



An emotion-based typology of wine consumers

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ABSTRACT

Product consumption is a sensory experience that can evoke a wide range of emotional responses; and accordingly, the emotional component of food consumption has been widely addressed and has appeared in marketing literature with increasing frequency.

To date, there is abundant literature on emotions elicited by product consumption, but there is little research concerning emotions and wine. In this context, we develop an emotion-based segmentation based on the emotions that consumers experience when consuming wine, both considering the valence and arousal dimensions of emotions. In addition, we profile and characterize the emotion-based obtained segments.

For this purpose, an emotion-based cluster analysis is conducted through a two-step cluster procedure, followed by a MANOVA test on data from 1269 wine consumers.

Our findings show that the average wine consumer does not exist, and that wine consumers cannot be seen as a homogenous group. More precisely, four clusters emerge from our results experiencing different emotions in wine consumption: “emotionally unattached”, “negatives”, “contented circumspects” and “wine lovers”. Results suggest that “wine lovers” is the most attractive segment due to their strong wine emotional bond; being the “negatives” the most challenging segment for wine makers. One useful insight for wineries is that it may not be possible to satisfy all these segments with one single wine.

1. Introduction

Emotions influence product experience and product consumption; and for this reason, marketing scholars have increasingly recognized the importance of emotions in consumer behavior. Wine and wine tasting evokes emotions, and during the last years there has been an increase in research on emotions elicited in wine consumption. Ferrarini et al. (2010) report on positive and negative emotions arising in wine consumption; while authors like Silva et al. (2016) note that wine compared to other alcoholic beverages evokes mostly pleasant low arousal emotions such as feeling relaxed, calmness or loving. Similarly, authors like Jiang, Niimi, Ristic, and Bastian (2016) report the influence of the aroma of wine on consumers' emotion profiles, since floral wines generally evoke pleasant emotions with higher intensity, while green wines mostly evoke negative emotions. Likewise, Danner et al. (2016) demonstrate that intrinsic wine quality attributes influence the intensity of emotions experienced in wine consumption. Further, Ashton, Bellis, Davies, Hughes, and Winstock (2017) show that consumers' emotional responses depend on the type of alcoholic beverage, and while consumers generally experience emotions of feeling tired and

relaxed when consuming red wine; white wine does not evoke strong emotional responses. In addition, previous research reports the influence of wine astringency and wine body on emotions (Niimi, Danner, Li, Bossan, & Bastian, 2017), so that the body of wine affects consumers' emotions, while wine astringency increases the unpleasant emotions experienced in wine consumption. And more recently, Ristic et al. (2019) note that even the verbal description of wine aromas influence consumer emotions, and that the type of positive emotions evoked are dependent on the kind of aroma. Finally, Mora, Urdaneta, and Chaya (2019) found associations between wine consumers' personality and wine elicited emotions.

However, to our knowledge, there is no previous research on the different consumer typologies based on the emotions they experience when drinking wine. Even though the conceptualization of the emotion construct as a segmentation variable has received theoretical support, previous research on consumer segmentation based on their emotions are still scarce today (Den Uijl, Jager, De Graaf, Waddell, & Kremer, 2014; Kim, Prescott, & Kim, 2017). So, there is a need for empirical studies on the use of emotions as segmentation variables in food products' consumption. In this context, we aim to identify and profile wine

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consumer segments on the basis of the emotions they experience when consuming wine; being the emotion valence and level of arousal the main drivers of the consumer segmentation; as well as some behavioral outcomes of the emotional appraisal of wine consumption, such as involvement, satisfaction and loyalty. The reason is that focusing solely on emotions overlooks behavioral outcomes, leading to a limited understanding of customer behavior. More precisely, this research examines emotional responses to real drink stimuli, in order to develop consumer segmentation; and in turn, consumers are asked to rate the emotions they experience in wine consumption. Then, consumer clusters are profiled in terms of their wine-related consumption behavior, as well as on their demographic and socioeconomic characteristics. Further, the purpose of this research is to provide a comprehensive emotion-based typology or profile of the different wine consumer segments, based on the emotions they experience when consuming wine. Therefore the major contribution of the present study is the identification and description of wine consumer segments based on wine consumption elicited emotions, providing insights into the desires and wants of these consumers.

2. Literature review

2.1. Consumption-elicited emotions

Today, most researchers consider emotion as a multi-componential phenomenon with a multi-componential response. A consensual definition of emotion was firstly proposed by Scherer (1982), who defined emotion as an episode of interrelated changes in the states of most of the organismic subsystems in order to evaluate an external or internal stimulus as relevant. Later, the term emotion was conceptualized as an affective reaction to perceptions of situations (Ortony, Clore, & Collins, 1988); and as a brief, intense physiological and mental reaction focused on a referent (Izard, 1977). Other authors such as Dube and Menon (2000) conceptualize emotions as a complex set of interactions among subjective and objective factors, giving rise to affective experiences, such as feelings of pleasure and arousal.

Emotions address the affective responses elicited in product consumption (Dube & Menon, 2000); guiding and influencing individual behaviors (Bagozzi, Gopinath, & Nyer, 1999). Prior research has tried to develop a set of descriptors to represent the emotions that consumers most frequently experience in consumption situations (Laros & Steenkamp, 2005; Richins, 1997); and develop standardized questionnaires and scales to measure the emotions experienced in product consumption, such as the *Consumption Emotion Set* (CES) proposed by Richins (1997) or the *EsSense Profile* developed by King and Meiselman (2010). Further, some authors have developed emotion profiles, which include emotion terms to distinguish products (Cardello et al., 2012; Spinelli, Masi, Dinnella, Zoboli, & Monteleone, 2014). More recently, research has experienced an increased focus on the measures of emotions elicited by food products (King & Meiselman, 2010).

2.2. Dimensions of emotions: the Circumplex model

When measuring emotional states that arise during consumption, the authors most frequently have used measures developed by emotion theorists. The first authors to be considered are Izard (1977) who proposed ten primary emotions, and Plutchik (1980) who suggested that emotions could be classified into a pleasant-unpleasant dimension, to be further classified into eight primary emotions. However, the measurement of product elicited emotions begins with the seminal work of Richins (1997), who developed the *Consumption Emotion Set measure*, containing 20 fundamental emotions experienced in most of consumption settings.

In the marketing literature, there is great consensus regarding the bi-dimensional structure of emotions (Mattila & Wirtz, 2000; Russell, 1980). This bi-dimensional structure suggests that emotions can be

described in terms of two primary dimensions –pleasure and arousal– that define a circular configuration that is commonly referred to as the emotions *Circumplex Model* (Russell, 1980). That is, emotions could be categorized into two independent dimensions which describe the internal emotional state of individuals: the pleasantness/unpleasantness and arousal/quietness dimensions. While the arousal refers to the energizing aspect of emotion; the pleasure dimension is related to the cognitive appraisal of emotions.

