilde{A}}(x)$ which is associated with each element x in X a real number in the interval $[0,1]$. The function value of $\mu_{\tilde{A}}(x)$ is termed the grade of membership of x in $\tilde{A}$ (Chen, Lin, & Huang, 2006; Kaufmann & Gupta, 1991).

A positive trapezoidal fuzzy number (PTFN) $\tilde{m}$ is defined as $\tilde{m} = (m_{\alpha}, m_{\beta}, m_{\gamma}, m_{\delta})$ and considered to have a membership function of $\mu_{\tilde{m}}(x)$ where $[m_{\beta}, m_{\gamma}]$ is called the mode interval and; m_{α} and m_{δ} are called upper and lower limits of $\tilde{m}$ (1) (Figure 2) (Abdullah & Najib, 2014; Chen *et al.*, 2006, p. 292; Sadi-Nezhad & Khalili Damghani, 2010; Zheng, Zhu, Tian, Chen, & Sun, 2012).

$$\mu_{\tilde{m}}(x) = \left\{ \begin{array}{ll} 0, & x < m_{\alpha}, \\ \frac{x-m_{\alpha}}{m_{\beta}-m_{\alpha}}, & m_{\alpha} \leq x \leq m_{\beta}, \\ 1, & m_{\beta} \leq x \leq m_{\gamma}, \\ \frac{x-m_{\delta}}{m_{\gamma}-m_{\delta}}, & m_{\gamma} \leq x \leq m_{\delta}, \\ 0, & x > m_{\delta}. \end{array} \right\} \quad (1)$$

Figure 2. A trapezoidal membership function (Chen et al., 2006, p. 292)

When x is accepted as a crisp value, the PTFN representation of the crisp value x is $(x, x, x, x; 1, 1)$ as shown in Figure 3 (Abdullah & Najib, 2014)

Figure 3. Crisp value x (Abdullah & Najib, 2014, p. 3300)

When $\tilde{m}$ and $\tilde{n}$ are considered as two trapezoidal fuzzy numbers parameterized as $\tilde{m} = (m_\alpha, m_\beta, m_\gamma, m_\delta)$ and $\tilde{n} = (n_\alpha, n_\beta, n_\gamma, n_\delta)$, the operations for these numbers will appear as shown in Table 2 (Abdullah & Najib, 2014; Sadi-Nezhad & Khalili Damghani, 2010; Zheng et al., 2012);

Defuzzification is an inverse conversion process that maps the output fuzzy number back from the fuzzy space to crisp space. When $\tilde{m} = (m_\alpha, m_\beta, m_\gamma, m_\delta)$ is accepted as a fuzzy number, and x is accepted as the crisp value of this fuzzy number $\tilde{m}$, defuzzification $[D(\tilde{m})]$ is performed as follows:

$$D(\tilde{m}) = x = \frac{m_\alpha + 2m_\beta + 2m_\gamma + m_\delta}{6} \quad (2)$$

Table 2. Fuzzy Operations

$\tilde{m} \oplus \tilde{n} = (m_\alpha, m_\beta, m_\gamma, m_\delta) \oplus (n_\alpha, n_\beta, n_\gamma, n_\delta) = (m_\alpha + n_\alpha, m_\beta + n_\beta, m_\gamma + n_\gamma, m_\delta + n_\delta)$
$\tilde{m} \ominus \tilde{n} = (m_\alpha, m_\beta, m_\gamma, m_\delta) \ominus (n_\alpha, n_\beta, n_\gamma, n_\delta) = (m_\alpha - n_\alpha, m_\beta - n_\beta, m_\gamma - n_\gamma, m_\delta - n_\delta)$
$\tilde{m} \otimes \tilde{n} = (m_\alpha, m_\beta, m_\gamma, m_\delta) \otimes (n_\alpha, n_\beta, n_\gamma, n_\delta) = (m_\alpha n_\alpha, m_\beta n_\beta, m_\gamma n_\gamma, m_\delta n_\delta)$
$\tilde{m} \oslash \tilde{n} = (m_\alpha, m_\beta, m_\gamma, m_\delta) \oslash (n_\alpha, n_\beta, n_\gamma, n_\delta) = \left(\frac{m_\alpha}{n_\alpha}, \frac{m_\beta}{n_\beta}, \frac{m_\gamma}{n_\gamma}, \frac{m_\delta}{n_\delta} \right)$
$k\tilde{m} = (km_\alpha, km_\beta, km_\gamma, km_\delta)$
$(\tilde{m})^{-1} = \left(\frac{1}{m_\delta}, \frac{1}{m_\gamma}, \frac{1}{m_\beta}, \frac{1}{m_\alpha} \right)$
Operations: $\oplus$ = fuzzy addition, $\ominus$ = fuzzy subtraction, $\otimes$ = fuzzy multiplication, $\oslash$ = fuzzy division

This technique called *graded mean integration approach* (2) for defuzzification is preferred because it follows the steps of weighting with crisp numbers and allows for the defuzzification of individual or consolidated judgements given by participants (Kahraman, Öztayşi, Uçal Sarı, & Turanoğlu, 2014; Zeng, An, & Smith, 2007).

The main purpose of using fuzzy set theory could be summarized as ensuring “a better performance for specific applications” made in this study. Because it is accepted that “fuzzy logic allows decision-making with estimated values under incomplete or uncertain information” (Kahraman, Ertay, & Büyüközkan, 2006, p. 396).

Data Analysis

In the following sections, the method used in the study is explained step by step. The main reason for this is that various approaches were used together in this study. Therefore, the explanation of the stages of analysis and the equations used are a necessity of ethical principles.

The data collected were analysed by integrating fuzzy calculations into algorithms prepared by Goepel (2018) on MS Excel in order to calculate the equations presented in the following sections. The calculations were carried out in four phases (Figure 4).

Figure 4. Data Analysis Process

First phase – consistency calculations related to expert judgements

Calculations were first made separately for destination value and the sub-factors determining it and then structured as two parallel processes in terms of mass tourism, in two contexts: culture and history destinations; and sea, sand, sun destinations.

These calculations are based on the comparison of the number of elements and the eigenvalues (λ) of the elements. For the calculation of eigenvalue, first, matrix multiplication is made between the *pairwise comparison matrix* and the w column vector. Then, eigenvectors (E) are generated (3). Finally, the eigenvalue related to the comparisons is obtained by calculating the arithmetic mean of eigenvectors (4).

$$E_i = \frac{ap_i}{p_i} \quad (3)$$

$$\lambda_{\max} = \frac{\sum_{i=1}^n E_i}{N} \quad (4)$$

In Satty's process (1980), the *consistency index* (CI) is calculated by (5). Then, the CR is calculated by dividing the CI by the value corresponding to the number of elements from the RI (6). We used this for calculating individual consistency.

$$CI = \frac{\lambda_{\max} - N}{N - 1} \quad (5)$$

$$CR = \frac{CI}{RI} \quad (6)$$

In this study, *Alonso/Lamata linear fit resulting* (7) were used to calculate the consolidated CR. According to Alonso and Lamata (2006), this technique aims to eliminate the inflexible and restrictive characteristics of traditional consistency criteria for comparison matrices, especially when the size of the matrices increases.

$$CR = \frac{\lambda_{\max} - N}{2,7699N - 4,3513 - N} \quad (7)$$

In Satty's original method, we see that the matrices with a CR of 0.10 or less are considered to be consistent (Saaty & Vargas, 2012, p. 9). The use of matrices with an inconsistency ratio of less than 0.20 is considered suitable for the calculations (Saaty, 1977). In the literature, it is seen that the inconsistencies between 0.10 and 0.20 are acceptable and the matrices with these values are used in the calculations according to the needs of the structure discussed (Byun, 2001; Dawotola, van Gelder, & Vrijling, 2009; S. Lee & Walsh, 2011; Liang & Peng, 2017). In this study, matrices that have CRs less than

0.15 were accepted as consistent. The reason for this is the flexibility needed due to the size of the structure subjected to pairwise comparisons.

Second phase – fuzzy criteria weighting by pairwise comparisons

In this study, we decided to use a reminiscent approach in calculations which Kahraman *et al.* (2014, p. 52) used in their study and described as “Buckley’s (1985) fuzzy AHP method has received no criticism.” In Step 1, for fuzzification, the *scale of relative importance used in the pairwise comparisons* prepared by (Zheng *et al.*, 2012, p. 232) was used. While the scale was applied to the study, the table in which intermediate and reciprocal values calculated by Abdullah and Najib (2014, p. 3300) were used.

