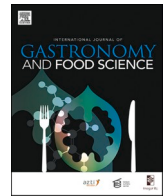


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What does the olive oil tourist value at the destination? A criterion for olive oil tourism segmentation[☆]

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ABSTRACT

Olive oil tourism, or oleotourism, is an activity with great potential for the development of rural, olive oil-producing areas. Various works exist from the point-of-view of demand, although the majority of these offer a descriptive analysis of olive oil tourists that does not enable an in-depth examination of their purchasing habits. The present work seeks to contribute to the knowledge of olive oil tourists' behaviour to enable the design of a differentiated offer with greater added value. We, therefore, propose a classification of olive oil tourists according to the value that they place on certain aspects of the destination, based on a quantitative study undertaken in Spain, the main olive oil-producing country in the world. The obtained results have enabled us to identify three market segments: safety and comfort, demanding and accessible. These segments present significant differences with respect to the aspects or dimensions that olive oil tourists value at the destination. The main implication of these results is to enable professionals in the olive oil tourism sector to configure the offer in line with the needs and aspects valued by each of the segments and to design communication strategies with messages and actions adapted to each different type of olive oil tourist. This would address the market more effectively.

Introduction

Olive oil tourism—or tourism based around olive oil—is an activity that is currently in its early stages, but one that has great potential for developing rural, olive oil-producing areas thanks to the success of significant consumer agrifood products being linked to tourist activity. In addition, olive oil tourism is framed in special interest tourism (Parrilla González et al., 2020; Pulido-Fernández et al., 2019), which includes rural tourism as it occurs in areas especially related to olive oil production, and gastronomic (or culinary) tourism as olive oil is particularly important both as a food product and as an integral part of the Mediterranean diet. In short, olive oil tourism is conceived as an experiential tourism activity that combines food, culture and knowledge of a product and how it is processed, as is the case of olive oil (Murgado-Armenteros et al., 2019).

This type of tourism enables the active assimilation of the product's culture, which has knock-on effects for both tourists' knowledge of and tourism development in the area, and on the rating of the product. It, therefore, includes activities related to visiting olive groves and the mills in which olive oils are produced and oil tasting sessions are held, along with the sampling of typical dishes in the region, complemented by other cultural and nature-related activities that make a connection between the visitor and the area.

Growth in this type of tourism is also being reflected in the academic sphere, where there has been a proliferation of works focused on studying the appropriateness of developing olive oil tourism in several different countries and regions (Murgado Armenteros, 2013; Millán Vázquez de la Torre et al., 2017; Elias and Barbero, 2017; Arikian Saltik, 2017; D' Auria et al., 2020; Čehić et al., 2020). Other works have also analysed the importance of food culture and heritage as key factors in

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the development of oleotourism, as it is also known (Alonso and Krajsic, 2013; Sánchez and Ortega, 2016).

Taking Hernández-Mogollón et al. (2019) as our reference, several studies exist that focus on analysing the olive oil tourist. Although these works describe the olive oil tourist's profile, they do not conduct a deep examination of purchasing behaviour variables such as motivations, attitudes, perceptions, values and preferences, which could be key variables for understanding the reasons for undertaking olive oil tourism or the olive oil tourist's predisposition towards this type of tourism experience. In this context, the success of olive oil tourism requires the adoption of an approach through the optic of marketing, where the design of the tourism product is based on the consumer having some deep knowledge, and which would enable the tourist's needs to be satisfied and generate value.

Consumer behaviour is one of the areas of knowledge that has received the greatest attention in the marketing literature. There are many works in the tourism sphere in general that analyse demand according to consumer behaviour-related variables or criteria that enable market segmentation (Carvache-Franco et al., 2020; Menor-Campos et al., 2020; Lukoseviciute and Pereira, 2021; Aksu et al., 2021; Yao et al., 2021). Various studies also exist that focus on the segmentation of rural tourism demand (Bayat et al., 2019; Chowdhary et al., 2020; Lwoga and Maturó, 2020; An and Alarcón, 2021).

However, only a limited number of studies are focused on this topic in the specific area of olive oil tourism and those that exist are basically descriptive and inform about general demand without identifying any market segments with different needs (Orgaz-Agüera et al., 2017; López-Guzmán et al., 2016; Cañero et al., 2015). Notwithstanding, in other spheres of tourism such as gastronomic and wine tourism (enotourism), a greater number of works do exist that use consumer behaviour-related variables to identify tourist typologies (Santos et al., 2020; Castillo-Canalejo et al., 2020; Pérez-Gálvez et al., 2020; Duarte-Alonso and Seng Kiat, 2020; Leong et al., 2017; Molina Collado et al., 2013; Rodríguez García et al., 2012).

