

## **How do Portuguese consumers select wine? Determinants of their buying decisions and consumption behaviours**

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### **Abstract**

This paper explores some of the key factors that determine the wine decision making process and explores the personal values and emotions of the Portuguese wine consumers. In addition, reports the results of the personal value based consumer segmentation. The empirical insights of this exploratory research suggest (1) the structure of perceived attributes and motivations that shape different degrees of involvement, (2) the interaction between different situations of wine use with different price bands, (3) the psychological dimensions that the consumer projects, recognizes and uses on wine purchase decisions. The findings of this study suggest that Portuguese wine consumer use a small range of buying decision intrinsic/extrinsic factors. The product information gap demands Portuguese wineries to improve value perceptions and wine usages.

**Main aim, findings and conclusions of this research**

The aim of the paper is to provide an overview about key factors that determine the wine decision making process and explores the personal values and emotions of the Portuguese wine consumers. The results enable the essential features of a consumer profile of purchase and consumption with respect to the structure of attributes - intrinsic and extrinsic - that Portuguese wine consumers best recognize and value in determining its quality; the motivational structures that encourage and guide them in their wine decision-making process; the interaction between different situations of consumption and different price bands. These findings led us to the following conclusions about the Portuguese wine industry profile: (1) must to adjust to huge competitive marketplace because it is still production and sales-based; (2) more market oriented.

**Keywords:** Anthropomorphic Perception; Involvement; Perceived quality; Price by usage situations;

**TOPIC AREA:** Consumer buying and choice behaviour

## Introduction

Wine is Portugal's most important agricultural export with still wine representing 0.6% of all exported products and services. Wine companies have been working against a downward trend in the volume and value of wine consumed in Portugal, which have been annually contracting in real terms by -2.0% and -1.6% respectively over the last decade. Portuguese winemakers still focused on the short-term opportunity in the domestic market. There are few 'brand leaders' that gain a reputation for excellence in export markets and simplify Portuguese wines for a potential consumer (Monitor Group, 2003).

There is still a considerable lack of knowledge in Portugal concerning wine consumers attitudes, perceptions and behaviour. Hence, our main objective has been to obtain structured and generalisable information to clarify the perceptions, expectations and motivations that Portuguese consumers place on the essential dimensions and attributes when purchasing and consuming still wine. Moreover, the results obtained from the heads of major companies in the sector by means of interviews suggest that their orientation to the dominant product and its distribution is subtly related to, or absent from the necessary guidance of the market.

## Revision Literature

The traditional theory of wine marketing defines this product as a set of attributes that attempt to meet the needs of its consumers (Spawton, 1991). Furthermore, the dynamics of the market changed the behaviour of consumers. This had a significant impact on the discourse of new consumers as quality has been increasingly assumed to be a multidimensional concept. Quester and Smart (1998) suggest that quality is a characteristic of the wine that is both difficult to define and to communicate. The level of quality required may vary upon a variety of circumstances including the consumption occasion. The quality of wine, however, is difficult to evaluate objectively or precisely measured (Oczkowski, 2001).

The complexity and perceived risk associated with the decision to purchase and consume wine justifies the concept of perceived total quality: the intrinsic and extrinsic attributes, and the extent to which these are recognized as causes of value. Lockshin & Rhodus (1993) found that quality perceptions of wine were based on *intrinsic cues*, such as grape variety, alcohol content and wine style, which relate to the product itself and the processing method as well as on *extrinsic cues*, including price, packaging, labeling and brand name, which can be altered without actually changing the product. In spite, Gluckman (1990) postulates that consumers do not have a clear understanding of branding in the wine market, while Lockshin, Rasmussen & Cleary (2000) highlights the fact that brand name acts a surrogate for a number of attributes including quality and acts as a short cut, in dealing with risk and providing product cues. When a product has a high proportion of attributes that can only be assessed during consumption (experience attributes) as with wine, then the ability of consumers to assess quality prior to purchase is severely impaired, and consumers will fall back on extrinsic cues in the assessment of quality (Speed 1998; Salaun & Flores, 2001; Antonelli, 2004 ). Price is an important cue for quality when few other cues are available, when the product cannot be evaluated, or when the perceived risk of making a wrong choice is high (Dodds & Monroe, 1985). According Spawton (1991) in the purchase of wine, price is also used to overcome perceived risk. The wine perceived price-quality relationship (umbra and market potential) enables the reasons for, and magnitude of, the decision to purchase to be determined; by measuring the gap between different price ranges (minimum / maximum) depending on the levels of perceived quality that consumers associate with it; setting up a relevant indicator of potential demand (Keown & Casey, 1995). Recent research by Jarvis, Rungie, & Lockshin, (2003a) shows that consumers seem most loyal to price bands. Furthermore, Hall & Lockshin (1999) found a relationship between price and the situation where the consumer intends to drink the wine. These 'attributes' are related in consumer's minds to the "consequences' they produce. The literature review (Aurifeille, Quester, Lockshin, & Spawton,

