

WINE PURCHASE AND CONSUMPTION IN PORTUGAL - AN EXPLORATORY ANALYSIS OF YOUNG ADULTS' MOTIVES/ATTITUDES AND PURCHASE ATTRIBUTES

COMPRA E CONSUMO DE VINHO EM PORTUGAL – UMA ANÁLISE EXPLORATÓRIA DAS MOTIVAÇÕES/ ATITUDES E ATRIBUTOS DE COMPRA DOS JOVENS ADULTOS

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SUMMARY

This study, exploratory in nature, examines how motives/attitudes, purchase and consumption behaviour, as well as extrinsic attributes for wine choice, of Portuguese young adult's (aged less than 35 years), differ from other age segments. With this aim an online survey was used, resulting in 1160 usable responses. Using factor and cluster analysis, based on motivation/attitudes towards wine consumption, four segments were obtained: "Enthusiast", "Regular", "Infrequent" and "Convivial" wine drinkers. Results show that despite some similarities, young adults (more represent in the two last clusters), particularly those under 24 years, show significant differences concerning the analysed factors.

RESUMO

Este estudo, de natureza exploratória, analisa em que medida, as motivações/attitudes, o comportamento de compra/consumo e os atributos extrínsecos relevantes na escolha de um vinho, dos jovens adultos portugueses, se diferenciam dos de outros grupos etários. Com este objectivo, foi levado a cabo um inquérito através da Internet, do qual resultou uma amostra de 1160 inquiridos. Recorrendo à análise factorial e de clusters, foi possível identificar quatro segmentos de consumidores de vinho: os "Entusiastas", os "Regulares", os "Raros" e os "Conviviais". Os resultados mostram que, apesar de algumas similitudes, os jovens adultos (mais representados nos dois últimos clusters), particularmente os de menos de 24 anos, mostram diferenças significativas relativamente aos factores analisados.

Key words: wine, consumption motives/attitudes, extrinsic attributes, information sources, market segmentation.

Palavras-chave: vinho, motivações de consumo/attitudes, atributos extrínsecos, fontes de informação, segmentação do mercado.

INTRODUCTION

Wine producers in Portugal, as well as in other EU traditional producing countries, are now facing a highly competitive environment in their domestic markets, as well as in the international market. While in Portugal and in other EU producing countries wine consumption continues to show a declining trend, in promising markets with increasing wine consumption (like those of the USA, Canada or Japan), EU producing countries face a huge competition from the New World wine producing countries, like Argentina and Australia¹.

Wine production has a considerable relevance in the Portuguese economy. It has a significant share in Agricultural Production, contributes positively to external trade balance, generates employment and income in other important sectors of activity like the cork one (being Portugal the world leading cork

producing country).

The impact of vines on landscape, the association of wine with local traditions and gastronomy, are also relevant factors shaping the attractiveness of many rural territories.

Wine production accounted on average (2000-2008), for 15 % of total Agricultural Production and 26% of Crop Production (INE, 2009). This share has even been increasing over the last decades as in the eighties those shares were, respectively, 9% and 16%.

Since Portugal's accession to the EC in 1986, the Portuguese wine sector has been experiencing deep changes, namely the renewal of vineyards and the modernisation of processing and marketing facilities², with the subsequent increase of quality wines production, and also of competition, with large availability of different brands and different types of wines, both in the domestic and international market. This

¹ Considering the USA, that became in 2008 the biggest wine market in volume (OIV, 2009), the share of EU exports, on total USA wine imports, over the period from 1995 to 2008, declined from 73% to 53% in volume, and from 89% to 71% in value (CE/DGADR, 2009).

²In fact, wine has been the most important sector, representing around 34% of total investment, between 2000 and 2009, under "Programa Agro"(Programa Agro 2010).

supply adjustment contributes to explain the above mentioned, growing share of wine in Portuguese Agricultural Production.

Concerning trade, wine is the Portuguese main agri-food export with 20.5 % in 2006 (MADRP - GPP, 2007). With an average production around 7 million hl (average 2003 to 2007), exports represent almost 40 % of this production. The Portuguese wine market is now relatively open to imports, which represented around 1.4 million hl, on average, in the same period.

With an average of 4.8 million hl, domestic wine consumption is still the main destination of the Portuguese wine production, a common feature of all EU main producing countries.

Wine *per capita* consumption in Portugal has been decreasing, since the beginning of the eighties (Duarte, 1991), reflecting deep changes on the role of wine in society that from a regular drink fitting everyday's meals, has become a more occasional drink, associated with fruition and pleasure.