For example, Castillo-Canalejo et al. (2020) segment gastronomic tourism according to the motivations for the visit and distinguish between: gastronomic experience and novelty; hedonism and leisure, and the relationship of the experience to the visitor's work. In the same sphere, Pérez Gálvez et al. (2020) use attitudes or interest in gastronomy to segment the market. Leong et al. (2017) propose a model to explain tourist behaviour formed of two key elements, the gastronomy and the appeal of the destination, and observe that the attraction of the local gastronomy has a positive influence on the attraction of the tourist destination and, in turn, on tourist behaviour. In the sphere of wine tourism, Molina Collado et al. (2013) make a segmentation that does not just take into account tourists, but also trippers and travellers, with expenditure taken as the main variable on which to base their segmentation. Meanwhile, Rodríguez García et al. (2012) take knowledge of and interest in wine as variables for segmentation and the prime motivations and distinguish between wine lovers, people interested in wine and people who are inquisitive about wine. Similarly, Santos et al. (2020) take into account the wine tourist's involvement to identify three market segments considering their high, medium and low involvement with wine.

The design of a destination or an olive oil tourism activity must be coherent with other aspects, preferences and interests that tourists value at the destination. Thus, the more the activity or destination's offer is adapted to what the tourist is looking for, the greater the likelihood that it will be chosen. So, it is essential to know what aspects tourists value highly for olive oil tourists to be attracted and their loyalty won. This study has, therefore, also been based on works that have analysed variables related to tourists' ratings of the destination (Campón-Cerro et al., 2014; Leong et al., 2017; Orgaz-Agüera et al., 2017).

In light of these considerations, this work pursues a dual objective: on the one hand, the identification of the variables or dimensions that olive oil tourists value at the destination and, on the other, the proposal

of a classification of olive oil tourists based on their preferences. This is important for identifying market segments with different needs that require the design of olive oil tourism products or experiences that adapt to these needs. This would enable an increase in the growth of this tourism typology based on a gastronomic product such as olive oil.

The main novelty and contribution of this work is the proposal of segmentation based on a key criterion, the advantages or benefits that the olive oil tourist seeks at the destination. This could contribute to a more effective segmentation that better adapts to olive oil tourists' needs. This criterion has not previously been used to discriminate between segments in existing studies demand for olive oil tourism. In short, this paper seeks to help close the gap between olive oil tourism supply and demand and generate greater knowledge of the demand to enable market opportunities to be better identified and adapt the offer to the needs of the different segments.

This work has been structured in four parts. Firstly, a literature review is carried out to identify the state-of-the-art of olive oil tourism demand. Next, an explanation is given of the research methodology, which is based on a personal survey of olive oil tourists in the place where the olive oil tourism activity is being done. Then, the obtained results are presented and discussed. Finally, the study's conclusions, limitations and implications that might contribute to improving the olive oil tourism offer and adapting it to the demands of the olive oil tourist segments are set out.

Literature review and theoretical implications

This section presents the literature review of olive oil tourism demand. Firstly, reference is made to works that have analysed the demand from both a general perspective and from the optic of market segmentation. Then, the similarities and differences between extant works are highlighted. The need is stated to conduct more demand studies that enable a market segmentation based on other criteria focused on consumers and their needs, such as the aspects or benefits sought at the destination, which is the main segmentation variable proposed in this work.

Concerning the studies on olive oil tourism, several works analyse the olive oil tourist's profile (Orgaz-Agüera et al., 2017; Murgado-Armenteros et al., 2019; Cañero et al., 2015; Morales et al., 2015).

In general terms, these studies characterise the olive oil tourist as a person with a high level of education, medium-high income and a consumer of extra virgin olive oil (EVOO). The majority are doing this tourist activity for the first time and are usually accompanied by friends, other family members or partners (Murgado-Armenteros et al., 2019; Orgaz-Agüera et al., 2017).

The following main purchase motivations can be highlighted: improving knowledge about olive oil production processes, conducting a novel tourism activity and learning about olive oil culture (Ruiz Guerra, 2010; Alonso and Krajsic, 2013; Orgaz-Agüera et al., 2017; Murgado-Armenteros et al., 2019). In short, conducting olive oil tourism is justified by the need to increase knowledge of this agrifood product and the culture and traditions associated with the product and the production area.