2002; Lockshin, Quester, & Spawton, 2001; Rodriguez, Blanco, & Fernandez, 2006) further highlights involvement as one of the most important variables of segmentation in wine marketing. In this sense Barber, Ismail & Dodd (2008, pp. 72) consider that “involvement is a goal oriented and emotional state of interest, enthusiasm and excitement consumers exhibit towards a product category, which ultimately influences purchase or consumption of the product”. If high involvement wine consumers use complex information cues to inform their decision-making (Tustin & Lockshin, 2001; Yuan, So, Si & Chakravarty, 2005), the low involved use risk reducing strategies based on choosing known brands, recommendations from friends, advice from sales assistants, low prices, wine packaging, labels, grape varietal, evidence and samples (Barber et al, 2008). Analysis of the perceived structure that consumers place on the product image and brands seeks to identify a reflection of their own identity within them. The use in this paper of a range of anthropomorphic measures supports its aim to identify the psychological dimensions that the customary wine consumer projects and recognizes on the images of the brand(s) in this product group. Following Govers and Schoormans (2005), consumers prefer products with a product personality that matches their self-image. This combination with other variables allows the design of a profile of segments capable of directly explaining the motivations behind purchasing certain brands and the way in which its products are used.

### Methodology

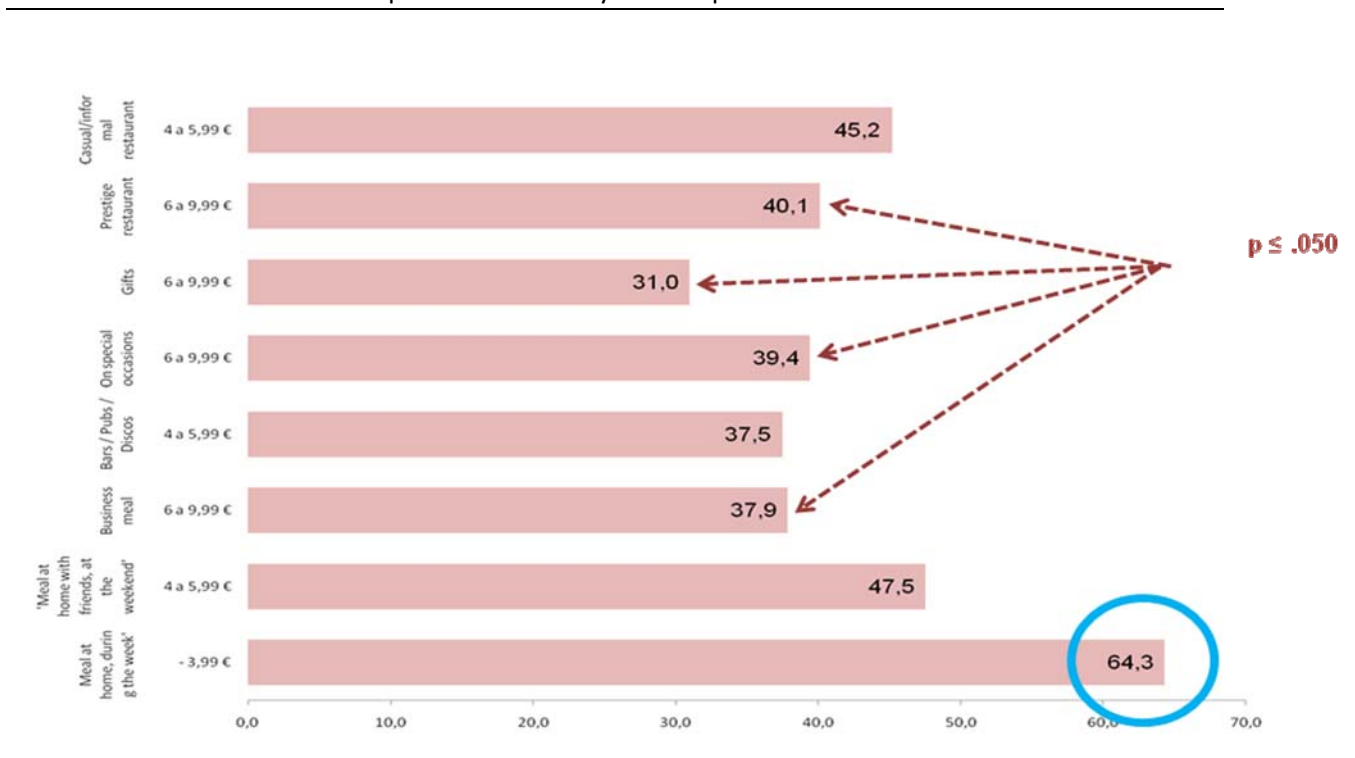
Method of Data Collection - Population: Portuguese (men/women) over 18 to 65+ years old, who drinks wine at least once a month. All profile characteristics are defined as being statistically significant at 95% confidence, unless otherwise stated. The data has been weighted to represent the profile of Portuguese market. A Phone (CAPI) survey (N=2044) was used to assess socio-demographic characteristics, consumer behavior activities (e.g., frequency of use, type of information sources, involvement and perceived quality) and psychographic information (motivations and attitudes). With each question, a respondent profile was created - 1203 valid responses, gathered in September 2008 (95% confidence interval; 2.8% margin of error). The questionnaire used closed-ended