When the columns are accepted as i and the rows are accepted as j , fuzzification is made for the values above the main diagonal, a_{ij} . For calculating the values below the main diagonal, a similar process which is also used when creating traditional comparison matrices is resolved (8). Therefore, when $\tilde{a}_{ij} = (a_{ij}^\alpha, a_{ij}^\beta, a_{ij}^\gamma, a_{ij}^\delta)$ is accepted, $1 / \tilde{a}_{ij}$ needs to be executed as in (9) (Abdullah & Najib, 2014; Zheng *et al.*, 2012). As a result of these calculations, fuzzy pairwise comparison matrices of n number of participants were prepared for each element.

$$\tilde{a}_{ji} = \frac{1}{\tilde{a}_{ij}} \quad (8)$$

$$\tilde{a}_{ji} = \frac{1}{\tilde{a}_{ij}} = \left(\frac{1}{a_{ij}^\delta}, \frac{1}{a_{ij}^\gamma}, \frac{1}{a_{ij}^\beta}, \frac{1}{a_{ij}^\alpha} \right) \quad (9)$$

In Step 2, the consolidated pairwise comparison matrix (B) which contains the answers of each participant (k) was created. For calculating the weighted geometric mean (3.10), each $a_{ij(k)}$ of pairwise comparison matrices was used and multiplied with the related participant’s *weight multiplier* (w_k). In this study, the individual weight multiplier is accepted as 1 ($w_k=1$).

$$\tilde{b}_{ij} = \exp \frac{\sum_{k=1}^N w_k \ln \tilde{a}_{ij(k)}}{\sum_{k=1}^N w_k} \quad (10)$$

In order to calculate the relative weights ($\tilde{P}_i$) of the elements, the row geometric mean method (3.11) was used, and the *consolidated weights* were calculated due to the normalization of row vectors ($\tilde{R}_i$) (12).

$$\tilde{R}_i = \exp \left[\frac{1}{N} \sum_{j=1}^N \ln(\tilde{k}_{ij}) \right] = \left(\prod_{i=1}^N \tilde{k}_{ij} \right)^{\frac{1}{N}} \quad (11)$$

$$\tilde{P}_i = \tilde{R}_i / \sum_{i=1}^N \tilde{R}_i \quad (12)$$

Third phase – defuzzification and consistency calculations

For consistency analysis, it is necessary to first defuzzify the consolidated fuzzy pairwise comparisons matrix. For each $\tilde{a}_{ij}$ expressing a fuzzy set, the crisp values [$D(a_{ij})$] are calculated as (2).

Equations related to the eigenvalue and Alonso/Lamata CR were given in previous topics (see 4, 5, 6, 7). In addition, the geometric CI (GCI) (13) (Aguarón & Moreno-Jiménez, 2003):

$$GCI = \frac{2 \sum_{i < j} \ln a_{ij} - \ln \frac{p_i}{p_j}}{(N-1)(N-2)} \quad (13)$$

dissonance (ψ) (ordinal inconsistency) (14) and total dissonance (Ψ) (15) (Siraj, 2011):

$$\psi_{ij} = \frac{1}{n-2} \sum_k \text{step}(-\log(a_{ij}) \log(a_{ik} a_{kj})) > 1 \quad (14)$$

where $i \neq k \neq j$ and the step function is defined as

$$\text{step}(x) = \begin{cases} 1 & \text{if } x > 0 \\ 0 & \text{otherwise} \end{cases}$$

$$\Psi = \frac{2}{n(n-1)} \sum_{i=1}^{n-1} \sum_{j=i+1}^n \psi_{ij} \quad (15)$$

and the mean relative error (MRE) (16 and 17) (Tomashevskii, 2015) was calculated in addition to CR.

Eigenvector technique:

$$\Delta w_i = \sqrt{\frac{1}{n-1} \sum_{k=1}^n \left(\frac{n}{\lambda_{\max}} a_{ik} w_k - w_i \right)^2} \quad (16)$$

$i = 1, \dots, n$

$$\left(\frac{\Delta w_i}{w_i} \right)_{\text{mean}} = \sqrt{\frac{1}{n} \sum_{j=1}^n \left(\frac{\Delta w_i}{w_i} \right)^2} \quad (17)$$

The GCI is a technique that measures cardinal consistency such as the abovementioned *Alonso/Lamata CR*. The difference between the two is that *Alonso/Lamata CR* is based on the eigenvector and *GCI* is a distance-based technique. Another type of consistency that would arise when considering the consistency of *pairwise comparisons matrices* is the ordinal consistency, also called *transition*. Satty's

(1980) *CR*, *Alonso/Lamata CR* or *GCI* does not take *transition* into account when measuring *cardinal consistency*. In this study, *ordinal consistency* was also measured by *dissonance* (Ψ) calculations (Siraj, 2011, pp. 47-52; 71). For this purpose, the *congruence matrix* was formed. *Dissonance* calculations were then performed. $\Psi = 0$ means *perfect congruence*. Siraj (2011, p. 148) produced some findings related to *transition* in matrices when $\Psi \approx 0,20$. In this study, $\Psi < 0,20$ was used as an acceptable value.

MRE is used to identify errors in *eigenvector based consistency calculations*. Tomashevskii (2015) suggests that errors in the weights sometimes reduce the consistency, even if the GCI is within the appropriate limits. The approach proposed for this purpose is to take MRE into account (16, 17).

Fourth phase – model integration

For model integration, it is necessary to calculate the universal weights of the sub-factors of each factor in the model. When the P_i is accepted as the defuzzified local weight of each factor, it is possible to measure universal weights (G_i). When S_i is considered to be the parent factor weight of P_i , this calculation is made by equation (18).

$$G_i = \left(P_i / \sum_{i=1}^N P_i \right) S_i \quad (18)$$

Data Collection Tool

Based on the hierarchical model (Figure 5), the factors of the destination value were subjected to pairwise comparisons with the fundamental scale of absolute numbers developed by Saaty (1980). The original scale is a 9-point ratio scale which was prepared to show the importance of element *A* in comparison with element *B* (Saaty, 2008, p. 86).

Within the scope of the study – with the help of the modification made in the scale – the unidirectional original scale structure was arranged in two directions and thus, the number of comparisons to be made was reduced by half. In this context, in the pre-test which was conducted on 12 researchers working in a tourism faculty of a state university in Turkey. We saw that all participants, except one, understood the use of the scale without any explanation. In the ongoing process, similar examples of the scale used in this study were also found in the literature (Hummel, Bridges, & IJzerman, 2014; Song *et al.*, 2018).

Thus, a total of 56 pairwise comparisons were included in the questionnaire, six of which were for factors determining destination value. In the questionnaires, the concept of destination value, the elements that forming this concept, the definitions related to each sub-component of these elements, the purpose of the research, and explanations regarding the use of the scale were included.

Prior to this, the participants in the participant pool had received permission to take part in the study. Details regarding the purpose, objectives and use of the questionnaire were then presented to them. Communication with participants in Turkey was done face to face or by phone. Participants out of Turkey were contacted via e-mail.

Profile of the Participants

Within the scope of the research, the purposive sampling method was found appropriate. A pool of 177 experts, including academicians, hospitality company and travel agency managers, and professional tourist guides, was established to measure the importance weights of the factors determining the

destination value and its sub-factors. Data collection was performed between 31 July 2018 and 11 December 2018.

Thirty-nine experts could not be reached. Four of them did not want to participate in the study. Thus, questionnaires were sent as hard copies or via e-mail to the 134 experts who agreed to participate. In addition, further information relating to the questionnaire and the research topic was provided by telephone or face to face.

Participants who did not respond for a while were sent a couple of reminders. Despite the reminders, 45 participants still failed to respond despite having agreed to participate in the study. Thus, 30 of the 89 returning participants, who gave inconsistent or incomplete answers, were not included in the analysis.

Of the 59 participants, 21 made comparisons in terms of both *sea, sand, sun destinations* and, *culture and history destinations*. 19 gave comparisons for only *sea, sand, sun destinations*, and 19 other participants gave comparisons for only *culture and history destinations*. In the context of mass tourism, the details regarding the participants who made comparisons for each destination type are given in Appendices 2 and 3. These tables show that responses from four professional tourist guides, a hotel manager, a tourism educator and 34 academics were used in the concept of *sea, sand, sun destinations*; the judgements of five professional tourist guides, two hotel managers, a tourism educator and 32 academics were used in the concept of *culture and history destinations*.

Considering the number of experts involved in multi-criteria decision-making studies, including criteria weighting by pairwise comparisons, a definite numerical value for sample size could not be found. Studies conducted with a single expert (Diaz-Ledezma & Parvizi, 2013; Munoz, Nembhard, & Kraschnewski, 2014); 2–9 experts (Suner, Çelikoğlu, Dicle, & Sökmen, 2012; Uzoka, Obot, Barker, & Osuji, 2011); 10–19 experts (Cancela, Fico, & Arredondo Waldmeyer, 2015; Soltés & Gavurová, 2014); 20–49 experts (Ramezanpour, Pronker, Kreijtz, Osterhaus, & Claassen, 2015; Shojaei *et al.*, 2014); 50–99 experts (Kuruoglu, Guldal, Mevsim, & Gunvar, 2015; Page, 2012); 500–999 (Xu, Levy, Daly, Bergus, & Dunkelberg, 2015) were observed in the literature.

Judgement Matrices for the Sample Participant

The following examples demonstrate the computational weights procedure of objectives for one expert in this study. First, the experts answered the questionnaire by giving pairwise comparisons related to determinants of destination value. Then, matrices were created for each expert's comparisons.

Table 3. *Crisp judgement matrix for the sample participant*

	NBV	CCBV	PV	IBV
Nature-Based Value (NBV)	1	4	5	4
Community and Culture-Based Value (CCBV)	1/4	1	4	2
Political Value (PV)	1/5	1/4	1	1/3
Industry-Based Value (IBV)	1/4	1/2	3	1

Table 3 shows the comparison of the sample expert's answers on *3s destinations* and *mass tourism* related to the factors that determine destination value. After the comparisons, 10 comparison matrices (1 matrix for factors that determine destination value and four matrices for sub-factors, for each

destination type) of each expert were created. The comparison matrices were then fuzzified. A fuzzified pairwise comparison matrix from the sample expert is shown in Table 4. Fuzzified pairwise comparison matrices were analysed through the processes presented above, and some conclusions were reached.

