

## WHO IS AN OLEOTOURIST? A MOTIVATION-BASED SEGMENTATION STUDY

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### Abstract

**Purpose** – Oleotourism is becoming increasingly important as Special Interest Tourism (SIT), especially among researchers who seek to propose an individual tourist experience related to the Mediterranean and olive oil production. This paper examines the profile of visitors to olive farms and olive mills to determine their motives.

**Design** – Purposive sampling was used as the method of data collection. Data were collected using a structured questionnaire during the mid-summer season and the post-summer season 2019 in Istria County (Croatia).

**Methodology** – In total, 263 adequately completed questionnaires were used for data analysis.

**Approach** – Twenty-five items of push and pull motivation are analysed with exploratory factor analysis (EFA), followed by cluster analysis on identified factor dimensions.

**Findings** – After EFA the questionnaire consisted of twenty-two motivational items. Five factor dimensions are identified after EFA and labelled: (1) Socialising and experience, (2) Exterior farm features, (3) Relax with family, (4) Surroundings, and (5) Olive oil and recognition. Cluster analysis revealed 2 different clusters, labelled: Involved olive visitors as the dominant cluster and Inconsequential as the smaller set.

**Originality of the research** – Market segmentation by motivation is key for understanding visitor behaviour in SIT such as oleotourism. This paper explores motivation through push and pull motives and provides a solid basis for further research as well as guidelines for tourism firms dealing with this flourishing business.

**Keywords** Olive oil tourism, Olive oil tourists, Motivation, Factor analysis, Segmentation

### 1. INTRODUCTION

The Mediterranean Diet was awarded the UNESCO patronage in 2013, due to its health benefits, its tradition, and the social value of food and its production (UNESCO 2013). Olive oil is part of the Mediterranean diet and recognized as a distinguished element of Mediterranean countries, with reference to food tradition, health, and the occupation leveraged by its production and connected activities, such as oleotourism or olive oil tourism.

Oleotourism focuses on enhancing natural resources and involves several issues related to sustainability (Ruiz-Guerra et al. 2018; Tregua et al. 2018), including cultural sustainability, as suggested by Millán et al. (2014), who define oleotourism as “*a form of domestic tourism (especially in rural areas) related to gastronomy, which allows for the essence of the culture encompassing the world of the olive to be captured while deepening knowledge about everything connected to olive oil*” (Millán et al. 2014, p. 180).

Oleotourism develops amid considerable production of olive oil and a considerable presence of olive trees, as in Mediterranean countries; many studies, especially empirical ones, are conducted in countries like Spain, Portugal, Italy, and Greece (Passalis 2017; Tregua et al. 2018; Millán et al. 2018) to learn about its manufacture and to taste different oil varieties. Andalusia, located in the south of Spain, produces 60% of Spain's olive oil, having the largest number of almazaras, and therefore most oleotourism offers. This differentiated tourism offer requires identifying the profile of oleotourists to determine sustainable strategies to increase demand without harming the local community. The objective of this study is to identify the Andalusian oleotourism offer according to the profile of oleotourists and project its demand evolution, in order to offer a sustainable product best suited to the demand. With this aim, three techniques are applied in this study: a random survey addressed to oleotourists in Andalusia, a SWOT (strengths, weaknesses, opportunities, and threats; Moral-Cuadra et al. 2020) more globally, gastronomic tourism is formed as an engine of socio-economic development wherever it is inserted, being even more important and decisive if it develops in rural areas. This study is based on a model of structural equations based on minimum partial squares. A sample size of 414 surveys was used, all of which were collected in the oil mills and museums of the towns of Baena, Cabra, Luque and Montilla, all of which belong to the province of Córdoba, Spain. This study develops a model based on motivations and gastronomic experience resulting from the development of oleotourism in the rural areas of the province of Córdoba (Spain). Generally, scholars recognize the importance of this form of tourism as a potential lever for local tourism development and, simultaneously, as instrumental to protecting and enhancing natural resources (Millán et al. 2018) to learn about its manufacture and to taste different oil varieties. Andalusia, located in the south of Spain, produces 60% of Spain's olive oil, having the largest number of almazaras, and therefore most oleotourism offers. This differentiated tourism offer requires identifying the profile of oleotourists to determine sustainable strategies to increase demand without harming the local community. The objective of this study is to identify the Andalusian oleotourism offer according to the profile of oleotourists and project its demand evolution, in order to offer a sustainable product best suited to the demand. With this aim, three techniques are applied in this study: a random survey addressed to oleotourists in Andalusia, a SWOT (strengths, weaknesses, opportunities, and threats; Folgado-Fernández et al. 2019), as well as a feature describing the identity of an area (Goffi et al. 2020). However, despite growing attention from scholars and administrations, oleotourism is not concretely exploited, especially because of a lack of resource systematization and a lack of professionalization among actors involved in related activities (López-Guzmán et al. 2017; Čehić et al. 2020).

In the literature, many critical issues emerge representing barriers to the sector's full development. The main critical issues concern the lack of a systemic approach and cooperation among key actors such as olive oil producers, local administrations, and tourism businesses (i.e., restaurants, hotels, tour operators). Despite increasing interest, most studies still focus on firms' and administrators' perspectives and roles (Martínez and Almonacid 2017; Rodríguez Cohard and Parras Rosa 2012). Studies on consumers are still scarce and have been called for (López-Guzmán et al. 2017; Pulido-Fernández et al. 2020).

To that end, our study aims to identify the levers for effective development of the sector by combining territorial enhancement, local economic and tourist development, and tourist satisfaction.

Analysing tourist motivation towards this form of tourism, with direct involvement through questionnaires, is useful considering the many facets of this phenomenon. Oleotourism combines different business areas, from agricultural production to hospitality and experiential tourism. Tourists' motivations can be varied but not equally effective. This study focuses on a specific territory, Croatia, where the willingness of local administrations and firms to implement tourism initiatives linked to olive oil emerged due to the considerable presence of olive trees and the significant production of extra virgin olive oil (Čehić et al. 2020; D'Auria et al. 2020). In detail, data from the Croatian Bureau of Statistics (2019) show that, although a decrease was registered in 2018, in 2019 the olive oil production significantly increased as emerges from the following data: 2015 (35,352hl), 2016 (34,538hl), 2017 (37,463), 2018 (36,573), 2019 (44,497hl). The country presents similar characteristics and conditions to other regions where oleotourism represents an opportunity; therefore, it can be a useful benchmark for other countries in the Mediterranean.

## **2. LITERATURE REVIEW**

### **2.1. The average profile of oleotourists in the literature**

Oleotourists are a category of tourists interested in a new form of tourism related to olive oil, i.e., oleotourism (e.g., Murgado-Armenteros et al. 2011; López-Guzmán et al. 2017; Moral-Cuadra et al. 2020). They are interested in activities depending on olive trees, olive harvests, mills, olive oil tasting, etc. (Murgado-Armenteros 2013). Thematic parks, visits to olive mills, museums, fairs, and festivals are among the most common initiatives to attract oleotourists (Murgado-Armenteros 2013; Orgaz-Agüera et al. 2018; Folgado-Fernández et al. 2019). Likewise, initiatives were launched to directly involve oleotourists, such as olive picking, walks among olive trees, tasting sessions, and specialized shops (Ruiz-Guerra et al. 2018). These tourists differ from others, as recent research showed: Ruiz-Guerra et al. (2018) contrasted oleotourism with other food-based forms of tourism and highlighted the 'ancestral' role of olive oil-centred activities, making oleotourism more similar to historic and artistic tourism. Folgado-Fernández et al. (2019) investigated oleotourists' features to profile them and depict their

decision-making process; the authors agreed that rural areas' characteristics stimulate oleotourists' interest, as a territory's identity represents a source of emotions and the core of the experience. Additionally, the territory's identity shapes the experience, which is affected by the emotions oleotourists feel from the territory. A positive experience leads to loyalty in behaviour. Oleotourists look for natural, unsaturated spaces to see and closely experience the culture, so tourism must be a complement to rural activity, taking care of the environment and the industrial and cultural heritage. Likewise, care must be taken that local cultural manifestations are not commercialized (Molina Moreno et al. 2011).

More recently, Moral-Cuadra et al. (2020) investigated the interplay between tourism motivations and the gastronomic side of the experience and stated that the latter is part of the former and of the tourism experience, too; the gastronomic side can catalyze a positive tourism experience. Interestingly, no difference emerged concerning gender, age, country of origin, and occupation of the oleotourists, as in previous studies. Scholars indicate that an oleotourist has a medium/high educational and cultural level (Moral-Cuadra et al. 2017). Another differentiating element of oleotourism is olive oil museums, where tourists can learn the evolution of cultivation, types, and varieties of the fruit, production processes, and olive oil categories. Finally, Moral-Cuadra et al. (2020) highlighted the impact of hospitality, treatment, and environmental conservation in shaping the oleotourism offering and experience.