It should also be highlighted that other studies carry out a comparative analysis of olive oil tourist and wine tourist profiles to examine opportunities for the joint commercialisation of the two tourist activities as a way to promote rural development in EVOO and wine-producing areas (Millán and Pérez, 2014; Agudo, 2010).

Table 1 synthesises the main works focused on the demand for olive oil tourism.

However, some differences between these works can also be detected. The Murgado-Armenteros et al. (2019) sociodemographic profile is broader than the Orgaz-Agüera et al. (2017) profile, which focuses on tourists aged over sixty. The Millán et al. (2018) profile puts the olive oil tourist's average age at fifty, whereas Cañero et al. (2015) state that this type of olive oil tourism could be interesting for young people under 30

Table 1
Main works on demand for olive oil tourism.

Authors (year)	Purpose	Methodology	Variables	Main results
Pulido-Fernández et al. (2020)	A deeper examination of demand for olive oil tourism	Questionnaire, two-step cluster analysis	Sociodemographics, trip characteristics and olive oil tourism experience	Four clusters identified: Dabbler Olive Oil Tourists, Experiential Olive Oil Tourists, Half-Day Guest Olive Oil Tourists and Enthusiast Olive Oil Tourists
Murgado-Armenteros et al. (2019)	Analysis of the olive oil tourist's profile and main motivations for undertaking olive oil tourism	Quantitative, questionnaire	Sociodemographics, trip characteristics, motivations and ratings	Olive oil tourist profile: male, between 35 and 65 years of age, higher education, medium-high income, EVOO consumer, stays overnight in the area for 1–2 days, national tourists. First time that they have done this tourist activity, usually do so accompanied by partners and mainly stay in hotels
Barać and Mitrović (2019)	Better understanding of who tourists are and of their perceived experience of a visit to an olive oil tasting room	Quantitative, questionnaire	Sociodemographics, dimensions of quality of the experience, results and motivation	The most highly valued dimensions of the experience are leisure and education. The environment is the dimension with the lowest rating. Significant differences in environmental and functional dimensions between males and females, higher income and medium/lower income. No differences in experience with regard to employment, education or motivations
Millán et al. (2018)	Identification of the olive oil tourism offer in Andalusia based on the olive oil tourist profile and of projected evolution of demand in order to offer a sustainable product better adapted to demand	Three techniques: survey, SWOT analysis and ARIMA model to estimate demand	Sociodemographics, itinerary characteristics, evaluations and opinions of the itinerary (*including of the tourist destination, e.g., roads, signage), degree of satisfaction with the product and knowledge about olive oil	The socioeconomic profile of an olive oil tourist is male, over 45 years of age, secondary education, income of between 1001 and 2000 Euros per month, married and mainly from Andalusia. The majority of the olive oil tourists did not stay in the area overnight, travelled with family or friends and spent approx. 36–50 Euros per day
Orgaz-Agüera et al. (2017)	Analysis of sociodemographic profile, activities, motivations, ratings and satisfaction levels	Quantitative, questionnaire	Sociodemographics, tourist activities, motivations, ratings and satisfaction	Visitors aged 60 or more, medium to high income, university studies, foreigners. Motivations are to visit the geographical area, learn about the world of olive oil and eat and drink products from the area. The most highly valued aspects are hospitality and the conservation of the setting. The majority are satisfied with the trip that they made
Sabbatini et al. (2016)	Exploration of olive oil preferences of tourists who have visited the Island of Crete (Greece)	Quantitative, questionnaires	Preferences, attitudes, sociodemographic profiles and tourists' criteria for purchasing olive oil	The results of the study show that the tourists' country of origin is one of the major drivers in the choice of olive oil, along with the time spent on the Island of Crete and interest in typical products
Cañero et al. (2015)	Development of an analysis of the profile of tourists who visit museums, olive oil mills and olive oil interpretation centres in Andalusia	Quantitative, questionnaire	Opinions, perceptions, ratings and sociodemographic profile of people who visit museums, olive oil mills and olive oil interpretation centres. This technique was used in Córdoba and Jaén provinces. The questionnaire was presented in Spanish, French, English and German	The age range of the people visiting these locations is mostly 50+, although it should be highlighted that a large percentage of visitors are tourists under 30 years of age. This indicates that this kind of tourism is very interesting for young people and it would be worthwhile to leverage this age stratum. The place of origin of the olive oil tourist should also be noted. Over half of the visitors visiting olive oil facilities were from overseas while only just over 40% were Spanish. This means that olive oil culture is highly valued outside of Spain, as confirmed by the results of the study
Morales et al. (2015)	Analysis of the profile of olive oil tourists and their satisfaction with visits to four olive oil Protected Designations of Origin (PDOs) in Córdoba province (Andalusia)	Quantitative, questionnaire	Ratings and sociodemographic profile and purchasing criteria of people who visit PDOs. This technique was used in Córdoba province	The results of this study can be used to fit a quality tourism product to the demand. Tourism activity can complement agricultural activity and generate wealth for rural areas