Quantitatively, this deep change is revealed by the evolution of *per capita* consumption, from around 100 l in the beginning of the seventies, to less than 50 l, on average, nowadays.

This trend is similar to the one observed in other main EU producing countries, France, Italy and Spain (Smith and Miltry, 2007). Many different factors may contribute to explain this trend, like growing consumer's health concerns, changes on population lifestyles, legal constraints related to alcohol consumption, as well as aggressive marketing strategies from beer and non-alcoholic drinks' industries, based on innovation and development of new products.

In this highly competitive environment it is important for wine producers, in order to reinforce their market orientation, to know better how Portuguese consumers choose the wine, what the relevant attributes for expected quality perception are, and what kind of consumer segments can be identified.

Of particular interest is to identify how young adults (those with less than 35 years of age) perceive wine extrinsic attributes and how their motives/attitudes towards wine consumption differ from elder consumers. These younger consumers are at present mainly targeted by non-alcoholic drinks' industries, but they may be a promising target also for the wine industry, as far as its marketing efforts are responsible and based on a sound knowledge of the particular needs, of this type of consumers.

There is still a considerable lack of knowledge in Portugal, concerning wine consumers attitudes, perceptions and behaviour. In this paper³, we try to identify

among others, the importance of extrinsic attributes and the main sources of information for wine purchase decision, the motives/attitudes, the frequency and occasions of consumption and how these different issues relate to consumer's age. Do young adults perceive extrinsic quality attributes differently from elder consumers? Do they use different information sources? Do they have different consumption motives/attitudes towards wine consumption? Those are the main research questions addressed in this paper.

REVIEW OF LITERATURE

The understanding of wine consumption decrease, in traditional producing countries has been the aim of several studies, since the beginning of the eighties, particularly in France (Boulet, and Houget, 1982, Boulet and Laporte, 1983 and 1985).

In fact, ONIVINS in association with INRA, have been implementing a large survey on wine consumption in France, since 1980 till today, every five years. Results from these surveys, show that the consumption frequency is a core variable to understand wine consumption decrease. Some trends identified at the beginning of the eighties, like the increasing number of occasional consumers (drinking wine once or twice a week or more rarely) and non-consumers, at the expenses of a decreasing number of regular consumers (drinking wine everyday or almost everyday), seem to be still in place nowadays (ONIVINS/GRECO, 2005).

Among the socio-demographic variables determining wine consumers' behaviour, age and gender seem crucial (Boulet and Laporte, 1997). According to these authors those with less than 20 years are mainly non-consumers, those with more than 50 years are regular consumers and occasional consumers are in between.

The relationship between age and wine consumption is complex, as different effects can be identified. According to Laporte (2004), based on the results of the ONIVINS/INRA surveys, French wine consumers' behaviour will not suffer significant changes with the ageing of the consumer, meaning that the generation effect is relevant, and other things equal, the young adults' behaviour of today, will probably be the future dominant behaviour.

In the US, the perceptions and attitudes of Millennials (those born between 1977 and 2000) regarding wine, have been analysed by Tach and Olsen (2006) as this age group is considered very promising according to its size and buying power. Results show the need to associate wine with fun, social and relaxing environments, to be more innovative with packaging and labels, and more environmentally oriented. Also an improved knowledge on taste profiling should be considered to better target this segment of wine drinkers.

Later, also the study of Olsen, Tach and Nowak (2007), analysing core US wine drinkers, support the

³ Preliminary results of this analysis have been presented at ENOMETRICS XVI, Namur 21-24 May, 2009 (Madeira, J., Duarte, F. and Barreira, M. , Wine purchase and consumption behaviour of young adults in Portugal: Is age a differentiation factor?).

premise that between age cohorts there are differences in what concerns motives, consumption practices and wine socialisation. Concerning the reasons why they started to consume wine, younger consumers, the Millennials, scored higher the influence of family and friends and lower the better taste of wine, compared with beer and mixed drinks, than other age groups. For this group, the image of wine seems more associated with sophistication and less with health.

These results were important to our own research as they legitimate a particular interest on young adults wine consumption behaviour, along with the previously mentioned fact, that this segment of consumers, one of the main targets of beer and non-alcoholic drinks industry, is often dismissed by wine marketers.

Concerning wine purchase decision, Lockshin and Hall (2003) give a good summary of the different attributes, with impact on the wine selection process, that have been identified on several studies, like taste, brand, price, origin and packaging, among others. Wine is in fact a complex product with different intrinsic and extrinsic attributes playing a role on consumers' quality perception.