## **2.2. The importance of motivation in tourism research**

Tourists' motivation among the most relevant parameters when shaping services and tourism initiatives. Firms must observe and understand market needs to timely fulfil expectations (Alananzeh et al. 2018; Zhang et al. 2020). As motivations cannot be measured, managers face challenges in detecting them. Crompton and McKay (1997) offer an interesting contribution underlying the importance of understanding customers' motivations to improve offerings, create a better experience, and detect tourist decision-making processes.

According to Dann (1981), tourists' motivation had been defined as a state of mind stimulating travel determining customers' decision-making process. Similarly, Viridi and Traini (1990) stated that tourist choice is determined mainly by the desire to manage one's free time and offer individual gratifications.

The motivation leading one to choose a specific location depends on the combination of perception of personal needs and the destination's perceived attractiveness (Pereira et al. 2019; Su et al. 2020). Crompton (1979) grouped motivations into two categories: push factors, explaining or determining the "desire for vacation", and pull factors, consisting of the destination's attractiveness and linked mainly to the need to break out from the ordinary routine, moving to a place that is far – or, at least, different – from the usual environment. Recalling Hudson (1999), "push factors are those that make you want to travel and the pull factors are those that affect where you travel" (Hudson 1999, p. 9). The definition of push and pull factors led scholars to identify two forms of motivation: generic and specific (Jacobs and Newstead 2000; Bekele 2010; Scuderi and Dalle Nogare

2018; Ketter 2019). The specific motivations refer to how the destination is perceived and the related tourists' expectations in their decision-making. Therefore, they are due to the pull factor. The pull-type motivations (Dancausa et al. 2020) are also linked to tourism actors' resources in creating consumer demand.

Tourism motivation is very different from the intention of travelling, and is a broader, more complex concept that includes intention, but also psychological, anthropological, sociological, and economic factors, such as needs, attitudes, and expectations (Gnoth 1997; Hsu et al. 2010) that mutually influence each other, affecting tourists' choices, perceptions, and satisfaction. Additionally, many studies highlight that interaction and socialization with other tourists or residents, and with the destination's elements, strongly influence tourist behaviour and motivation (Bandura and Cervone 1986; Hsu et al. 2010).

### **2.3. Motivation in the oleotourism literature**

Few studies have investigated oleotourists' motivation; most of them have been published by Spanish scholars, as Spain is one of the countries where oleotourism, although not totally exploited, is already spread (Millán et al. 2018; Hernández-Mogollón et al. 2019; D'Auria et al. 2020). In general, oleotourists' motivation can be observed from two perspectives: living a 'food experience' and practicing 'unusual activities' linked to the destination's cultural and natural heritage. In this regard, several scholars consider gastronomic resources for tourists looking for an authentic tourism experience (Moral-Cuadra et al. 2020). According to Moral-Cuadra et al. (2020: p. 3), "the motivation that causes a tourist to come into contact with the local gastronomy [...] can have a dual origin: one motivation leads them to satisfy only their primary need to eat, and the other determines the time of choosing a particular tourist destination". Similarly, López-Guzmán et al. (2017) described the ties between tourism and gastronomy, while Fields (2002) stressed the links between food tourism initiatives and local heritage and identified three aspects of motivation: willingness to discover local cultural heritage through gastronomic products; willingness to interact and create relationships with the local community discovering gastronomy; and desire to gain social recognition after understanding local values and gastronomic culture.

The development of tourism initiatives related to local heritage, natural environment, or culture – such as oleotourism – highlights that food-based tourism experiences and local gastronomy leverage value creation and delivery to tourists and enhance their experience and satisfaction. However, gastronomic experiences can be perceived differently, being unique and subjective for each consumer. Therefore, their motivations vary. For example, according to Quan and Wang (2004), one of the motivations stimulating oleotourists and, generally, gastronomic tourists is the desire to discover new ingredients and new ways of cooking and prepare the ingredients or consume food. Another important component is the product test or olive oil tasting, which is closely related to gastronomy; gastronomy itself acts as a tourist resource (Millán et al. 2011), leading oleotourism to be a form of gastronomic tourism (Parrilla-González et al. 2020). Thus, gastronomic routes are a useful instrument to position food with a certain quality and origin. According

to Barrera and Bringas (2008), routes are frequently organized based on a specific product. Mediterranean Europe has a long tradition in designations of origin and other certifications, linking food quality and geographical origin. Promoting food through such routes adds value to the product and includes consumption in both the establishment and purchase of regional food products as souvenirs (Millán et al. 2011). The purchase of the product is another key element of the olive oil tourism experience and can be done at various points along the olive oil tourism route: at the place of production (the olive oil mill), restaurants, museum shops, specialized stores, and even fairs and festivals.

All these enclaves are part of the area's cultural heritage, as is the landscape, another driving force behind the tourist experience and closely linked to oleotourism. A rural landscape implies a lifestyle reflecting a certain culture and helps create a tourist image (Molina Moreno et al. 2011). According to Millán et al. (2015), oleotourism preserves olive grove landscapes and uses them respectfully and sustainably. Sustainability is a characteristic of oleotourism from both the supply and demand sides.

However, the main component of olive oil tourism activities is the visit to the mill or place where olive oil is manufactured. According to Millán et al. (2018), this is the main motivation for the trip and most tourists are willing to return due to their satisfaction with the visit. Recently, many oil mills have diversified and adapted their activity to tourism. That is why, in addition to the traditional visit to production facilities, mills are offering activities such as harvesting the olives directly from the tree, producing one's own oil, trying oil at a country breakfast, practicing yoga surrounded by olive trees, etc. One of the reasons why oleotourists are satisfied with their visits to mills is the desire to learn more about the olive oil production. The oleotourist seeks a combination of experiences, authenticity, and learning (Hernández-Mogollón et al. 2019). Besides scholars addressed this combination as relevant in oleotourism and as a lever to increase the interest in this form of tourism, further investigation is still needed; this is due to limited evidence and the need to further focus on the interplay between motivational factors stimulating oleotourists. Indeed, some scholars called for empirical observations to corroborate theoretical advances (Hernández-Mogollón et al. 2019), while some others encouraged research in contexts other than Spain (e.g., Folgado-Fernández et al. 2019). Both considerations depict the research gap that still exists with reference to this form of Special Interest Tourism (SIT).

### **3. RESEARCH AIM AND RESEARCH QUESTIONS (RQs)**

Profiling is among the first descriptive features in identifying the profile of the average visitor involved in a particular type of SIT. Marketing experts consider the survey of this data particularly important because it provides insight into factors affecting customers' behaviour (Chandler and Costello 2002). The profile of oleotourism tourists has been limitedly covered; according to recent studies, oleotourists are slightly more often women, are employed full-time, and have a university degree (Moral-Cuadra et al. 2020; Pulido-Fernández et al. 2020). A similar profile is confirmed by a study of tourists visiting olive mills, olive museums, and visitor centers in variables such as gender and education

level (López-Guzmán et al. 2016), while a study of visitors to an olive oil museum with a store also matches gender, educational level, and employment (Oplanić et al. 2020). Olive farm visitors have not been studied in greater detail, except for the exploratory analysis of demand at olive farms in Istria (Croatia), which confirmed a visitor profile similar to the aforementioned one (Čehić et al. 2019). Considering the low number of visitors and profile-based studies into olive tourism activities, particularly of visitors to olive farms, this paper aims to identify the profiles, motivations, and possible differences between visitors of olive mills and farms.

The first research question is: What motives drive visitors to visit facilities offering an oleotourism experience? Detailed research on oleotourists' motivation is scarce. The biggest leap in investigating oleotourists' motivation was made in the Spanish province of Córdoba and explored motivation on a sample of visitors to four olive mills. The leading motives were: 'to know the geographical area', 'to learn about olive oil world', 'to eat and drink traditional products of this zone', and to 'relax' (Moral-Cuadra et al. 2020). Motivation studies with a detailed list of push and pull motives on a sample of oleotourists have not been investigated, and this study intends to answer the question of the importance of each motive for participating in oleotourism, and to allocate the resulting motivation factors, by segmentation, to clusters.

The second question is: Can we establish whether differences exist between oleotourists? Possible differences between oleotourists are indicated in parallel with evidence of differences between wine tourists, who are also a kind of gastro-tourist in terms of motivation and socio-demography (Charters and Ali-Knight 2002; Alant and Bruwer 2004; Bruwer et al. 2018). The authors will answer the question based on the number of clusters identified and the possible differences between them.

