Perceived quality as a antecedent for buying intention of the olive oil from bajo Aragon with protected designation of origin


Abstract

This paper aims to analyse the relationship between the perceived quality of an agro-food product with Protected Designation of Origin (PDO) as a criterion for loyalty and buying intention of the Aragonesic consumers, being a key factor that the attainment of this PDO is recent. To this end, a clear distinction is established between quality perceived through intrinsic and extrinsic attributes. To demonstrate the causal relationship between the variables mentioned, an empirical study was conducted with Aragonesic consumers of olive oil with PDO. The methodology we used was the structural equations model. The results show that what influences consumer loyalty and buying intention is exclusively quality measured through the intrinsic attributes. These results display the particular significance of intrinsic attributes such as colour, flavour, form and appearance in the marketing and success of PDO products. However, results such as place of origin or the image of a traditional product do not have the influence expected. This may be explained by the short time that this Designation of Origin has been running, some six years, and so consumers are not aware of the links required to consolidate the image of this PDO.

Keywords: Quality, intrinsic attributes, extrinsic attributes, loyalty, buying intentions, protected designation of origin.

JEL Code: M21, M30, M31.

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1. Introduction

Under marketing point of view, the analysis of customers is going through a process in constant evolution. Their available information is increasingly better in quality and quantity, so they are becoming more demanding when buying certain products, the previous thing has supposed an evolution in their buying habits (Rodríguez del Bosque, Collado and Herrero, 2005; Ruiz and Sanz, 2007). In the same line, they are able to pay a higher price for products that they consider as better quality.

These changing needs are linked to new habits and values of people about the configuration of their preferences, for instance, food security and health, as they consider fundamental that products are certified and guaranteed by Official Certifying Bodies. Besides, the concept of quality is tied to a big complexity due to constant changes in customers needs, among others.

The producers of traditional food are aware about the need of carrying out new proposals in order to achieve and create value. Traditional food products can achieve competitive advantages by using quality, product differentiation and branding policy as marketing strategies. The practice of using Protected Designations of Origin (PDO) as common, generic or umbrella brands has spread ever wider in Europe, because they allow producers to exploit natural and human factors as well as geographical origin and local production methods. The proof of this is that the number of PDOs, Protected Geographical Indications (GPIs) and Traditional Speciality Guaranteed (TSGs) based on the quality systems established by the European Union has increased year by year (there are currently over 500), together with the number of firms and products covered (Fandos y Flavían, 2006).

The main aim of this paper is to analyse if higher perceived quality, measured by intrinsic and extrinsic attributes, in “Protected Designation of Origin” food products, is linked to higher loyalty and buying intention for aragonese consumers, supposing in this way a key factor the fact that this Protected Designation of Origin is only been used six years and can
be seen as “young” certification by the market. The product chosen has been olive oil from Bajo Aragon with PDO.

2. Perceived quality, loyalty and buying intention

In the specialised literature the concept of quality has been analysed from the perspective of the products (Rao and Monroe, 1989; Rose, 1990; Chang and Kinnucan, 1991; Sjolander, 1992; Showers and Showers, 1993; Archer and Wesolowsky, 1996; Issanchou, 1996; Waller and Ahire, 1996; Chao, 1999; Kroll et al., 1999; Wang et al., 2003); the services (Parasuraman et al., 1985; 1988; 1991; 1993; 1994; Bolton and Drew, 1991a; Cronin and Taylor, 1992; 1994; Sweeney et al., 1997; Robinson, 1999; Zeithaml, 2000; Furrer et al., 2000; Brady and Cronin, 2001; Cox and Dale, 2001; Zeithaml et al., 2002; Díaz, 2005); and, the business and information management (González and González, 2006).

Thus, the concept of quality may be analysed from two different perspectives: objective quality and perceived quality (Brunsø et al., 2005). The first concept refers to the technical, measurable and verifiable nature of products, processes and quality control procedures; subjective or perceived quality refers to value judgements or perceptions of quality by the consumer.

