Influence of ethnocentrism on consumer preference patterns: the case of olive oil in Portugal

Rodolfo Bernabéu*, Fátima Oliveira**, Adrián Rabadán*, Mónica Díaz***

Abstract

Consumers are influenced by a multitude of stimuli, which affect their behaviour and guide their preferences towards a particular product. Ethnocentric tendencies are one of these stimuli, understood as consumers' positive attitudes towards goods produced in their own region rather than those from other regions. From this perspective, the current study describes ethnocentric tendencies and identifies olive oil consumer preferences from Lisbon (Portugal). CETSCALE and the conjoint analysis technique have been used for this purpose. Results show that Portuguese olive oil consumers exhibit a strong ethnocentric tendency but the price attribute is also key. Nonetheless, there exists a less ethnocentric segment, on which foreign business strategy can be focused. On this segment, consumers attach lower relative importance to the price and higher relative importance to differentiated-quality parameters: oil type (extra virgin), bottle (glass) and production system (organic).

Keywords: *Consumer behaviour, Consumer Ethnocentric Tendency Scale (CETSCALE), Conjoint Analysis, organic olive oil, extra virgin olive oil.*

1. Introduction

Given their agro-climatic conditions, the countries around the Mediterranean basin form the centre of world olive oil production, accounting for three-quarters of global olive oil production. The mean olive oil production from 2001 to 2014 was 2,830,000 t, of which 42% corresponded to Spain, 19% to Italy, and 12% to Greece, these three countries being the main producers. The Mediterranean olive oil producing countries account for 75% of consumption. The main producers, Italy, Spain and Greece, consume 25.4%, 19.9% and 8.7% respectively. Per capita consumption is 15.5 kg/year in Greece, 11.4 kg/year in Spain, 10.3 kg/year in Italy and 7.1 kg/year in Portugal (IOC, 2015).

However, olive oil consumption is not only limited to this production area. There is a growing worldwide trend associated with the benefits of the Mediterranean diet, of which olive oil is an essential part.

* Escuela Técnica Superior de Ingenieros Agrónomos y de Montes, Universidad de Castilla-La Mancha, Albacete, Spain.
** Escola Superior Agrária de Coimbra, Instituto Politécnico de Coimbra, Coimbra, Portugal.
*** Escuela de Ingenieros Agrónomos, Universidad de Castilla-La Mancha, Ciudad Real, Spain.
Corresponding author: Rodolfo.Bernabeu@uclm.es

In this regard, the consumption of olive oil is associated with the prevention of cardiovascular diseases (the fatty acids found in virgin olive oil, especially oleic acid, help to reduce LDL cholesterol levels, while enhancing HDL levels, favours arterial vasodilation, improves blood circulation and lowers blood pressure) (Hernáez *et al*., 2016; Sikand *et al*., 2015). Olive oil also facilitates the digestive function (Alarcón de la Lastra *et al*., 2001), helps to combat constipation (Ramos *et al*., 2015), reduces complications in type II diabetes mellitus patients (Sikand *et al*., 2015; Esposito *et al*., 2017), contributes to the correct mineralisation and development of the bones, protects against cellular oxidative stress and increases longevity by reducing the number of deaths from cardiovascular disease and certain types of cancer (Ostrowska *et al*., 2006; Chin and Ima-Nirwana, 2016; Del Río *et al*., 2016).

Focusing on the Portugal case, mean production of olive oil in this country from 2001 to 2014 was 48,500 t, while mean consumption was 74,000 t (IOC, 2015). In 2015, Portugal imported 103,260 t of olive oil, been Spain the main exporter (76,486 t), followed at a considerable distance by Tunisia (5,794 t) and Morocco (1,115 t) (COMTRADE, 2015). Per capita consumption of olive oil is 38% lower in Portugal than in Spain, which represents an opportunity not only for local producers, but also for olive oil producers from other culturally similar countries, given the previously mentioned health benefits of the Mediterranean diets.

