# UNIVERSIDADE TÉCNICA DE LISBOA INSTITUTO SUPERIOR DE ECONOMIA E GESTÃO

# **MASTERS IN MARKETING**

# WINE REPUTATION: ARE THERE DIFFERENCES BETWEEN RED AND WHITE WINE?

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#### **ABSTRACT**

Reputation is a relevant concept in different areas and to different subjects such as personalities, organizations, products and countries (Bromley, 2001). Adjusting existing theory to wine sector, we justify this research with this product's importance to Portugal's economy. Therefore we identified the need for understanding existing differences in wine consumption and perception using the Corporate Character Scale (Davies, Chun, Da Silva, & Roper, 2004). Because human values unify the assorted interests of all sciences concerned with human behaviour (Schwartz, 1992), we assessed the relationship between respondents' values and their associations to wine.

With that purpose we used a quantitative approach with a convenience sampling method (non probabilistic), and collected 107 usable questionnaires from wine consumers. We concluded that red wine is not thought to have higher quality than other types of wine or even to taste better, particularly among elder respondents. About money spent per bottle, in average, it is not related to the type of wine people prefer. White wine is not considered a lady's wine. Nowadays we cannot relate women's identification with the sense of freedom and wine consumption. Being an adventurer and self-confident is not related to white wine preference.

A Reputação é um conceito relevante em diferentes áreas e face a diferentes temas, tais como personalidades, organizações, produtos e países (Bromley, 2001). Ajustando a teoria existente ao sector do vinho, justificamos a pesquisa com a importância do vinho na economia portuguesa. Assim, identificámos a necessidade de entender diferenças no consumo e percepção do vinho utilizando a Escala de Personalidade de Davies, Chun, Da Silva, & Roper (2004). Porque os valores humanos unificam o diverso leque de interesses de todas as ciências relativas ao comportamento humano (Schwartz, 1992), pretendemos explorar a relação entre os valores dos respondentes e as suas associações ao vinho.

Para isso, utilizámos uma abordagem quantitativa com amostra por conveniência (não probabilística), recolhendo 107 questionários válidos de consumidores. Concluímos que o vinho tinto não é considerado como tendo qualidade superior face a outros ou sequer que tenha melhor sabor, particularmente entre as pessoas mais velhas. Em relação ao valor médio por garrafa que a pessoa despende, essa questão não está relacionada com o tipo de vinho preferido. O vinho branco não é associado ao sexo feminino. Também não foi encontrada uma relação significativa entre consumo de vinho pelo sexo feminino e o seu sentimento de liberdade. Da mesma forma, a associação aos valores de aventura e auto-confiança não se relaciona com a preferência por vinho branco.

**Keywords**: reputation, quality, corporate character, wine, human values.

#### **CHAPTER 1 – INTRODUCTION**

In this first chapter we present the theme relevance, the research objectives, methodology and structure of this study.

#### 1.1. Theme Relevance

This theme comes from the authors' personal interests and considers the importance of wine for our country's economy. Wine exports increased 17% in 2010 to 600 million euros (Secretary of State for Fisheries and Agriculture, Luís Vieira, February 3, 2010. Retrieved from www.ivv.min-agricultura.pt/np4/3077.html). 53% of the total export is port wine; the remaining 47% relies on table wine. The investment of 150 million euros planned until 2013 for the Portuguese wine promotion reflects the importance of this sector in the Portuguese economy. Portugal is one of the 5 leading EU exporters along with Germany, Spain, France and Italy. In absolute numbers, 2010 forecast for exportation are 2,6 millions of hI (corresponding to 3% of global market). In 2009 2,3 million hI headed worldwide market (Organisation Internationale de la Vigne et du Vin [OIV], 2009).

Given the recent proliferation of wine producing countries, generating a growing and more aggressive competition among Portuguese consumers, we are interested to learn the different perceptions about wine, especially when considering white wine versus red wine. International data shows different consumption habits emphasizing which one is more consumed in certain countries. Regardless of brands and their reputation, white wine is overlooked in the Portuguese market. Therefore, we developed an introductory exploratory research to schematize the descriptive research developed in this study.