and five-point Likert scale responses - demographic and consumption questions, followed 70 attitudinal statements, each question being rated with 5 strongly agree and 1 strongly disagree. Before data collection procedures began, the questionnaire was pilot-tested at local hypermarkets in Porto to assess content validity. All the modifications were made accordingly. Method of Data Analysis - most of the sequence data were subjected to statistical treatments concerning the attitudes and behaviors of the respondents. In a subsequent second phase, the information was further subject to a sequence of multivariate statistical techniques: Exploratory PCA (SPSS, v.17.0) and CFA (EQS, V.6.1), Oneway ANOVA, Cluster analysis and Logistic Regression to describe the perceptually implicit substructures and to clarify theoretically relevant relationships.

### RESULTS AND DISCUSSION

For habitual wine consumers the data show that Portuguese men consume still wine more frequently: 45% claim to drink wine daily. The emergence of female consumption is concentrated in a less intense level of wine use: 21% claim to drink wine 2-3 times per month or less. When questioned about the most likely circumstances in which still wine would be consumed, the results of a Oneway ANOVA showed that Portuguese consumers in the age bracket of 45 years or older, drank wine with their daily meals (*at regular meals*) ( $F = 7.518, p = 0.000$ ). If wine consumption *alone without food* is not expressed among Portuguese consumers, its social consumption - *in groups, in special occasions* and *at restaurant meals* - is an area of growth among the younger age bracket (18-34 years). Globally, Portuguese consumer's decision of buying still wine depends on their latest *consumption experience* ( $\bar{x} = 3.97, SD = .891$ ), *wanting to drink it with friends* ( $\bar{x} = 3.90, SD = .824$ ), the *type of food one will eat* ( $\bar{x} = 3.87, SD = .890$ ) and its brand being well known and awarded ( $\bar{x} = 3.83, SD = .837$ ). Portuguese wine consumers underline some intrinsic key quality factors like the *harvest year* ( $\bar{x} = 4.07, SD = .719$ ), the *age of the wine* ( $\bar{x} = 4.00, SD = .860$ ), the *color* ( $\bar{x} = 3.96, SD = .792$ ), the *aroma* ( $\bar{x} = 3.76, SD = .748$ ) and *full body* ( $\bar{x} = 3.71, SD = .805$ ). The most valued extrinsic cues are *wine*