From a marketing perspective, consumers are the key factor when designing business strategies. It is also clearly a risk to design these strategies without knowledge of consumer behaviour. Thus, if olive oil producers wish to generate and exploit all business opportunities, it is necessary to closely analyse consumer behaviour.

Consumers are influenced by a multitude of stimuli, which affect their behaviour and guide their preferences towards a particular product. Ethnocentric tendencies are one of these stimuli, understood as consumers' positive attitudes towards goods produced in their geographical area of origin. Pragmatically speaking, we can say that ethnocentrism is the name given to the sense of belonging felt by any individual. More importantly, it explains the reason why a group accepts certain choices rather than others, which, in the case that concerns us here, refers to accepting certain buying behaviours rather than others (Witkowsky, 1998).

The term consumer ethnocentrism was first used to explain the preference or rejection of consumers towards products from other countries, but this concept has currently been extended to include products produced in different regions of the same country (Bernabéu *et al*., 2013). In this regard, less ethnocentric consumers are able to choose products regardless of their origin, since they evaluate them by taking into account all their qualities and may even prefer products from other regions to those of their own.

By contrast, more ethnocentric consumers may feel that products from other regions act against their regional identity, damage the local economy and cause the loss of jobs (Bilkey and Nes, 1982; Chasin *et al*., 1988; Durvasula *et al*., 1997; Han, 1988; Hung, 1989; Johansson *et al*., 1985; Kaynak and Kara, 1996; Sharma *et al*., 1995; Supphellen and Gronhaug, 2003; Wall and Heslop, 1986; White, 1979). While this feeling is persistent and may resurface strongly in times of economic crisis, it may give rise to morally wrong opinions (Shimp and Sharma, 1987).

In light of the above, it is of interest to be able to measure the degree of consumers' ethnocentrism to determine the possibilities for commercial success of products in the market of destination, olive oil in our case. The final aim of this work is to propose business strategies to increase olive oil consumption in Portugal. To determine the existence of market opportunities, we will first analyse consumers and classify them according to their degree of ethnocentrism. Second, we will determine their preferences regarding olive oil, and, finally, we will establish the business strategies required for companies wishing to enter, position and differentiate themselves in the Portuguese olive oil market.

The structure of the paper is as follows. In the next section, a description of the data and the methodology used is included. Then, the results of the empirical analysis are shown, followed by their discussion. At the end of the paper, we finish with the conclusions, limitations, implications and future lines of research.

2. Methodology

The conceptual framework of this study draws on work previously undertaken by other researchers, especially that conducted by Sharma and colleagues (Shimp and Sharma, 1987, Sharma *et al.*, 1995, Durvasula *et al.*, 1997). The conceptual framework for the study is presented in Figure 1.

For this paper, a survey was taken of 421 olive oil consumers in Lisbon in August 2015. To design the sample, Lisbon population data from 2012 was used according to the National Census of the National Statistics Institute (2014). Random, stratified sampling (Parasuraman, 1991) was conducted by district, population, gender and age group: between 18 and 24 years old, 25 to 34, 35 to 49, 50 to 64, and over 64 years of age. Those surveyed were about to buy food for their home consumption in supermarkets and hypermarkets. The error level was below 4.87%, for a 95.5% confidence level, under the principle of maximum indetermination, as is seen in the technical details in Table 1.

The definitive questionnaire was divided into four thematic sections: 1) olive oil consumption characteristics, 2) purchasing attitudes, 3) various ethnocentric statements and 4) consumer socioeconomic characteristics.