Table 4. *Fuzzy judgement matrix for the sample participant*

	NBV	CCBV	PV	IBV
NBV	1, 1, 1, 1	3, 7/2, 9/2, 5	4, 9/2, 11/2, 6	3, 7/2, 9/2, 5
CCBV	1/5, 2/9, 2/7, 1/3	1, 1, 1, 1	3, 7/2, 9/2, 5	1, 3/2, 5/2, 3
PV	1/6, 1/5, 2/9, 1/4	1/5, 2/9, 2/7, 1/3	1, 1, 1, 1	1/4, 2/9, 2/5, 1/2
IBV	1/5, 2/9, 2/7, 1/3	1/3, 2/5, 2/3, 1	2, 5/2, 9/2, 4	1, 1, 1, 1

Results and Discussion

Findings related to the Consistency of the Participants' Judgements

It was mentioned in the previous paragraphs that the research aimed to test the hierarchical model for destination value. Therefore, after the inconsistent questionnaires were extracted, the number of 80 (40 + 40) participants that gave comparisons for both types of destination were considered compatible for further analysis (Table 5).

Findings regarding the Distinction between Intrinsic and Extrinsic Values of Destinations

After extracting participants who made inconsistent judgement even in one factor; a total of 44 participants' judgements, 22 for each destination type, were taken into further analysis. As shown in Table 6, the result of the consistency analysis is found acceptable regarding the limits mentioned in previous paragraphs. It is also found that the absolute error values regarding each factor, which is shown as +/- in the table, are in acceptable levels.

When the combined hierarchical model (Figure 5) of the two types of destination is examined. It is seen that importance weights of the *nature-based value* ($w_{3s}= 0.465$; $w_{ch}= 0.274$) and the *community and culture-based value* ($w_{3s}= 0.231$; $w_{ch}= 0.461$) – which are defined as factors determining the *destination's intrinsic value* – were found to be relatively high compared with the *political value* ($w_{3s}= 0.125$; $w_{ch}= 0.143$) and the *industry-based value* ($w_{3s}= 0.179$; $w_{ch}= 0.122$) which are defined as the factors determining the *destination's extrinsic value*. These results were taken as supporting evidence for the distinction of the *intrinsic* and *extrinsic value of destination*, for both types of destination discussed in the study.

Another important point in the model is that, when *sea, sand, sun destinations* are considered, the *nature-based value* ($w_{3s}= 0.465$) is the most important factor for the *intrinsic value of destination*. By contrast, when *culture and history destinations* are considered, the *community and culture-based value* ($w_{ch}= 0.461$) is the most important factor for the *intrinsic value of destination*. A similar shift between factors was also found among the factors of the extrinsic value of the destination. This result suggests that the model responds to changes in the type of tourism observed in different types of destination. A similar shift between factors was also observed when the sub-factors of the model were examined. For example, the *climate and weather* ($w_{3s}= 0.112$) factor was found to be the most important sub-factor in terms of *sea, sand, sun destinations*. However, in terms of *culture and history destinations*, *artefacts* ($w_{3s}= 0.143$) factor was found to have the highest importance, while *climate and weather* ($w_{3s}= 0.031$) was ranked of lower importance. This result is also interpreted as the evidence of the model responding to changes in the type of tourism observed in different types of destinations. These results are thought to support the functionality of the model.

Table 5. *Information on the consistency of participants' judgments*

Consistency Ratio (CR)						Consistency Ratio (CR)					
Code	DV	NBV	CCBV	PV	IBV	Code	DV	NBV	CCBV	PV	IBV
p1.3s**	0.072*	0.102*	0.049*	0.037*	0.049*	p1ch***	0.042*	0.015*	0.043*	0.031*	0.02*
p2.3s**	0.048*	0.061*	0.052*	0.089*	0.062*	p2ch***	0.082*	0.15*	0.059*	0.056*	0.117*
p3.3s	0.064*	0.239	0.29	0.411	0.365	p3ch	0.231	0.18	0.271	0.301	0.086*
p4.3s	0.183	0.072*	0.223	0.242	0.129*	p4ch	0.197	0.144*	0.15*	0.204	0.148*
p5.3s	0.36	0.349	0.123*	0.22	0.225	p5ch	0.03*	0.11*	0.144*	0.269	0.461
p6.3s**	0.034*	0.014*	0.15*	0.102*	0.15*	p6ch***	0.045*	0.101*	0.107*	0.14*	0.125*
p7.3s**	0*	0.028*	0.146*	0*	0.135*	p7ch***	0.004*	0*	0.119*	0*	0.064*
p8.3s**	0.048*	0.105*	0.115*	0.115*	0.142*	p8ch	0.228	0.256	0.15*	0.15*	0.138*
p9.3s**	0.078*	0.124*	0.15*	0.089*	0.076*	p9ch***	0.137*	0.13*	0.1*	0.089*	0.111*
p10.3s	0.136*	0.043*	0.05*	0.098*	0.346	p10ch	0.137*	0.283	0.291	0.244	0.475
p11.3s	0.324	0.123*	0.172	0.124*	0.136*	p11ch***	0.078*	0.051*	0.15*	0.15*	0.069*
p12.3s	0.289	0.061*	0.15*	0.147*	0.126*	p12ch***	0.077*	0.086*	0.07*	0.076*	0.005*
p13.3s**	0.141*	0.055*	0.053*	0.071*	0.135*	p13ch***	0.035*	0.111*	0.153*	0.099*	0.133*
p14.3s	0.245	0.085*	0.247	0.16*	0.412	p14ch	0.097*	0.255	0.095*	0.276	0.233
p15.3s	0.102*	0.15*	0.29	0.062*	0.454	p15ch	0.226	0.15*	0.208	0.261	0.049*
p16.3s**	0.053*	0.048*	0.056*	0.075*	0.051*	p16ch***	0.113*	0.095*	0.067*	0.128*	0.149*
p17.3s	0.147*	0.052*	0.081*	0.194	0.212	p17ch	0.239	0.018*	0.172*	0.206	0.195
p18.3s	0.064*	0.359	0.433	0.168	0.249	p18ch***	0.089*	0.098*	0.12*	0.05*	0.108*
p19.3s**	0.136*	0.15*	0.107*	0.148*	0.032*	p19ch	0.217	0.116*	0.381	0.206	0.239
p20.3s**	0.148*	0.02*	0.068*	0.103*	0.086*	p20ch***	0.012*	0.057*	0.09*	0.05*	0.088*
p21.3s**	0.119*	0.114*	0.15*	0.023*	0.074*	p21ch	0.206	0.52	0.15*	0.053*	0.216
p22.3s**	0.062*	0.034*	0.021*	0.087*	0.08*	p22ch***	0.138*	0.143*	0.04*	0.15*	0.129*
p23.3s**	0.1*	0.113*	0.123*	0.15*	0.139*	p23ch	0.112*	0.086*	0.19	0.15*	0.432
p24.3s	0.115*	0.461	0.127*	0.238	0.26	p24ch***	0.005*	0.122*	0.125*	0.148*	0.063*
p25.3s**	0.088*	0.125*	0.15*	0.12*	0.045*	p25ch***	0.117*	0.083*	0.139*	0.116*	0.148*
p26.3s	0.237	0.088*	0.258	0.161	0.23	p26ch	0.147*	0.146*	0.068*	0.222	0.05*
p27.3s	0.115*	0.138*	0.254	0.226	0.52	p27ch	0.035*	0.199	0.258	0.256	0.237
p28.3s	0.395	0.288	0.334	0.209	0*	p28ch***	0.081*	0.13*	0.066*	0.096*	0.15*
p29.3s**	0.131*	0.034*	0.037*	0.018*	0.058*	p29ch***	0.141*	0.139*	0.065*	0.04*	0.102*
p30.3s	0.301	0.288	0.111*	0.211	0.516	p30ch	0.411	0.144*	0.15*	0.391	0.067*
p31.3s**	0.025*	0.018*	0.146*	0.078*	0.088*	p31ch***	0.07*	0.043*	0.075*	0.08*	0.106*
p32.3s	0.127*	0.258	0.22	0.161	0.048*	p32ch	0.244	0.068*	0.106*	0.474	0.082*
p33.3s	0.217	0.027*	0.15*	0.073*	0.07*	p33ch***	0.074*	0.065*	0.05*	0.079*	0.063*
p34.3s**	0.104*	0.15*	0.079*	0.123*	0.15*	p34ch***	0.065*	0.043*	0.072*	0.07*	0.016*
p35.3s	0.258	0.6*	0.536	0.118*	0.171*	p35ch	0.021*	0.129*	0.244	0.195	0.214
p36.3s**	0.044*	0.09*	0.119*	0.15*	0.134*	p36ch	0.034*	0.04*	0.091*	0.294	0.105*
p37.3s**	0.009*	0.02*	0.07*	0.125*	0.15*	p37ch	0.085*	0.172*	0.15*	0.088*	0.135*
p38.3s**	0.042*	0.123*	0.025*	0.046*	0.061*	p38ch***	0.147*	0.145*	0.144*	0.15*	0.136*
p39.3s**	0.141*	0.153*	0.135*	0.144*	0.144*	p39ch***	0.118*	0.09*	0.101*	0.132*	0.083*
p40.3s**	0.05*	0.04*	0.133*	0.104*	0.142*	p40ch***	0.137*	0.088*	0.148*	0.15*	0.066*