Thus, Olson and Jacoby (1972), Szybillo and Jacoby (1974), Zeithaml (1988), Oude Ophuis and Van Trijp (1995) and Steenkamp (1997) feel it is relevant to classify the concept of perceived quality into two groups of factors that enable the consumer to evaluate products: intrinsic attributes and extrinsic attributes.

Intrinsic attributes are related to the physical aspects of the product, such as colour, flavour, shape and appearance; extrinsic attributes are related to the non-physical attributes of the product, such as brand, quality certificate, price, country or place of origin, the shop, packaging and production information (Bernués et al., 2003).

The concept of loyalty is the behaviour pattern of customer preference for a particular brand/product from a selection of similar brands/products
over a period of time that influences decision-making evaluation process (Jacoby and Kyner, 1973; Jacoby and Chesnut, 1978).

These authors suggest analysing loyalty based on two analysis perspectives: *behavioural* and *attitudinal*. From the behavioural perspective, Dick and Basu (1994) define customer loyalty as the relationship between relative attitude and repurchase behaviour. According to de Ruyter et al. (1998), early customer loyalty studies focussed on the behavioural perspective and have recently centred on the attitudinal factor.

Thus, from the attitudinal perspective, Oliver (1997, 1999) defines customer loyalty and proposes a loyalty development model, with four main phases: cognitive, affective, conative and action. Yi and La (2004) suggest that loyalty (behavioural and attitudinal) measurements provide insights into the nature of loyal customers. Loyal customers also tend to display special preferences, commitment, positive word of mouth commentary, a low rate of change to competitive brands and a willingness to pay top prices.

The *concept of buying intention* has been used in the specialist marketing literature as a measurement of prediction of a subsequent or successive purchase behaviour (Morwitz and Schmittlein, 1992; Grewal et al., 1998).

Thus, in psychology, the *Theory of Reasoned Action* states that the best predictor of behaviour is intention (Fishbein and Ajzen, 1975). In fact, intention is predicted through attitudes to behaviour and subjective norms.

In the marketing context, Notani (1987) claims that the prediction of consumer purchasing is based on this reasoning. Furthermore, for a complete representation of consumers’ purchase behaviour, their attitudes, preferences, motivations and profitability perceptions need to be considered.

Similarly, it is fair to say that buying intention is a future projection of the consumer’s behaviour that will significantly help to shape his attitudes. Thus, if we analyse the basic components of the attitudes model proposed by Assael (1995), it is clear that attitudes are actually developed as a result
of the combination of three basic elements that are associated with the consumer’s beliefs, emotions and forecast actions: cognitive, affective and conative or behavioural.

Specifically when talking about buying intention, this concept reflects the behaviour the consumer is likely to adopt in his most immediate purchase decisions (e.g. what product or brand he will be buying next, etc.). Thus attitudes are developed over time through a process of learning and are marked by family influences, membership (actual and aspirational) of social groups, information received, experience and character.

2.1. Causal relationship between perceived quality, loyalty and buying intention

Firstly, with regard to the influence that intrinsic attributes may have on consumers’ perceptions and purchase behaviour, it should be said that the perception of quality is a complex process that begins with the acquisition and classification of signals that are associated with the intrinsic attributes, such as the product’s appearance, colour, flavour or presentation. However, it should be pointed out that some of these attributes cannot be properly perceived by the individual until the product has been consumed (e.g. flavour and smell).

Thus, it would be fair to say that the level of perceived quality associated with the intrinsic attributes may rise on consumption and, as a result, consumer loyalty and buying intention for a PDO food product may be increased (Fandos and Flavián, 2006). In this respect, Olsen (2002) maintains that there is a strong relationship between consumers’ perceived quality, satisfaction, loyalty and buying intention for foodstuffs. Thus, the following hypotheses are proposed:

H1: The perceived quality of the intrinsic attributes of a PDO product has a positive and significant impact on consumer loyalty.

H2: The perceived quality of the intrinsic attributes of a PDO product has a positive and significant impact on consumer buying intention.
With regard to the possible influence that the perceived quality of the extrinsic attributes may have, it is worth noting that the perceived quality of traditional food products is higher because the consumer recognises that the product was produced in a given region with its own specific geography and climate, tradition and *know-how* (Calvo, 2001).