#### 1.2. Research Objectives

This study results from the need to understand differences in wine perception and consumption, identifying favourite types of wine and the reasons for expressed preference. In the end, because values are the concept that unifies the apparently diverse interests of all sciences concerned with human behaviour (Schwartz, 1992), we intend to explore the relationship between respondents' values and their associations to wine. The purpose of this analysis is also to be able to expand, in future studies, the scope of this initial exploratory study. Therefore we defined three objectives:

- 1. To identify the quality attributes valued by consumers when choosing wine
- 2. To understand the differences in red and white wine reputation, i.e., to identify which attributes are recognized in each of these products
- 3. To compare consumers' preferences according to their values

#### 1.3. Methodology

This research followed a positivist paradigm, in a quantitative approach, applying questionnaires through a non probabilistic and convenience sampling, collecting answers among our personal contacts (entities asked to disclose our questionnaire: wineries, restaurants, wine shops).

#### 1.4. Structure

This section aims to present the research problem and identify and justify the research objectives and hypotheses to be tested. On chapter two we review the existing literature on reputation. Chapter three explores our adopted model/frame of reference, in chapter four we formalize research objectives and hypothesis and chapter five presents our context of research. Chapter six introduces our methodology and the following chapters present results, respective discussion and conclusions. Finally, we indicate limitations of this study and some recommendations for future research.

#### **CHAPTER 2 - LITERATURE REVIEW**

Here we will briefly present the main purpose of studying reputation, its definition, different perspectives about the concept, difficulties in defining and operationalizing it. We continue presenting a brief overview on wine reputation, before entering the Human Values Construct.

#### 2.1. Purpose of Studying Reputation

Devine and Halpern (2001) highlight the many rewards of building and maintaining a good reputation: it is an indicator of quality and companies' strategies, a source of information for potential investments, career decisions as well as product choices. Also, a good reputation motivates and attracts the best human resources, with competitive prices, thus allows the offer of more attractive prices to the consumers. In terms of business partnerships, a good reputation raises better partners and better businesses.

To Rindova and Fombrun (1999), corporate reputation is a collective representation of the results and actions of an organization, to prove its ability to deliver added value to various stakeholders. This representation is measured by internal and external stakeholders, within an institutional and competitive environment.

#### 2.2. Reputation Definition

#### 2.2.1. Reputation as a multidisciplinary concept

Psychological studies of personality and individual reputation contribute to the studies of corporate reputation, since some of the human dimensions are able to be adjusted to organizations. Bromley (2001) noticed that not only people and organizations have reputations. And this is an important statement for our work because we want to analyse a product category, regardless of the brand or organization, and clearly not being related to a person or country.

The definition of reputation and especially how it should be measured / assessed is a multidisciplinary subject according to Fombrun and Van Riel (1997), (as cited in Chun, 2005, p. 92). Gotsi and Wilson (2001) summarize some of the areas that study the meaning of corporate reputation - economy, accounting, sociology, strategy and management. However, it is agreed that this is an important element for the organization / entity / person / country, a valuable asset (Caruana, 1997) and a competitive advantage (Rindova & Fombrun, 1999). Brady (2002) defines it as holistic beliefs of most individuals.

Fombrun and Van Riel (1997) present a categorization of the existing literature on reputation:

| Discipline                  | Categorization of reputation  |
|-----------------------------|---|
| Accountancy                 | Reputation seen as an intangible asset and one that can or should be given financial worth.   |
| Economics                   | Reputation viewed as traits or signals. Perception held of the organization by an organization's external stakeholders.                       |
| Marketing                   | Viewed from the customer or end-user's perspective and concentrating on the manner in which reputations are formed.                           |
| Organizational<br>Behaviour | Viewed as the sense-making experiences of employees or the perception of the<br>organization held by an organization's internal stakeholders. |
| Sociology                   | Viewed as an aggregate assessment of a firm's performance relative to expectation and norms in an institutional context.                      |
| Strategy                    | Reputation viewed as assets and mobility barriers. Since reputations are based on perception, they are difficult to manage.                   |

Table 2.2.1.: Literature Categorization on Corporate Reputation. Source: Fombrun & Van Riel (1997), (as cited in Chun, 2005, p. 92)

#### 2.3. Perspectives on Reputation

Apart from the different fields of study, literature shows us different perspectives on reputation that are not mutually exclusive. Here we explore three particular perspectives: first we present the Quality-Price Duality, where we demonstrate literature on this dominating duo on consumer options (pricing and quality); secondly, we intend to present the literature on Identity & Image, and their dynamic relationship. Individual & Collective Reputation, i.e., reputation in its individual concept and as a collective subject is what we discuss here.