Several studies have tried to identify the relevance of these choice criteria, in different contexts, and different periods of time. Many of these studies were based, as mentioned by Cohen (2009), on traditional survey methods, using scores in order to identify the more relevant criteria in consumer's decision. A recent study (Goodman, 2009), recognizing some problems with the use of these scores, particularly in international comparisons, is based on a different approach, called Best-Worth Scaling (Cohen, 2009). This research reveals an important similarity among the twelve analysed countries, concerning the wine attributes relevant for purchase decision: "Having tasted the wine previously" is among the three main choice criteria in all of them. However, the importance of the wine origin and of the brand differs from country to country. For traditional producers, like Italy and France, origin of the wine is considerably more important than brand names, or grape varieties.

In Spain, where overall wine consumption is also decreasing, Mitmet and Albisu (2006) show, using a choice experiment technique, that the designation of origin and wine ageing attributes, are of great importance for the Spanish consumer buying decision. However, the grape variety variable seems also to be a significant choice criterion and so these authors conclude, that a "New World" marketing strategy, based on well-known varietal wines is emerging, in the Spanish market.

The analysis of Portuguese wine purchase and consumption behaviour is scarce, as previously mentioned. However two studies should be mentioned. First, a study from AESBUC (2003), based on a national sample and using a 7 point scale, which identifies as the four more important choice criteria:

the region, the price, the brand and the harvest year. In this study, the region is clearly less important for younger consumers (those with less than 24 years) and for women. The brand was also less valued by younger people. More recently and based on a survey to distributors and consumers from the Minho's region (North of Portugal), also Ribeiro and Santos (2008) show, that the most important extrinsic attribute for wine choice is the region of origin. According to their results, brand was the next most important attribute, followed by the price. They also remark that wine specialists, as well as consumers, use the region of origin as a strong cue in their wine purchasing decision. Both studies don't segment the Portuguese wine market.

Concerning motives and attitudes towards wine, a deep change is taking place in traditional wine producing countries. According to Hetzberg and Malorgio (2008, p. 41), in these countries, "the function of wine has been changing from nutrition to pleasure; it is consumed on special occasions and represents a sort of status symbol, leading to a more occasional drinking". Their study revealed strong association between purchasing and consumption patterns and some demographic traits, particularly age. Younger generations drink less and less frequently, but are more likely to buy quality products (bottled DOC wine, meaning wine with protected designation of origin).

For another traditional producing country (France), d'Hauteville (2003) using scales of attitudes and factor analysis, identified as the more relevant factor, the first one, related positively with taste, pleasure, interest, and negatively with "I prefer other drinks". This factor was the basis for the involvement construct and was used in a segmentation of French consumers. Younger people are mostly associated with the non-consumers, and uninvolved occasional consumers' segments.

Bruwer, Li and Reid (2002) while segmenting the Australian wine market, identify as main desired consequences of wine consumption: mood enhancement, ego and image, health benefits and personal enjoyment.

More recently Charters and Pettigrew (2008) using a qualitative approach, and a sample of Australian consumers, summarize as main motives to consume wine: taste (probably the most significant), enjoyment, food and mood enhancement, as well as various symbolic motives, like self-esteem or image projection. For a traditional producing country, Spain, Barrena and Sanchez (2009), confirm that, in general, consumers drink wine mainly for the sensory pleasure. But, according to these authors, younger consumers are also motivated for reasons related to cultural identity and social status.

Previous research on wine consumption behaviour has, in fact, also attempted to identify market seg-

ments. According to Spawton (1998) in Bruwer, Li and Reid (2002) both the wine market in Australia and elsewhere have been subjected to all types of segmentation. Extensive reviews on the segmentation in the wine market can be found, namely, in Bruwer, Li and Reid op. cit. and Thomas and Pickering (2003).

Questioning the ability of traditional segmentation criteria, like the demographical ones, to describe and predict consumers 'behaviour, more recent segmentation studies in the wine market rely on the lifestyle concept (Bruwer, Li and Reid 2002, and more recently Bruwer and Li, 2007), or on the involvement concept (like those of Lockshin, Quester and Spawton, 2001 and d'Hauteville, F., 2003).