According to Russell (1980) each emotion can be described according to its position on the pleasantness and arousal dimensions. The pleasure dimension could be conceptualized as the degree to which an individual feels good, happy, contented or joyful with some stimuli or situation (Bitner, 1992); being pleasure one of the major dimensions of emotional experience, highlighting the importance of classifying emotions in terms of positive–negative (Diener, 1999; Schifferstein & Desmet, 2010). Similarly, the arousal or activation dimension could be defined as the degree to which an individual feels active, excited, alert, stimulated or awake in one situation (Bitner, 1992). Further authors such as Moore, Harris, and Chen (1995) indicate that arousal could be described as the strength of the emotional response to a given stimulus. In addition, theory and evidence has supported the appropriateness of the bi-dimensional structure of affect as the basis for product-consumption elicited emotions and consumption experiences (Mano & Oliver, 1993); and more precisely, in food-related emotion research, these two dimensions have also been identified (Macht, Haupt, & Salewsky, 2004; Spinelli et al., 2014). For this reason, the present study is based on this bi-dimensional approach of emotions.

2.3. Wine consumer segmentation and emotions as a segmentation variable

Consumer segmentation is an important procedure to show consumer subsets commonly used to better understand the diversity of preferences, needs and desires across consumers (Baker & Hart, 2007). Regarding wine consumers, a great number of different segmentation criteria have been used in wine marketing, and some of these criteria include age (Thach & Olsen, 2006), nationality (Lockshin, Quester, & Spawton, 2001), wine involvement (Hollebeek, Jaeger, Brodie, & Balemi, 2007; Lockshin et al., 2001); wine knowledge (Blackman, Saliba, & Schmidtke, 2010; Ellis & Caruana, 2018; Frøst & Noble, 2002); risk reduction, consumption occasion, quality and lifestyle (Bruwer, Li, & Reid, 2001); wine-related lifestyle (Johnson & Bruwer, 2003); or even wine liking (King, Johnson, Bastian, Osidacz, & Francis, 2012).

More precisely, the seminal work of Spawton (1991) identified four major segments of wine consumers, considering as segmentation variables the consumer expectations and risk reduction, namely “*connoisseurs*”, “*aspirational*”, “*beverage*” and “*new wine drinkers*”. Later, Bruwer et al. (2001) identified five wine consumer segments using lifestyle and values as segmentation criteria, who were labelled as the “*ritual-oriented conspicuous wine enthusiasts*”, the “*purposeful inconspicuous premium wine drinkers*”, the “*fashion/image oriented wine drinkers*”, the “*basic wine drinkers*” and the “*enjoyment-oriented wine drinkers*”; confirming and extending the work of Spawton (1991). Similarly, Johnson and Bruwer (2003) conducted a segmentation analysis based on wine-related lifestyle, identifying five segments named as “*conservative knowledgeable drinkers*”; “*image-oriented, knowledge seeking drinkers*”; “*basic wine drinkers*”; “*experimenter highly knowledgeable drinkers*”, and “*enjoyment-oriented social drinkers*”. Likewise, authors like Brunner and Siegrist (2011) used lifestyle as segmentation criteria for wine consumers, along with wine involvement and consumer motives. These authors described six consumer segments named as “*the price-conscious consumer*”, the “*involved knowledgeable wine consumer*”, the “*image-oriented wine consumer*”, the “*indifferent wine consumer*”, the “*basic wine consumer*”, and the “*enjoyment-oriented, social wine consumer*”. Other authors, like De Magistris, Groot, Gracia, and Albisu (2011) developed wine consumer segmentation based on wine consumption preferences and obtained four different segments:

“traditionalists”, “wine seekers”, “label fans”, “insecure” and “price conscious”. More recently, Bruwer and Li (2017) conducted a wine consumer cluster analysis based on lifestyle factors, and propose five clusters of wine drinkers labelled as “involved knowledge-seeking”, “younger, relatively inexperienced”, “enjoyment-oriented social”, “basic wine drinkers” and “conservative knowledgeable”.

Numerous segmentation methodologies classify consumers according to different criteria, and in this context, the conceptualization of emotion as a segmentation variable has received considerable theoretical support. Emotions may help to understand consumer behavior in situations and contexts where other variables, such as attitude, fail to capture the variation in behavior. Likewise, emotions could be considered as a personal variable, since the same products may evoke different emotions in different individuals (Barrena & Sánchez, 2009; Jaeger & Hedderley, 2013); and as a temporal variable, since an individual could experience different emotions toward a product in different times (Maheswaru & Shavitt, 2000).

Some prior studies in consumer behavior show the suitability of emotions as a segmentation variable in food consumption, being the identification of consumer segments based on affective dimensions a common practice in food consumption behavior (Cariou & Wilderjans, 2018; Den Uijl et al., 2014; Kim et al., 2017). Other authors indicate that the use of emotions elicited in food consumption may be a more efficient consumer segmentation criterion than traditional segmentation variables, since it provides more information in terms of market segmentation (Jaeger, Cardello, & Schutz, 2013; King, Meiselman, & Carr, 2013). Further, the emotional profiles related to food products are more suitable to differentiate consumer behavior, compared to socio-demographic characteristics (Köster, 2009; Spinelli et al., 2014); given the key role played by emotions in product experience and in the choice of products and consumer decisions (Bagozzi et al., 1999). One possible reason is that emotions and the hedonic appreciation are often better predictors of food choice behavior than psychological constructs such as intention or attitude (Köster, 2009), since much decision making occurs at a non-conscious level.

Previous studies have developed segmentation analysis based on the emotions associated with meals (Den Uijl et al., 2014; Piqueras-Fizman & Jaeger, 2016); however, there is a lack of empirical research on the use of emotions as segmentation variables in wine consumption.

2.4. Emotions and emotion-based behavioral outcomes

2.4.1. Positive and negative emotions

The classification of emotions in positive and negative affect –pleasant and unpleasant emotions– appears to be the most popular conceptualization. Previous research on consumer behavior has emphasized the two main dimensions of emotions supporting the positive and negative affect as the major underlying emotional dimension (Izard, 1977; Oliver, 1993); and authors like Russell (1980) indicate that the major structural dimension of the affective experience is often found to be a bipolar continuum of pleasantness–unpleasantness.

In this context, product consumption could be considered as consisting of several attributes that can be evaluated by consumers as potential sources of positive and negative affect (Oliver, 1993). Other authors support this idea, emphasizing that the two main dimensions of emotions and their affective component –positive and negative affect– indicate which feelings and emotions consumers have towards a specific product (Dube & Menon, 2000). In addition, previous research shows a Hedonic Asymmetry suggesting that emotional responses to products more often tend to be positive than negative, and that the majority of products seem to elicit positive emotions (King & Meiselman, 2010; Schifferstein & Desmet, 2010). However, negative emotion terms are also important for understanding the response to product consumption and consumer behavior; and in turn, the present research considers both positive and negative emotional responses.