The Annex presents the 17 items comprising the Consumer Ethnocentric Tendency Scale (CETSCALE) (Bawa, 2004; Kavak and Gumusluoglu, 2007; Chryssochoidis *et al.*, 2007; Brugarolas *et al.*, 2009; Bernabéu *et al.*, 2013) which were included in the survey to identify the ethnocentric attitudes of consumers in Lisbon. Consumers were asked to score each of the variables from 1 to 7, according to their level of agreement or disagreement with the statement. A score of 1 corresponds to "I totally agree" and 7 corresponds to "I totally disagree". Considering that the total score awarded by each individual to the scale may vary between 17 and 119, the lowest scores identify the least ethnocentric consumers and the highest scores, the most ethnocentric consumers.
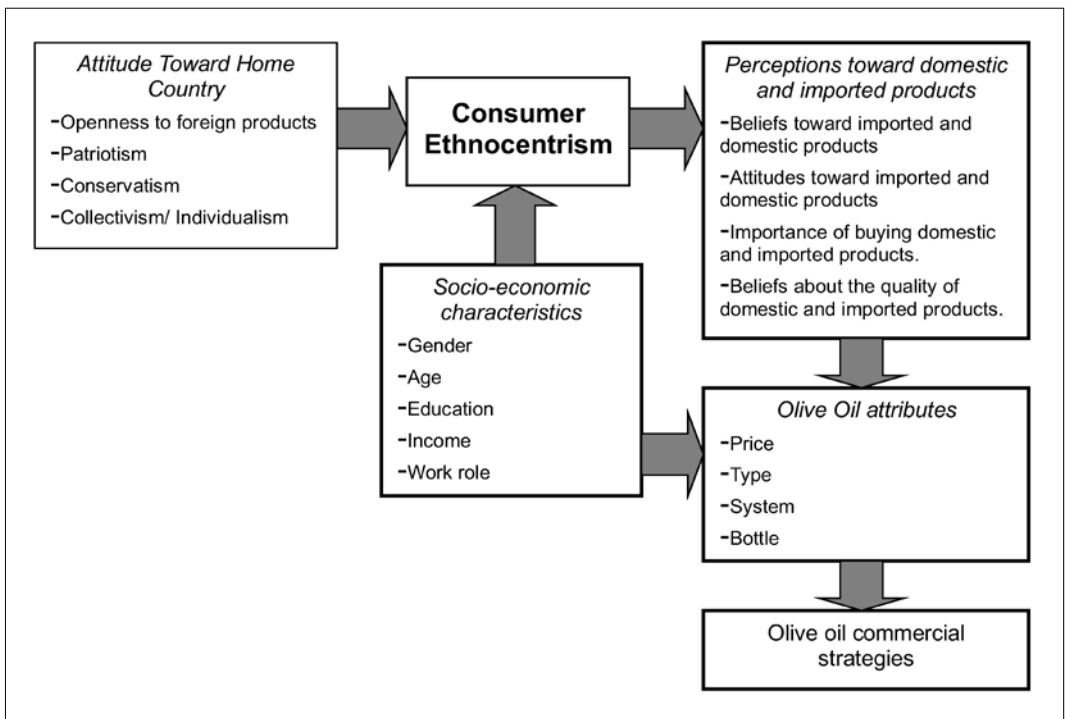
Figure 1 - Conceptual Framework.

Table 1 - Technical details.

Ambit	City of Lisbon (Portugal)
Universe	Adult olive oil consumers
Survey size	421 surveys
Survey error	±4.87%
Level of confidence	95.5% (k=2)
Sampling	Stratified with proportional affixation by population district, gender and age
Control	Of coherence and stability
Preliminary questionnaire	Pretest to 25 individuals
Field work	August 2015

"k" is a constant that depends on the level of confidence we assign. The confidence level indicates the probability that the results of our investigation are certain.

We then conducted a direct segmentation, taking the mean score as the reference. Thus, consumers with a total score lower than the mean were considered "less ethnocentric", meaning they exhibited a more favourable attitude towards products produced outside their region of origin (Camarena-Gómez and Sanjuán, 2010). Each segment was typified according to socio-economic characteristics and preferences related to olive oil consumption.

Broadly speaking, there are two types of models used to determine consumer preferences. On one hand, we have consumption models, where respondents give their opinions about different attributes of the same product, and by using aggregation, the total utility is calculated (Wilkie and Pessemier, 1973). On the other hand, we have decomposition models, one of which is the Conjoint Analysis technique (Green and Rao, 1971). In these models, consumers declare their preference for a specific product and the researcher then calculates the importance of each attribute, taking this global preference as the basis (Vázquez, 1990).