(continued on next page)

Table 1 (continued)

Authors (year)	Purpose	Methodology	Variables	Main results
Lopez-Guzman et al. (2015)	A deeper look at the knowledge of the olive oil tourist's profile	Quantitative, survey	Sociodemographics, olive oil consumption, reasons for visit, evaluation of tourist destination and satisfaction	Visitors aged 60 and over, medium-high income, studied at university, from Spain, retired. Consume olive oil daily. The main reasons are to visit the geographical area and learn about the world of olive oil. The most highly valued elements at the destination are the hospitality and the food
Millán and Pérez (2014)	Comparison of the profiles of wine tourists and olive oil tourists	Quantitative, survey	Sociodemographics, who travelling with, duration of trip, daily expenditure, wineries/olive oil mills visited, motivation, choice of route, whether would repeat the visit, satisfaction, whether would recommend the route	There are similarities between wine tourists' and olive oil tourists' characteristics, tourist behaviour and the determinants of their degree of satisfaction. Based on the obtained results, the authors suggest that the wine, olive oil and tourism industries could work together to incentivise rural development

Source: prepared by authors.

years of age. All these studies highlight the spending capacity of these tourists and their capacity for purchasing olive oils as they are presented as frequent consumers of the product. From the point-of-view of the tourist product configuration, Millán and Pérez (2014) propose the development of combined olive oil and wine tourist products as a gastronomic marketing lure for destinations, while Morales et al. (2015) propose the development of a single, quality product, Barać and Mitrović (2019) highlight its educational and fun value and Murgado-Armenteros et al. (2019) suggest a greater diversity and complementarity in the offer for the tourist to be able to repeat the experience with other activities. In our opinion, most of the differences that exist may be due to the analysed geographical areas and the period during which the data were gathered.

Some of the studies propose the need to continue scrutinising demand to identify market segments and design tourist products that afford greater value to the olive oil tourist (Lopez-Guzman et al., 2015; Murgado-Armenteros et al., 2019). The tourists' experience and segmentation thus contribute to improving the marketing strategies in the sphere of olive oil tourism (Barać and Mitrović, 2019).

Very few works exist that are focused on olive oil tourist segmentation. Of these, the work by Pulido-Fernández et al. (2020) should be highlighted. Said authors propose segmentation based on the experience of the trip made. They identify four groups or segments of olive oil tourists: 1) Dabbler Olive Oil Tourists, 2) Experiential Olive Oil Tourists, 3) Half-Day Guest Olive Oil Tourists and 4) Enthusiast Olive Oil Tourists. These segments are characterised by the type of trip (whether tourists stay overnight or not and whether they do so at their location) and the interests that motivate olive oil tourists to opt for a given trip.

The work that we present here is framed in studies of the second type, those that seek to propose a classification of olive oil tourists. In this sense, one novelty compared to existing works is the proposal that tourists' ratings of the destinations be used as a criterion for segmenting olive oil tourism demand.

Destination ratings are considered to be one of the most important analytical variables for the tourists' visits together with their socio-demographic characteristics and motivations for visiting the geographical area (Poria et al., 2003; Alonso and Northcote, 2010; Molina Moreno et al., 2011; De Salvo et al., 2013). Concerning this variable, Orgaz et al. (2017) state that the main aspects that are valued at the destination are hospitality, conservation of the setting, cultural activities and food. Murgado-Armenteros et al. (2019) also conclude that cleanliness and the attractiveness of the heritage and cultural setting are the attributes or aspects that olive oil tourists consider the most relevant at the destination. However, no works exist that segment the market according to the aspects or benefits that olive oil tourists value. This is the reason why this segmentation criterion is focused on here to identify whether any

differences can be established in olive oil tourists' behaviour and, consequently, whether different olive oil tourist segments can be identified.