bottle design ( $\bar{x} = 3.79$ ,  $SD = .882$ ), brand awareness ( $\bar{x} = 3.51$ ,  $SD = .966$ ) and the price ( $\bar{x} = 350$ ,  $SD = .835$ ). In this work, the price is analyzed according to perceived brand/product quality and contextualized by various scenarios in which wine may be used. Graph 1. shows that in situations of wine use with a "meal at home during the week", Portuguese consumers claim to buy bottled still wine from a price range between 2 € - 3.99 €. At the weekend "with friends in bars, pub's and clubs" and from consumption during "informal occasions at restaurants", the value increases up to 4€ - 5.99 €. In the case of wine use for "special occasions", "gifts", "business meals" or when dining in "prestigious restaurants" the price consumers are disposed to pay is positioned in a price band between 6€ - 9.99 €. The results also suggest that the majority of Portuguese consumers are not predisposed to pay more than €10 in any situation of wine consumption. The data indicates that a lack of knowledge concerning strong intrinsic and extrinsic attributes makes it difficult for higher prices to be accepted, blocking the implementation of strategies to differentiate by price. Any improvement, revision and reorientation of the general pricing strategy implies an effort to educate and raise awareness of the qualities and attributes of still wine amongst final consumers, as well as professionals and advisors.

Graph 1. Price level by consumption occasion



### Logistic Regression: best predictors of wine involvement levels

Data were analyzed using SPSS V. 17.0 statistical procedures such as descriptive statistics, exploratory factor analysis and logistic regression. The descriptive statistics provide a slight description of the Portuguese wine consumer habits. Exploratory factor analysis and Logistic Regression were utilized to identify underlying factors set that best discern between Portuguese high/low involvement wine consumers.

Portuguese low involved individuals do not relate to wine as part of their lifestyle and seldom spend much time on reading specialty magazines, lingering in retail stores, talking to sales people or discussing wine with their" friends.

Usually these low involved wine consumers simplify their choice by utilizing *price, label design, grape variety, brand, wine menus, restaurant wine stewards* and risk reduction strategies to assist in wine purchase decisions. By contrast, high involvement wine consumers are more inclined to use complex information cues and buy more wine and spend more per bottle. To measure the involvement dimensions – *product involvement, brand involvement and purchase involvement* -, we used the overall mean and distribution derived from data and classified (*tow step cluster analysis*) the respondents into low or high involvement clusters. The overall mean was  $\bar{x} = 26.89$  (SD =4.564) with a Cronbach's Alpha of 0.751, indicating good internal consistency of the items. This dichotomous variable - wine consumer's personal involvement - acted as the dependent variable in 3 separate logistic regression analysis, taking the value 0 when subjects have low level of personal involvement with wine, and 1 when they have high level of personal involvement. The factor scores of wine *buying motivations, intrinsic/extrinsic cues and anthropomorphic wine perceptual structure* acted as the independent variables (*iv*). Of the 1203 respondents, 57.2% were wine enthusiasts and 42.8 % were low involved wine consumers. The results of binary logistic regressions suggest that different levels of wine purchase / consumption involvement can be explain by multiple factors – expectations, intrinsic/extrinsic cues and psychological ones. Nevertheless, only 6 of those 16 original motivational describers can discriminate between high/low wine involvement – “feeling enough informed to buy wine”, “the type of food one will eat”, “having visited the DOC Region”, “knowing the DOC Region historical tradition”, “trust on the person who sells it” and “the information on the label” (see Table 1), while only 4 of those original intrinsic perceived quality factor can also discriminate between high/low wine involvement – “wine aroma is diverse and intense”, “the best wine comes from just one grape variety”, “the best wine comes from the grape variety mixture” and “the best wine comes from an excellent grape variety”. Differently, 6 of those 6 original extrinsic cues can discriminate between high/low wine involvements. Portuguese low involved wine consumers use brands awareness, labels, price, bottle design, label/back label information to chose, but they claim they need more information. Additionally, analysis of the perceptual structure that consumers place on the product and brand image seeks to find within them the reflection of their own identity. The use in this study of a scale of anthropomorphic perception measure aims to identify the psychological dimensions that the Portuguese consumer recognize and projects on to the brand image(s) of still wine. Despite a general association of various personality traits, and as shown in Table 1., the results of Binary Logistic Regression by involvement high/low levels show that the degree of involvement with still wine is only determined by the traits *sociable, fun and young*. This positioning may facilitate individual brands' in the adoption of "price premium" strategies, which reinforce among these segments an image of quality and exclusivity to attract younger and more dynamic market segments. Our results suggest that specific consumer knowledge components (*subjective/objective*) lead wine consumers to employ specific expectations, quality perceptions and psychological traits on their buying decision making process.