2.4.2. Involvement

The concept of involvement was defined in the seminal work of Zaichkowsky (1985) as the perceived personal relevance of one product to the individual’s needs, values and goals. Later, the term of involvement has been widely used in the extant literature defined as the level of interest in an object or activity (Mittal & Lee, 1989). So, in general terms, involvement could be considered as a mere interest in a particular product category. Further, prior research shows that the level of consumer involvement with a product influences consumption behavior, product variety seeking, information searching, price interest and attribute evaluation (Zaichkowsky, 1985). On one side, those consumers with a low level of involvement display little interest in either the product or the brand alternatives, and are satisfied with a minimum level of product performance. Conversely, highly involved consumers show great motivation to search for product information, being concerned about the quality performance of the product and willing to compare different product alternatives. So, product involvement has great influence on consumers’ attitudes, perceptions and preferences, and underpins product choice and decision processes. Similarly, prior research shows that involvement with food products is strongly related to the emotional responses (Piqueras-Fizman & Jaeger, 2015).

The construct of product involvement has been previously considered in consumer research on wine, being helpful to better understand consumption behaviors and attitudes (Lockshin, Spawton, & Macintosh, 1997; Quester & Smart, 1998). Regarding the product category of wine, product involvement has been conceptualized as the interest, enthusiasm and excitement that consumers exhibit towards wine (Mittal & Lee, 1989). Likewise, wine involvement has been referred to as one’s personal interest and enthusiasm with wine (Barber, Ismail, & Dodd, 2008). Similarly, previous research has identified involvement as an important variable influencing consumer wine behavior (Lockshin, Jarvis, d’Hauteville, & Perrouty, 2006). For example, Barber et al. (2008) report that wine involvement influences the consumption situation and the quantity consumed, as well as consumers’ reaction to price, wine country or region of origin and wine variety.

2.4.3. Satisfaction

In the consumption experience emotional reactions are of great importance for the creation of satisfaction (Mano & Oliver, 1993). Oliver (1999) conceptualized satisfaction from a cognitive perspective as the evaluative post-experience or post-consumption judgement. So, consumers compare their product expectations with the product perceived performance and this evaluative aspect of satisfaction judgment is typically assumed to vary from unfavorable to favorable (Oliver, 1980). Nevertheless, there is sufficient support to understand that satisfaction is partly affective or emotional and partly a cognitive evaluation of a consumption experience (Mano & Oliver, 1993).

In the context of eating and drinking, satisfaction can influence food experiences and expectations (Robinson, 2014). Authors like Cardello, Schutz, Snow, and Leshner (2000) suggested that the concept of satisfaction is a more appropriate measure of the consumers’ response to foods than *liking*, since satisfaction connotes a more generalized appreciation of food products, along with aspects related to the sensory food properties. Later Vad Andersen and Hyldig (2012) noted that two satisfaction terms should be considered as key variables: *sensory satisfaction* and *food satisfaction*. On one hand, *sensory satisfaction* referred to the hedonic experience of the product properties; and in turn, the term is closely related to the measure of *liking* whereby the consumers were often asked to express their degree of satisfaction with the sensory food properties. Conversely, the term *food satisfaction* represents a generalized hedonic response to food products whereby consumers evaluate the sensory experience, psychological and physical well-being after food intake.

2.4.4. Loyalty

From a behavioral standpoint, loyalty is seen as effective consumer

behavior toward a specific product; while from an attitudinal standpoint loyalty may be considered as involving feelings and affects towards a product (Oliver, 1999). Regarding product loyalty, empirical evidence supports that product attributes drive repeat loyalty (Chrysochou, Krystallis, & Giraud, 2012; Jarvis, Rungie, & Lockshin, 2007), and that whether individuals are heavy or light consumers of a specific product is strongly related with their product elicited emotional associations (King et al., 2013).

Jarvis et al. (2007) analyze loyalty to product attributes in the case of wine, distinguishing between wine extrinsic and intrinsic product attributes. These authors report that consumers who want to simplify their consumption choice rely on product attributes such as the perceived quality, wine variety or the country of origin. Likewise, Fandos and Flavián (2006) suggest that wine extrinsic attributes are more important drivers of consumers' loyalty.

3. Methodology

3.1. Sampling and fieldwork

When measuring consumption elicited emotions, we should notice that emotions are implicitly spontaneous; and thus, merely asking about them as "how do you feel?" could induce participants to report emotion-related responses which may be somewhat artificial (Piqueras-Fizman & Jaeger, 2014). Additionally, when examining product elicited emotions a relevant distinction should be made between the emotions triggered by the product itself and the emotions triggered by the appearance of the product (Richins, 1997). In the present study, we focus on the emotions triggered by the consumption of the product; so, the focus of the present research is on the emotions arising from wine consumption, i.e. "how do you feel when drinking wine?".

Wine was selected as a hedonic product because it bears emotional and hedonic signs and values, being particularly conducive to an analysis of emotional mechanisms and to the appraisal of hedonic dimensions (Mora & Moscarola, 2010); and further, we used the scale proposed by Ferrarini et al. (2010) because it evaluates emotions related to wine consumption based on the dimensions of arousal and pleasantness.

The first part of the questionnaire focused on wine consumption frequency and occasions. In the second part of the questionnaire, participants were presented with a list of 16 emotional terms, so that participants were asked to rate them in order indicate the level to which they experienced each emotion when drinking wine on a 10-point Likert-type scale (1 = "strongly disagree"; 10 = "strongly agree"). More precisely, the questionnaire included full sentences such as "I feel happy", instead of using single terms, since the use of sentences instead of isolated emotional terms makes clearer the indicated emotional state (Spinelli et al., 2014). Then, participants were evaluated regarding their involvement, satisfaction and wine loyalty on a 10-point Likert-type scale. Finally, the last part of the questionnaire included questions regarding socioeconomic and demographic characteristics.

The study involved a convenience sample through a restaurant and bar intercept survey. Research participants were at the restaurant or bar as part of their daily lives, allowing them to participate in a real consumption setting. Participants were not compensated monetarily, but instead they were compensated with a free glass of wine for their participation. Finally a total amount of 1269 valid questionnaires were collected, yielding a sampling error of 3.94% at a confidence level of 95%. The fieldwork was carried in La Rioja (Spain) from April to June 2016.

3.2. Variables and scale development

The wine consumption elicited emotions were evaluated using the scale proposed by Ferrarini et al. (2010). More precisely, we selected 16 words which allow consumers to describe their emotions while consuming wine. Further, these emotions are appropriate to a Southern

European culture, since are the most commonly used to describe the feelings of wine consumers (Ferrarini et al., 2010). So, according to Ferrarini et al. (2010) we measured the consumers' emotional response to wine considering the appraisal dimension, distinguishing between positive/pleasant and negative/unpleasant emotions. Then, in order to measure consumer involvement with wine a 3-item scale was adopted from Mittal and Lee (1989). For measuring consumer satisfaction we used the items proposed by Oliver (1980) and Tsiros, Mittal, and Ross (2004). Finally, in order to evaluate consumer loyalty we adapted a 6-item scale from Oliver (1999) and Fandos and Flavián (2006). The final part of the questionnaire included some questions regarding wine consumption habits and socio-demographic characteristics.