Materials and methods

A quantitative methodology based on a personal questionnaire was designed to carry out this research. The questionnaire was administered to 471 visitors engaging in an olive oil tourism activity (such as a visit to an olive mill, taking part in an oil tasting session, sampling typical local dishes, purchasing olive oils and visiting museums and other interpretation centres specialised in olive and olive oil culture, amongst other things) at the 10 most important establishments for olive oil tourism (oil mills, museums, and interpretation centres) in the province of Jaén (Spain). Jaén is the world's leading olive oil-producing region and is known as the olive oil capital of the world. This province, home to more than 66 million olive trees, generates between 15% and 20% of the world's production of olive oil (AICA, 2020; COI, 2020).

The questionnaire was given to tourists after they had completed their olive oil tourism activity. The tourists filled out the questionnaire on their own, although the administrators of the questionnaire were on hand in case they had any questions. The questionnaire was distributed in three languages (English, French and Spanish).

A pre-test of 25 questionnaires was also conducted to detect any possible errors or elements that could cause confusion. Table 2 presents the quantitative study's technical information.

A cluster analysis was carried out to achieve the objective. The analysis included variables related to aspects that olive oil tourists value at the destination, olive oil tourists' sociodemographic characteristics and satisfaction with the visit. All the items used were included in a more extensive questionnaire developed for a research project focused on analysing demand for olive oil tourism.

This questionnaire design was based on several works in the spheres of rural tourism (Campón-Cerro et al., 2014), gastronomic tourism (Leong et al., 2017) and olive oil tourism (Cañero-Morales et al., 2015;

Table 2
Technical datasheet.

Sample	471 Valid Surveys
Procedure	Convenience sampling
Time period	April 2018 to February 2019
Location	10 survey locations: oil mills, museums, and interpretation centres in Jaén province (Spain)
Sampling Error	±4.60%, under SRS for overall percentages ($p = q = 0.5$); $k = 2$

Source: prepared by authors.

López-Guzmán et al., 2016; Orgaz-Agüera et al., 2017; Millán et al., 2018; Pulido-Fernández et al., 2020). These studies analyse a number of different variables related to olive oil tourism demand and olive oil tourist activity.

Specifically, the variable related to aspects that olive oil tourists value at the destination was measured with 16 items scored on a 5-point Likert scale from 'not at all important' to 'very important'. Although the number of surveys carried out was 471, the response rate for this concrete question was 83%.

The sociodemographic variables included in the analysis were age, gender, level of education and family unit income level.

The characteristics of the trip taken into account were repeating the olive oil tourism activity, staying at the destination overnight and type of accommodation.

Lastly, satisfaction with the visit was measured on a 5-point Likert scale from 'do not agree' to 'strongly agree'.

Data tabulation and statistical analysis were done with the SPSS v. 24 IT program. First, statistics were applied to check the reliability and validity of the questionnaire responses (Cronbach's alpha). When reliability and validity had been checked, factor analysis was performed to identify the motivational dimensions for olive oil tourists. The multivariate case grouping technique (K-means conglomerates) was used to identify tourist segments with similar characteristics regarding the aspects sought at the destination. Statistics were applied to the obtained groups or segments along with association measures that provided the necessary information to study any possible between-variable association patterns for an analysis of any significant differences between the groups in the sample. Specifically, the Chi-square test of independence was used to study the relationships between the nominal variables, the Gamma test for the ordinal variables, and the Kruskal-Wallis and Mann-Whitney U tests for the relationships between the ordinal and nominal variables.

Results and discussion

As a preliminary step, factor analysis was performed to identify the various tourist segments. The purpose was to identify dimensions of aspects sought by olive oil tourists on their trips. The items used for this analysis are given in Table 3. The Cronbach's alpha coefficient for the final scale had a value of 0.804, which is indicative of the merit of the internal consistency of the elements on the scale. The critical level (p) associated with the Friedman χ^2 statistic (695.446; sig: 0.000) allows the quality of means of the used elements assumption to be rejected. This analysis enabled us to identify 4 dimensions of aspects sought by olive oil tourists.