Thus, further research is needed, especially with practical implications. Observing those areas where oil tourism initiatives have been launched can represent a useful starting point. While there are several studies on the subject, most focus on the business perspective of administrations. To respond to this gap, the present work examines the factors that push tourists to choose olive oil tourism or oleotourism.

#### **4. METHODOLOGY**

Primary data were collected using a quantitative research process (Burns and Burns 2008), as scholars pointed out the key features describing oleotourists' behaviour but stressed the need to further understand what drives them to visit a facility or location related to olive oil. This research was performed on a purposive sample of visitors to olive mills and farms open for visit in Istria County (Croatia)—a choice mirroring previous perspectives on studying the motivation of people to further segment them in a food-based research context (e.g., Pole and Kumar 2015); this is also in line with recent contributions performing a motivation-based segmentation in tourism domain (e.g., Phan and Schott 2019). A survey was conducted from July to October 2019. Istria was chosen for data collection because it is home to the largest number of oil mills and olive

farms open to visitors and possesses a well-developed marketing background through development of olive oil roads as compared to other Croatian counties. Moreover, Istria produces PDO (Protected designation of origin) extra virgin olive oil at the EU level, called 'Istra' (Croatian Ministry of Agriculture 2019), which adds value to the region in planning oleotourism. Simultaneously, it is the county with the largest share of tourists within Croatia annually (Čehić et al. 2020). Before the survey, consent was solicited from the facility owners. The research was conducted in 3 olive farms and 3 olive oil mills (Table 1). The first criterion for choosing olive farms and olive mills was that they be open to visitors at the time of data surveying. Furthermore, relatively similar product offer was taken into consideration. We found it relevant to have space for tastings with the capacity to seat at least 10 people at a time, to have within the grounds of the homestead a shop featuring the entire product line, to offer olive oil in bottles of various sizes, and to have at display awards or acknowledgments for the quality of olive oil from international fairs. Stated criteria were met by all subjects where data surveying took place.

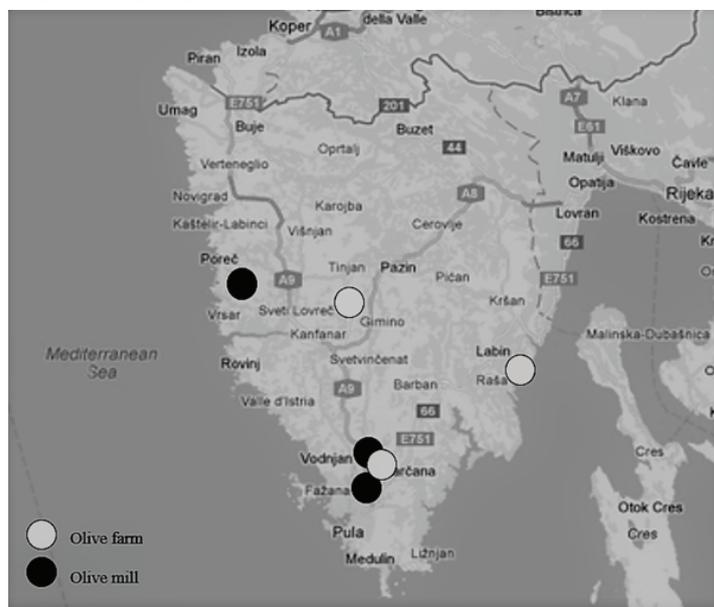
Table 1: **Sampling location**

Type of facility	Location	Number of olive trees	Tasting room and shop	Work time during the year
Olive mill 1	West Istria	67 000	Yes	Open all year
Olive mill 2	South Istria	1 700	Yes	Season work time
Olive mill 3	South Istria	1 400	Yes	Open all year
Olive farm 1	South Istria	7 500	Yes	Open all year
Olive farm 2	Central Istria	700	Yes	Open all year
Olive farm 3	East Istria	4 500	Yes	Season work time

\*Olive mill (own olive groves and oil mill for the processing of olives and for service)

\*Olive farm (own olive groves, but olive processing is outsourced)

Figure 1: Map of sampling location in Istria



Source: <http://orthopediewestbrabant.nl/karta-istre-ceste/>

Data collection via questionnaires was performed by trained interviewers who remained stationary in one place while the respondents were mobile (Veal 2006). At the end of the visit, the interviewers approached visitors and asked them to participate in the research by handing them a questionnaire. Daily visits to olive farms and olive mills do not comprise a large share of visits, and thus the process of surveying proved demanding due to the disparate location of subjects. Moreover, certain visitors did not wish to participate in the survey, which made the research process all the more difficult. However, enough questionnaires were raised to proceed with planned analyses notwithstanding.

Completing the questionnaire took approximately 10 minutes. Given the heterogeneity of the speaking areas of the visitors, who tended to be tourists staying in the destination proper, the questionnaires were made available in Croatian, English, German, Slovenian, and Italian.

The questionnaire consisted of 4 groups of questions to: (a) measure motivation, (b) observe socio-demographics, (c) track travel characteristics, and (d) investigate behaviour towards the facility. Motives were measured according to 25 items for push and pull motivation; 5 questions were used for socio-demographic characteristics, 7 questions related to travel behaviour, and 6 questions related to behaviour towards the facility. Given the lack of detailed motivation particles in the oleotourism field, and considering the specific location of the questionnaire survey, motivation particles were taken from previous visitor interviews and available tourism literature to cover push and pull dimensions of motivation (Yuan et al. 2005; Correia et al. 2007). Questions for

measuring socio-demographics and travel behaviour were used to obtain visitor profiles (Ozdemir et al. 2012). Motivation particles were measured on a seven-point Likert-type scale (ranging from 1 = Strongly Disagree to 7 = Strongly Agree), while other questions included the possibility of selecting an answer under multiple categories.

In total, 291 questionnaires were collected in the research process, and 263 correctly completed questionnaires (90.38%) were analysed. In line with the above-mentioned researches (Pole and Kumar 2015; Phan and Schott 2019), the number of questionnaires was considered suitable to perform the analysis, furthermore, the results mirrored previous studies. Descriptive statistics were employed to describe the sample using distribution and frequency. Exploratory factor analysis (EFA) singled out motive factors, which were used as a basis for segmentation through cluster analysis. EFA was performed using Principal Axis Factoring (PAF). PAF was translated into a scale of 25 items for push and pull motives to visit olive farms. The authors chose this approach because the number of observations is 4-5 times greater related to the number of variables (Neal 2010). Varimax rotation was used in the PAF to maximize the sum of variances of squared loadings. Among all the coefficients, we considered those that assumed a value greater than one (Kaiser, 1960). Isolated factors were used to apply two-step cluster analysis to identify homogeneous groups differing from each other.

To determine the existence of differences between identified clusters,  $\chi^2$  tests were conducted. Statistical analyses were performed at a significance level of 95%, using SPSS ver. 26 statistical software.

## 5. RESULTS

The average visitor is a female, having a college or higher education degree, employed full-time, earning more than 1,500 Euros per month net, and over 57 years old in nearly 40.1% of the sample. Regarding the manner of stay at the destination, visitors are, in over 90% of cases, foreign tourists; they generally organize the trip independently, travel with a partner, and stay at hotels (Table 2).

Table 2: **Demographic and travel behaviour profile of respondents (N=263)**

Variable	Frequency (%)	Variable	Frequency (%)
Socio-demographic variable		Travel behaviour variable	
Gender		Stay in destination	
Female	147 (58.6)	Local resident	3 (1.2)
Male	102 (40.6)	Tourist	237 (94.4)
I don't want to answer	2 (0.8)	Excursionists	6 (2.4)
Education		Weekend tourist	5 (2.0)
Primary school	7 (2.8)	Organization of the trip	

Secondary school	66 (26.3)	Individually	151 (60.2)
College	98 (39.0)	Tour operator	100 (39.8)
Master's degree or higher	80 (31.9)	Accompaniment	
Employment status		Alone	10 (4.2)
Self-employed	30 (12.0)	Partner	118 (49.2)
Employed	147 (58.6)	Family	80 (33.3)
Retired	61 (24.3)	Friends	32 (13.3)
Student	9 (3.4)	Accommodation	
Unemployed	4 (1.6)	Hotel	134 (55.4)
Net monthly income		Camp site	19 (7.9)
Up to 700 euro	12 (5.8)	Private accommodation	89 (36.7)
700 – 1.000 euro	16 (7.7)	Number of previous visits to destination	
1.001 – 1.500 euro	28 (13.5)	No previous visits	77 (32.4)
1.501 – 2.500 euro	77 (37.2)	1 – 2 visits	105 (44.1)
More than 2.500 euro	74 (35.7)	3 – 4 visits	28 (11.8)
Age		5 or more	28 (11.8)
Up to 26	22 (10)	Length of stay in destination	
27 – 36	41 (18.7)	Up to 2 days	17 (6.9)
37 – 46	37 (16.9)	3 – 4 days	31 (12.9)
47 – 56	29 (13.2)	5 – 7 days	81 (32.9)
57 – 66	46 (21.0)	8 – 12 days	59 (22.5)
More than 67	44 (20.1)	13 or more days	58 (22.1)