3.3. Data analysis

An explorative factor analysis with principal components using SPSS 18.0, followed by a confirmatory factor analysis using Amos 18.0 software were carried out to identify the independent factors. Then, multidimensional scaling through Euclidean distance method was conducted in order to gain further insight into the underlying factor structure. After examining the dimensions obtained, a two-step cluster analysis was conducted in order to identify the wine consumer segments. Finally, a multivariate analysis of variance (MANOVA) was performed on the entire set of variables, followed by a Tuckey post hoc analysis to examine the significant differences among the clusters identified. These analyzes were carried out using SPSS 18.0 software.

4. Results

4.1. Confirmatory factor analysis

An explorative factor analysis with principal components extraction and Varimax rotation procedure was conducted to explore the number of independent factors, and whether they could be grouped under general characteristics (Hair, Anderson, Tatham, & Black, 1998). A five factor solution was identified, jointly accounting for 74.08% of the variance. The obtained factors were well interpretable and all items loaded strongly on one of the five factors. The obtained factors were named as "positive emotions", "negative emotions", "involvement", "satisfaction" and "loyalty" (Table 1). In addition, the measures of sampling adequacy indicated that the correlation matrix for a 30-item scale was suitable (Test of Bartlett's Sphericity: $X^2 = 34339.516$; $df = 435$; $p < 0.001$); and the Kaiser-Meyer-Olkin criterion shows a value of sampling adequacy of 0.934.

Then, a confirmatory factor analysis using maximum likelihood estimation through the Amos 18 software was performed. Our results indicate that the model fit is deemed satisfactory since the relative chi-square ($X^2/df = 2.546$) was < 5 ; the root mean squared error of approximation (RMSEA = 0.055) is ≤ 0.06 and the root mean square residual (SRMR = 0.063) is ≤ 0.08 (Hair et al., 1998). In addition, Cronbach's alphas were calculated for the factors to examine their internal consistency, and values higher than 0.70 are considered acceptable (Hair et al., 1998).

In order to analyze the convergent validity and reliability of the scale the standardized factor loadings were considered, showing values higher or close to the acceptable threshold of 0.70 (Hair et al., 1998). Similarly, the average variance extracted (AVE) was calculated for each of the constructs to evaluate convergent and discriminant validity; and our findings indicate that the AVE values are greater than 0.50, supporting convergent validity. Likewise, all of the composite reliability (CR) values are above 0.70; and in turn constructs were deemed satisfactory (Hair et al., 1998). Finally, discriminant validity is achieved, since the AVE values for each construct is greater than the squared correlation between the construct and any other construct in the model (Fornell & Larcker, 1981) as shown in Table 2. Finally, our results indicate adequate correlation values between constructs, with the

Table 1
Confirmatory factor analysis.

Variables	Indicators	Factor Loadings	Cronbach Alpha	CR	AVE
Positive/Pleasant emotions Ferrarini et al. (2010)	EMO1: I feel funny	0.713	0.935	0.944	0.687
	EMO2: I feel delighted	0.826			
	EMO3: I feel euphoric	0.712			
	EMO4: I feel happy	0.847			
	EMO5: I feel enthusiastic	0.773			
	EMO6: I feel passionate	0.826			
	EMO7: I feel interesting	0.692			
	EMO8: I feel distinguished/elegant	0.717			
	EMO9: Wine opens my curiosity	0.709			
	EMO10: I feel wine appetizing	0.694			
	EMO11: I feel relaxed	0.781			
	EMO12: I feel comfortable/pleasant	0.761			
Negative/Unpleasant emotions Ferrarini et al. (2010)	EMONEG1: I feel aggressive	0.744	0.876	0.890	0.674
	EMONEG2: I feel superior to others	0.690			
	EMONEG3: I feel uncomfortable	0.933			
	EMONEG4: I feel bored	0.963			
Involvement Mittal and Lee (1989)	INV1: Wine is important to me	0.881	0.936	0.941	0.842
	INV2: I have a strong interest in wine	0.907			
	INV3: Wine matters to me (I am strongly attached to wine)	0.963			
Satisfaction Oliver (1980); Tsiros et al. (2004)	SAT1: When I drink wine, I'm pleased with the results	0.872	0.948	0.949	0.789
	SAT2: The wine meets my expectations	0.884			
	SAT3: When I drink wine, I'm satisfied with the experience	0.913			
	SAT4: The wine satisfies my needs and desires	0.875			
	SAT5: Wine is exactly what I need when purchasing drinks and beverages	0.894			
Loyalty Oliver (1999); Fandos & Flavian (2006)	LOY1: I would prefer to drink wine, rather than other beverages	0.874	0.911	0.925	0.676
	LOY2: When purchasing, I always consider wine, rather than other beverages	0.902			
	LOY3: If wine is not available at the store, I do not buy a different beverage	0.696			
	LOY4: I often find the wine better than other beverages	0.812			
	LOY5: I would always choose wine, rather than other beverages	0.863			
	LOY6: If I cannot find wine in my regular store, I would rather search for it in other stores	0.756			

Note: CR indicates composite reliability values, and AVE indicates average variance extracted values.

Table 2
Correlation matrix.

	Correlation coefficients				
	PE	NE	Involv.	Sat.	Loy.
Positive Emo.	0.829				
Negative Emo.	0.012	0.821			
Involvement	0.422	-0.159	0.918		
Satisfaction	0.393	-0.150	0.535	0.888	
Loyalty	0.430	-0.175	0.618	0.537	0.822

Note: the diagonal values in bold represent the square root of the average variance extracted of each construct.

exception of the correlation between loyalty and involvement, which is close to the commonly accepted threshold of 0.70 (Hair et al., 1998).

4.2. Multidimensional scaling

Wine consumption experienced emotions were examined to gain further insight to their underlying factor structure; and for this purpose, data were analyzed through multidimensional scaling through Euclidean distance method. The Krusal's stress coefficient was 0.134% and the squared correlation coefficient was 0.98 indicating that the two-dimensional solution was appropriate. Fig. 1 represents the obtained two-dimensional plot for the 16 emotions evaluated through the measurement scale. This finding supports the Circumplex Model of affect (Russell, 1980), since the two dimensions -arousal and pleasantness- are well distinguishable in the plot: the vertical axis or dimension 1 corresponds to the pleasure/displeasure dimension; while the horizontal axis or dimension 2 corresponds to the arousal/sleepiness dimension, reflecting the emotional intensity or activation level.

More precisely, dimension 1 represents the valence or positivity versus negativity of the emotion experience; and in turn, emotions such as *funny* (EMO1), *euphoric* (EMO3), *happy* (EMO4), *relaxed* (EMO11), *comfortable/pleasant* (EMO12) are loaded on the positive direction of dimension 1; while negative emotions such as *aggressive* (EMONEG1), *uncomfortable* (EMONEG 3) or *bored* (EMONEG2) are loaded on the negative direction of dimension 1. Similarly, dimension 2 represents the activation/arousal dimension; and in turn, emotions with extreme coordinate values on the poles of dimension 2 are *funny* (EMO1), *delighted* (EMO2), *euphoric* (EMO3), or *happy* (EMO4). These emotion terms load on the negative direction of dimension 2, meaning high arousal/activation; and therefore, *happiness* or *euphoria* is more outward and intense states of emotion. Conversely, emotions such as *enthusiastic* (EMO5), *interesting* (EMO7), *distinguished*, *elegant* (EMO8), *uncomfortable* (EMONEG3), *bored* (EMONEG4), or feeling “*superior to others*” (EMONEG2) load on the positive direction of dimension 2, meaning low arousal or activation.