#### 2.3.1. Duality Quality-Price

When leaving the strict organizational sphere and in the case of experience-goods (Nelson, 1970, 1974, 1978), as cited in Milgrom & Roberts (1986, p.797), there is another duo dominating consumer options: pricing and quality (Milgrom & Roberts, 1986). Landon and Smith (1998) argue that reputation is an indicator on which consumers rely on to infer the quality of a product or good and make consumption decisions, i.e. reputation defines the level of expected quality about such products or goods. Moreover, the authors introduce the concept of real/actual quality based on public opinion and scores published in specialized panels. Empirical analysis show that the expected quality is supported on the reputation built over time, and so has greater influence when setting product price. That price, in turn, is used by the consumer as a reference of real and expected quality levels (Milgrom & Roberts, 1986). Several studies have been developed to determine a hedonic price for quality, reputation and attributes of various products. According to Rosen (1974), (as cited in Schamel, 2006, p. 364), the markets have implicit prices for the attributes embedded in the product and consumers evaluate the product for these attributes. The real price is the sum of these implicit prices and here is where we meet the subjectivity concept Schamel (2006) mentioned. It is difficult to define a quality measuring scale because sensory indicators are very subjective so other elements help in the decision process: labels, packaging, legal reputation. Again, the fact that consumers have little time to seek out information prepares them to pay more when a certain quality is assured (Schamel, 2006).

Kahneman (as cited in Roberts & Reagans, 2001, p. 1) recognizes that many of the signs of quality are not captured by consumers because of pure inattention. People pay attention to some things and not others (Cyert & March (1963) as cited in Roberts & Reagans, 2001, p.2), because due to an evolutionary context attention depends on random events and on industry development itself. This way, it is important to acknowledge that nothing exists in a vacuum but in a certain context and this can influence individual perception.

#### 2.3.2. Identity and Image

The main research about reputation building is subdivided into two other concepts: identity and image (Pruzan, 2001). The same author discusses the potentially adaptive nature, not stagnant of both elements. Identity is described as something enduring, central, a distinctive character of the organization (Gioia, Schultz, & Corley, 2000) and image as the attitudes developed by people towards an organization believing that it has certain characteristics (Spector, 1961).

But discussions are long and definitions are not consensual, regarding identity (Melewar & Jenkins, 2002), and also image (Gioia, Schultz, & Corley, 2000). Therefore, a position supported in the literature that somehow displaces this view of reputation comes from the "opposition" between Public Relations and Marketing presented by Grunig (1993) about identity and image. The author, based on Cutlip (1991) discusses the term "image" with some apprehension and even some negative connotation, especially concerning the credibility of Public Relations. Image is *imitari*, a mere reproduction of the individual or object, claiming that "image" in a marketing point of view is something (symbols) built by the receivers.

Grunig (1993) concludes that image is an *umbrella* term that encloses all the concepts about a message reception. This way we are able to analyse reputation through two perspectives:

- Identity: intrinsic and technical characteristics from an objective standard (related to the product or from the producers' perspective).
- Image: extrinsic (related to the product environment or from the consumers' perspective)

#### 2.3.3. Individual and Collective Reputation

Landon and Smith (1998) dissected the concept of reputation in both individual and collective reputation:

- Individual reputation is the reputation of an organization based on their past and public performance;
- Collective reputation (Tirole, 1996) is the perception of the average quality of a group of organizations (referring to a geographic area, for example).