The first dimension found, called the *accessible dimension*, explains almost 18% of the total variance and corresponds to the search for elements that facilitate access to tourist spots in the visited location (Cronbach's alpha coefficient: 0.771). The second dimension, which explains slightly over 16% of the total variance and corresponds to the search for cultural environment-related elements, is named the *cultural and environmental dimension* (Cronbach's alpha coefficient: 0.662). The third dimension of sought-after aspects, which explains over 13% of the total variance, combines the search for complementary leisure elements and quality of infrastructure at the location (Cronbach's alpha coefficient: 0.637). The last dimension found is called the *safety and comfort dimension* and is made up of some additional aspects that improve the tourist's comfort and safety and explains slightly over 13% of the total variance (Cronbach's alpha coefficient: 0.635).

Following the factor analysis, a non-hierarchical analysis of conglomerates was performed with the four extracted dimensions' factor scores. Three segments of olive oil tourists were identified. Table 4 gives the characterisation of the clusters based on the means of the items used in the study. The Kruskal Wallis H statistic enabled us to test that the compared segment means are not equal.

The first segment comprises 35.9% of the surveyed tourists and is

Table 3

Aspects valued by olive oil tourists at the destination. Rotated component (factor) matrix.

Aspects sought at the destination	Components				Dimension
	1	23	3	4	
Information and tourist signage	0.682				Accessible dimension
Communication and transport infrastructure	0.808				
Accessibility to facilities and areas to be visited	0.742				Cultural and environmental dimension
Proximity of locality to other points of interest (natural parks, etc.)	0.611				
Environmental conservation		0.643			
Attractiveness of the heritage and cultural setting		0.706			
Attractiveness of the natural setting		0.703			Tourist and leisure infrastructure dimension
Restaurants			0.547		
Accommodation			0.561		
Leisure available			0.787		
Retail areas			0.611		Safety and comfort dimension
Cleanliness and comfort				0.716	
Citizen safety				0.637	Safety and comfort dimension
Climate of the area				0.646	
Factor loadings	2.508	2.256	1.903	1.848	
% of explained variance	17.912	16.117	13.590	13.197	
% of accumulated variance	17.912	34.030	47.619	60.816	
KMO	0.785				
Bartlett's sphericity test	Chi-square = 1618.235 sig. < 0.000				

Extraction method: main components.

Source: prepared by authors.

Table 4

Characterisation of olive oil tourist segments.

Means of dimensions of aspects sought in olive oil tourism	Olive oil tourist segments			H-Kruskal Wallis	
	Safety and comfort (Mean)	Demanding (Mean)	Accessible (Mean)	χ^2	Sig.
Accessible dimension	3.67 ^(*)	4.25	4.28	87.747	<0.000
Cultural and environmental dimension	4.47	4.15 ^(*)	4.46	27.450	<0.000
Tourist infrastructure dimension	3.94 ^(*)	4.27 ^(*)	3.39 ^(*)	111.542	<0.000
Safety and comfort dimension	4.31 ^(*)	4.10 ^(*)	3.96 ^(*)	17.916	<0.000

(*) The Mann-Whitney U means difference test identifies the existence of significant differences from the values of the other 2 segments.

Source: prepared by authors.

characterised by higher scores in the safety and comfort and cultural and environmental dimensions. The latter receives very high scores in all three segments, while the first segment stands out for its high score in the safety and comfort dimension. This first segment could be called

safety or precautionary tourist and decision-making in this segment is highly influenced by factors related to both the tourist's physical and health safety. The second segment is characterised by having high scores in all four dimensions and so is called *demanding tourist*. This second segment comprises 42.2% of the studied sample and places a high value on the complementary offer while also considering said offer's compliance with tourist safety, comfort and accessibility. The third segment comprises 21.9% of the surveyed tourists. This segment is characterised by recording the highest scores in the accessible dimension and is called the *accessible tourist*. This group is very mindful of the purchasing or consumption decision, aspects related to an accessible setting and places a high value on tourist information and signage, access to facilities and olive oil tourism activities, and also the destination's communication and transport links.

The results of the analysis have been validated by a discriminant analysis to verify the percentage of correctly classified tourists (Table 5). It is worth highlighting that this analysis showed that 87.8% of tourists had been correctly assigned to their corresponding segments.