Source: Own elaboration

### 5.1. Exploratory factor analysis

On a scale of 25 motive particles, exploratory factor analysis (EFA) with principal axis factoring (PAF) was applied as one of the most popular methods enabling the recovery of weaker factors and ensuring the asymptotic efficiency of the maximum likelihood estimator (De Winter and Dodou 2012). For EFA application, samples greater than 100 are required and those greater than 200 are considered fair (Williams et al. 2010). Hence, the authors conclude that 263 is the appropriate sample size for EFA application. The Kaiser-Meyer-Olkin (KMO) test result was measures of sampling adequacy (MSA) = 0.911 (Tabachnick et al. 2007), indicating that the PAF may be useful with this data set based on the underlying components' ability to explain common variance in the data. Bartlett's test of sphericity showed that the overall correlation matrix was significant ( $p < .000$ ); this means the variables are correlated highly enough to provide a reasonable basis for factor analysis. For interpretation, PAF uses components requirement for Eigenvalues greater than 1. After Varimax rotation of the particle with factor loading, smaller nodes 0.4 are excluded and the procedure is repeated. A total of 3 plots were

excluded, namely: *Because of easily available information on the olive farm* (0.298), *Because of educational opportunities* (0.359), and *Because it is located on the "olive oil road"* (0.353). A similar principle was applied in Lee et al.'s (2004) paper, where a similar methodology of visitor segmentation according to motivation was performed. Afterwards, rotation was repeated on 22 motivation items, and these were subsequently retained in a five-factor solution, representing a 57.641% cumulative variance (Table 3).

**Table 3: Principal axis factoring for importance of push and pull motivation on visiting olive farm and olive mill**

Factor/item (% of explained variance)	Mean	Overall mean	Factor loading	Cronbach's $\alpha$	Eigenvalue
Factor 1: <i>Socialising and experience (14.884%)</i>		4.98		0.857	10.378
To find interesting people	4.85		0.737		
To experience olive farm life and activities	5.27		0.695		
To make friends or meet people with similar interests	3.83		0.648		
To get to know different cultures and lifestyles	5.50		0.616		
To meet the olive oil producer	5.28		0.556		
To increase my knowledge about olives and olive oil	5.88		0.431		
To improve my health and well-being	4.31		0.404		
Factor 2: <i>Exterior farm features (13.537%)</i>		3.27		0.885	1.959
Because of easy accessibility (good road)	3.15		0.900		
Because of convenient parking lots	2.95		0.838		
Because of opening/closing times	3.48		0.757		
Because it is an appropriate area for children	3.49		0.407		

Factor/item (% of explained variance)	Mean	Overall mean	Factor loading	Cronbach's $\alpha$	Eigenvalue
Factor 3: <i>Relax with family (13.089%)</i>		4.18		0.861	1.639
To relieve stress	3.80		0.787		
To relax mentally	4.10		0.755		
To get away from city life	3.97		0.665		
To be together with my family	4.16		0.587		
To have an adventure	4.61		0.407		
Factor 4: <i>Surroundings (8.793%)</i>		4.94		0.830	1.244
Because of olive groves in the region	5.19		0.788		
Because of beautiful scenery and landscapes	5.12		0.672		
Because it is not too touristy	4.50		0.449		
Factor 5: <i>Olive oil and recognition (7.337%)</i>		5.51		0.644	1.096
To purchase olive oil	5.61		0.649		
Because the region is known for its olive oils	5.69		0.544		
To taste olive oil	6.14		0.498		

Source: Own elaboration

The first factor is named *Socialising and experience* and explains 14.884% of total variance. This factor includes 7 particles of push motivation that represent motives of socialization with people of similar interests, getting to know olive oil producers and experiencing farm activities as direct motives for olive-related tourism, and getting to know different cultures and increasing one's well-being. The second factor is *Exterior farm features*, which explains 13.537% of total variance. In the second factor, 4 particles represent pull motives for visiting the facilities and relate to external features, traffic connection, availability of parking spaces, working hours, and accessibility for children in the facility. The third factor is *Relax with families*, which explains 13.089% of total variance. In this factor are push motives relating to the need to relax with family and experience an adventure. The fourth factor is *Surroundings* and explains 8.793%. This factor includes 3 particles of pull motivation, which relate to the environment that encourages visitors to visit. The last, fifth factor is *Olive oil and recognition*, which explains 7.337% of the total variance. This factor refers to the push motivation of olive oil as the main element of olive tourism. The Cronbach's  $\alpha$  of this factor is 0.644, this value is between 0.6 and 0.7 and has a moderate strength of association (Hair et al. 2003), but taking into consideration the exploratory nature of this study the authors choose to keep it. Visitors visit farms to buy and taste olive oil, prompted by the region's popularity due to its olive oils.

## 5.2. Segmentation of visitors by motivation factors

The five-factor solution identified in PAF was used as an input variable in two-step cluster analysis. The silhouette measure of cohesion and separation is above 0.5, showing a fair separation distance between clusters (Tkaczynski 2017). Two clusters were revealed within the data set (Table 4).

Table 4: Clusters profile

Factors	Clusters profiles				F-value	Significance
	Involved olive visitors (173, 66 %)		Inconsequential (89, 34%)			
	M	SD	M	SD		
<i>Socialising and information</i>	5.46	0.781	3.92	1.140	164.176	p<0.001
<i>Exterior farm features</i>	4.03	1.318	1.64	0.869	238.579	p<0.001
<i>Relax with family</i>	4.86	1.138	2.80	1.217	184.295	p<0.001
<i>Surroundings</i>	5.47	0.899	3.39	1.628	176.692	p<0.001
<i>Olive oil and recognition</i>	5.95	0.765	4.51	1.166	136.556	p<0.001

Source: Own elaboration

### Cluster 1, Involved olive visitors

This cluster occupies the larger share of the sample size. According to the average values of individual factors of the motive, members of this cluster focus on tasting olive oil as a push motivation, the need for socialization with people of similar interests, and relaxation with family, which constitute important elements of pull motivation. Furthermore, the pull factor *Surroundings* is an important incentive for visiting farm households. As per profile, members of this cluster are women, have a higher education degree, are employed, earn more than 1,500 Euros, are younger people aged 27 to 46, come mostly from Germany and Austria, and are mainly from Europe, in countries where olive oils are not produced. Regarding manner of stay at the destination, members of this cluster are tourists, organize their trip individually, travel with partners or families, are largely accommodated at hotels and private accommodations, are visiting the destination for the first time or have visited 1 to 2 times in the previous 5 years, spend 5-7 days at the destination, and have travelled past the high season. Members of this cluster more often choose to visit an olive mill and stay there for up to an hour. Most of them plan to buy products in the future from the facility they visited.

### Cluster 2, Inconsequential

Cluster 2 occupies a smaller part of the sample, containing respondents who are mostly indifferent or have low to no motivation to visit farm households. *Olive oil and recognition* is a somewhat important motivating factor, while being neutral or negative towards other factors. Regarding profile, members of this cluster are women, have a higher education degree, are employed or retired, have incomes above 1,500 Euros per month, are seniors, i.e., older than 57, and come largely from Germany and Australia, or from countries that do not produce olive oil. Regarding staying at the destination, these are mostly tourists whose trip is organized by a tour operator, who generally travel with a partner, family, or friends, who are accommodated at a hotel, who are visiting the destination for the first time or have visited 1 to 2 times in the previous 5 years, who stay at the destination for 5-7 days, and who visit the destination during the high season. Members more often choose an olive farm to visit and stay an average of up to an hour. Members of this cluster plan to buy products from the facility in the future.