Interesting new developments in this subject can be found in the cross-national market segmentation study of Lockshin et al. (2008). In their study, segmentation is based on the attributes consumers use to choose the wines, using Best Worst Scaling, instead of traditional scaling. Results from this segmentation across eleven countries, allows the identification of three different segments of wine consumers, that seem to be present in all the analysed countries, having however a different percentage of members in each country: a segment of cognitive-based buyers that make decisions based on the grape variety, the region, the brand name and the awards, a segment of risk reducing consumers making decisions mainly based on recommendations and previous experience and finally a segment sensitive to displays, attractive front labels and back labels. Younger consumers seem more represented in cluster 2 meaning they are probably more associated with risk reducing strategies.

According to the literature review above mentioned, segments obtained differ according to the variables considered, the methodology used and the analysed countries, being difficult to replicate results. However, Lockshin et al. (2008, p.12) argue that their segmentation approach "has the potential to allow marketers to capture a wide range of preferences with accurate and replicable measurements, something that has not been part of our toolbox in the past".

METODOLOGY

As previously mentioned, with this research we tried to identify, the importance of extrinsic attributes and the main sources of information for wine purchase decision, the motives/attitudes, the frequency and the occasions of consumption, and how these different issues relate to consumer's age.

For this purpose, and due to resource and time constraints, a survey was implemented, using the internet (July/August, 2008), and the answers of a convenience sample (all those over 16 years of age who desired to participate) of 1160 respondents were analysed.

The questionnaire used mainly close-ended questions

in order to obtain information on certain demographic variables (age, gender, education level, income, living region) as well as behavioural variables towards wine (frequency of consumption, buying places, attributes relevant for choice), attitudes towards wine consumption and subjective knowledge variables.

Considering consumption frequency, using the same situations of the ONIVINS/INRA surveys, previously defined, allowed the separation of three groups: regular consumers, occasional consumers and non-consumers.

For the identification of choice criteria twelve extrinsic attributes have been chosen based on literature review (region of origin, grape variety, brand, price, DOC, oenologist, label, back-label, awards, harvest year, other packs and cork stopper).

For each attribute, importance scores were used, ranging from 1 (non-important) to 5 (extremely important).

A similar scale was used to identify the relative importance of different information sources: previous consumption experience, recommendations of family and friends, recommendations from experts, label and back label information, advertising and internet).

Concerning motives/attitudes towards wine consumption, respondents were asked about their level of agreement, with several statements, using a 5 point Likert scale (1 – strongly disagree, 5 - strongly agree). Some of the twelve statements were related to perceived attributes of wine, like "I like the taste of wine" or "A moderate wine consumption is good for health", while others try to capture the perceived role of wine like "Wine consumption favours conviviality", "Wine goes well with meals", "Wine consumption gives social status".

Concerning subjective knowledge about wine characteristics, and based on the INRA/ONIVINS survey, three simple questions (yes or no) were introduced in order to check if consumers know what a DOC wine, a regional wine, or a varietal wine are.

Using the data from the survey, on a first stage analysis was based on independence tests and ANOVA, in order to test if significant differences can be found among different age classes.

On a second stage factor and cluster analysis were implemented in order to identify consumer segments, based on factors identified with motives/attitudes towards wine.

RESULTS

Sample Characteristics

The sample of 1160 respondents (Table I) is almost evenly split between man (53%) and women (47%). All age classes over 16 are represented, but on average, respondents are relatively young. The most

TABLE I

Demographic and socio-economic characteristics of the sample
Características demográficas e socioeconómicas da amostra

		%
Gender	Female	47.0
	Male	53.0
Age	15 – 24	12.8
	25 – 34	38.5
	35 – 44	20.0
	≥ 45	28.7
Income ¹	Level 1	36.7
	Level 2	24.3
	Level 3	32.5
	Level 4	6.5
Region	North	28.5
	Centre	7.4
	Lisbon	49.0
	Alentejo	12.4
	Other	2.7

¹Monthly family income levels:

1 – until 4 minimum wages,

2 – from 4 until 6 minimum wages,

3 – from 6 until 10 minimum wages

4 – 10 minimum wages or more

represented age class is from 25 to 35 years, with almost 39% of respondents. Concerning income classes and living region of the respondents there is some bias towards higher income classes and the region of Lisbon. However the main discrepancy concerns the educational level. In fact almost all the respondents (99%), have concluded at least 12 years of education, while in the Portuguese population as a whole, this share is only 25%, and in those aged from 25 to 34 years, the age class most represented in the sample, the proportion is 46%. So this sample is not representative of the Portuguese population, but may be a good representation of wine consumption behaviour of younger, educated wine consumers. With this in mind our results should be interpreted with caution as they are just one contribution to the analysed issues.