*CR ≤ 0.15

**Participants whose judgments used in the analysis in the contexts of sea, sand, sun destinations and mass tourists

***Participants whose judgments used in the analysis in the contexts culture & history destinations and mass tourists

Table 6. Defuzzified importance weights of the factors determining destination value in the contexts of both destination types and mass tourism

Factors	Sea, sand, sun (3s) destinations* (N= 22)		Culture and history (ch) destinations** (N=22)	
	Defuzzified weight (w_{3s})	+/-	Defuzzified weight (w_{ch})	+/-
Nature based value	0.465	0.059	0.274	0.037
Community & culture-based value	0.231	0.023	0.461	0.009
Political value	0.125	0.017	0.143	0.013
Industry based value	0.179	0.024	0.122	0.015
*GCI= 0.031 / ψ = 0 / MRE= 0.125 / λ = 4.023 / CR= 0.008				
**GCI= 0.02 / ψ = 0 / MRE= 0.102 / λ = 4.015 / CR= 0.006				
Climate & weather	0.24	0.011	0.114	0.002
Physical geography	0.201	0.014	0.164	0.005
Biodiversity	0.122	0.006	0.127	0.011
Environmental liveability	0.216	0.013	0.267	0.023
Environmental protection & landscaping	0.221	0.009	0.328	0.027
*GCI= 0 / ψ = 0.2 / MRE= 0.054 / λ = 5.006 / CR= 0.001				
**GCI= 0.01 / ψ = 0.06 / MRE= 0.067 / λ = 5.009 / CR= 0.001				
Narratives	0.078	0.007	0.119	0.014
Artefacts	0.21	0.025	0.31	0.044
Food & beverage culture	0.26	0.027	0.157	0.026
Religions & beliefs	0.112	0.004	0.108	0.007
Living styles	0.197	0.016	0.17	0.024
Special events	0.143	0.012	0.136	0.016
*GCI= 0.01 / ψ = 0.03 / MRE= 0.09 / λ = 6.020 / CR= 0.003				
**GCI= 0.02 / ψ = 0.13 / MRE= 0.128 / λ = 6.040 / CR= 0.006				
Political will	0.095	0.006	0.1	0.008
International relations	0.145	0.012	0.136	0.011
Safety & security	0.4	0.042	0.307	0.048
Local political atmosphere	0.144	0.014	0.146	0.022
Legal system	0.144	0.005	0.177	0.022
Education & research	0.072	0.009	0.134	0.01
*GCI= 0.01 / ψ = 0.11 / MRE= 0.089 / λ = 6.019 / CR= 0.003				
**GCI= 0.02 / ψ = 0.13 / MRE= 0.115 / λ = 6.032 / CR= 0.005				
Infrastructure	0.146	0.021	0.196	0.026
Hospitality	0.244	0.033	0.218	0.007
Transportation	0.173	0.025	0.226	0.031
Human resources	0.175	0.018	0.198	0.01
Popularity	0.262	0.023	0.162	0.025
*GCI= 0.03 / ψ = 0.23 / MRE= 0.125 / λ = 5.031 / CR= 0.006				
**GCI= 0.02 / ψ = 0.23 / MRE= 0.113 / λ = 5.025 / CR= 0.005

Figure 5. Comparative combined model with both types of destination

According to the results, the most important elements of *sea, sand, sun destinations* are air temperature, clean seas and coastal structures. *Climate and weather, physical geography and environmental liveability* factors have high importance levels in terms of *sea, sand, sun destinations*. Similar results were observed for *culture and history destinations*. A comparison chart of the distribution of importance weights for all factors is presented in Appendix 4. These findings support the theoretically defined distinction of the intrinsic and extrinsic values of the destinations.

Conclusion

The concept of destination value and the factors determining it were defined with the literature review and document analysis. In this context, a hierarchical model was developed for the factors determining destination value. As mentioned in the study, this model is not a conclusion and could still be changed. However, it was considered sufficient for the aims of this study. Additions or simplifications can be made to the model according to the views of researchers. However, it is thought that the general context will be shaped within the framework of these elements.

The distinction between the *intrinsic value of destination* that expresses the value desired by tourists and the *extrinsic value of destination* that facilitates and catalyses this value is presented as a solution to the problems arising in the context of industrialized tourism. This reflects the fact that sustainability initiatives (such as; Aygün & Baycan, 2020; Mathew & Sreejesh, 2017; Rodríguez Díaz & Espino Rodríguez, 2016), which are presented as solutions to the problems posed by industrialized tourism, have an important place in this conceptualization. In the context of destination value as a value-based approach, intrinsic value is philosophically in a more important position and the role that falls on the extrinsic value is to support the intrinsic value. In this respect, the development of destinations by bringing the *intrinsic value* to the fore is also important in terms of the sustainability of tourism in these destinations.

Accepting that a tourist destination can be examined in the same way as an enterprise or a product by ignoring the performance of the tourists, examining a destination in a pure manufacturer–consumer context could prevent us from seeing the problems. Products exist for consumption. They are consumed and depleted. Approaching tourist destinations as if they were a packaged product is to accept these structures as *unsustainable* (see. Davis & Morais, 2004; Riasi & Pourmiri, 2016; Tosun, 1998) at the outset. To consider a tourist destination as a kind of enterprise means that the primary purpose of its existence is to make and increase profits. Even though the primary objective of some of the stakeholders operating within a destination is to make a profit, it should not be forgotten that what is defined as a destination does not itself have a desire to make a profit, to increase profit or to achieve competitive advantage over other destinations. This perspective adopted in the study is accepted as the starting point of the destination value approach. It is appropriate to interpret the most prominent characteristic of this approach built on the concept defined upon the terms *intrinsic and extrinsic values* in the light of *temperance* which Democritus defines as the highest virtue.

Increasing the number of tourists and increasing tourism revenues by achieving competitive advantage seems to be positive in terms of the economy. However, taking into account the costs of these actions on tourist destinations leads to a less optimistic outlook. It is possible to give commodification of culture (Bowers & Cheer, 2017), illegal sex tourism (Ying & Wen, 2019), malpractices in medical tourism (Mirrer-Singer, 2007) or other kind of adverse situations such as overtourism (see. Perles-Ribes, Ramón-Rodríguez, Moreno-Izquierdo, & Such-Devesa, 2021), in addition to well-known environmental problems arising with the industrialized tourism. Sustainability approaches added to *destination competitiveness* (Ritchie & Crouch, 2010), or Porter's addition of *shared value creation* (Porter & Kramer,

2011) to his competitiveness paradigms, tell us that these additions aim to reduce the costs. But there is no reason not to think that these additions to competitiveness paradigms aim to minimize any public reaction via sharing the *benefits*, even if costs to nature or culture are not reduced. It is also known that green tourism and responsible tourism are not the “correct answers” to the problems arising from industrialized tourism development (Wheeller, 1991). A paradigm shift is needed to solve the problematic reflections of tourism that continue today. The process which is experienced through COVID-19 pandemic could be seen as an opportunity for introducing new theories and insights for tourism research and destination development.

Limitations and Future Research

The use of small samples may be problematic for many studies involving data analysis and cause-effect relationships (Darko *et al.*, 2018). However, reaching significant sample sizes targeting generalization or statistically strong results is not a necessity for performing ‘criteria weighting by the pairwise comparisons’ technique which is also used within other multi-criteria decision analysis (Darko *et al.*, 2018; Dias & Ioannou, 1996; Doloi, 2008). Some researchers suggest that these are subjective techniques that address specific problems and do not imply an obligation to work with large samples (Darko *et al.*, 2018; Lam & Zhao, 1998), while others suggest that such techniques are based on expert opinion and, in this context, even a single competent expert has a representation characteristic (Darko *et al.*, 2018; Tavares, Tavares, & Parry-Jones, 2008).

This study aims to support the distinction made between the *intrinsic* and *extrinsic value of destinations*, which were seen by the authors as starting concepts of the above-mentioned paradigm change. In this context, when the experts’ judgements were analysed, it was found that factors forming the intrinsic value of destination were relatively more important than factors forming the extrinsic value of destination. These findings were evaluated as positive results considering the research objectives. At this point, the findings of this study are thought to be important for structuring new approaches within the framework of *destination development* studies. It is thought that the information obtained from different disciplines such as economics, anthropology, sociology and administrative sciences can be used together under a destination value approach within the framework of tourism research.

This approach of destination value, including sub-concepts such as intrinsic and extrinsic values of destination, can be considered as an initiative capable of unifying the eclectic knowledge spotted in the literature. It is essential to prepare models that aim to measure the destination value for destination types and different types of tourists. Preparing a theoretical assessment to synthesise different value approaches under destination value is another direction for future research.

Acknowledgements

We would like to thank Klaus D. Goepel for allowing us to use his AHP algorithms and integrating fuzzy logic to them.