Similarly, a competitive company should not be content with just offering products and services to the market; it should make an effort to create value for the consumer. Therefore, the more distinctive and harder to imitate a company’s product is – as a result of its greater intangibility – the more likely the company is to create loyalty among its customers (Bigné *et al.*, 2000).

Furthermore, other companies strive to exceed customers’ expectations of quality in order to produce high levels of satisfaction and thus loyalty and buying intention (Stanton *et al.*, 2004). In this respect, the extrinsic attributes of a PDO food product, such as place of origin, the image of a natural product or greater *know-how* associated with the production centre are all distinctive symbolic factors that are hard to imitate because of their unique nature.

Erickson *et al.* (1984) maintain that image variables might be the brand, price, celebrity endorsement or region of origin. In particular, there has been a review of the importance attached to the place of origin in buying intention decisions with products such as fruit and vegetables (Tootelian and Segale, 2004); what influence price and brand with regard to the country of origin have on the evaluation and buying intention of foodstuffs (Ahmed *et al.*, 2004); and consumers’ perception of the effect of the country of origin on the buying intention for luxury or convenience products for public or private consumption (Piron, 2000).

It is thus likely that the perception of quality associated with symbolic factors such as the image of the product, the region of origin and so on will have a positive influence on consumer loyalty and buying intentions with PDO products (Fandos and Flavián, 2006). Hence, we may formulate the following hypotheses:
H3: The perceived quality of the extrinsic attributes of a PDO product has a positive and significant impact on consumer loyalty.  
H4: The perceived quality of the extrinsic attributes of a PDO product has a positive and significant impact on consumer buying intention.

To study the relationship between consumer loyalty and buying intention, we need to consider the numerous marketing studies (Gardner, 1985; Westbrook, 1987; Westbrook and Oliver, 1991, Allen et al., 1992) that relate consumers’ attitudes to their buying behaviour. Loyalty is defined as an attitude when it involves positive affects and feelings toward the product.

It thus seems likely that consumers will attach greater importance to the perception of quality if the role of designations of origin as collective brands that seek to differentiate highly specialised products is underscored. Consequently, it would seem reasonable to suppose that the commitment to repeat the purchase of a preferred product due to the feelings and affects formed as a result of this perception of quality will have a clearly positive influence on the consumer’s predisposition to repeat the purchase (Olsen, 2002, Fandos and Flavián, 2006). Hence, we may propose the following hypothesis:

H5: Consumer loyalty toward a PDO product has a positive and significant effect on the consumer’s buying intentions.

3. Methodology

In order to test the above hypotheses, we have performed a data-gathering exercise involving a series of actions. Firstly, a group dynamic was carried out to learn the opinions of a small number of consumers and establish a basis for the development of the scales used to quantify the concepts of perceived quality of intrinsic and extrinsic attributes, loyalty and buying intention. In order to achieve a better fit, the scales developed were then presented to various external marketing specialists with expert knowledge of the issues associated with PDO food products for their opinion.
The information was gathered by a group of previously-prepared interviewers, through a personal interview using a closed-answer structured questionnaire. The interviews were carried out at the entrances/exits of shopping malls and specialist food shops, and subjects were asked about consumption of the specific product.

Specifically, the consumer was asked to indicate his/her level of agreement or disagreement with a series of statements based on a 7-point Likert scale. In particular, information was gathered on perception of quality, concepts such as flavour, colour, aroma, appearance and acidity level for the intrinsic attributes, and concepts such as place of origin, traditional product image, loyalty and intention to purchase Bajo Aragon olive oil for the extrinsic attributes. Finally, information was gathered on frequency of purchase, varieties of olive oil usually bought and more detailed information on purchasing behaviour and sociodemographic characteristics.