After identifying the olive oil tourist segments according to the aspects that they value at the destination, a sociodemographic analysis (gender, age, education and income level) was performed on the segments (Table 6). With regard to the gender of the olive oil tourist, there is a greater presence of males in this type of tourism (61.3% of total tourists), with no significant differences observed between the segments (Kruskal-Wallis H statistic = 0.113; p = 0.945). There is no consensus on this variable in the literature. While some works conclude that significant differences between males and females exist (Barać and Mitrović, 2019), with a predominance of men undertaking this tourist activity (Millán et al., 2018), other works state that practically no gender difference exists (Lopez-Guzman et al., 2015; Orgaz-Agüera et al., 2017; Pulido-Fernández et al., 2020).

With respect to the age of the olive oil tourist, a medium to high age stands out. Statistically significant differences at a 90% confidence level can be observed in this case (Kruskal-Wallis H statistic = 5.482; p = 0.065), with a higher age being conspicuous in the accessible tourist segment (60 years or over) and a medium age in the safety tourist segment (between 40 and 50). In other respects, the olive oil tourist has a high level of education (58.5% state that they are university graduates), with no differences detected between the different segments (Kruskal-Wallis H statistic = 0.781; p = 0.677). These results are in line with other works that conclude that olive oil tourists are in the medium-high age range and have completed university studies (Lopez-Guzman et al., 2015; Cañero et al., 2015; Orgaz-Agüera et al., 2017; Barać and Mitrović, 2019; Pulido-Fernández et al., 2020).

The stated level of income can be graded as medium. In this sense, the higher income level of tourists seeking safety and comfort (safety tourist) stands out compared to the other two segments, although no significant differences can be observed between the segments (Kruskal-Wallis H statistic = 3.771; p = 0.152). These results are in line with other studies that highlight a profile of olive oil tourists with a medium to high income level (Lopez-Guzman et al., 2015; Cañero et al., 2015; Orgaz-Agüera et al., 2017; Barać and Mitrović, 2019; Pulido-Fernández et al.,

Table 5
Discriminant analysis.

	Segments			Total
	Safety and comfort	Demanding	Accessible	
Totals				
Safety and comfort	124	15	2	141
Demanding	11	147	8	166
Accessible	6	6	74	86
Percentage				
Safety and comfort	87.9%	10.6%	1.4%	100%
Demanding	6.6%	88.6%	4.8%	100%
Accessible	7.0%	7.0%	86.0%	100%

Source: prepared by authors.

Table 6
Sociodemographic characteristics of the olive oil tourist.

Variables	Categories	Olive oil tourist segments			Total	
		Safety and comfort	Demanding	Accessible		
Gender (N = 393)	Male	62.4%	60.8%	60.5%	61.3%	
	Female	37.6%	39.2%	39.5%	38.7%	
	Age (N = 393)	Under 30 years of age	5.7%	14.5%	19.8%	12.5%
		Between 30 and 39	8.5%	13.3%	16.3%	12.2%
		Between 40 and 49	34.8%	31.3%	10.5%	28.0%
		Between 50 and 59	31.9%	24.7%	17.4%	25.7%
60 years of age or over		19.1%	16.3%	36.0%	21.6%	
Level of education (N = 393)	No schooling	1.4%	0.6%	1.2%	1.0%	
	Primary education	5.7%	6.0%	7.0%	6.1%	
	Secondary education	37.6%	33.1%	31.4%	34.3%	
Monthly family income (N = 353)	University	55.3%	60.2%	60.5%	58.5%	
	Under 1000€	1.6%	2.6%	8.1%	3.4%	
	From 1000€ to 1999€	26.8%	36.8%	35.1%	32.9%	
	From 2000€ to 2999€	39.4%	30.9%	23.0%	32.3%	
	From 3000€ to 3999€	17.3%	19.7%	24.3%	19.8%	
	From 4000€ to 4999€	6.3%	5.9%	6.8%	6.2%	
	From 5000€ to 5999€	0.8%	1.3%	0.0%	0.8%	
	From 6000€ to 6999€	1.6%	0.7%	1.4%	1.1%	
	7000€ or more	6.3%	2.0%	1.4%	3.3%	

Source: prepared by authors.

2020).

Apart from their sociodemographic aspects, this study analyses olive oil tourists' satisfaction level (Table 7). A very high level of satisfaction with the trip can be highlighted (mean 4.51 out of 5 points). In this sense, safety tourists present slightly higher satisfaction than the other segments, although no significant differences exist between the detected segments.