Table 5: Demographic profile of respondents of two-cluster visitor

Variable	Cluster 1, Involved olive visitors (%)	Cluster 2, Inconsequential (%)	$\chi^2$ , p value
Socio-demographic variable			
Gender			
Female	94, (57.3)	53, (60.9)	$\chi^2=0.071$ , p=0.531
Male	68, (41.5)	34, (39.1)	
I don't want to answer	2, (1.2)	0	
Education			
Primary school	5, (3.1)	2, (2.3)	$\chi^2=0.136$ , p=0.330
Secondary school	41, (25.2)	25, (28.4)	
College	60, (36.8)	38, (43.2)	
Master's degree or higher	57, (35)	22, (25.0)	
Employment status			
Self-employed	20, (12.2)	10, (11.5)	$\chi^2=11.519$ , p=0.021
Employed	104, (63.4)	43, (49.4)	
Retired	33, (20.1)	28, (32.2)	
Student	3, (1.8)	6, (6.9)	
Unemployed	4, (2.4)	0	
Net monthly income			

Variable	Cluster 1, Involved olive visitors (%)	Cluster 2, Inconsequential (%)	$\chi^2$ , p value
Up to 700 euro	6, (4.3)	6, (9.0)	$\chi^2=3.592$ , p=0.464
700-1.000 euro	12, (8.6)	4, (6.0)	
1.001 – 1.500 euro	21, (15)	7, (10.4)	
1.501 – 2.500 euro	49, (35.0)	28, (41.8)	
More than 2.500 euro	52, (37.1)	22, (32.8)	
Age			
Up to 26	15, (10.3)	7, (9.5)	$\chi^2=5.189$ , p=0.393
27 – 36	29, (20.0)	12, (16.2)	
37 – 46	29, (20.0)	8, (10.8)	
47 – 56	19, (13.1)	10, (13.5)	
57 – 66	28, (13.1)	18, (24.3)	
67 and above	25, (17.2)	19, (25.7)	
Country of origin			
Germany	45, (28.0)	42, (50.0)	$\chi^2=18.469$ , p=0.002
Sweden	8, (5)	6, (7.1)	
Austria	15, (9.3)	6, (7.1)	
Australia	13, (8.1)	9, (10.7)	
USA	14, (8.7)	1, (1.2)	
Other	66, (41.0)	20, (23.8)	
EU or non-EU country			
EU	124, (77.0)	73, (86.9)	$\chi^2=0.118$ , p=0.064
Non-EU	37, (23.0)	11, (13.1)	
Olive oil producer/ non-producer country			
Producer	45, (28.0)	13, (15.5)	$\chi^2=0.139$ , p=0.029
Non-producer	116, (72.0)	71, (84.5)	

Source: Own elaboration

Table 6: Travel behaviour profile of respondents of two-cluster visitor

Variable	Cluster 1, Involved olive visitors (%)	Cluster 2, Inconsequential (%)	$\chi^2$ , p value
Travel behaviour variable			
Stay in destination			
Local resident	2, (1.2)	1, (1.1)	$\chi^2=1.822$ , $p=0.768$
Tourist	154, (94.5)	83, (94.3)	
Excursionist	3, (1.8)	3, (3.4)	
Weekend tourist	4, (2.5)	1, (1.1)	
Organization of the trip			
Individually	109, (66.9)	42, 47.7%	$\chi^2=10.032$ , $p=0.007$
Tour operator	54, (33.1)	45, 51.1%	
Accompaniment			
Alone	3, (1.9)	7, (8.3)	$\chi^2=7.898$ , $p=0.048$
Partner	78, (50.0)	40, (47.6)	
Family	57, (36.5)	23, (27.4)	
Friends	18, (11.5)	14, (16.7)	
Accommodation			
Hotel	75, (48.1)	59, (68.6)	$\chi^2=20.664$ , $p=0.000$
Camp site	8, (5.1)	11, (12.8)	
Private accommodation	73, (46.8)	16, (18.5)	
Number of previous visits to destination			
No previous visits	53, (33.8)	24, (29.6)	$\chi^2=5.245$ , $p=0.155$
1 – 2 visits	63, (40.1)	42, (51.9)	
3 – 4 visits	18, (11.5)	10, (13.3)	
5 or more	23, (14.6)	5, (6.2)	
Length of stay at destination			
Up to 2 days	13, (8.1)	4, (4.7)	$\chi^2=1.947$ , $p=0.746$
3 – 4 days	21, (13.1)	10, (11.6)	
5 – 7 days	49, (30.6)	32, (37.2)	
8 – 12 days	38, (23.8)	21, (24.4)	
13 or more days	39, (24.4)	19, (22.1)	

Variable	Cluster 1, Involved olive visitors (%)	Cluster 2, Inconsequential (%)	$\chi^2$ , p value
Period of visiting			
High summer season	82, (47.4)	54, (60.7)	$\chi^2=4.149$ , $p=0.042$
Post-season	91, (52.6)	35, (39.3)	

Source: Own elaboration

Table 7: Behaviour on farm of two-cluster visitor

Variables	Cluster 1, Involved olive visitors (%)	Cluster 2, Inconsequential (%)	$\chi^2$ , p value
Type			
Olive mill	106, (61.3)	36, (40.4)	$\chi^2=10.601$ , $p=0.001$
Olive farm	67, (38.7)	53, (59.6)	
Stay on the farm			
Half hour	35, (22.2)	15, (18.1)	$\chi^2=1.713$ , $p=0.788$
1 hour	68, (43.0)	43, (51.8)	
2 hours	44, (27.8)	20, (24.1)	
3 hours	9, (5.7)	4, (4.8)	
More than 3 hours	2, (1.3)	1, (1.2)	
Plan to buy products in the future			
Yes	93, (59.6)	41, (54.7)	$\chi^2=1.761$ , $p=0.623$
No	22, (14.1)	15, (20.0)	
I don't know	41, (26.3)	19, (25.3)	

Source: Own elaboration

A statistical difference was noted concerning motivational factors between cluster 1 Involved olive visitors and cluster 2 Inconsequential which divides them into two groups according to the degree of motivation for visiting. The chi-square test revealed statistically significant differences in individual variables between the two clusters. The two clusters differ statistically from each other regarding country of arrival and whether this country produced olive oil (Table 5). Furthermore, differences were found in the respondent's behaviour during the trip (Table 6) regarding the trip's organization; members of cluster 1 are more inclined to organize travel independently than members of cluster 2, who leave it to a tour operator. This may predict a lack of motivation for visiting considering that a visit to an oil mill/farm in an organized trip is a planned step regardless of the individual's wishes. Moreover, the two groups differ in travel accompaniment; members of cluster 2 more often travel alone or with friends. Regarding choice of accommodation

at the destination, Members of cluster 1 choose hotel and private accommodation, whereas members of cluster 2 most often choose a hotel. A difference was also found in the time period of the visit; members of cluster 1 visit the destination more often in the post-season period as opposed to members of cluster 2, who do so in the summer, at the height of the season. This difference can also be brought into the context of different levels of motivation between the two clusters. Members of cluster 1, who are more motivated to visit, travel in the summer season, when visitors are generally more driven by gastronomic pleasure than those who visit during the high season; the latter's primary motivation for visiting the destination is to enjoy the sea and sun. Simultaneously, a difference was determined between the two groups of clusters according to the type of facility visited (Table 7). Members of cluster 1 more often choose to visit oil mills as compared to members of cluster 2, who choose olive farms. To a degree, the connection between motivation and choice of facility may be explained here as well; namely, members of cluster 1 choose oil mills as a place for olive processing, where they can also see a processing plant, which can replenish the motive for learning about olive oil production. Additionally, in the region where this primary survey was conducted, the number of olive farms is significantly higher than that of oil mills. Therefore, one can conclude that members of cluster 1 make a greater effort to choose an oil mill than members of cluster 2, who may take trips to the nearest olive farm.

## 6. DISCUSSION AND CONCLUSION

This study analyzes the motivations and profiles of visitors carrying out oleotourism activities. One of this work's strengths is that it is the first in the literature to investigate a detailed list of push and pull motives on a sample of oleotourists

Profiling oleotourists is relevant for practitioners, as the oleotourism business is developing fast and must be supported to further advance. The research identifies the average oleotourist as a female with a college or higher education degree, employed full-time, earning more than 1,500 Euros per month net, over 57 years old in nearly 40.01% of cases, a similar profile was obtained in previous studies (Moral-Cuadra et al. 2020; Pulido-Fernández et al. 2020). In terms of nationality, these are mainly foreign visitors, while in previous studies local oleotourists composed a significant share of the sample (Pulido-Fernández et al. 2020; Moral-Cuadra et al. 2020). Regarding the first research question, we focused on the motivations of tourists visiting mills, olives fields, and olive oil factories.

Five push and pull motivation factors have been identified (Hudson 1999). These factors complement each other and influence visitor behaviour. Push motives are socio-psychological and impact visiting a place of interest, whereas pull motives are generated by the quality and attractiveness of the place of interest; those, in turn, encourage visitors to visit (Said and Maryono 2018). This work achieved a similar push and pull relationship. The identified push motive factors cover the dimensions of knowledge, socializing with family and friends, entertainment, holidays, and relaxation, which previous visitor motivation studies have identified (Chen and Chen 2015); in addition

to purchasing, tasting olive oil and the region's renown for olive oils are push motives specific to visitors of olive tourism facilities.