Therefore, the structure of wine consumption elicited emotions can be satisfactorily categorized according to a bipolar dimension solution, being in line with previous research (Russell, 1980).

4.3. Cluster analysis

A two-step cluster analysis is conducted to identify consumer segments. This segmentation procedure integrates hierarchical clustering with iterative partitioning methods (Punj & Stewart, 1983). In the first stage, the number of clusters is explored by performing Ward's hierarchical clustering method with squared Euclidean distances (Hair et al., 1998), and the results show that a four-cluster solution was deemed to be the most appropriate based on the dendrogram. Then, a non-hierarchical k-means segmentation is performed based on the previous hierarchical clustering (Punj & Stewart, 1983), revealing a

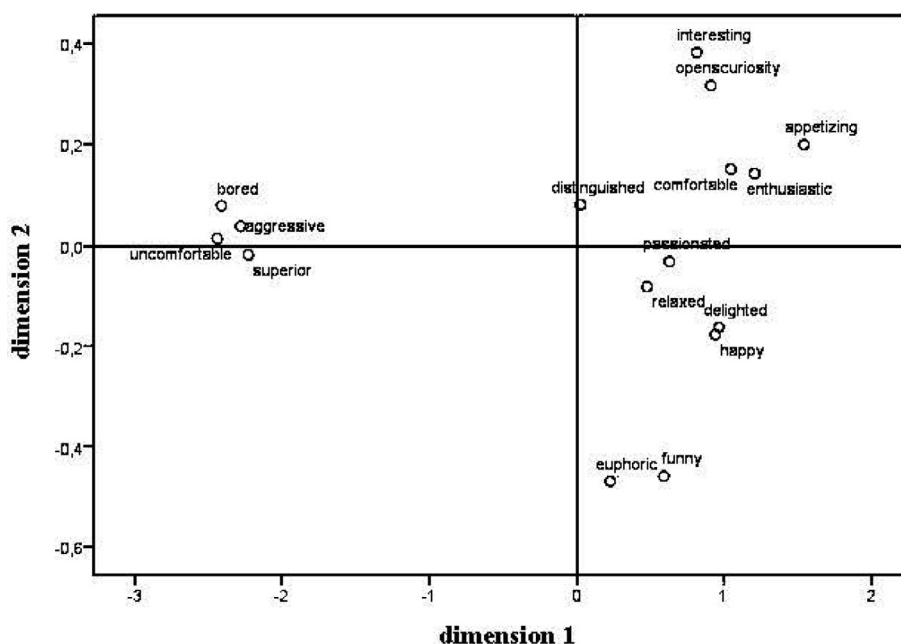


Fig. 1. Multidimensional scaling of emotions elicited during wine consumption.

correct classification rate of the 89%. Finally, one-way analysis of variance (Anova) was conducted to confirm that the differences between the identified segments were statistically significant. A four-cluster solution emerged with 190 individuals in Cluster 1; 362 individuals in Cluster 2; 264 individuals in Cluster 3; finally 453 individuals in Cluster 4.

4.4. MANOVA analysis

In order to examine the internal validity of the four-cluster solution a multivariate analysis of variance (MANOVA) was conducted on the entire set of variables (Hair et al., 1998), namely emotions, wine involvement, satisfaction and loyalty. This analysis enables to differentiate consumers based on their emotions, subsequently examining whether their involvement with wine, as well as their consumption behavior vary across the identified segments. Results indicate that the four identified clusters differ significantly in their wine consumption emotional responses (Hotelling's $T^2 = 5.901$; $F = 54.566$, $p < 0.001$). The multivariate test using Pillai's Trace and Wilks' Lambda were conducted, obtaining values of Pillai's Trace = 1.545, $F(132, 29.535)$, $p < 0.001$; and Wilks' Lambda = 0.067, $F(132, 40.613)$, $p < 0.001$, respectively. Then, a post hoc analysis was carried out using the Tuckey test (Hair et al., 1998). Significant differences between the four clusters were found for the positive and negative emotions, as well as for wine involvement, satisfaction and loyalty (Table 3).

Different emotional profiles emerge for the four consumer segments (Fig. 2). Our findings show a greater experience of pleasant/positive emotions, rather than unpleasant/negative emotions in wine consumption, being in line with food elicited emotions being overwhelmingly positive (Desmet & Schifferstein, 2008; King & Meiselman, 2010). So, we can state that emotional responses to wine consumption are predominantly positive, being the cluster named as "wine lovers" the ones who experienced the stronger positive emotions. Additionally, the emotional dimensions mostly experienced when consuming wine are "enthusiastic" and "appetizing". Conversely, for all clusters negative emotions were poorly experienced, but the cluster labelled as "negatives" expressed somewhat stronger negative emotions than the other clusters.

In addition, wine consumer segments are further examined and profiled on wine consumption behavior, socioeconomic and

demographic variables through the Chi-Square test (Table 4). The obtained findings indicate significant differences regarding the wine consumption frequency, the place of consumption, the wine purchase frequency and the place of wine purchase. Similarly, our findings support significant differences regarding the consumers' education level, age and household income level; but our findings do not support differences between clusters regarding consumers' gender.

5. Discussion

5.1. Cluster 1 "Emotionally unattached"

This is the smallest cluster, because customers in this cluster represent the 14.97% of the sample ($n = 190$). The majority of them are young customers between 18 and 30 years old (34.4%), who report a moderate consumption frequency, given that the 26.8% of them consume wine several times a week indistinctly at home or out of home (44.7%). Likewise, the majority of them purchase one wine bottle per week (25.3%) at supermarkets. The great wine consumption frequency of individuals who are 18 to 30 years old was reported in previous research (Fountain & Lamb, 2011); as well as their greater tendency to drink wine in more everyday contexts.

These consumers show the lowest level of product involvement, and feel poorly attached and affectively connected with wine, reporting the lowest score for the statement "I am strongly attached to wine". In addition, this group experiences the lowest pleasurable emotions when drinking wine, being their scores below average; and in turn, they are labelled as "emotionally unattached". Interestingly, they show the lowest mean scores in elicited emotions like feeling "enthusiastic" or feeling "passionated". Therefore, we can assume that these customers have developed weak emotional bonds with wine. One possible explanation for this result is that the emotional responses of this cluster are dominated by their low product involvement. Accordingly, we can assume that these consumers only consume wine in social contexts or situations and that may be exclusively interested in functional attributes of wine, such as alcohol content. Similarly, the "emotionally unattached" consumers report an unemotional pattern associated with moderately low levels of satisfaction and product loyalty, since this consumer group is the least satisfied with wine.

Further, considering their lowest mean value of "I am strongly

Table 3
Differences for the four-cluster group solution.