Appendix 1. Information related to the documents analysed

Document Information		Scope	Number of Interviews	ISBN
Interview Texts of Oral History Project on Tourism and Hospitality Industry in Turkey	Vol. 1	Side, Alanya, Antalya	60	978-605-68258-2-8
	Vol. 2	Bodrum, Fethiye, Marmaris	62	978-605-68258-3-5
	Vol. 3	Akcakoca, Erdek, Kapadokya, Uludag	61	978-605-68258-5-9
	Vol. 4	Didim, Kusadasi	42	978-605-68258-4-2
	Vol. 6	Hospitality Management in Turkey	36	978-605-68258-7-3
	Vol. 7	Travel Agency, Tourist Guidance, Turkish Airlines	32	978-605-68258-8-0

Appendix 2. Information on participants performing comparisons for sea, sand, sun destinations

Code	Experience (Year)	Expertise	Profession	Degree
p1.3s	9	Tourism Marketing	Academician	Ph.D.
p2.3s	8	Tourism Management	Academician	Ph.D.
p3.3s	8	Recreation Management	Academician	Ph.D.
p4.3s	8	Tourism Management	Academician	Ph.D.
p5.3s	9	Tourism Financing	Academician	-
p6.3s	7	Tourism Management	Academician	-
p7.3s	8	Tourism Management	Academician	Ph.D.
p8.3s	16	Tourism Management	Academician	Ph.D.
p9.3s	25	Tourism Management	Academician	Ph.D.
p10.3s	8	Tourism Management	Academician	Ph.D.
p11.3s	9	Tourism Management	Academician	Ph.D.
p12.3s	17	Tourism Management	Academician	Ph.D.
p13.3s	20	Tourism Management	Academician	Ph.D.
p14.3s	48	Hotel Management	Hotel Manager	Ph.D.
p15.3s	22	Tourism Management	Academician	Ph.D.
p16.3s	5	Tourist Guidance	Professional Tourist Guide	-
p17.3s	10	Tourism Marketing	Tourism Educator	-
p18.3s	16	Tourism Management	Academician	Ph.D.
p19.3s	18	Tourism Management	Academician	Ph.D.
p20.3s	24	Tourism Management	Academician	Ph.D.
p21.3s	10	Consumer Behaviour	Academician	Ph.D.
p22.3s	24	Tourism Management	Academician	Ph.D.
p23.3s	10	Tourism Management	Academician	Ph.D.
p24.3s	25	Tourism Management	Academician	Ph.D.
p25.3s	19	Tourism Management	Academician	Ph.D.
p26.3s	28	Tourism Marketing	Academician	Ph.D.
p27.3s	13	Tourist Guidance	Academician	Ph.D.
p28.3s	11	Tourism Management	Academician	Ph.D.
p29.3s	14	Tourism Management	Academician	Ph.D.
p30.3s	8	Tourism Management	Academician	Ph.D.
p31.3s	30	Tourism Marketing	Academician	Ph.D.
p32.3s	12	Tourist Guidance	Professional Tourist Guide	Ph.D.
p33.3s	20	Tourism Management	Academician	Ph.D.
p34.3s	15	Tourist Guidance	Professional Tourist Guide	Ph.D.
p35.3s	11	Tourism Management	Academician	Ph.D.
p36.3s	8	Tourism Management	Academician	Ph.D.
p37.3s	35	Tourism Management	Academician	Ph.D.
p38.3s	16	Tourism Marketing	Academician	Ph.D.
p39.3s	25	Tourist Guidance	Professional Tourist Guide	-
p40.3s	17	Tourism Management	Academician	Ph.D.

Appendix 3. *Information on participants performing comparisons for cultural and historical destinations*

Code	Experience (Year)	Expertise	Profession	Degree
p1ch	9	Tourism Marketing	Academician	Ph.D.
p2ch	8	Tourism Management	Academician	Ph.D.
p3ch	8	Recreation Management	Academician	Ph.D.
p4ch	8	Tourism Management	Academician	Ph.D.
p5ch	9	Tourism Financing	Academician	-
p6ch	7	Tourism Management	Academician	-
p7ch	8	Tourism Management	Academician	Ph.D.
p8ch	24	Tourism Management	Academician	Ph.D.
p9ch	16	Tourism Management	Academician	Ph.D.
p10ch	25	Tourism Management	Academician	Ph.D.
p11ch	8	Tourism Management	Academician	Ph.D.
p12ch	30	Tourism Marketing	Academician	Ph.D.
p13ch	11	Tourism Management	Academician	Ph.D.
p14ch	9	Tourism Management	Academician	Ph.D.
p15ch	20	Tourism Management	Academician	Ph.D.
p16ch	17	Tourism Management	Academician	Ph.D.
p17ch	20	Tourism Management	Academician	Ph.D.
p18ch	12	Tourism Management	Academician	Ph.D.
p19ch	48	Tourism Management	Hotel Manager	Ph.D.
p20ch	5	Tourist Guidance	Professional Tourist Guide	-
p21ch	10	Tourism Marketing	Tourism Educator	-
p22ch	20	Tourism Management	Academician	Ph.D.
p23ch	10	Tourism Management	Academician	Ph.D.
p24ch	15	Tourism Marketing	Academician	Ph.D.
p25ch	22	Tourist Guidance	Academician	Ph.D.
p26ch	14	Tourism Management	Academician	Ph.D.
p27ch	8	Tourism Management	Academician	Ph.D.
p28ch	21	Hotel Management	Academician	Ph.D.
p29ch	28	Tourist Guidance	Professional Tourist Guide	-
p30ch	12	Tourist Guidance	Professional Tourist Guide	Ph.D.
p31ch	8	Tourism Management	Academician	Ph.D.
p32ch	11	Tourism Management	Academician	Ph.D.
p33ch	27	Tourism Management	Academician	Ph.D.
p34ch	16	Tourism Economics	Academician	Ph.D.
p35ch	14	Tourist Guidance	Professional Tourist Guide	-
p36ch	6	Tourism Management	Academician	Ph.D.
p37ch	27	Tourism Management	Academician	Ph.D.
p38ch	11	Tourist Guidance	Professional Tourist Guide	Ph.D.
p39ch	30	Hotel Management	Hotel Manager	-
p40ch	17	Tourism Management	Academician	Ph.D.

Appendix 4. Importance chart of the combined model

References

- Abdullah, L., & Najib, L. (2014). A new type-2 fuzzy set of linguistic variables for the fuzzy analytic hierarchy process. *Expert Systems with Applications*, 41(7), 3297-3305. doi: <https://doi.org/10.1016/j.eswa.2013.11.028>
- Adler, F. (1956). The Value Concept in Sociology. *American Journal of Sociology*, 62(3), 272-279. doi:10.1086/222004
- Aguarón, J., & Moreno-Jiménez, J. M. (2003). The geometric consistency index: Approximated thresholds. *European Journal of Operational Research*, 147(1), 137-145. doi: [https://doi.org/10.1016/S0377-2217\(02\)00255-2](https://doi.org/10.1016/S0377-2217(02)00255-2)
- Akis Roney, S. (2011). *Tourism: Bir Sistemin Analizi [Tourism: An Analysis of a System]*. Ankara: Detay Publications.
- Alonso, J. A., & Lamata, M. T. (2006). Consistency in the Analytic Hierarchy Process: A New Approach. *International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems*, 14(04), 445-459. doi:10.1142/S0218488506004114
- Austin, Z., & Sutton, J. (2014). Qualitative research: getting started. *The Canadian journal of hospital pharmacy*, 67(6), 436-440. doi: 10.4212/cjhp.v67i6.1406
- Aygün, A., & Baycan, T. (2020). A Critical Analysis of Turkey's Tourism Strategy Plan (2023) Based on the Key Factors in Mitigation and Adaptation to Climate Change. *Journal of Tourism Leisure and Hospitality*, 2(2), 48-61. Retrieved from <https://dergipark.org.tr/en/pub/toleho/issue/56188/747030>
- Backman, S. J., Uysal, M., & Backman, K. (1991). Regional analysis of tourism resources. *Annals of Tourism Research*, 18(2), 323-327. doi: [https://doi.org/10.1016/0160-7383\(91\)90016-5](https://doi.org/10.1016/0160-7383(91)90016-5)
- Barbour, R. S. (2001). Checklists for improving rigour in qualitative research: a case of the tail wagging the dog? *BMJ*, 322(7294), 1115. doi:10.1136/bmj.322.7294.1115
- Bayraktaroğlu, E. (2019). Tourists as Meme-seekers: A Theoretical Approach. *Journal of Tourism, Leisure and Hospitality*, 1(1), 22 - 28.
- Boksberger Philipp, E., & Melsen, L. (2011). Perceived value: a critical examination of definitions, concepts and measures for the service industry. *Journal of Services Marketing*, 25(3), 229-240. doi:10.1108/0887604111129209
- Bowers, H., & Cheer, J. M. (2017). Yoga tourism: Commodification and western embracement of eastern spiritual practice. *Tourism Management Perspectives*, 24, 208-216. doi: <https://doi.org/10.1016/j.tmp.2017.07.013>
- Braun, P. (2005). *Creating value to tourism products through tourism networks and clusters: uncovering destination value chains* Conference on Global Tourism Growth: A Challenge for SMEs. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.124.9515&rep=rep1&type=pdf>
- Braun-LaTour, K. A., Grinley, M. J., & Loftus, E. F. (2006). Tourist Memory Distortion. *Journal of Travel Research*, 44(4), 360-367. doi:10.1177/0047287506286721
- Buckley, J. J. (1985). Fuzzy hierarchical analysis. *Fuzzy Sets and Systems*, 17(3), 233-247. doi: [https://doi.org/10.1016/0165-0114\(85\)90090-9](https://doi.org/10.1016/0165-0114(85)90090-9)
- Byun, D.-H. (2001). The AHP approach for selecting an automobile purchase model. *Information & Management*, 38(5), 289-297. doi: [https://doi.org/10.1016/S0378-7206\(00\)00071-9](https://doi.org/10.1016/S0378-7206(00)00071-9)
- Calveras, A. (2019). All-inclusive and value creation in hospitality: Evidence from a mature destination, 2001-2017. *Tourism Management*, 74, 234-246. doi: <https://doi.org/10.1016/j.tourman.2019.03.002>
- Cancela, J., Fico, G., & Arredondo Waldmeyer, M. T. (2015). Using the Analytic Hierarchy Process (AHP) to understand the most important factors to design and evaluate a telehealth system for Parkinson's disease. *BMC Medical Informatics and Decision Making*, 15(3), S7. doi:10.1186/1472-6947-15-s3-s7
- Carlback, M. (2019). Brand Value Attributable to Affiliation (BVAA) – a Method for Measurement in a Consortium Context. *European Journal of Tourism Research*, 23, 112 - 126. Retrieved from <https://ejtr.vumk.eu/index.php/about/article/view/392>