In a market where it is difficult and expensive for consumers to obtain complete information on all products and organizations, collective reputation plays the role of quality indicator. The information on labels and packaging also serves to infer product quality, because they objectively indicate what group of organizations the product belongs to (Tirole, 1996). Panzone and Simões (2009) mention the importance of this factor in establishing the price (which in turn also indicates quality), also previously approached.

#### 2.4. Difficulties in Definition and Operationalization

In an historical perspective, Spector (1961) developed one of the first scales in this area concerning basic dimensions for measuring corporate image. The scale includes 45 features organized into six factors related to personality of the company and humanizing assessment: Dynamism, Cooperation, Business Competence, Character, Success and Introversion.

Gardberg and Fombrun (2002) go further to state that to be managed, organizational reputation must be measured. This way, they indicate a series of rankings empirically developed (Wartick, 2002) therefore not justifying any dimension or worrying about sample representativeness. Gardberg and Fombrun (2002) develop a measurement model to compare reputation in the U.S. and Europe. This enquiry is based on interviews where respondents only have to mention two organizations with good reputation and two with bad reputation. The authors won't mention or conclude about dimensions or attributes measured, they only collect the perceptions of individuals.

Wartick (2002) summarizes and criticizes several existing standard rankings, in particular, Fortune's America's Most Admired Companies identifying specific problems concerning data and measurement, such as: absence of concept predefinition, lack of samples representativeness, the fact that these scales include only financial data not taking account that stakeholder evaluate different attributes, unclear scales and weightings for attributes.

Garberg and Fombrun (2002) built the Reputation Quotient based on 32 items of the eight most visible scales, adding some items suggested by literature on reputation in order to build a reliable and valid scale. The next challenge was to adjust the scale to cultural differences from country to country.

I am very familiar with the products and services of the company. I haven't seen or heard anything about this company lately. I know a lot about this company's financial performance. I know many people who work for this company. This company is well-managed. This company has highly skilled employees. This company is inefficient and non-productive. This company is led by an intelligent and competent CEO. This company sells high quality products and services. This is an innovative company. The products and services of this company are unfairly priced. This company provides excellent value to the customer. This company has extensive resources to draw on. This company is very powerful. This company is a leader in the (name of industry) industry. This company seems to be very weak to me. This company doesn't really have anything unique to offer. This company is very distinctive in the way it does things. I really identify with this company. I have a good feeling about this company. I usually believe what this company says. From what I know, this company never lives up to its promises. This is a company I can trust. This company is honest and straightforward in its communications with the public. This is a company that really cares about its employees, This company contributes a lot to the communities in which it operates. This is an environmentally responsible company. This company cares very little about the safety of its customers and employees. Note: Bents in itlaies were reverse ended.

Table 2.4.1: Initial list of 32 items tested in the Reputation Quotient development. Source: Gardberg & Fombrun (2002)

Some more important theories representing humanization and wideness of these concepts applied to Reputation (Bromley, 2001) came from Aaker (1997) and Davies et al. (2004).

Aaker (1997) worked on the Personification Metaphor reaching 5 dimensions and 42 items:

Sincerity (11 items), Competence (9 items), Sophistications (6 items), Excitement (11 items), Ruggedness (5 items). This scale has been widely used to infer customers' view of a brand.

The personification metaphor has also been widely applied in order to obtain opinions from consumers or customers and employees, in understanding organizations as if they were a person. Corporate Character is defined as "how a stakeholder distinguishes an organization, expressed in terms of human characteristics" (Davies, Chun, Da Silva, & Roper, 2004, p. 127). The Corporate Character Scale, according to these last authors, identifies 7 dimensions: Agreeableness, Enterprise, Competence, Chic, Ruthlessness, Informality, Machismo fulfilled with 14 facets and 49 items.

| Dimensions                   | 49 items  |
|------------------------------|---|
| Agreeableness                | Friendly, pleasant, open, straightforward,<br>concerned, reassuring, supportive, agreeable,<br>honest, sincere, socially-responsible, trustworthy |
| Competence                   | Reliable, secure, hardworking,  |
| 500000 <b>5</b> 900000100011 | ambitious, achievement-oriented, leading,<br>technical, corporate   |
| Enterprise                   | Cool, trendy, young,  |
|                              | imaginative, up-to-date, exciting, innovative,<br>extrovert, daring   |
| Chic                         | Charming, stylish, elegant,   |
|                              | prestigious, exclusive, refined,  |
|                              | snobby, élitist   |
| Ruthlessness                 | Arrogant, aggressive, selfish,  |
|                              | inward-looking, authoritarian, controlling  |
| Machismo                     | Masculine, tough, rugged  |
| Informality                  | Casual, simple, easy-going  |

Table 2.4.2.: Davies's Corporate Character Scale. Source: Davies, Chun, da Silva, , & Roper, (2004).