Variables	Indicators	Cluster Means				Tuckey test	
		Cluster 1 (n = 190) unattached	Cluster 2 (n = 362) negatives	Cluster 3 (n = 264) circumspects	Cluster 4 (n = 453) wine lovers	F-Value	Significance (p < 0.05)
Positive emotions	EMO1: funny	4.16	6.64	3.32	7.36	268.350	0.000 ^{un,uc,ul,nc,nl,cl}
	EMO2: delighted	4.09	6.81	4.51	8.33	347.359	0.000 ^{un,ul,nc,nl,cl}
	EMO3: euphoric	3.67	6.02	2.66	6.66	232.790	0.000 ^{un,uc,ul,nc,nl,cl}
	EMO4: happy	4.36	6.92	4.16	8.23	360.226	0.000 ^{un,ul,nc,nl,cl}
	EMO5: enthusiastic	3.52	6.81	5.79	8.88	397.787	0.000 ^{un,uc,ul,nc,nl,cl}
	EMO6: passionate/	3.38	6.13	3.47	7.92	403.860	0.000 ^{un,ul,nc,nl,cl}
	EMO7: interesting	4.14	4.69	6.53	7.88	187.412	0.000 ^{un,uc,ul,nc,nl,cl}
	EMO8: distinguished/ elegant	2.83	2.26	5.32	6.76	302.428	0.000 ^{un,uc,ul,nc,nl,cl}
	EMO9: opens my curiosity	4.05	4.73	6.59	8.11	235.810	0.000 ^{un,uc,ul,nc,nl,cl}
	EMO10: appetizing	5.37	7.08	7.42	9.02	232.440	0.000 ^{un,uc,ul,nl,cl}
	EMO11: relaxed	3.45	2.89	6.05	7.50	361.642	0.000 ^{un,uc,ul,nc,nl,cl}
	EMO12: comfortable/ pleasant	4.18	4.97	6.80	8.44	290.484	0.000 ^{un,uc,ul,nc,nl,cl}
Negative emotions	NEG1: aggressive	1.80	2.48	1.53	1.69	21.635	0.000 ^{un,nc,nl,cl}
	NEG2: superior to others	1.65	2.59	1.46	1.94	22.894	0.000 ^{un,nc,nl,cl}
	NEG3: uncomfortable	1.76	1.94	1.40	1.37	14.083	0.000 ^{uc,ul,nc,nl,cl}
	NEG4: bored	1.84	1.94	1.42	1.42	12.386	0.000 ^{uc,ul,nc,nl,cl}
Involvement	INV1	3.99	6.93	8.81	9.28	677.579	0.000 ^{un,uc,ul,nc,nl,cl}
	INV2	3.67	6.64	8.64	9.30	569.249	0.000 ^{un,uc,ul,nc,nl,cl}
	INV3	3.20	6.39	8.69	9.32	813.968	0.000 ^{un,uc,ul,nc,nl,cl}
Satisfaction	SAT1	6.63	7.87	8.67	8.90	169.454	0.000 ^{un,uc,ul,nc,nl}
	SAT2	6.53	7.81	8.50	8.67	139.474	0.000 ^{un,uc,ul,nc,nl}
	SAT3	6.60	7.88	8.59	8.83	153.082	0.000 ^{un,uc,ul,nc,nl}
	SAT4	6.22	7.67	8.37	8.73	158.927	0.000 ^{un,uc,ul,nc,nl,cl}
	SAT5	6.69	7.94	8.59	8.98	157.625	0.000 ^{un,uc,ul,nc,nl,cl}
Loyalty	LOY1	4.59	7.47	9.10	9.44	559.133	0.000 ^{un,uc,ul,nc,nl}
	LOY2	4.14	7.09	8.97	9.32	594.288	0.000 ^{un,uc,ul,nc,nl}
	LOY3	1.94	3.84	6.22	7.46	242.924	0.000 ^{un,uc,ul,nc,nl,cl}
	LOY4	4.47	6.80	8.55	9.11	433.855	0.000 ^{un,uc,ul,nc,nl,cl}
	LOY5	3.42	6.48	8.45	9.15	587.552	0.000 ^{un,uc,ul,nc,nl,cl}
	LOY6	2.11	4.67	7.14	8.31	420.878	0.000 ^{un,uc,ul,nc,nl,cl}

Note: Letters u,n,c,l indicate significant differences (p ≤ 0.05) between clusters (u = “unattached” cluster; n = “negatives” cluster; c = “circumspects” cluster; and l = “wine lovers” cluster), according to Tuckey post-hoc test.

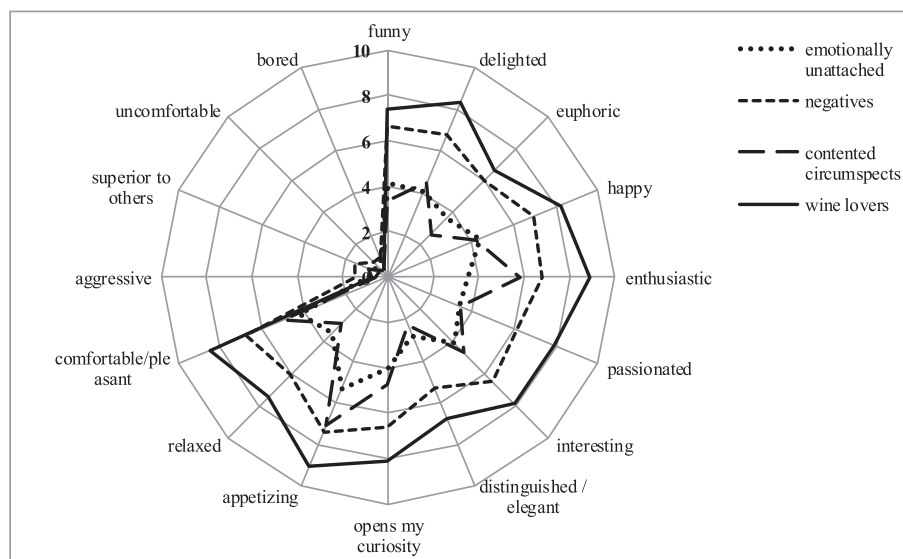


Fig. 2. Emotional profile for the four identified clusters. Source: Own elaboration.

Table 4
Description of four cluster group solution (expressed as percentage).