In order to determine both the levels for each of the attributes analysed, and the specific attributes used in olive oil studies, we referred to reviews of the literature, interviews with experts and a preliminary questionnaire was prepared. The origin of the olive oil was predetermined as Portuguese, given the importance of this attribute for Portuguese consumers, as the case of Spanish olive oil and Spanish consumers (Espejel and Fandos, 2008; Bernabéu *et al*., 2009; Erraach *et al*., 2014; Yangui *et al*., 2014). Thanks to this prior work, the most important attributes and their levels were selected, specifically: price (2.90 €/l, 3.80 €/l and 4.40 €/l), type (olive oil, virgin olive oil and extra virgin olive oil),[1] bottle (plastic, glass) and finally, production system (conventional, organic).

The combination of the ten levels of these four attributes yielded 36 different products. This is too many products to show to the consumer. Hence, we utilised an orthogonal design, which allows to reduce the number of options to nine[2] (Table 2). Thus, eliminating

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[1] Extra virgin olive oil is maximum quality oil. It is obtained directly from olives in good condition, through mechanical procedures only, has perfect flavour and aroma, and is free from defects. The degree of its acidity is not over 0.8º, expressed as a percentage of oleic acid. Virgin olive oil follows the same quality parameters as extra virgin olive oil regarding production methods. The difference is that it cannot have more than 2º of acidity. Such defects should be practically imperceptible to the consumer. Lastly, olive oil is a mixture of olive oil with virgin or virgin extra olive oil. The degree of acidity of this olive oil cannot be over 1º (IOC, 2013).

[2] The number of products evaluated by the consumers was 11. Nine corresponded to the orthogonal design (those used in calculating the utilities). Two additional products (holdout cases) were for verifying the validity of the utility of the first 9 products (which was not significant). Therefore, they were considered valid (Bernabéu *et al*., 2013).

Table 2 - Hypothetical olive oil cards shown to those surveyed.

Card number	Price (€/L)	Type	Bottle	System
1	2.90	Olive oil	Plastic	Conventional
2	3.80	Olive oil	Glass	Conventional
3	3.80	Virgin olive oil	Glass	Conventional
4	2.90	Virgin olive oil	Glass	Organic
5	4.40	Virgin olive oil	Plastic	Conventional
6	4.40	Extra virgin olive oil	Glass	Conventional
7	2.90	Extra virgin olive oil	Glass	Conventional
8	4.40	Olive oil	Glass	Organic
9	3.80	Extra virgin olive oil	Plastic	Organic

the interactions, information is obtained on the main effects. Evidently, reducing the number of options involves a loss of information but this loss is more than compensated for by the advantage of showing only nine products to each respondent (Kirk, 1982; Braña *et al.*, 1995).

Once the hypothetical olive oil cards were designed, they were shown to each of the respondents who assigned a score from 1 to 10 to each card depending on their declared preferences. They had the possibility of repeating scores on more than one card. The number 1 corresponded to the lowest degree of preference and 10 to the highest, according to the complete profile method. The object was to discover which characteristics had a greater influence on the total preference for the olive oil in question, as well as the relative importance of each attribute.

The specification of the conjoint analysis model is based on the hypothesis that respondent preferences, or global olive oil valuation, is obtained from the individual scores for each attribute, so that the sum of those scores generates the global valuation (Steenkamp, 1987). An additive model was used as the starting point, since, in almost every case, it explains a very high percentage, between 80% and 90%, of the variation in individual preferences. Its formula is shown in the following equation:

$$Valuation = \beta_0 + \sum_{i=1}^{3}\beta_i D_{1i} + \sum_{j=1}^{3}\beta_j D_{2j} + $$
$$+ \sum_{k=1}^{3}\beta_k D_{3k} + \sum_{l=1}^{3}\beta_l D_{4l}$$

where β_i, β_j, β_k and β_l are the coefficients associated with levels i (i=1,2,3), j (j=1,2,3), k (k=1,2), and l (l=1,2) of the attributes of price (1), type (2), bottle (3) and system (4), respectively, and where D_{1i}, D_{2j}, D_{3k} and D_{4l} are the fictitious variables for each attribute, considering the levels of each attribute as categorical.