Table 1. Technical Conditions

<table>
<thead>
<tr>
<th>Geographic scope</th>
<th>• Main cities of Autonomous Community of Aragon</th>
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<tbody>
<tr>
<td>Universe</td>
<td>• Consumers of olive oil with PDO</td>
</tr>
<tr>
<td>Methodology</td>
<td>• Personal interviews based on a structured questionnaire</td>
</tr>
<tr>
<td>Sampling procedure</td>
<td>• Convenience</td>
</tr>
<tr>
<td>Sample size</td>
<td>• 223 valid interviews</td>
</tr>
<tr>
<td>Sample error</td>
<td>• ± 6.69 %</td>
</tr>
<tr>
<td>Confidence level</td>
<td>• 95 %; p = q = 0.5</td>
</tr>
<tr>
<td>Date of fieldwork</td>
<td>• May 2004</td>
</tr>
</tbody>
</table>

Source: Own elaboration.
After the completion of the fieldwork, a screening process was performed to obtain 223 valid questionnaires. The technical conditions of the study are given in Table 1. The analytical process to refine the scales and obtain measurement instruments to quantify the aspects under analysis was structured in a series of stages, which will be examined in the next section of this paper.

4. Results
The analytic process carried out to refine the scales was structured in stages, as follows. In the first place, an exploratory analysis was performed to test the reliability and unidimensionality of the subscales. The analysis was carried out using Cronbach’s Alpha, providing satisfactory levels of reliability in all cases without the need to eliminate any of the indicators. Similarly, the initial analyses of unidimensionality provided satisfactory results in all cases, reflecting the existence of a single dimension in each of the sub-scales used without the need to eliminate any indicator.

The second step consisted of a confirmatory reliability analysis, which was carried out using EQS version 5.7b statistical software. We opted for the Maximum Robust Verisimilitude Method of estimation. This process required developing various confirmatory models in line with the methodology proposed by Hair et al. (1999) based on the three criteria established by Jöreskog and Sörbom (1993). This process resulted in the successive elimination of various indicators from the majority of the scales used in the analysis. In addition, we calculated the composite reliability coefficient as Del Barrio and Luque (2000) recommend, as well as the AVE coefficient for each of the proposed scales. The values obtained were acceptable (see Table 2).

(2) Specifically, the results of the Cronbach Alpha test for the different dimensions and sub-dimensions forming part of the model was as follows: perceived quality 0.90, loyalty 0.89 and buying intention 0.95. The results of the Cronbach Alpha test for the two sub-dimensions making up the perceived quality scale were: 0.91 in the sub-dimension referring to intrinsic attributes and 0.87 in the sub-dimension referring to extrinsic attributes.

(3) In particular, the variance explained by the different dimensions was: perceived quality (72% for the sub-dimension reflecting intrinsic attributes and 61% for the sub-dimension reflecting extrinsic attributes), loyalty 87.57% and buying intention 75.53%.

(4) In order to ensure compliance with the weak convergence condition, Steenkamp and Van Trijp (1991) suggest analysing the significance of the factorial regression coefficients in the indicators.
The third and final step consisted of a process of refinement for the subsequent analysis of internal validity. Specifically, this analysis requires conformance with the properties of reliability, content validity and construct validity (Flavián and Lozano, 2003). Reliability was confirmed on a satisfactory basis using various analyses, as indicated above. The exhaustive prior review of the bibliography and the refinement of the scales by various experts ensured that a satisfactory result was obtained for content reliability. Finally, verification of construct validity required testing for convergent validity and discriminatory validity in the various sub-scales making up each of the scales considered in the study.

The correlations of the scales analysed were calculated in order to establish convergent validity. The results confirm that the various dimensions are significantly correlated, confirming convergent validity (see Table 2).

The discriminatory validity of the dimensions was confirmed on the basis of the data reflected in Table 2. When the confidence intervals between each pair of dimensions were calculated, a score of “1” was obtained in each case falling outside these intervals. Consequently, all of the dimensions considered in the study measure concepts that are clearly distinct from each other. Discriminatory validity was also confirmed by calculating $\chi^2$ differences between the proposed model and each of the six new models, in order to establish whether they are significantly different.
perceived quality as an antecedent for buying intention of the olive oil from Bajo Aragon with protected designation of origin (Baggozi and Yi, 1998; Del Barrio and Luque, 2000). As shown in Table 2, the six comparisons indicate that the proposed model is significantly different in each of the new models. Consequently, the discriminatory validity of the scales forming the proposed models is assured.