- Carlsen, J., & Wood, D. (2004). Assessment of the Economic Value of Recreation and Tourism in Western Australia's National Parks, Marine Parks and Forests.
- Chen, C.-T., Lin, C.-T., & Huang, S.-F. (2006). A fuzzy approach for supplier evaluation and selection in supply chain management. *International Journal of Production Economics*, 102(2), 289-301. doi: <https://doi.org/10.1016/j.ijpe.2005.03.009>
- Cracolici, M. F., & Nijkamp, P. (2009). The attractiveness and competitiveness of tourist destinations: A study of Southern Italian regions. *Tourism Management*, 30(3), 336-344. doi: <https://doi.org/10.1016/j.tourman.2008.07.006>
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4 ed.). London: SAGE Publications.
- Dann, G. M. S. (1977). Anomie, ego-enhancement and tourism. *Annals of Tourism Research*, 4(4), 184-194. doi: [https://doi.org/10.1016/0160-7383\(77\)90037-8](https://doi.org/10.1016/0160-7383(77)90037-8)
- Darko, A., Chan, A. P. C., Ameyaw, E. E., Owusu, E. K., Pärn, E., & Edwards, D. J. (2018). Review of application of analytic hierarchy process (AHP) in construction. *International Journal of Construction Management*, 1-17. doi:10.1080/15623599.2018.1452098
- Davis, J. S., & Morais, D. B. (2004). Factions and Enclaves: Small Towns and Socially Unsustainable Tourism Development. *Journal of Travel Research*, 43(1), 3-10. doi:10.1177/0047287504265501
- Dawotola, A. W., van Gelder, P. H. A. J. M., & Vrijling, J. K. (2009). *Risk assessment of petroleum pipelines using a combined analytical hierarchy process - Fault tree analysis (AHP-FTA)*. Paper presented at the 7th International Probabilistic Workshop, Delft.
- Dedeoğlu, B. B. (2019). Shaping tourists' destination quality perception and loyalty through destination country image: The importance of involvement and perceived value. *Tourism Management Perspectives*, 29, 105-117. doi: <https://doi.org/10.1016/j.tmp.2018.11.006>
- Deng, J., King, B., & Bauer, T. (2002). Evaluating natural attractions for tourism. *Annals of Tourism Research*, 29(2), 422-438. doi: [https://doi.org/10.1016/S0160-7383\(01\)00068-8](https://doi.org/10.1016/S0160-7383(01)00068-8)
- Dias, A., & Ioannou, P. G. (1996). Company and Project Evaluation Model for Privately Promoted Infrastructure Projects. *Journal of Construction Engineering and Management*, 122(1), 71-82. doi: 10.1061/(ASCE)0733-9364(1996)122:1(71)
- Diaz-Ledezma, C., & Parvizi, J. (2013). Surgical Approaches for Cam Femoroacetabular Impingement: The Use of Multicriteria Decision Analysis. *Clinical Orthopaedics and Related Research*, 471(8), 2509-2516. doi:10.1007/s11999-013-2934-6
- Doloi, H. (2008). Application of AHP in improving construction productivity from a management perspective. *Construction Management and Economics*, 26(8), 841-854. doi:10.1080/01446190802244789
- Duman, T., & Kozak, M. (2010). The Turkish Tourism Product: Differentiation and Competitiveness. *Anatolia*, 21(1), 89-106. doi:10.1080/13032917.2010.9687092
- Eagles, P., McLean, D., & Stabler, M. J. (2000). Estimating the tourism volume and value in protected areas in Canada and the USA. *George Wright Forum*, 17, 62-76.
- Emmons, R. A., & King, L. A. (1992). Thematic analysis, experience sampling, and personal goals In C. P. Smith, J. W. Atkinson, D. C. McClelland, & J. Veroff (Eds.), *Motivation and personality: Handbook of thematic content analysis*. (pp. 73-86). New York, NY, US: Cambridge University Press.
- Fan, D. X. F., Hsu, C. H. C., & Lin, B. (2020). Tourists' experiential value co-creation through online social contacts: Customer-dominant logic perspective. *Journal of Business Research*, 108, 163-173. doi: <https://doi.org/10.1016/j.jbusres.2019.11.008>
- Ferrario, F. F. (1979). The Evaluation of Tourist Resources: an Applied Methodology. *Journal of Travel Research*, 17(3), 18-22. doi: 10.1177/004728757901700305
- Flagestad, A., & Hope, C. A. (2001). Strategic success in winter sports destinations: a sustainable value creation perspective. *Tourism Management*, 22(5), 445-461. doi:10.1016/S0261-5177(01)00010-3

- Formica, S., & Uysal, M. (2006). Destination Attractiveness Based on Supply and Demand Evaluations: An Analytical Framework. *Journal of Travel Research*, 44(4), 418-430. doi:10.1177/0047287506286714
- Gallarza Martina, G., & Gil, I. (2008). The concept of value and its dimensions: a tool for analysing tourism experiences. *Tourism Review*, 63(3), 4-20. doi:10.1108/16605370810901553
- Gearing, C. E., Swart, W. W., & Var, T. (1974). Establishing a Measure of Touristic Attractiveness. *Journal of Travel Research*, 12(4), 1-8. doi:10.1177/004728757401200401
- Georgantzis, N. C. (2003). Tourism dynamics: Cyprus' hotel value chain and profitability. *System Dynamics Review*, 19(3), 175-212. doi:10.1002/sdr.275
- Gios, G., Goio, I., Notaro, S., & Raffaelli, R. (2006). The value of natural resources for tourism: a case study of the Italian Alps. *International Journal of Tourism Research*, 8(2), 77-85. doi:10.1002/jtr.552
- Goeldner, C. R., & Ritchie, J. R. B. (2009). *Tourism: principles, practices, philosophies* (11 ed.). New Jersey: John Wiley.
- Goepel, K. D. (2018). Implementation of an online software tool for the analytic hierarchy process (AHP-OS). *International Journal of the Analytic Hierarchy Process*, 10(3), 469-487. doi: <https://doi.org/10.13033/ijahp.v10i3.590>
- Graeber, D. (2001). *Toward An Anthropological Theory of Value: The False Coin of Our Own Dreams*. New York: Palgrave.
- Gray, P. H. (1970). *International travel-international trade*. Lexington Heath Lexington Books.
- Harold, J. (2005). Between intrinsic and extrinsic value. *Journal of Social Philosophy*, 36(1), 85-105.
- Hong-bumm, K. (1998). Perceived attractiveness of korean destinations. *Annals of Tourism Research*, 25(2), 340-361. doi: [https://doi.org/10.1016/S0160-7383\(98\)00007-3](https://doi.org/10.1016/S0160-7383(98)00007-3)
- Hummel, J. M., Bridges, J. F. P., & Iljerman, M. J. (2014). Group Decision Making with the Analytic Hierarchy Process in Benefit-Risk Assessment: A Tutorial. *The Patient - Patient-Centered Outcomes Research*, 7(2), 129-140. doi: 10.1007/s40271-014-0050-7
- Hung, K.-p., Peng, N., & Chen, A. (2019). Incorporating on-site activity involvement and sense of belonging into the Mehrabian-Russell model – The experiential value of cultural tourism destinations. *Tourism Management Perspectives*, 30, 43-52. doi: <https://doi.org/10.1016/j.tmp.2019.02.003>
- Iso-Ahola, S. E. (1982). Toward a social psychological theory of tourism motivation: A rejoinder. *Annals of Tourism Research*, 9(2), 256-262. doi: [https://doi.org/10.1016/0160-7383\(82\)90049-4](https://doi.org/10.1016/0160-7383(82)90049-4)
- Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using Mixed-Methods Sequential Explanatory Design: From Theory to Practice. *Field Methods*, 18(1), 3-20. doi:10.1177/1525822x05282260
- Jewell, B., & Crotts, J. C. (2002). Adding Psychological Value to Heritage Tourism Experiences. *Journal of Travel & Tourism Marketing*, 11(4), 13-28. doi:10.1300/J073v11n04_02
- Johnson, C. L. (2017). *Millennials' perception of destination attractiveness*. (Masters Thesis). Indiana University,
- Kagan, S. (1998). Rethinking Intrinsic Value. *The Journal of Ethics*, 2(4), 277-297. doi:10.1023/A:1009782403793
- Kahraman, C., Ertay, T., & Büyüközkan, G. (2006). A fuzzy optimization model for QFD planning process using analytic network approach. *European Journal of Operational Research*, 171(2), 390-411. doi: <https://doi.org/10.1016/j.ejor.2004.09.016>
- Kahraman, C., Öztayşi, B., Uçal Sarı, İ., & Turanoğlu, E. (2014). Fuzzy analytic hierarchy process with interval type-2 fuzzy sets. *Knowledge-Based Systems*, 59, 48-57. doi: <https://doi.org/10.1016/j.knsys.2014.02.001>
- Kaufmann, A., & Gupta, M. M. (1991). *Introduction to fuzzy arithmetic: theory and applications*: New York (N.Y.): Van Nostrand Reinhold.
- Klenosky, D. B. (2002). The "Pull" of Tourism Destinations: A Means-End Investigation. *Journal of Travel Research*, 40(4), 396-403. doi:10.1177/004728750204000405