The final result of the *Conjoint* program permits estimating the partial utilities of each attribute and the total utility of each profile (Espejel and Fandos, 2008; Menapace *et al.*, 2011; Imani *et al.*, 2013; Erraach *et al.*, 2014; Bernabéu *et al.*, 2016). Using the partial utilities of each respondent to determine consumer preference structure, the relative importance (RI) of the attributes of each of them was calculated, as well as the proportion of the range assigned to each attribute over the total range variation (Halbrendt *et al.*, 1991; Hair *et al.*, 1999).

$$RI(\%) = \frac{maxU_i - minU_i}{\sum(maxU_i - minU_i)} \times 100$$

where RI, is the relative importance, max U_i, is the maximum utility and min U_i is the minimum utility.

Socioeconomic characteristics of the sample are shown in Table 3.

3. Results

Generally, consumers from Lisbon exhibited a clear ethnocentric behaviour regarding products made in their country, since the values obtained

Table 3 - Sample socio-economic characteristics of the subjects participating to the consumer panel (%).

Variable/Levels		Lisbon	
		Population[a]	Sample
Gender	Male	45.8	48.0
	Female	54.2	52.0
Age (in years)	18-24	8.6	13.1
	25-34	16.9	20.0
	35-49	23.9	17.1
	50-64	22.3	17.1
	≥ 65	28.3	32.7
Education	Grade School	46.9	33.3
	High School	17.1	19.8
	College	36.0	46.9
Work role	Housewife	3.2	0.2
	Employee	47.1	39.0
	Student	7.3	13.8
	Business person	9.5	7.6
	Retired	31.4	31.9
	Other	1.5	7.5
Monthly family net income (€)[b]	< 900	48.0	11.9
	900 to < 1,500	27.5	38.4
	1,500 to < 2,100	10.8	28.0
	2,100 to < 3,000	6.8	14.6
	> 3,000	6.9	7.1

[a] Source: National Statistics Institute (2014).
[b] Data available is for Portugal.

on the CETSCALE are above the halfway score of the scale. Consumers were then segmented as a function of the sample median, identifying the most and the least ethnocentric consumers in Lisbon city with a maximum level of error of 1% (Table 4).

An analysis of the socioeconomic characteristics of the consumer segments shows, with significant differences, that the less ethnocentric consumers are those younger, with the highest educational level (frequently with a university degree), employees or business persons, and with a medium or high family income (over 1,500 €/month). On the other hand, the more ethnocentric consumers are older and are more frequently women (Table 5).

Regarding the structure of olive oil consumer preferences, according to their degree of ethnocentrism, the attributes most valued by Lisbon consumers when choosing olive oil are: price (62.39%), followed by type of oil (17.15%), bottle (11.92%) and, finally, production system (8.54%). Thus, we can state that Lisbon olive oil consumers prefer economic, extra virgin olive oil, sold in a glass bottle and produced organically.

Nonetheless, as suggested by Shimp and Sharma (1987), consumers' ethnocentric tendencies do not function uniformly, with segments of population exhibiting ethnocentric tendencies to differing degrees. In this regard, we have determined the preferences of olive oil consumer depending on their degree of ethnocentrism (Table 6).

Table 4 - Average values from the CETSCALE variables.