Pull factors are the characteristics of the facility visited and the overall landscape. To encourage visitors, managers emphasize certain features of their facilities such as: accessibility, natural environment, ease of access, and cleanliness (Chen and Chen 2015). A peculiar pull motivation factor in oleotourism that will influence visitors to visit a particular facility is 'because of olive groves in the region'. Olive groves are a key external factor, namely, the pull factor at a given destination, which will encourage visitors to engage in oleotourism activities.

Our results conclude the existence of two segments of oleotourists differentiated mainly by their level of interest and involvement in oleotourism. Pulido-Fernández et al. (2020) used a segmentation approach on a sample of oleotourism visitors, identifying four different clusters with varying interests. A connection between these two studies can be the level of participant involvement. The cluster named Dabbler Olive Oil Tourists in Pulido-Fernández et al. (2020) is the segment of tourists who participate in oleotourism activities due to the proximity of these activities to their residence; this is similar to the cluster Inconsequential identified in this study. The other three segments in Pulido-Fernández et al. (2020) are more involved in oleotourism activities in Spain, which aligns with this research.

Regarding the second research question, the comparison of oleotourists' choices led to the observation of additional elements of their choice, contributing to the understanding of this phenomenon on the way paved by other scholars who described – sometimes in contrasting ways – this tourist profile as mostly having a high education level (Pulido-Fernández et al. 2020) or wider perspectives (Oplanić et al. 2020). Our study shows the characteristics driving visitors' behaviour; occupation, accompaniment, trip organization, and accommodation were relevant to oleotourists' choices. Therefore, oleotourists make their decisions to visit a mill or other facility according to the features scholars pointed out as their personal interests and emotions (Ruiz-Guerra et al. 2018; Folgado-Fernández et al. 2019) and based on other personal features that the literature did not previously mention. These features drive oleotourists' behaviour and help explain their involvement during the visit. Indeed, the most involved oleotourists prefer to visit places where they can study olive oil processing; thus, they are willing to learn something and choose the facility to visit regardless of the distance from home. Consequently, a higher involvement is observed among tourists organizing the tour on their own, as this mirrors their level of interest, as well as their being attracted by mills more than farms. These considerations highlight the relevance of the education level as in Moral-Cuadra et al. (2017), but expand the understanding of which personal drivers affect oleotourists' choices. Moreover, the use of statistical analysis on oleotourists represents a novelty, as, to the best of our knowledge, most of scholars dealing with this topic investigate the companies and not the tourists (e.g., Folgado-Fernández et al. 2019).

Finally, we must point out limitations of this work. First, the scope is limited to a specific region in Croatia. Future research should expand and extend the sample of oleotourists to other region and countries. Regarding the methodology, the use of factor and cluster analysis is widely used in market segmentation, especially for novel forms of tourism such as oleotourism. Thus, from a methodological point of view, future research may implement other methods to complement our considerations.

## REFERENCES

- Alananzeh, O.A., Jawabreh, O., Al Mahmoud, A. and Hamada, R. (2018), "The impact of customer relationship management on tourist satisfaction: The case of Radisson Blue Resort in Aqaba city", *Journal of Environmental Management & Tourism*, Vol. 9, No. 2 (26), pp. 227–240.  
[https://doi.org/10.14505/jemt.v9.2\(26\).02](https://doi.org/10.14505/jemt.v9.2(26).02)
- Alant, K. and Bruwer, J. (2004), "Wine tourism behaviour in the context of a motivational framework for wine regions and cellar doors", *Journal of Wine Research*, Vol. 15 No. 1, pp. 27–37.  
<https://doi.org/10.1080/0957126042000300308>
- Bandura, A. and Cervone, D. (1986), "Differential engagement of self-reactive influences in cognitive motivation", *Organizational Behavior and Human Decision Processes*, Vol. 38, No. 1, pp. 92–113.  
[https://doi.org/10.1016/0749-5978\(86\)90028-2](https://doi.org/10.1016/0749-5978(86)90028-2)
- Barrera, E. and Bringas, O. (2008), "Las rutas alimentarias: una arquitectura turística basada en la identidad de los alimentos", *Gastronomic Sciences*, Vol. 3, No. 706, pp. 1–11.
- Bekele, T.A. (2010), "Motivation and satisfaction in internet-supported learning environments: A review", *Journal of Educational Technology & Society*, Vol. 13, No. 2, pp. 116–127.
- Bruwer, J., Prayag, G. and Disegna, M. (2018), "Why wine tourists visit cellar doors: Segmenting motivation and destination image", *International Journal of Tourism Research*, Vol. 20, No. 3, pp. 355–366.  
<https://doi.org/10.1002/jtr.2187>
- Burns, R.P. and Burns, R. (2008), *Business Research Methods and Statistics Using SPSS*, Sage.
- Chandler, J.A. and Costello, C.A. (2002), "A Profile of Visitors at Heritage Tourism Destinations in East Tennessee according to Plog's Lifestyle and Activity Level Preferences Model", *Journal of Travel Research*, Vol. 41, No. 2, pp. 161–166. <https://doi.org/10.1177/004728702237416>
- Charters, S. and Ali-Knight, J. (2002), "Who is the wine tourist?", *Tourism Management*, Vol. 23, No. 3, pp. 311–319. [https://doi.org/10.1016/S0261-5177\(01\)00079-6](https://doi.org/10.1016/S0261-5177(01)00079-6)
- Chen, L.-J. and Chen, W.-P. (2015), "Push-pull factors in international birders' travel", *Tourism Management*, Vol. 48, pp. 416–425. <https://doi.org/10.1016/j.tourman.2014.12.011>
- Correia, A., Oom do Valle, P. and Moço, C. (2007), "Why people travel to exotic places", *International Journal of Culture, Tourism and Hospitality Research*, Vol. 1, No. 1, pp. 45–61.  
<https://doi.org/10.1108/17506180710729600>
- Croatian Bureau of Statistics, (2019), Crop Production, 2013-2019, viewed 20 February 2021, <https://www.dzs.hr/>
- Croatian Ministry of Agriculture. (2019), "Extra virgin olive oil 'Istra' with PDO", viewed 20 February 2021, <https://poljoprivreda.gov.hr/vijesti/zasticeno-ekstra-djevicansko-maslinovo-ulje-istra-na-eu-razini/1271>
- Crompton, J.L. (1979), "Motivations for pleasure vacation", *Annals of Tourism Research*, Elsevier, Vol. 6, No. 4, pp. 408–424. [https://doi.org/10.1016/0160-7383\(79\)90004-5](https://doi.org/10.1016/0160-7383(79)90004-5)
- Crompton, J.L., and McKay, S.L. (1997). Motives of visitors attending festival events. *Annals of Tourism Research*, Vol. 24, No. 2, pp. 425-439. [https://doi.org/10.1016/S0160-7383\(97\)80010-2](https://doi.org/10.1016/S0160-7383(97)80010-2)
- Čehić, A., Cerjak, M., Čop, T., Begić, M. and Oplanić, M. (2019), "Diversifikacija maslinarskih gospodarstava u segment turizma-istraživanje potražnje", *Agroeconomia Croatica*, Hrvatsko agroekonomsko društvo, Vol. 9, No. 1, pp. 1–13. <https://hrcak.srce.hr/231052>
- Čehić, A., Mesić, Ž. and Oplanić, M. (2020), "Requirements for development of olive tourism: The case of Croatia", *Tourism and Hospitality Management*, Vol. 26, No. 1, pp. 1–14.  
<https://doi.org/10.20867/thm.26.1.1>
- D'Auria, A., Marano-Marcolini, C., Čehić, A. and Tregua, M. (2020), "Oleotourism: A Comparison of Three Mediterranean Countries", *Sustainability*, Multidisciplinary Digital Publishing Institute, Vol. 12, No. 21, p. 8995. <https://doi.org/10.3390/su12218995>
- Dancausa, G., Hernández, R.D. and Pérez, L.M. (2020), "Motivations and Constraints for the Ghost Tourism: A Case Study in Spain", *Leisure Sciences*, pp. 1–22. <https://doi.org/10.1080/01490400.2020.1805655>