- Kluckhohn, C. (1951). Values and value-orientations in the theory of action: An exploration in definition and classification. In T. Parsons & E. A. Shils (Eds.), *Toward a general theory of action* (pp. 388–433). New York: Harper and Row.
- Kunst, I., & Ivandić, N. (2021). The viability of the travel and tourism competitiveness index as a reliable measure of destination competitiveness: the case of the Mediterranean region. *European Journal of Tourism Research*, 27, 2704. Retrieved from <https://ejtr.vumk.eu/index.php/about/article/view/2124>
- Kuruoglu, E., Guldal, D., Mevsim, V., & Gunvar, T. (2015). Which family physician should I choose? The analytic hierarchy process approach for ranking of criteria in the selection of a family physician. *BMC Medical Informatics and Decision Making*, 15(1), 63. doi: 10.1186/s12911-015-0183-1
- Lam, K., & Zhao, X. (1998). An application of quality function deployment to improve the quality of teaching. *International Journal of Quality & Reliability Management*, 15(4), 389–413. doi: 10.1108/02656719810196351
- Lee, C.-F., Huang, H.-I., & Yeh, H.-R. (2010). Developing an evaluation model for destination attractiveness: sustainable forest recreation tourism in Taiwan. *Journal of Sustainable Tourism*, 18(6), 811–828. doi:10.1080/09669581003690478
- Lee, S., & Walsh, P. (2011). SWOT and AHP hybrid model for sport marketing outsourcing using a case of intercollegiate sport. *Sport Management Review*, 14(4), 361–369. doi:<https://doi.org/10.1016/j.smr.2010.12.003>
- Lewis, C. I. (1955). *The Ground and Nature of the Right*. New York: Columbia University Press.
- Liang, T.-C., & Peng, S.-H. (2017). Using Analytic Hierarchy Process to Examine the Success Factors of Autonomous Landscape Development in Rural Communities. *Sustainability*, 9(5), 1–17.
- Litvin, S. W., & Ng Sok Ling, S. (2001). The destination attribute management model: an empirical application to Bintan, Indonesia. *Tourism Management*, 22(5), 481–492. doi: [https://doi.org/10.1016/S0261-5177\(01\)00003-6](https://doi.org/10.1016/S0261-5177(01)00003-6)
- MacCannell, D. (1973). Staged Authenticity: Arrangements of Social Space in Tourist Settings. *American Journal of Sociology*, 79(3), 589–603.
- Mathew, P. V., & Sreejesh, S. (2017). Impact of responsible tourism on destination sustainability and quality of life of community in tourism destinations. *Journal of Hospitality and Tourism Management*, 31, 83–89. doi: <https://doi.org/10.1016/j.jhtm.2016.10.001>
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: a methods sourcebook* (Third edition. ed.). Thousand Oaks, California: SAGE Publications, Inc.
- Minnaert, L., Maitland, R., & Miller, G. (2009). TOURISM AND SOCIAL POLICY: The Value of Social Tourism. *Annals of Tourism Research*, 36(2), 316–334. doi: <https://doi.org/10.1016/j.annals.2009.01.002>
- Mirror-Singer, P. (2007). Medical Malpractice Overseas: The Legal Uncertainty Surrounding Medical Tourism. *Law and Contemporary Problems*, 70(2), 211–232. Retrieved from www.jstor.org/stable/27592188
- Mitchell, F. (1969). *The value of tourism in East Africa*: University College, Institute for Development Studies, Social Science Division.
- Morse, J. M. (1997). "Perfectly Healthy, but Dead": The Myth of Inter-Rater Reliability. *Qualitative Health Research*, 7(4), 445–447. doi: 10.1177/104973239700700401
- Munoz, D. A., Nembhard, H. B., & Kraschnewski, J. L. (2014). Quantifying complexity in translational research: an integrated approach. *International journal of health care quality assurance*, 27(8), 760–776.
- Murphy, P., Pritchard, M. P., & Smith, B. (2000). The destination product and its impact on traveller perceptions. *Tourism Management*, 21(1), 43–52. doi: [https://doi.org/10.1016/S0261-5177\(99\)00080-1](https://doi.org/10.1016/S0261-5177(99)00080-1)
- Naess, A. (1984). A defence of the deep ecology movement. *Environmental Ethics*, 6(3), 265–270.
- O'Neill, J. (1992). The Varieties of Intrinsic Value. *The Monist*, 75(2), 119–137.

- Olalı, H. (1963). *Turizm Teorisi ve Politikası [Tourism Theory and Policy]*. İzmir: İzmir Ticaret Odası Yayınları.
- Oliveira, P., & Pereira, P. T. (2008). Who Values What in a Tourism Destination? The Case of Madeira Island. *Tourism Economics*, 14(1), 155-168. doi: 10.5367/000000008783554758
- Page, K. (2012). The four principles: Can they be measured and do they predict ethical decision making? *BMC Medical Ethics*, 13(1), 10. doi: 10.1186/1472-6939-13-10
- Pechlaner, H., Smeral, E., & Matzier, K. (2002). Customer value management as a determinant of the competitive position of tourism destinations. *Tourism Review*, 57(4), 15-22. doi:10.1108/eb058390
- Perles-Ribes, J., Ramón-Rodríguez, A., Moreno-Izquierdo, L., & Such-Devesa, M. (2021). Competitiveness and overtourism: a proposal for an early warning system in Spanish urban destinations. *European Journal of Tourism Research*, 27, 2707. Retrieved from <https://ejtr.vumk.eu/index.php/about/article/view/2137>
- Petrick, J. F., & Backman, S. J. (2002). An Examination of the Construct of Perceived Value for the Prediction of Golf Travelers' Intentions to Revisit. *Journal of Travel Research*, 41(1), 38-45. doi: 10.1177/004728750204100106
- Porter, M. E., & Kramer, M. R. (2011). Creating Shared Value. *Harvard Business Review*, 89(1-2), 62-77.
- Ramezanzpour, B., Pronker, E. S., Kreijtz, J. H. C. M., Osterhaus, A. D. M. E., & Claassen, E. (2015). Market implementation of the MVA platform for pre-pandemic and pandemic influenza vaccines: A quantitative key opinion leader analysis. *Vaccine*, 33(35), 4349-4358. doi: 10.1016/j.vaccine.2015.04.086
- Riasi, A., & Pourmiri, S. (2016). Examples of Unsustainable Tourism in Middle East. *Environmental Management and Sustainable Development* 5(1), 69-85.
- Ritchie, J. R. B., & Crouch, G. I. (2003). *The Competitive Destination: A Sustainable Tourism Perspective*. Oxon: CABI.
- Ritchie, J. R. B., & Crouch, G. I. (2010). A model of destination competitiveness/sustainability: Brazilian perspectives. *Revista de Administração Pública*, 44, 1049-1066. Retrieved from http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-76122010000500003&nrm=iso
- Ritchie, J. R. B., & Zins, M. (1978). Culture as determinant of the attractiveness of a tourism region. *Annals of Tourism Research*, 5(2), 252-267. doi: [https://doi.org/10.1016/0160-7383\(78\)90223-2](https://doi.org/10.1016/0160-7383(78)90223-2)
- Rodríguez Díaz, M., & Espino Rodríguez, T. F. (2016). Determining the Sustainability Factors and Performance of a Tourism Destination from the Stakeholders' Perspective. *Sustainability*, 8(9), 951.
- Ronnow-Rasmussen, T. (2015). Intrinsic and Extrinsic Value. In I. Hirose & J. Olson (Eds.), *The Oxford Handbook of Value Theory* (pp. 29-43). New York: Oxford University Press.
- Rutherford, E. (1911). LXXIX. The scattering of α and β particles by matter and the structure of the atom. *The London, Edinburgh, and Dublin Philosophical Magazine and Journal of Science*, 21(125), 669-688. doi:10.1080/14786440508637080
- Ryu, K., Han, H., & Kim, T.-H. (2008). The relationships among overall quick-casual restaurant image, perceived value, customer satisfaction, and behavioral intentions. *International Journal of Hospitality Management*, 27(3), 459-469. doi: <https://doi.org/10.1016/j.ijhm.2007.11.001>
- Saaty, T. L. (1977). A scaling method for priorities in hierarchical structures. *Journal of Mathematical Psychology*, 15(3), 234-281. doi: [https://doi.org/10.1016/0022-2496\(77\)90033-5](https://doi.org/10.1016/0022-2496(77)90033-5)
- Saaty, T. L. (1980). *The Analytic Hierarchy Process: Planning, Priority Setting, Resource Allocation*. New York: McGraw Hill.
- Saaty, T. L. (2008). Decision making with the Analytic Hierarchy Process. *International Journal of Services Sciences*, 1(1), 83-98. doi: 10.1504/IJSSCI.2008.017590
- Saaty, T. L., & Vargas, L. G. (2012). *Models, Methods, Concepts & Applications of the Analytic Hierarchy Process* (2 ed.). New York: Springer.