Variables		Lisbon	
	Total	Seg. 1. More ethnocentric 50.4% [a]	Seg. 2. Less ethnocentric 49.6% [a]
1. Portugal consumers should always buy products…**	6.28	6.78	5.83
2. Only those products that are not available in Portugal should be imported**	4.26	5.77	2.76
3. Buying products from Portugal means saving jobs in our region…**	6.14	6.59	5.69
4. Portugal products should be considered as the first, last and most important**	5.83	6.42	5.27
5. Purchasing products made outside the region is anti-Portugal…**	4.51	5.46	3.58
6. It is not good to purchase products made outside the region because…**	5.58	6.41	4.79
7. A true Portugal consumer should always buy products made in Portugal…**	5.61	6.48	4.72
8. We should purchase products made in Portugal instead of allowing other…**	6.01	6.39	5.62
9. It is best always to purchase products made in Portugal…**	6.06	6.66	5.48
10. There should be very little commerce or acquisition of goods…**	5.22	6.34	4.14
11. Portugal consumers should not purchase products from other areas…**	5.71	6.52	4.92
12. All imports should be curbed…**	3.16	4.01	2.32
13. It may cost me more in the long run but I prefer to support Portugal products**	5.59	5.87	5.30
14. People from other regions should not be authorized to place their products**	4.33	5.84	2.84
15. Products from other regions should be heavily taxed to reduce their…**	4.93	6.17	3.69
16. We should only purchase from other areas those products that…**	6.02	6.59	5.47
17. Portugal consumers who purchase products made in other regions…**	4.70	5.91	3.49
TOTAL	89.94	104.21	75.91

Source: designed by the authors, based on Shimp and Sharma (1987).
[a] *Size of the segment.*
** *Indicates significant differences with a maximum error of 1%.*

Thus, we find that consumers in the more ethnocentric segment attach greater importance to the price attribute than consumers in the less ethnocentric segment. In contrast, the less ethnocentric consumers give more importance to attributes such as type of olive oil, type of bottle and production system.

Portuguese producers could focus on the two groups, selling no differentiated oil with low price to the more ethnocentric consumers, and differentiated oil (i.e. organic extra virgin olive oil) for the less ethnocentric consumers. Companies from other countries, such as Spain, should focus on exporting to Portugal mainly high qual-

Table 5 - Socio-economic characteristics of consumer segments (%).

Variables		Seg. 1. More ethnocentric	Seg. 2. Less ethnocentric
Gender	Male	41.5	49.7
	Female	58.5	50.3
Age (in years)	18-24	18.0	8.1
	25-34	15.5	26.9
	35-49	15.5	12.7
	50-64	6.0	28.9
	≥ 65	45.0	23.4
Education**	Grade School	45.3	21.6
	High School	19.3	20.6
	College	35.4	57.7
Work role**	Housewife	0.0	0.5
	Employee	30.5	45.7
	Student	17.0	10.7
	Business person	3.0	11.2
	Retired	44.5	21.8
	Other	5.0	10.1
Monthly family net income**	< 900 €	13.6	10.0
	900 € to < 1,500 €	48.0	29.5
	1,500 € to < 2,100 €	25.3	30.5
	2,100 € to < 3,000 €	11.1	17.9
	> 3,000 €	2.0	12.1

** *Indicates significant differences with a maximum error of 1%.*

ity differentiated oil. Given that the more ethno-centric consumers choose a product depending on its price and the less ethnocentric consumers also value other attributes, it seems logical for marketing strategies promoting olive oil to target the latter consumer group.

4. Discussion

It is generally thought that ethnocentric tendencies are especially important in consumers who feel their socioeconomic variables and quality of life are threatened by the competition of foreign products (Shimp and Sharma, 1987). In this regard, Sharma, Shimp and Shin (1995) and Marín (2005) suggest that women tend to be more ethnocentric than men and that consumers with lower educational levels and lower incomes also exhibit greater ethnocentric tendencies. Camarena-Gómez and Sanjuán (2010) identify the most ethnocentric consumers as those with an income of less than 1,500 €/month.

The present study confirms that consumers with lower levels of education and lower incomes (1.500 €/month) are more ethnocentrically oriented, but results for gender and age are inconclusive. However, women and older consumers exhibit a more ethnocentric tendency, which is similar to the findings of Bernabéu *et al*. (2013). Furthermore, our results show significant differences according to consumers' type of employment, which is possibly related to income and educational levels.

With regard to scores on the CETSCALE, in comparison to the results of the study by Bernabéu *et al*. (2013), conducted in Madrid and

Table 6 - Utilities assigned to attribute levels.