**Table 1.**  
**Underlying factors that best discern between high/low involvement wine consumers**  
*(Binary Logistic Regression)*

<b>Buying Motivations (Variables in the Equation)</b>		Exp(B)	S.E.	Sig.
<b>(C. Alpha = .837)</b>	Feeling enough informed to buy wine	2.384	.158	.000
	The type of food one will eat	1.550	.156	.005
	Having visited the DOC Region	1.401	.114	.003
	Knowing the DOC Region historical tradition	1.388	.131	.012
	Trust on the person who sells it	.754	.142	.047
	The information on the label	.733	.130	.016
	-2 Log Likelihood	453.368		
	Goodness of fit	907.906		
	Cox & Snell – R <sup>2</sup>	0.217		
	Nagelkerke – R <sup>2</sup>	0.290		
	Overall correct predictions	87.9 %		
<b>Intrinsic Perceived Quality (Variables in the Equation)</b>		Exp(B)	S.E.	Sig.
<b>(C. Alpha = .839)</b>	Wine aroma is diverse and intense	2.356	.165	.000
	The best wine comes from just one grape variety	1.677	.145	.000
	The best wine comes from the grape variety mixture	1.484	.157	.012
	The best wine comes from an excellent grape variety	1.454	.148	.011
		-2 Log Likelihood	478.380	
	Goodness of fit	69.232		
	Cox & Snell – R <sup>2</sup>	0.160		
	Nagelkerke – R <sup>2</sup>	0.214		
	Overall correct predictions	68.0 %		
<b>Extrinsic Quality (Variables in the Equation)</b>		Exp(B)	S.E.	Sig.
<b>(C. Alpha = .661)</b>	Wine brands are familiar/known to me	1.879	.155	.000
	The label of the bottles is clear	1.786	.172	.001
	The best wines are expensive	1.501	.173	.019
	Wine bottles design is attractive	1.401	.174	.053
	The information in the back label of the wine bottles is not clear	1.397	.140	.017
	I don't have enough information to choose wine	.546	.139	.000
	-2 Log Likelihood	436.597		
	Goodness of fit	112.240		
	Cox & Snell – R <sup>2</sup>	.246		
	Nagelkerke – R <sup>2</sup>	.328		
	Overall correct predictions	73.9 %		
<b>Anthropomorphic wine perceptual structure (Variables in the Equation)</b>		Exp(B)	S.E.	Sig.
<b>(C. Alpha = .794)</b>	Sociable	1.523	.150	.005
	Fun	1.409	.125	.006
	Young	1.288	.118	.033
	-2 Log Likelihood	516.329		
	Goodness of fit	30.941		
	Cox & Snell – R <sup>2</sup>	.075		
	Nagelkerke – R <sup>2</sup>	.100		
	Overall correct predictions	59.7 %		

## Limitations

Instead this ongoing research focus on the Portuguese consumer's involvement with wine, the results of this study can't be generalized. Next step research must be amplified to multicultural/multimarket to capture different knowledge structures and win involvement framework.

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