Variables	Indicators	Cluster 1 (n = 190) unattached	Cluster 2 (n = 362) negatives	Cluster 3 (n = 264) circumspects	Cluster 4 (n = 543) Wine lovers	Chi-Square test	
						Chi-Square value	Significance (p < 0.005)
Freq. wine consumption	Daily	19.5	8.5	24.1	27.8	45.133	0.001
	Several times/week	26.3	23.7	32.0	32.7		
	Once a week	18.4	21.0	18.0	15.9		
	Several times/month	17.9	27.4	13.2	15.5		
	Occasionally	17.9	19.3	12.8	8.2		
Place of wine consumption	Always at home	14.2	7.2	10.2	12.1	43.585	0.000
	Habitually/regularly at home	12.6	19.6	39.6	21.9		
	Indistinctly at home/ out of home	44.7	46.4	30.7	50.6		
	Habitually/regularly out of home	17.9	19.3	13.9	12.4		
	Always out of home	10.5	7.5	5.6	3.1		
Freq. wine purchase	More than 1 bottle per week	24.7	16.3	18.0	34.7	47.621	0.000
	One bottle per week	25.3	22.4	24.4	24.7		
	Up to 3 bottles per month	23.2	28.5	24.8	17.4		
	One bottle per month	11.6	11.3	6.4	16.8		
	Occasionally	15.3	21.5	26.3	6.3		
Place of purchase of wine	Hypermarkets	26.8	23.5	13.4	15.0	106.216	0.000
	Supermarkets	29.4	31.8	30.8	13.1		
	Discounters	4.7	3.0	2.3	2.9		
	Specialty stores	12.6	13.3	23.6	31.3		
	Winery/wine makers	25.2	21.8	25.9	39.4		
	Online	3.7	6.7	4.0	2.4		
Education level	Did not complete primary education	3.7	5.8	3.4	6.6	28.717	0.004
	Primary education	26.8	25.4	27.4	36.6		
	Secondary education	35.3	30.4	28.2	28.5		
	University studies	34.2	38.4	41.0	28.3		
Age	18–30 years	34.4	32.8	12.0	16.3	58.429	0.000
	31–40 years	21.6	34.4	20.7	24.6		
	41–50 years	20.6	19.9	24.3	24.7		
	51–65 years	20.1	18.8	42.0	27.9		
	Older than 65	4.2	4.1	6.0	6.4		
Household average income level (Eur/Month)	Less than 900	23.2	21.0	7.5	8.2	42.288	0.033
	900–1800	42.3	37.9	28.6	33.0		
	1800–2700	26.8	36.5	39.2	37.9		
	More than 2700	8.7	4.6	24.7	17.0		
Gender	Male	48.4	55.0	55.3	59.2	7.185	0.126
	Female	51.6	45.0	44.7	40.8		

attached to wine”, as well as for the wine involvement, these consumers could be described as being somehow indifferent to the product. This is coherent with their lowest score for “If wine is not available at the store, I do not buy a different beverage” which indicates the intention to switch to other beverages when wine is not available. One possible reason is that these consumers may perceive wine as a commodity and they do not mind switching to other beverage in order to have something enjoyable to drink, being consumers who are prone to switch to other beverage options. Similarly, this consumer group indicates the lowest scores for “if I cannot find wine in my regular store, I would rather search for it in other stores”, suggesting a low wine search effort.

This cluster has some similarities with the “*enjoyment-oriented social wine drinkers*” described by Johnson and Bruwer (2003), since these consumers show a low level of wine involvement and poor knowledge about wine, while showing high enjoyment elements and being characterized as occasional drinkers. Likewise, the “*younger relatively inexperienced wine drinkers*” proposed by Bruwer and Li (2017) are somehow similar to our “*emotionally unattached*”, since they are young consumers who are 18–30 years old. However, the main difference between the “*emotionally unattached*” and the “*younger relatively*

inexperienced wine drinkers” (Bruwer & Li, 2017) is the place of wine consumptions, since the latter drink wine mainly at home, while the “*emotionally unattached*” consume wine indistinctly at home and out of home.

Considering their lowest pleasurable emotions when drinking wine and their low wine involvement, this could be considered the most challenging consumer group for wine makers. So, wineries should put specific emphasis on this consumer group, developing effective communication strategies to prevent these consumers from switching to other alcoholic beverages.

5.2. Cluster 2: “Negatives”

Customers in this cluster comprise 28.53% of the sample (n = 362), being the second largest cluster in size and predominantly made up of young consumers who are 31–40 years old (34.4%), followed by consumers aged 18 to 30 years old (32.8%). Likewise, they exhibit the lowest level of wine consumption frequency, since the 19.5% of them drink wine occasionally and the 27.4% report consuming wine several times a month. So, in terms of wine consumption frequency, they could

be considered as occasional wine consumers. The majority of these consumers consume wine indistinctly at home and out of home (46.4%) and most of them purchase wine at supermarkets (31.8%).

These customers experience pleasant high arousing emotions above the average scores, and feel pleasant low arousing emotions below the average. Surprisingly, these consumers express the highest negative/unpleasant emotions compared to the other groups; and in turn, they are named as “*negatives*”. More precisely, our findings show that this consumer segment tends to elicit negative/unpleasant emotions derived from a hedonic product consumption, experiencing emotions such as feeling *aggressive, superior to other people, uncomfortable or bored*. Thus, this consumer group could be differentiated by the negative emotions experienced. Similarly, they also score low on pleasant low arousing emotions, such as feeling *interesting, distinguished, appetizing, relaxed or comfortable*.

Even though they show the highest negative emotion scores, they are moderately satisfied and loyal to wine. So, despite of the unpleasant/negative emotions experienced in wine consumption, they do not feel dissatisfaction. One possible reason is that positive and negative emotions experienced in wine consumption may compensate each other to some extent; or that these consumers tolerate some slight negative emotions without letting them affect their satisfaction with the product. So, the slight negative emotions experienced are not immediately translated into dissatisfaction or low product loyalty. This wine consumer described here is unique and has not been previously described in the literature before.

5.3. Cluster 3: “*Contented circumspects*”

This cluster represents the 20.80% of the sample (n = 264), and the majority of them are senior customers between 51 and 65 years old (42%), who report a moderate wine consumption frequency, since the 32% of them consume wine several times a week. Interestingly, the majority of these consumers drink wine at home (39.6%) and purchase wine occasionally (26.3%) through supermarkets (30.8%).

These consumers experience positive low arousing emotions above the average scores; but surprisingly, they express the lowest values for pleasant high-arousal emotions, such as feeling *euphoric, happy or passionate*. For this reason they are named as “*contented circumspects*”, since they show a moderate emotional behavior. More precisely, this group of consumers feels low arousal pleasant emotions in wine consumption. That is, they mostly experience emotions such as feeling *enthusiastic, interesting, relaxed or comfortable* and they also feel that wine opens their curiosity. So, we can state that these consumers exhibit a differentiated pattern of emotional response to wine consumption dominated by positive/pleasant emotions, in combination with a low value of arousal; thus experiencing emotions during consumption in a moderate way. The consumers’ age may be one potential explanation for their emotional behavior, so that they feel emotions with a lower intensity. Additionally, these consumers are highly satisfied and contented with the product and are moderately involved with wine; so we can assume that these consumers feel contented with the experience of drinking wine.

This consumer group is somehow similar to the “*conservative, knowledgeable wine drinkers*” proposed by Johnson and Bruwer (2003) considering their moderate satisfaction derived from wine consumption; but the main difference is that this consumer group mostly drinks wine every day, while our “*contented circumspects*” drink wine less frequently. Likewise, this cluster has some similarities with the “*conservative, knowledgeable wine drinkers*” (Bruwer & Li, 2017) given that this group is mostly formed by consumers who are older than 55 years. However, the “*contented circumspects*” described in the present study show a moderately high wine involvement, compared to the highest involvement with wine showed by the “*conservative, knowledgeable wine drinkers*” (Bruwer & Li, 2017).