Most of the respondents are occasional consumers (73%). Regular consumers represent 25% and only a few respondents declared never consuming wine. Wine is more frequently consumed at dinner time (59%), week-ends (55%) and particularly special occasions (75%).

For the whole sample the four main choice criteria are: The region of origin (3.8), having a cork stopper (3.6), the price (3.6) and the harvest year (3.1). Almost all the respondents recognize that the importance of

choice criteria may change with the consumption occasion and for 77 % of them, the price is not a good quality cue for wine.

Clearly, most important information sources are: previous consumption experience (4.1) and recommendations from family and friends (3.6).

Considering motives/attitudes towards wine: “I like the taste of wine”, “Wine goes well with meals”, “I like to know and evaluate wine quality”, “Wine moderate consumption favours health”, “Wine consumption favours conviviality” and “Wine helps to relax” all had a high level of agreement (scores between 3.5 and 4.2).

Results from independence tests and ANOVA

Results from the first stage of the analysis, suggest that age is a relevant differentiation factor of consumer's choice, expected quality perception and motives/attitudes towards wine. Region of origin, cork stopper, and price, are considered by the respondents, the three more important extrinsic attributes for choice decision. However, elder consumers (35 years or more), give more relevance to attributes like the region, the grape variety, the DOC mention, the oenologist, the harvest year and the cork stopper. On the opposite, younger consumers are those who attribute more relevance to the front label and the brand (this extrinsic attribute with no significant differences among age classes). Previous consumption experiences (taste), followed by suggestions of family and friends, are the main information cues for all age classes. Advertising is considered not very important by all age classes. However, younger consumers (particularly those with less than 25 years) are those who attribute more relevance to this source of information. Consumers from 25 to 34 years old are those who attribute a higher importance to the internet, as an information source.

Concerning motives/attitudes towards wine consumption, “I like the taste of wine” is the more important reason to consume followed by the recognition that “A moderate consumption is good for health”, and third, the fact that “Wine consumption favours conviviality”. Despite being identified as the main three reasons for wine consumption, for all age classes, they are particularly relevant for those over 35 years of age. Wine consumption as a factor of “social status” is more associated with younger consumers (25-34 years old).

Detailed results of this stage of the analysis can be found in Madeira (2008).

Results from factor and cluster analysis

Factor analysis performed on the motives/attitudes influencing wine consumption allowed the identification of three factors (eigen values above one),

explaining 59% of total variance (Table II). These factors can be interpreted as follows:

Two step cluster analysis technique was used to identify segments of consumers according to these factors.

TABLE II
Factor analysis on motives/attitudes variables
Análise factorial com base nas motivações/attitudes

Statements	Factors		
	1 <i>Taste/ Pleasure</i>	2 <i>Conviviality</i>	3 <i>Personal performance</i>
I like the taste of wine	0.829	0.038	0.004
I like to know and enjoy wine quality	0.814	0.066	0.147
Wine goes well with meals	0.755	0.240	0.026
I prefer wine to other drinks	0.666	0.126	0.358
Wine consumption helps to relax	0.262	0.746	-0.115
Wine consumption favours conviviality	0.457	0.614	-0.043
Enjoying wine is a factor of social status	0.069	0.609	0.351
Wine is crucial for my lifestyle	0.338	0.502	0.474
Wine is cheap	-0.239	0.501	0.265
Wine consumption favours my professional performance	0.104	0.209	0.787
Wine consumption doesn't interfere with my driving ability	0.084	-0.024	0.748
Eigenvalue	2.835	1.931	1.762
Variance (%)	25.78	17.55	16.02
Cumulative variance (%)	25.78	43.33	59.35

n = 1092. Loadings were derived for each of these factors using a varimax rotation.
Bartlett's test for sphericity: $\chi^2_{55} = 3444.195$ ($p < 0.001$).
Kaiser-Meyer-Olkin measure of sampling adequacy: KMO = 0.817.

Factor 1: variables with the highest contribution to this factor are, "I like the taste of wine", "I like to know and enjoy wine quality", "Wine goes well with meals" and "I prefer wine to other drinks". This factor was named "Taste/Pleasure".

Factor 2: the items that loaded most heavily on this factor were "Wine consumption helps to relax", "Wine consumption favours conviviality", "Enjoying wine is a factor of social status", "Wine is crucial for my lifestyle" and "Wine is cheap". Therefore this factor was named "Conviviality".

Factor 3: including statements as "Wine consumption favours my professional performance" and "Wine consumption doesn't interfere with my driving ability". This factor was named "Personal performance".