Figure 1 shows the results obtained in the relationships addressed in the research, as well as goodness of fit within the recommended levels.

Figure 1. Shows the results obtained in the relationships addressed in the research, as well as goodness of fit within the recommended levels

Thus, perceived quality through the intrinsic attributes had the expected impact on loyalty and buying intention displayed by consumers, as shown by the significance and sign of the model parameters; thus there is evidence to back hypotheses H1 and H2. Similarly, H5 would be suppor-
Perceived quality as a antecedent for buying intention of the olive oil from Bajo Aragon with protected designation of origin, as it has been observed that greater levels of loyalty have a notable effect on the consumer’s buying intention. However, it was observed that the relationship established between extrinsic attributes and consumer loyalty and buying intention was not significant, and so we find no evidence to support hypotheses H3 and H4.

In view of these results, we can stress the relevance of the extrinsic attributes for this type of product. Thus, the influence of the extrinsic attributes on loyalty and buying intention is eclipsed by the influence of the intrinsic attributes on both variables.

5. Conclusions
In this research paper it can be certified that one of the main reasons that make typical products from a certain place so successful in based on the link products-place of origin. This place of origin is seen as a source of differential assets such as: ingredients, nutritional value, tradition, place of origin guaranteed, system of production and sensorial and individual product values.

The main aim of this paper has been to analyse the relationship between perceived quality of a food product (olive oil with PDO assignment in this case), taking specially into account the two aspects of this variable, the so called, intrinsic and extrinsic attributes, with loyalty shown by customers, as well as the influence of this loyalty with buying intentions. This analysis was framed by a recently created PDO, as important factor for purchasing process for consumers in Aragon, region of Spain.

Concretely, the results obtained with this analysis have shown a clearly significative and positive influence of the level of perceived quality linked to intrinsic attributes, like colour, taste and smell, about customers’ loyalty and about this loyalty on buying intention.

On the other hand, we found no evidence that extrinsic attributes are linked to loyalty. A justification for these results can be found in the level of knowledge or familiarity that customers have about this new PDO, since that the associations merged with the image may be not consolidated in customers mind.
These results are very interesting and can derive important implications when developing strategies destined there is necessary to develop lasting relations with the consumers of this kind of food products (Cambra and Polo, 2006). Thus, in can be underlined that PDO should strengthen the perceived quality of intrinsic attributes in order to achieve higher consumer loyalty, emphasizing the organoleptic factors like colour, taste and smell, and so gain higher repurchase intention.

Also, the most important implication is the importance for managers to recognise that extrinsic attributes are the assets that should receive bigger attention. This means to empower the perception of quality associated to symbolic factors such as product image and place of origin, in order to influence positively the satisfaction toward certain product and finally the customer’s loyalty and buying intention.

Thus, the sector should emphasise the design of optimal promotion and communication strategies, and so achieve a stronger PDO image. The aim would be to communicate the information related to place of origin, culture, tradition, environmental factors and so to get a higher acceptation and success for products. All this would achieve a higher perceived quality, and influence higher levels of satisfaction, loyalty and buying intention of consumer.

Likewise, the results obtained allowed to show how producers that want to get sustainable competitive advantages should not just launch products to the market but to make an effort to create value in a specific way for each consumer. As a result, the more rare and distinctive a product is the higher odds to get loyal consumers and fulfil quality levels it has.

Finally, it could be pointed out that some limitations should be taken into account for future research lines. First, the geographic field it took place, that make desirable to contrast the results in other influence places, and with other kinds of PDO with similar characteristics. At last, we could start with the point of view of variables like loyalty and buying intention are not the only variables that make up customer behaviour, so it would
be necessary to add others such as the satisfaction, trust, commitment, perceived risk, willingness to pay a premium price or moderating variables, like involvement or familiarity and experience and so be able to follow a more global and complete research about consumer behaviour.

6. References


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