5.4. Cluster 4: “*Wine lovers*”

This cluster represents the 42.79% of the sample (n = 543) being the biggest cluster in number of consumers, being the 27.9% of them aged between 51 and 65 years old, followed by consumers who are 41 to 50 years old (24.7%) with a medium average income level. These consumers report the highest wine consumption frequency, given that the 27.8% of them consume wine on a daily basis and the 32.7% drink wine several times a week. Therefore, in terms of wine-drinking habits and consumption frequency, they could be considered as regular wine consumers with a high consumption frequency. Likewise, the majority of “*wine lovers*” consume wine indistinctly at home or outside home (50.6%) and purchase more than one bottle per week (34.7%), mainly through wineries (39.4%) or specialty stores (31.3%). So, it can be stated that these consumers have a stronger tendency to consume wine in restaurants and bars, as well as to consume wine out of home.

These consumers feel the most pleasant/positive emotions when drinking wine; since they show the highest average scores for positive emotions. Interestingly, they experience the highest arousal emotions, showing the highest mean scores for emotions such as feeling *euphoric, funny, passionate, delighted or happy* in wine consumption. So, we can state that this consumer segment tends to elicit pleasant and active emotions from wine consumption, expressing the higher positive emotional intensity. Further, we can assume that this customer group places a great emotional value on wine, and have a clear preference for emotional stimuli, being more susceptible to emotional product image and to affective advertising and communication. Moreover, their high consumption frequency could be explained by the pleasant emotions they experience during consumption, since according to Ng, Chaya, and Hort (2013) positive emotions elicited in food consumption indicate an increased consumption. Likewise, these consumers have strong involvement to the product being “*strongly attached*” to wine; indicating a strong affective bond with the product; and for this reason they are labelled as “*wine lovers*”. Consequently, we can assume that these consumers are strongly interested in wine, and that they actively seek information about new wines and wine varieties. Similarly, “*wine lovers*” show the greatest level of satisfaction with the product, as well as higher loyalty towards wine, compared to the other segments.

This consumer segment shows some resemblance with the “*experimenter, highly knowledgeable wine drinker*” proposed by Johnson and Bruwer (2003), since they are strongly interested and involved with wine, actively seek information about wine and get great satisfaction in wine consumption. Likewise, the cluster proposed here is somehow similar to the “*involved, knowledge-seeking wine drinkers*” described by Bruwer and Li (2017) and to the “*involved, knowledgeable wine consumer*” (Brunner & Siegrist, 2011) due to their high level of wine involvement and because “*wine is important*” to them. Further, the “*involved, knowledgeable wine consumer*” described by Brunner and Siegrist (2011) is the least prone to buy wine in the supermarket, that is one of the behavioral characteristics of our “*wine lovers*”, who mostly purchase wine at specialty stores, wineries and wine makers.

This segment constitutes the most appealing segment for wine makers, since they exhibit the greatest level of wine involvement and considering the large size of this segment. Wine makers could take into consideration that these consumers are the most emotional ones; and in turn, wineries could develop effective emotional actions to influence this consumer group, putting great emphasis on strengthening emotional bonds with the product. In addition, wineries could charge premium prices for product offerings when targeting these highly product-involved consumers.

6. Conclusions

One relevant finding is the identification and profile of wine consumer segments on the basis of the emotions they experience when consuming wine. This study provides a comprehensive emotional-based

categorization of the identified wine consumer segments, named as “emotionally unattached” consumers, “negatives”, “contented circumstances” and “wine lovers”. More precisely, the four identified segments differ significantly in the emotions they experience in wine consumption, varying in the dimensions of valence - pleasantness and unpleasantness- and activation or arousal. Therefore, wine consumers cannot be perceived as one homogeneous consumer segment, since the identified segments exhibit heterogeneous emotions and behavioral patterns in wine consumption.

Another interesting research finding is that the four identified segments experienced predominantly positive emotions in wine consumption. So, our findings are in line with the Theory of Positive Asymmetry or Hedonic Asymmetry (Desmet & Schifferstein, 2008; King & Meiselman, 2010), supporting that individuals respond to food or drink products with mainly positive or emotions. Further, this study shows that wine evokes mainly pleasant emotions in consumers, since the emotions experienced were generally positive and the elicited negative emotions all scored approximately 1.0.

Finally, we need to mention some limitations of this study. In the first place, the consumption context has a significant influence on the emotions associated with food products and beverage consumption, and this potential effect has not been considered in the present research, since the participants were asked about their emotions when consuming wine out of home, at restaurants or bars. Second, findings relate to one country where the study was carried; and hence, further extension of the research to other countries might provide interesting results. In the third place, future research could explore wine consumer segmentation with more depth, including a larger number of emotions and also other wine attributes such as taste and aroma perceptions. In addition, research dedicated to alcoholic beverages could also replicate the emotion-based cluster analysis to other product categories outside the wine category. Finally, future research should examine to what extent emotions could be conceptualized as segmentation variables and are suitable for consumers' segmentation. In addition, further research could repeat the emotion-based segmentation analysis over time, since wine consumers may be evolving; and in turn, the proposed consumer segments would be unlikely to remain stable.

6.1. Academic contribution

Our findings provide empirical support for the suitability of consumption elicited emotions as a segmentation variable, detecting emotion-based consumer segments who experience different emotions with different levels of arousal and who have different wine consumption habits. So, the present research supports that the emotional criteria can be used to segment food products' consumers. In addition, the bi-dimensional model of emotions has been considered the most appropriate framework for structuring and measuring the emotions of the present study; and our findings reveal that the conceptualization of emotions as bi-dimensional constructs is adequate for the examination of hedonic products, and it helps to analyze emotions arising from food or drink consumption. Finally, the present study aligns with a central dogma in consumer and sensory research, namely “the average consumer does not exist” (Köster, 2009); thus, going beyond the fallacy of the average consumer, contributing to knowledge on the different emotion-based wine consumer segments.

6.2. Managerial and practical implications

Our findings report that emotions arising when consuming the product differentiate consumers; and accordingly, wine makers and product managers should consider wine consumers as four different types, instead of considering them as one single customer type. Further, wineries and product managers should examine the emotions experienced in wine consumption, because these emotions should be managed carefully. In this vein, the segment named as “wine lovers” seems to be

the most attractive for wineries, due to their strong emotional bond with the product.

Considering the diverse customer segments to be targeted and satisfied; we can assume that in the wine market there is room for different products. That is, it may be not possible to satisfy all these consumer segments with one single wine; and in turn, we suggest wineries to develop different wine lines and varieties. Accordingly, communication strategies and advertising campaigns may need to be designed to attract consumers who feel different emotions when consuming the product. Finally, findings suggest that hedonic products like wine could be marketed and communicated on the basis of the emotions arising from consumers.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.foodqual.2019.103777>.

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