- Dann, G.M. (1981), "Tourist motivation an appraisal", *Annals of Tourism Research*, Elsevier, Vol. 8, No. 2, pp. 187–219. [https://doi.org/10.1016/0160-7383\(81\)90082-7](https://doi.org/10.1016/0160-7383(81)90082-7)
- De Winter, J.C.F. and Dodou, D. (2012), "Factor recovery by principal axis factoring and maximum likelihood factor analysis as a function of factor pattern and sample size", *Journal of Applied Statistics*, Vol. 39, No. 4, pp. 695–710. <https://doi.org/10.1080/02664763.2011.610445>
- Fields, K. (2002), "Demand for the gastronomy tourism product: motivational factors", *Tourism and Gastronomy*, London and New York, Vol. 4, No. 2, pp. 36–50. <https://doi.org/10.4324/9780203218617-9>
- Folgado-Fernández, J.A., Campón-Cerro, A.M. and Hernández-Mogollón, J.M. (2019), "Potential of olive oil tourism in promoting local quality food products: A case study of the region of Extremadura, Spain", *Heliyon*, Elsevier, Vol. 5, No. 10, p. e02653. <https://doi.org/10.1016/j.heliyon.2019.e02653>
- Goffi, G., Osti, L., Nava, C. R., Maurer, O. and Pencarelli, T. (2020), "Is preservation the key to quality and tourists' satisfaction? Evidence from Lake Garda. Tourism Recreation Research, Vol. 46, No. 3, pp. 1-7. <https://doi.org/10.1080/02508281.2020.1795591>
- Gnoth, J. (1997), "Tourism motivation and expectation formation", *Annals of Tourism Research*, Vol. 24, No. 2, pp. 283–304. [https://doi.org/10.1016/S0160-7383\(97\)80002-3](https://doi.org/10.1016/S0160-7383(97)80002-3)
- Hair, J.F.Jr., Babin, B., Money, A.H. and Samouel, P. (2003). *Essential of business research methods*. John Wiley & Sons: United States of America
- Hernández-Mogollón, J.M., Di-Clemente, E., Folgado-Fernández, J.A. and Campón-Cerro, A.M. (2019), "Olive oil tourism: State of the art", *Tourism and Hospitality Management*, Vol. 25, No. 1, pp. 179–207. <https://doi.org/10.20867/thm.25.1.5>
- Hsu, C.H., Cai, L.A. and Li, M. (2010), "Expectation, motivation, and attitude: A tourist behavioral model", *Journal of Travel Research*, Vol. 49, No. 3, pp. 282–296. <https://doi.org/10.1177/0047287509349266>
- Hudson, S. (1999), "Consumer behavior related to tourism", *Consumer Behavior in Travel and Tourism*, The Haworth Hospitality Press Binghamton, Scotland, pp. 7–32.
- Jacobs, P.A. and Newstead, S.E. (2000), "The nature and development of student motivation", *British Journal of Educational Psychology*, Vol. 70, No. 2, pp. 243–254. <https://doi.org/10.1348/000709900158119>
- Kaiser, H.F. (1960), "The application of electronic computers to factor analysis", *Educational and Psychological Measurement*, Vol. 20, No. 1, pp. 141–151. <https://doi.org/10.1177/001316446002000116>
- Ketter, E. (2019), "Eating with eat with: analysing tourism-sharing economy consumers", *Current Issues in Tourism*, Vol. 22, No. 9, pp. 1062–1075. <https://doi.org/10.1080/13683500.2017.1357682>
- Lee, C.-K., Lee, Y.-K. and Wicks, B.E. (2004), "Segmentation of festival motivation by nationality and satisfaction", *Tourism Management*, Vol. 25, No. 1, pp. 61–70. [https://doi.org/10.1016/S0261-5177\(03\)00060-8](https://doi.org/10.1016/S0261-5177(03)00060-8)
- López-Guzmán, T., Cañero Morales, P.M., Moral Cuadra, S. and Orgaz-Agüera, F. (2016), "An exploratory study of olive tourism consumers", *Tourism and Hospitality Management*, Vol. 22, No. 1, pp. 57–68. <https://doi.org/10.20867/thm.22.1.1>
- López-Guzmán, T., Lotero, C.P.U., Gálvez, J.C.P. and Rivera, I.R. (2017), "Gastronomic festivals: Attitude, motivation and satisfaction of the tourist", *British Food Journal*, Vol. 119, No. 2, pp. 267–283. <https://doi.org/10.1108/BFJ-06-2016-0246>
- Martínez, J.D.S. and Almonacid, A.G. (2017), "Productivism and post-productivism in the olive groves of southern Spain", *Quaestiones Geographicae*, Vol. 36, No. 2, pp. 57–69. <https://doi.org/10.1515/quageo-2017-0015>
- Millán, G., Arjona, J.M. and Amador, L. (2014), "A new market segment for olive oil: Olive oil tourism in the south of Spain", *Agricultural Sciences*, Vol. 5, pp. 179–185. <https://doi.org/10.4236/as.2014.53022>
- Millán, M.G., Agudo, E. and Morales, E. (2011), "Análisis de la oferta y la demanda de oleoturismo en el sur de España: un estudio de caso", *Cuadernos de Desarrollo Rural*, Vol. 8, No. 67, p. 22.
- Millán, M.G., Hidalgo, L.A. and Arjona Fuentes, J.M. (2015), "El oleoturismo: una alternativa para preservar los paisajes del olivar y promover el desarrollo rural y regional de Andalucía (España)", *Revista de Geografía Norte Grande*, Pontificia Universidad Católica de Chile, No. 60, pp. 195–214. <http://dx.doi.org/10.4067/S0718-34022015000100011>
- Millán, M.G., Pablo-Romero, M.P. and Sánchez-Rivas, J. (2018), "Oleotourism as a sustainable product: An analysis of its demand in the south of Spain (Andalusia)", *Sustainability (Switzerland)*, Vol. 10, No. 1 <https://doi.org/10.3390/su10010101>
- Molina Moreno, V., Quesada Rubio, J.M. and Ruiz Guerra, I. (2011), "Potencial del oleoturismo como diversificación económica del sector cooperativo agrario: el caso español. Revista de Ciencias Sociales. Red Universidad del Zulia. Vol. 17, No. 3, pp. 533-541. <https://produccioncientificaluz.org/index.php/rcs/article/view/25581>
- Moral-Cuadra, S., Acero de la Cruz, R., Rueda López, R. and Salinas Cuadrado, E. (2020), "Relationship between consumer motivation and the gastronomic experience of olive oil tourism in Spain", *Sustainability*, Vol. 12, No. 10, pp. 4178. <https://doi.org/10.3390/su12104178>