The results show a four clusters' solution (Table III and Figure 1)

Cluster 1, with 25% of the sample, includes respondents that evaluate factor "Taste/Pleasure" above average, and "Personal performance" and "Conviviality" below the average. Cluster 2, with 26% of the respondents, shows a positive value for the factor evaluating "Personal performance", well above the average. Cluster 3, with 14% of the sample, include those respondents who evaluate all factors below the average, particularly "Taste/Pleasure". Finally cluster 4, with 35% of respondents, evaluate above the average the "Conviviality" factor and below the average the "Personal performance" factor.

Bivariate analysis, including cross-tabulation with

TABLE III
Clusters centres' identification
Identificação dos centros dos clusters

Motives/Attitudes factors	Cluster 1	Cluster 2	Cluster 3	Cluster 4
<i>Taste / Pleasure</i>	0.49	0.24	-1.88	0.18
<i>Conviviality</i>	-0.90	0.00	-0.12	0.70
<i>Personal performance</i>	-0.57	1.28	-0.31	-0.44
Number of respondents	276	288	147	381
% of respondents	25.3	26.4	13.5	34.9

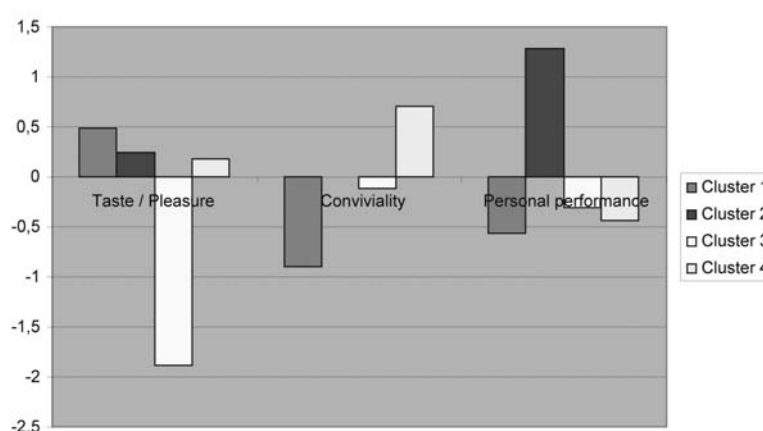


Figure 1 - Clusters centres' identification

Identificação dos centros dos clusters

Chi square statistics, was used to profile the clusters in terms of their socio-demographic characteristics, buying and consumption behaviour, subjective knowledge of wine characteristics, choice criteria and information sources (Tables IV to VII).

As can be seen youngest respondents are mainly represented in segment 3, respondents aged 25-34 years are more frequently in segment 3 and also 4, respondents aged 35-44 years are mainly represented in segment 1 and elderly respondents are more frequently represented in segment 2.

Women are clearly more represented in segment 3, while segment 2 is largely represented by men.

Respondents with the lowest income level are clearly more represented in segment 3, those of "medium income" in segment 4 while "high" and "very high" income respondents are mostly in segment 2.

Respondents of the North and Centre are mainly in segment 2, while those from Lisbon are more frequently in segments 3 and 4.

Buying and consumption behaviour are quite different among segments, as can be learned on Table V.

Non-consumers and infrequent wine consumers are

more represented in segment 3, occasional consumers are more frequent in segment 1 and 4, and regular consumers in segment 2.

Respondents in segments 3 and 4 preferred more frequently to buy wine in the supermarket.

Respondents in segments 2 and 4 are more sensitive to wine promotions and those in segment 3, considered more frequently, that a "Higher price is a sign of higher wine quality".

Knowledge of wine characteristics DOC, varietal wine and regional wine is greater for respondents of segments 1 and considerably lower for respondents from segment 3, as expected. According to these different consumption patterns, the four clusters were named as follows: Cluster 1- Occasional Enthusiast wine drinkers ("Enthusiast"), Cluster 2 – Regular wine drinkers ("Regular"), Cluster – 3 Infrequent wine drinkers ("Infrequent") and Cluster 4 – Occasional convivial wine drinkers ("Convivial").