- Sadi-Nezhad, S., & Khalili Damghani, K. (2010). Application of a fuzzy TOPSIS method base on modified preference ratio and fuzzy distance measurement in assessment of traffic police centers performance. *Applied Soft Computing*, 10(4), 1028-1039. doi: <https://doi.org/10.1016/j.asoc.2009.08.036>
- Saldaña, J. (2016). *The coding manual for qualitative researchers* (3E Third edition. ed.). Los Angeles; London: SAGE.
- Sánchez, J., Callarisa, L., Rodríguez, R. M., & Moliner, M. A. (2006). Perceived value of the purchase of a tourism product. *Tourism Management*, 27(3), 394-409. doi: <https://doi.org/10.1016/j.tourman.2004.11.007>
- Sandler, R. (2012). Intrinsic Value, Ecology, and Conservation. *Nature Education Knowledge* 3(10), 4.
- Seddighi, H. R., & Theocharous, A. L. (2002). A model of tourism destination choice: a theoretical and empirical analysis. *Tourism Management*, 23(5), 475-487. doi: [https://doi.org/10.1016/S0261-5177\(02\)00012-2](https://doi.org/10.1016/S0261-5177(02)00012-2)
- Shamim, A., Ghazali, Z., & Jamak, A. B. S. A. (2015, 25-27 Aug. 2015). *Extrinsic experiential value as an antecedent of customer citizenship behavior*. Paper presented at the 2015 International Symposium on Technology Management and Emerging Technologies (ISTMET).
- Shojaei, P., Karimlou, M., Nouri, J., Mohammadi, F., Malek Afzali, H., & Forouzan, A. S. (2014). Ranking the effects of urban development projects on social determinants of health: health impact assessment. *Global journal of health science*, 6(5), 183-195. doi: 10.5539/gjhs.v6n5p183
- Siraj, S. (2011). *Preference Elicitation from Pairwise Comparisons in Multi-Criteria Decision Making*. (Unpublished Doctoral Dissertation). University of Manchester Faculty of Engineering and Physical Sciences, Manchester.
- Soltés, V., & Gavurová, B. (2014). The Functionality Comparison of the Health Care Systems by the Analytic Hierarchy Process Method. *Business Administration and Management*, XVII(3), 100-117. doi: <http://dx.doi.org/10.15240/tul/001/2014-3-009>
- Song, Y.-K., Kim, J. H., Choi, B., Han, N., Kim, M. G., Lee, J.,... Oh, J. M. (2018). Strategic Priorities to Improve Effectiveness of Anti-smoking Interventions for the Korean Military: An Application of the Analytic Hierarchy Process. *Military Medicine*, 183(7-8), e223-e230. doi: 10.1093/milmed/usx027
- Spotts, D. M. (1997). Regional Analysis of Tourism Resources for Marketing Purposes. *Journal of Travel Research*, 35(3), 3-15. doi:10.1177/004728759703500302
- Suner, A., Çelikoğlu, C. C., Dicle, O., & Sökmen, S. (2012). Sequential decision tree using the analytic hierarchy process for decision support in rectal cancer. *Artificial Intelligence in Medicine*, 56(1), 59-68. doi: <https://doi.org/10.1016/j.artmed.2012.05.003>
- Tavares, R. M., Tavares, J. M. L., & Parry-Jones, S. L. (2008). The use of a mathematical multicriteria decision-making model for selecting the fire origin room. *Building and Environment*, 43(12), 2090-2100. doi: <https://doi.org/10.1016/j.buildenv.2007.12.010>
- Tomashevskii, I. L. (2015). Eigenvector ranking method as a measuring tool: Formulas for errors. *European Journal of Operational Research*, 240(3), 774-780. doi: <https://doi.org/10.1016/j.ejor.2014.07.050>
- Tosun, C. (1998). Roots of unsustainable tourism development at the local level: the case of Urgup in Turkey. *Tourism Management*, 19(6), 595-610.
- Turpie, J., & Joubert, A. (2001). Estimating potential impacts of a change in river quality on the tourism value of Kruger National Park: An application of travel cost, contingent and conjoint valuation methods. *Water S.A.*, 27. doi:10.4314/wsa.v27i3.4983
- Uzoka, F.-M. E., Obot, O., Barker, K., & Osuji, J. (2011). An experimental comparison of fuzzy logic and analytic hierarchy process for medical decision support systems. *Computer Methods and Programs in Biomedicine*, 103(1), 10-27. doi: <https://doi.org/10.1016/j.cmpb.2010.06.003>

- van der Merwe, P., & Saayman, M. (2003). Determining the economic value of game farm tourism. 2003, 46(2), 10. doi: 10.4102/koedoe.v46i2.59
- van Rekom, J. (1995). Adding Psychological Value to Tourism Products. *Journal of Travel & Tourism Marketing*, 3(3), 21-36. doi:10.1300/J073v03n03_02
- Var, T., Beck, R. A. D., & Loftus, P. (1977). Determination of Touristic Attractiveness of the Touristic Areas in British Columbia. *Journal of Travel Research*, 15(3), 23-29. doi:10.1177/004728757701500306
- Vujičić, M. D., Stamenković, I., Stankov, U., Kovačić, S., Vasiljević, Đ. A., & Locke, J. P. (2019). What will Prevail within Citybreak Travel, Motivation or Demotivation? Case Study of Novi Sad, Vojvodina, Serbia. *Geographica Pannonica*, 24(4), 42-55. doi:10.5937/gp24-22613
- Wheeller, B. (1991). Tourism's troubled times: Responsible tourism is not the answer. *Tourism Management*, 12(2), 91-96. doi: [https://doi.org/10.1016/0261-5177\(91\)90062-X](https://doi.org/10.1016/0261-5177(91)90062-X)
- Williams, A. V., & Zelinsky, W. (1970). On Some Patterns in International Tourist Flows. *Economic Geography*, 46(4), 549-567. doi:10.2307/142940
- Winter, D. G. (1992). Content analysis of archival materials, personal documents, and everyday verbal productions. In C. P. Smith, J. W. Atkinson, D. C. McClelland, & J. Veroff (Eds.), *Motivation and personality: Handbook of thematic content analysis*. (pp. 110-125). New York, NY, US: Cambridge University Press.
- Xu, Y., Levy, B. T., Daly, J. M., Bergus, G. R., & Dunkelberg, J. C. (2015). Comparison of patient preferences for fecal immunochemical test or colonoscopy using the analytic hierarchy process. *BMC Health Services Research*, 15(1), 175. doi:10.1186/s12913-015-0841-0
- Yılmaz, Y., & Bititci, Ü. S. (2006). Performance measurement in tourism: a value chain model. *International Journal of Contemporary Hospitality Management*, 18(4), 341-349. doi:10.1108/09596110610665348
- Ying, T., & Wen, J. (2019). Exploring the male Chinese tourists' motivation for commercial sex when travelling overseas: Scale construction and validation. *Tourism Management*, 70, 479-490. doi: <https://doi.org/10.1016/j.tourman.2018.09.014>
- Zadeh, L. A. (1965). Fuzzy sets. *Information and Control*, 8(3), 338-353. doi: [https://doi.org/10.1016/S0019-9958\(65\)90241-X](https://doi.org/10.1016/S0019-9958(65)90241-X)
- Zeng, J., An, M., & Smith, N. J. (2007). Application of a fuzzy based decision making methodology to construction project risk assessment. *International Journal of Project Management*, 25(6), 589-600. doi: <https://doi.org/10.1016/j.ijproman.2007.02.006>
- Zheng, G., Zhu, N., Tian, Z., Chen, Y., & Sun, B. (2012). Application of a trapezoidal fuzzy AHP method for work safety evaluation and early warning rating of hot and humid environments. *Safety Science*, 50(2), 228-239. doi: <https://doi.org/10.1016/j.ssci.2011.08.042>

Received: 15/08/2020

Accepted: 19/04/2021

Coordinating editor: Stanislav Ivanov