- Moral-Cuadra, S., López-Guzmán, T., Orgaz Agüera, F. and Morales, P. (2017), "Motivación y satisfacción de los oleoturistas en España. El caso de Andalucía", *Revista Espacios*, Vol. 38, No. 58.
- Murgado-Armenteros, E.M. (2013), "Turning food into a gastronomic experience: olive oil tourism", *Options Méditerranéennes*, Vol. 106, pp. 97–109.
- Murgado-Armenteros, E.M., Torres-Ruiz, F.J., Parras-Rosa, M. and Vega-Zamora, M. (2011), "El aceite de oliva como elemento nuclear para el desarrollo del turismo", *Turismo Gastronómico: Estrategias de Marketing y Experiencias de Éxito*, Universidad de Zaragoza, Vol. 82.
- Neal, W.D. (2010), "Factor analysis", *Marketing Research: An Applied Orientation*, N.K. Malhotra., Pearson Education, New Jersey, pp. 634–660.
- Oplanić, M., Čop, T. and Čehić, A. (2020), "Maslinarski turizam: razumijevanje motivacija posjetitelja muzeja", *Acta turistica*, Vol. 32, No. 2, pp. 141–167. <https://doi.org/10.22598/at/2020.32.2.141>
- Orgaz-Agüera, F., Moral Cuadra, S., López-Guzmán, T. and Cañero Morales, P. (2018), "General characteristics of oleotourism and proposals for future lines of research.", *Estudios y Perspectivas En Turismo*, Centro de Investigaciones y Estudios Turísticos, Vol. 27 No. 3, pp. 487–505.
- Ozdemir, B., Aksu, A., Ehtiyar, R., Çizel, B., Çizel, R.B. and İçigen, E.T. (2012), "Relationships among tourist profile, satisfaction and destination loyalty: Examining empirical evidences in Antalya Region of Turkey", *Journal of Hospitality Marketing & Management*, Vol. 21, No. 5, pp. 506–540. <https://doi.org/10.1080/19368623.2012.626749>
- Parrilla-González, J.A., Murgado-Armenteros, E.M. and Torres-Ruiz, F.J. (2020), "Characterization of olive oil tourism as a type of special interest tourism: An analysis from the tourist experience perspective", *Sustainability*, Vol. 12, No. 15, pp. 6008. <https://doi.org/10.3390/su12156008>
- Passalis, A. (2017), "15. Olive oil as an important asset for Greek tourism product differentiation and sustainable development", *Tourism and New Media*, Franco Angeli, pp. 164.
- Pereira, V., Gupta, J.J. and Hussain, S. (2019), "Impact of Travel Motivation on Tourist's Attitude Toward Destination: Evidence of Mediating Effect of Destination Image", *Journal of Hospitality & Tourism Research*. <https://doi.org/10.1177/1096348019887528>
- Phan, T.T.L. and Schott, C. (2019), Visitor responses to environmental interpretation in protected areas in Vietnam: a motivation-based segmentation analysis. *Tourism Recreation Research*, Vol. 44, No. 4, pp. 492–506. <https://doi.org/10.1080/02508281.2019.1630168>
- Pole, A. and Kumar, A. (2015), "Segmenting CSA members by motivation: Anything but two peas in a pod", *British Food Journal*, Vol. 117, No. 5, pp. 1488–1505. <https://doi.org/10.1108/BJFJ-12-2014-0405>
- Pulido-Fernández, J.I., Casado-Montilla, J. and Carrillo-Hidalgo, I. (2020), "Understanding the behaviour of olive oil tourists: A cluster analysis in Southern Spain", *Sustainability*, Vol. 12, No. 17, pp. 6863. <https://doi.org/10.3390/su12176863>
- Quan, S. and Wang, N. (2004), "Towards a structural model of the tourist experience: An illustration from food experiences in tourism", *Tourism Management*, Vol. 25, No. 3, pp. 297–305. [https://doi.org/10.1016/S0261-5177\(03\)00130-4](https://doi.org/10.1016/S0261-5177(03)00130-4)
- Rodríguez Cohard, J.C.R. and Parras Rosa, M.P. (2012), "Los canales de comercialización de los aceites de oliva españoles", *Cuadernos de estudios agroalimentarios*, No. 4, pp. 93–102.
- Ruiz-Guerra, I., Molina, V. and Quesada, J.M. (2018), "Multidimensional research about oleotourism attraction from the demand point of view", *Journal of Tourism Analysis: Revista de Análisis Turístico*, Vol. 25, No. 2, <https://doi.org/10.1108/JTA-06-2018-0017>
- Said, J. and Maryono, M. (2018), "Motivation and perception of tourists as push and pull factors to visit national park", *E3S Web of Conferences*, EDP Sciences, Vol. 31, pp. 08022. <https://doi.org/10.1051/e3sconf/20183108022>
- Scuderi, R. and Dalle Nogare, C. (2018), "Mapping tourist consumption behaviour from destination card data: What do sequences of activities reveal?", *International Journal of Tourism Research*, Vol. 20, No. 5, pp. 554–565. <https://doi.org/10.1002/jtr.2205>
- Su, L., Lian, Q. and Huang, Y. (2020), "How do tourists' attribution of destination social responsibility motives impact trust and intention to visit? The moderating role of destination reputation", *Tourism Management*, Vol. 77, pp. 103970. <https://doi.org/10.1016/j.tourman.2019.103970>
- Tabachnick, B.G., Fidell, L.S. and Ullman, J.B. (2007), *Using Multivariate Statistics*, Vol. 5, Pearson Boston, MA.
- Tkaczynski, A. (2017), "Segmentation using two-step cluster analysis", in *Segmentation in Social Marketing*, Springer, pp. 109–125. [https://doi.org/10.1007/978-981-10-1835-0\\_8](https://doi.org/10.1007/978-981-10-1835-0_8)
- Tregua, M., D'Auria, A. and Marano-Marcolini, C. (2018), "Oleotourism: local actors for local tourism development", *Sustainability*, Vol. 10, No. 5, pp. 1492. <https://doi.org/10.3390/su10051492>
- UNESCO (2013), "Mediterranean diet", viewed 15 February 2021, <https://ich.unesco.org/en/lists>
- Veal, A.J. (2006), *Research Methods for Leisure and Tourism: A Practical Guide Essex*, Pearson Education Limited.
- Virdi, R. and Traini, A. (1990), *Psicologia Del Turismo: Turismo, Salute, Cultura*, Armando Editore.

- Williams, B., Onsman, A. and Brown, T. (2010), "Exploratory factor analysis: A five-step guide for novices", *Australasian Journal of Paramedicine*, Vol. 8, No. 3, <https://doi.org/10.33151/ajp.8.3.93>
- Yuan, J.J., Cai, L.A., Morrison, A.M. and Linton, S. (2005), "An analysis of wine festival attendees' motivations: A synergy of wine, travel and special events?" *Journal of Vacation Marketing*, Vol. 11, No. 1, pp. 41–58. <https://doi.org/10.1177/1356766705050842>
- Zhang, Y., Li, J., Liu, C.-H., Shen, Y. and Li, G. (2020), "The effect of novelty on travel intention: the mediating effect of brand equity and travel motivation", *Management Decision*, Vol. 59, No. 6, <https://doi.org/10.1108/MD-09-2018-1055>

## APPENDIX

Sample of questions addressed in the study

1. These next few questions are related to the motives for your visit to this olive farm. Please answer how much you disagree/agree with each of the following statements by checking the appropriate response.

I visited this olive farm...	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
To increase my knowledge about olives and olive oil	1	2	3	4	5	6	7
To purchase olive oil	1	2	3	4	5	6	7
To taste olive oil	1	2	3	4	5	6	7
To improve my health and well-being	1	2	3	4	5	6	7
To have an adventure	1	2	3	4	5	6	7
To get to know different cultures and lifestyles	1	2	3	4	5	6	7
To find interesting people	1	2	3	4	5	6	7

I visited this olive farm...	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
To experience olive farm life and activities	1	2	3	4	5	6	7
To meet the olive oil producer	1	2	3	4	5	6	7
To make friends or meet people with similar interest	1	2	3	4	5	6	7
To be together with my family	1	2	3	4	5	6	7
To relieve stress	1	2	3	4	5	6	7
To relax mentally	1	2	3	4	5	6	7
To get away from the city life	1	2	3	4	5	6	7
Because of easily available information about the olive farm	1	2	3	4	5	6	7
Because of convenient parking lots	1	2	3	4	5	6	7
Because of easy accessibility (good road)	1	2	3	4	5	6	7
Because of opening/closing times	1	2	3	4	5	6	7
Because of educational opportunities	1	2	3	4	5	6	7

I visited this olive farm...	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
Because of beautiful scenery and landscapes	1	2	3	4	5	6	7
Because of olive groves in the region	1	2	3	4	5	6	7
Because it is not too touristy	1	2	3	4	5	6	7
Because it is an appropriate area for children	1	2	3	4	5	6	7
Because the region is known for its olive oils	1	2	3	4	5	6	7
Because it is located on the "olive oil road"	1	2	3	4	5	6	7

2. How long did you stay on the farm?

- a) Half an hour    b) 1 hour    c) 2 hours    d) 3 hours    e) More than 3 hours

3. Do you plan to buy products (olive oil) in the future from this farm?

- a) Yes    b) No    c) I don't know

4. What is your gender?

- a) Female    b) Male    c) I don't want to answer

5. What is your age?

6. What is your highest level of completed education? (Please choose just one answer)

- a) Primary school    b) Secondary school    c) College    d) Master's degree or higher

7. What is your employment status? (Please choose just one answer)

- a) Self-employed    b) Employed    c) Retired    d) Student    b) Unemployed

8. What is your net monthly income? (Please choose just one answer)

- a) up to 700 €    b) 700 – 1000 €    c) 1,001 – 1,500 €    d) 1,501 – 2,500 €  
e) More than 2,500 €

9. Based on your stay in the destination (Istria), which group do you belong to? (Please choose just one answer)

- a) Local resident                      b) Tourist                      c) Excursionist                      d) Weekend tourists

(If your answer is b, c or d, answer questions 9-15, and if your answer is a, thank you for your participation.)

10. How did you organize your trip to the destination (Istria): individual arrangement or tour operator, Please choose just one answer

- a) Individually    b) Tour operator

11. Who is accompanying you to the destination (Istria)? (Please choose just one answer)

- a) Alone    b) Partner                      c) Family                      d) Friends                      e) Other, please specify \_\_\_\_\_

12. Your accommodation in the destination (Istria) (Please choose just one answer)

- a) Hotel    b) Camp site                      c) Private accommodation                      d) Other, please specify \_\_\_\_\_

13. What is your country of origin?

\_\_\_\_\_

14. How many times did you visit the destination (Istria) in the last 5 years?

\_\_\_\_\_

15. How many days did you stay in the destination Istra?

\_\_\_\_\_ days

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