The results obtained in this study allow the objectives to be met. Firstly, 4 key dimensions have been identified that olive oil tourists value: accessibility to the destination, to the facilities and to the olive oil tourism activities; the opportunity to do activities with a cultural component and that are nature- and environment-related; the existence of quality infrastructure and complementary leisure activities, and a commitment to safety and comfort. Secondly, based on these dimensions, 3 olive oil tourist segments have been identified who seek or value different aspects of the destination and the offer.

Table 7
Analysis of satisfaction by segment.

Satisfaction	Segments			Kruskal Wallis	
	Safety and comfort (mean)	Demanding (mean)	Accessible (mean)	χ ²	Sig.
	4.62	4.45	4.45	1.499	<.473

(*)The Mann-Whitney U means difference test identifies the existence of significant differences from the values of the other 2 segments.

Source: prepared by authors.

Conclusions

This work analyses the aspects that olive oil tourists value at the destination as the main criterion for segmenting the market and considers the importance that these factors have for their purchase and consumption decision. The main novelty of this work is the proposal of an olive oil tourist typology based on tourists' ratings of the destination, which is one of the most important variables related to the valuation of the visit. Despite a range of studies already existing in the literature that analyse the olive oil tourist's profile based on more general variables such as the sociodemographic characteristics or the type of travel, this work uses a different and more specific criterion focused on the advantages or benefits that olive oil tourists value at the destination.

Specifically, three market segments have been identified (safety and comfort, demanding and accessible) that value different aspects of the destination. This would enable an olive oil tourism offer to be designed adapted to the preferences and wishes of each segment.

In general, no significant differences have been found in the segments' sociodemographic characteristics except for the age variable. The accessible and safety variables are rated more highly by olive oil tourists in the medium-high age range. Similarly, there are no significant differences between the segments' degree of satisfaction with the olive oil tourism activity. Indeed, it can be concluded that there is a high degree of satisfaction in all three segments, albeit slightly higher in the segment seeking safety and comfort.

The obtained results have implications for both theory and practice. This classification enables a deeper study of the demand for olive oil tourism by identifying olive oil tourist segments with different needs, which will enable greater knowledge to be gained of the olive oil tourist and the quantification of each segment's dimension and attraction.

On the practical level, the identification of these segments is very useful for companies specialising in olive oil tourism. On the one hand, it will enable an offer to be designed that provides greater added value for each of the segments and so contribute to a differentiation of the offer and the setting of higher price levels. In this sense, for the safety-seeking segment, the offer should focus on developing initiatives that represent improvements to the facilities and laying down standards and protocols that guarantee physical, health and hygiene safety as well as comfort in activities such as visits to the olive mills, olive oil tasting, sampling of local dishes in the olive-growing area, etc. For the demanding segment, differentiation should stress the diversity and quality of the expanded offer and highlight activities of an experiential nature both at the mill, on a culinary level and in the wider olive-related surroundings, which would enable the olive oil tourist to connect more with the production area and, in the final instance, to provide a greater level of satisfaction. Lastly, the accessible segment would value an improved offer with established accessibility and signage standards for both the olive mills and other establishments such as restaurants, accommodation and olive oil tasting rooms.

In addition, this study will contribute to the design of more effective communication strategies, with messages and actions targeted at each of the segments. Concerning communication, based on the results for satisfaction, the analysed olive oil tourism destination could be positioned as a destination committed to tourist safety. This is an aspect of major importance with tourists—in general, and olive oil tourists, in particular—rating the safety and comfort dimension more and more highly in these times of economic downturn due to the Covid-19 pandemic.

As far as limitations are concerned, there is a need for longitudinal studies that enable the results of this study to be compared in time and with other olive oil tourism destinations, bearing in mind above all that olive oil tourism is a fledgling tourist activity whose development may lead to the emergence of new olive oil tourist segments and typologies. In this sense, some future research lines are proposed, such as 1) analysing demand based on other segmentation criteria such as olive oil tourists' motives for their visit, values, perceptions and attitudes; 2) a

study of demand at other olive oil tourism destinations to find whether any country- or production area-based differences exist; 3) replicating this study during the Covid-19 period to ascertain its possible influence on the importance of the identified segments and 4) analysing the offer of a variety of olive oil tourism establishments based on the dimensions valued by olive oil tourists to discover their influence on the degree of tourist satisfaction.

CRedit authorship contribution statement

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Declaration of competing interest

The authors of this manuscript declare there are no conflicts of interest and that this manuscript has not been published in any other journal.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.ijgfs.2021.100378>.

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