For all the segments the three main choice criteria are: region of origin, cork stopper and price. However some differences can be enhanced: "Enthusiast" are those who value more the origin of the wine, the cork stopper and the DOC mention. "Regular" are those

TABLE IV

Cluster profiling: demographic and socio-economic characteristics
Perfil dos clusters: características demográficas e socioeconómicas

		Cluster 1	Cluster 2	Cluster 3	Cluster 4	Sample	Signif. level (1)
Gender	Female (%)	47.8	37.1	68.0	45.6	47.0	< 0.001
	Male (%)	52.2	62.9	32.0	54.4	53.0	
Age	15 – 24 (%)	7.6	12.2	32.7	10.8	13.3	< 0.001
	25 – 34 (%)	36.2	33.7	43.5	40.9	38.2	
	35 – 44 (%)	24.3	15.3	13.6	22.6	19.9	
	≥ 45 (%)	31.9	38.9	10.2	25.7	28.6	
Income	Level 1 (%)	31.4	36.4	54.3	33.7	36.6	0.001
	Level 2 (%)	23.9	21.6	22.8	27.4	24.4	
	Level 3 (%)	39.4	32.1	16.5	33.4	32.4	
	Level 4 (%)	5.3	9.7	6.4	5.4	6.7	
Region	North (%)	29.7	35.9	22.0	25.5	28.9	0.003
	Centre (%)	6.2	11.6	7.1	5.1	7.4	
	Lisbon (%)	48.7	38.4	59.6	52.8	48.8	
	Alentejo (%)	13.6	12.3	9.9	12.5	12.4	
	Other (%)	1.9	1.9	1.4	4.1	2.6	

(1) χ^2 test.

TABLE V

Cluster profiling: buying and consumption behaviour
Perfil dos clusters: comportamentos de compra e de consumo

		Cluster 1	Cluster 2	Cluster 3	Cluster 4	Sample	Signif. level (1)
Consumption frequency	Never (%)	0.0	0.3	14.3	0.3	2.1	< 0.001
	Rarely / occasionally (%)	42.4	24.3	81.0	39.6	41.8	
	Once or twice a week (%)	34.8	33.7	3.4	37.0	31.0	
	Everyday or almost every day (%)	22.8	41.7	1.4	23.1	25.0	
Buying wine	yes (%)	92.8	86.8	32.7	84.3	80.1	< 0.001
Supermarket	yes (%)	50.2	49.6	60.4	60.6	54.4	0.020
Sensitive to wine promotions	yes (%)	62.9	67.9	35.4	67.0	64.3	< 0.001
Higher price is a sign of higher quality	yes (%)	17.6	18.0	41.7	25.7	22.0	< 0.001
Knowledge of DOC wine	yes (%)	83.3	87.7	38.4	77.6	76.4	< 0.001
Knowledge of varietal wine	yes (%)	81.1	86.0	43.2	77.4	76.0	< 0.001
Knowledge of regional wine	yes (%)	92.0	94.7	67.3	89.4	88.5	< 0.001

(1) χ^2 test.

TABLE VI

Cluster profiling: importance scores for choice criteria
Perfil dos clusters: importância dos critérios de escolha

	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Sample	Signif. Level (1)
Region of origin	3.9	3.8	3.4	3.8	3.8	< 0.001
Cork stopper	3.7	3.6	3.0	3.6	3.6	0.001
Price	3.5	3.5	3.7	3.6	3.6	0.473
Brand	3.1	3.1	3.3	3.1	3.1	0.522
Harvest year	3.1	3.2	2.4	3.1	3.1	< 0.001
Grape variety	3.1	3.2	2.3	3.0	3.1	< 0.001
DOC	2.9	2.8	2.4	2.8	2.8	0.029
Back-label	2.7	2.8	2.3	2.7	2.7	0.008
Awards	2.6	2.6	2.3	2.7	2.6	0.031
Label	2.3	2.4	2.2	2.5	2.4	0.256
Oenologist	2.0	2.3	1.5	2.1	2.1	< 0.001
Other packs	2.0	2.2	2.0	2.0	2.0	0.010

(1) F test.

TABLE VII

Cluster profiling: importance scores for information sources
Perfil dos clusters: importância das fontes de informação

	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Sample	Signif. Level(1)
Consumption experience	4.2	4.1	3.7	4.2	4.1	< 0.001
Family and friends	3.7	3.4	3.5	3.7	3.6	< 0.001
Experts	3.0	3.0	2.4	3.0	3.0	0.001
Label and back-label	2.8	2.9	2.3	2.8	2.8	0.002
Advertising	2.2	2.2	2.2	2.2	2.2	0.661
Internet	2.0	2.1	1.6	2.1	2.0	0.001

(1) F test.

who value more some attributes like the grape variety, the harvest year, the back label information and the oenologist. The “Infrequent” score under the sample average almost all the extrinsic attributes considered in the analysis, except the price and particularly the brand. For this segment of very young rare wine drinkers and non-drinkers, the region of origin and the cork stopper are scored well below the average.