Attributes and levels	Seg. 1. More ethnocentric		Seg. 2. Less ethnocentric	
	RI (%)	U	RI (%)	U
Price**	65.64		59.09	
2.90 €/l**		2.86		2.53
3.80 €/l		0.13		0.05
4.40 €/l**		-2.99		-2.58
Type*	15.59		18.73	
Olive Oil*		-0.38		-0.57
Virgin Olive Oil		-0.02		-0.03
Extra Virgin Olive Oil*		0.40		0.60
Bottle	11.11		12.75	
Glass		0.43		0.40
Plastic		-0.43		-0.40
System*	7.66		9.43	
Conventional*		-0.40		-0.10
Organic*		0.40		0.10

RI= Relative Importance; U= Utility.
** and * correspond to 1% and 5% maximum error levels, respectively.

Barcelona, it is worth noting that average scores in both Madrid (39.49) and Barcelona (44.27) were low, in contrast to the findings for Lisbon (89.94). This is arguably because Lisbon continues to be a medium-sized city, and thus inhabitants have a higher perceived risk of the globalisation of markets, associating the process with the recent economic crisis.

The difference in this perception between Portugal and Spain is especially striking since the two societies are generally thought to be very similar. An analysis of the socioeconomic characteristics of the more ethnocentric consumer segments in both Madrid and Lisbon shows that consumers with the lowest levels of family income are significantly the most ethnocentric (Bernabéu et al., 2013), while the segmentation of consumers in Lisbon shows that individuals with a lower educational level are the most ethnocentric.

However, other similar studies conducted in Spain have yielded higher scores. Brugarolas et al. (2009) obtained 65.29 in the Valencian Community, and Marín (2005) obtained 70.87 in the Province of Valencia. These higher scores might

be because the studies included small and large towns, whereas the study conducted by Bernabéu et al. (2013) focused on the two most populated cities in Spain. The size of the town in which the study is conducted might, thus, determine the results obtained.

Studies conducted in other countries reveal a greater tendency towards non-ethnocentrism: Shimp and Sharma (1987) obtained scores ranging from 56.62 and 68.58 in consumers in the United States; Good and Huddleston (1995), found scores of 51.68 for Russian consumers and 69.2 for Polish consumers; Bigné (1999) obtained a score of 52.8 for German consumers, 53.1 for British consumers and 62.3 for those in France. Sharma, Shimp and Shin (1995) obtained a score of 85.07 for South Korean consumers, possibly because the study coincided with the onset of the market globalisation process.

Regarding preferences for olive oil, in the case of Spanish consumers, Espejel and Fandos (2008) found the most important attributes to be colour, taste, form and appearance, while they found origin to be irrelevant. Bernabéu et al. (2009) showed that the most valued attrib-

utes were type (extra virgin), followed by origin, price and production system (organic). Erraach *et al.* (2014) reported the most valued attribute to be price, followed by origin, bottle and colour, and, finally, Yangui *et al.* (2014) demonstrated that the most appreciated attributes were price, origin, protected denomination of origin and brand. In a later work not including the origin attribute, Bernabéu *et al.* (2016), found that the main attributes were price, followed by type of olive oil, production system and, finally, type of bottle. Regarding the bottle material, Sanz-Cañada *et al.* (2015) found that the use of glass bottles generated a higher price in the different commercial phases of the chain.

If we compare our results with those of similar studies conducted in other countries, we see that for Italian, French and Canadian consumers the most valued attribute is origin (Caporale *et al.*, 2005; Dekhili *et al.*, (2011); Menapace *et al.*, 2011). In the case of Greek consumers, Krystallis and Ness (2005) also found that the most valued attributes were origin and organic production, with price and bottled being the least valued. Results on the importance of origin among Tunisian consumers vary according to the study consulted (Dekhili *et al.*, 2011; Mtimet *et al.*, 2011).

Ward *et al.* (2003) also found that for German consumers the most appreciated attribute is origin, which, in turn, determined the evaluation of the other attributes of the olive oil. In contrast, English consumers, according to García *et al.* (2002), most value the type attribute, followed by price. In a more recent study, Kavallari *et al.* (2009) found a preference among German and English consumers for bulk rather than packaged olive oil.