Concerning information sources, previous consumption experience is the most important, for all the groups, followed by family and friends. However, is interesting to remark, that the “Infrequent” youngest consumer is the one who gives less importance to the

opinion of experts, or the information on the front and back-label. Advertising, as well as the internet, are perceived as non-important by all segments.

CONCLUSIONS

For the analyzed sample, age is in fact, a differentiation factor, of wine buying and consumption behaviour.

From factor analysis, three factors summarize the information concerning motives/attitudes towards wine

consumption: one factor related to Taste/Pleasure, one with Conviviality and the third with Personal Performance.

Using cluster analysis, based on these factors, four different segments have been identified. Young adults are mainly represented in segment 3, for those aged less than 25 years and segments 3 and 4, for those aged 25 to 34 years.

Segment 3 called the “Infrequent”, is mainly represented by non-consumers and rare wine drinkers, many of them being women. This type of consumers doesn’t seem to appreciate wine, nor recognize its conviviality role. As they are very young, they probably prefer other drinks as the results of the ESPAD report (Hibell, B., et al., 2009) suggest. In fact, according to this study’s results, for young Portuguese students aged 16, the most commonly reported type of alcoholic drink, used in the last 30 days before the survey took place, was beer with 54 % of the respondents, while wine had the lowest share with 33%.

On the opposite, segment 2, “Regular”, is associated clearly with older consumers, mainly men. They drink wine everyday or almost everyday and they do appreciate wine taste. Wine seems also important for their individual performance.

Two different segments of occasional consumers were also identified: one group (cluster 1 – “Enthusiast”) that despite drinking mainly rarely, enjoys the taste of the wine, and another group named “Convivial”, including respondents that associate wine consumption mainly with conviviality. The age classes more represented in these two segments are: 25 – 34 years and 35 – 44 years. Both segments show a larger share of consumers drinking wine more frequently (once or twice a week) than those included in cluster 3 (“Infrequent”).

In summary and concerning young adults’ motives/ attitudes towards wine, only consumers aged 25 – 34 years seem to perceive the conviviality role of wine. Youngest consumers don’t seem to be attracted by the taste nor even recognize the conviviality role of wine.

For all segments, the three main extrinsic attributes for choice decision are: the region of origin, having a cork stopper, and the price. However, “Regular” consumers (segment 2) are those that most value the origin, the cork stopper and the DOC mention. On the opposite the youngest, “Infrequent” consumers, are those who value most the price and the brand. It’s interesting to notice that even for these very young consumers the region of origin is the second highly scored extrinsic attribute, just after the price.

The cork stopper is identified as the second more relevant extrinsic cue, after the region of origin, except by “Infrequent” young consumers. The relevance of this attribute may be explained by the fact that maybe there is still an image of higher quality associated with this type of closure, as has been shown for the

US market by Barber and Taylor (2009), Nelson et al. (2009) and Marin et al. (2007). Other possible explanation, more specific of the Portuguese context, is that this result may also reflect an ethic motivation, considering that in fact Portugal is the main world cork producing country.

For all segments the main sources of information are previous consumption experience, followed by recommendations from family and friends. All segments seem to have a saving risk approach to wine consumption and surprisingly, the internet is not identified as an important information source, not even for young adults.

The main limitation of this study is the fact that it was based on an Internet survey, thus making the sample non-random and significant biased towards respondents with higher education levels. Results can not be considered then, as representative of the Portuguese wine drinkers and so, further research is needed to support these results.

Despite this limitation some implications from this study may be of interest for wine marketers.

If the generation effect holds, the predominant groups of wine consumers in the future will drink wine with a low or very low frequency. However, the good news are that young adults aged 25 – 34 years, seem to perceive the conviviality role of wine, or they associate wine with a good taste, and an enjoyment experience. The connection between wine consumption and a pleasant experience or conviviality should be stressed as a communication message by wine marketers.

Concerning the youngest consumers (15 – 24), they don’t seem, in general, to like wine, nor associate it with good conviviality experiences. However, for this group, maybe drinking preferences are not stabilized and the life-cycle effect will still have a role to play.

In a very competitive environment, and in the absence of extended previous research on the Portuguese wine market, these study’s results, despite the sample bias, may be a contribution to a better knowledge of Portuguese wine consumption behaviour, particularly of young adults.

Further research is needed particularly on taste profile, packaging and closure attributes, image associations and environmental concerns, in order to better target this segment of Portuguese wine consumers.

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