Coinciding with the aforementioned authors, we find there is no main attribute in consumer preferences. In some cases the preferred attribute is found to be the type of olive oil, if possible extra virgin (Bernabéu *et al.*, 2009; García *et al.*, 2002; Mtimet *et al.*, 2011), while in other cases it is the origin (Caporale *et al.*, 2005; Menapace *et al.*, 2011; Sottomayor *et al.*, 2010; Ward *et al.*, 2003) and in others, the price (Bernabéu *et al.*, 2016; Erraach *et al.*, 2014; Yangui *et al.*, 2014).

Finally, it is worth noting that, in line with other studies, Portuguese olive oil consumers consider that plastic is associated with a lower quality product, and the opposite is true for materials like glass (Bernabéu *et al.*, 2016; Cabrera *et al.*, 2015; Romo *et al.*, 2013). Furthermore, organic production labels emerge in the case of Portuguese consumers as an additional sign of quality that generates greater utility in olive oil consumers on accordance with results in similar countries (Bernabéu *et al.*, 2016).

5. Conclusions

Generally, Lisbon consumers show strong ethnocentric tendencies. This must be taken into account for local producers and for companies exporting to the country. Low education and low income have been traditionally linked to stronger ethnocentric tendencies. In the case of Portugal, the most ethnocentric consumers are mainly older women, with a lower educational level, and also with lower incomes. This is presumably the profile of a Portuguese consumer who perceives more risk in the process of increased globalisation.

Due to the results, the strategies to follow in the case foreign companies exporting olive oil of Lisbon, should vary according to the target population segment. The more ethnocentric consumers attach greater importance to price when purchasing olive oil. Foreign companies, therefore, will only be able to access to this segment if they can offer a significantly more economic olive oil than any nationally produced Portuguese oil.

In contrast, exists a less ethnocentric segment, which is willing to purchase olive oil at a higher price when it is clearly differentiated by type of oil (extra virgin), bottle (glass) and production system (organic). Thus, it seems recommendable for companies exporting olive oil to Portugal to focus their business strategy on product differentiation in order to access the less ethnocentric consumer segment.

Moreover, further effort of Public Administrations to disclose the benefits of extra virgin olive oil or organic olive oil (certified organic production) should be done as an important segment of

consumers (the more etnocentric) are not giving enough importance to these key attributes.

As regards the limitations of this work, it should be noted that the work was conducted exclusively in Lisbon, a cosmopolitan, city which sets trends and breeds new opinions, while also being a major market for olive oil consumption. It would be advisable to extend the study to other parts of Portugal in order to establish comparisons, since other cities may have stronger ethnocentric tendencies.

Another limitation of the study is that it is based on a survey conducted at one specific moment in time. It would be interesting to analyse the evolution of consumers' ethnocentric behaviour over time, and, in particular, the preferences of olive oil consumers.

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Appendix 1

Consumer Ethnocentric Tendency Scale (CETSCALE)

Items
1.   [1] consumers should always buy products from the region rather those from other places.
2.   Only those products that are not available in [1] should be imported.
3.   Buying products from [1] means saving jobs in our region.
4.   [1] products should be considered as the first, last and most important.
5.   Purchasing products made outside the region is anti-[1].
6.   It is not good to purchase products made outside the region because it leaves people from [1] without work.
7.   A true [1] consumer should always buy products made in [1].
8.   We should purchase products made in [1] instead of allowing other regions to get rich at our expense.
9.   It is best always to purchase products made in [1].
10. There should be very little commerce or acquisition of goods from other regions unless it is necessary.
11. [1] consumers should not purchase products from other areas, as it harms [1] businesses and causes unemployment.
12. All imports should be curbed.
13. It may cost me more in the long run but I prefer to support [1] products.
14. People from other regions should not be authorized to place their products on our markets.
15. Products from other regions should be heavily taxed to reduce their entry into [1].
16. We should only purchase from other areas those products that we cannot obtain in our own region.
17. [1] consumers who purchase products made in other regions are responsible for placing their fellow citizens on unemployment.

Source: Our own elaboration based on Shimp and Sharma (1987).
[1] Portugal.