#### 2.5. Wine Reputation

The elements that guarantee each customer a "quality level" can have two expressions: an objective and a subjective one (Cox, 2009), or in other words, an intrinsic and an extrinsic one (Lowengart, 2010). Objective signals of quality are technical specifications of the product and the absence of defects (Cox, 2009), or written information on labels (producer, vintage, region, appellation, grape varieties (Benfratello, Piacenza, & Sachetto, 2009)).

Benfratello, Piacenza and Sachetto (2009) aim to disprove the preconceived idea that wine evaluation is purely subjective and sensorial so they present studies on Bordeaux and Burgundy wines. About Bordeaux wines, sensory characteristics proved to have little relevance in wine appreciation and definition of its price; major factors in price definition of Burgundy wines are acidity, concentration and fat content. Subjective elements result from consumer perceived quality. "Perceived quality" must be understood as a "mediator between product objective characteristics and consumer preferences" (Steenkamp (1989) as cited in Cox (2009, p. 210).

Lowengart (2010) reaffirms these positions by identifying two categories of attributes - extrinsic (brand and packaging) and intrinsic (taste) - that are the target of a heterogeneous sensory evaluation by consumers, determining choice probabilities of a particular wine. The author identifies several sources of heterogeneity influencing consumer preferences: personal differences (gender), geographic and behavioural differences (experience with the product). Tirole (1996) claims that producers and grape varieties reputation play an important role because they allow identifying a group of wine producers. The collective reputation has an impact on purchasing decisions or in choosing a wine referring not only to the product itself,

but to the place of origin as previously described. Consumers are likely to use short cuts and

sources of reliance (Chaney, 2002) in order to make decisions and "country-of-origin" effect works as a facilitator for consumers' choices towards unfamiliar brands or even unfamiliar wines (Chaney, 2000). Bretherton (2004) emphasizes that small producers struggle to have a voice so they rely on distribution chain for promotion and in an exportation context *country-of-origin* may work as a competitive advantage.

From a complementary standpoint, Schamel (2006) says that associating wine origin to a quality measure can neglect the subjective preference of the consumer as a consequence of marketing, advertising, brands and even potential brand loyalty. The operationalization of any measure of reputation is associated with quality assessment and, critics' sensory evaluations are a support for wine analysis. The ranking of Wine Spectator, explained by Landon and Smith (1998) and developed by Robert Parker (2001) is one of the most respected and is based in blind tastings. Despite all the inherent subjectivity in the evaluation process, these are quality standards recognized by wine professionals (Robinson, 1994).

#### 2.6. The Human Values Construct in Wine Reputation

Value is the criteria people use to select and justify actions as well as evaluate other people and events (Schwartz, 1992). Also according to Schwartz (1992), these criteria are not just an attitude differing in the abstractness of its essence, involving values and its function of guiding selection or evaluation of behaviours and events.

Values aren't understood as inherent qualities of an entity, instead they have a general facet working as leading priorities (or hierarchy) affecting people's orientations and choices. These values differ from person to person, from country to country and from culture to culture, influencing how people behave and organizing human existence. In conclusion, human values are the way people understand life and its meaning. This leads to an interesting dynamic between them, because in pursuit of a value, people experience psychological, practical and social consequences that may conflict or may be congruent with the pursuit of other values (Schwartz, 2003).

According to this author's studies, he has identified 10 major groups of values: benevolence, tradition, conformity, security, power, achievement, hedonism, stimulation, self-direction and universalism, being measured by following indicators and organized in four major values: Self-enhancement, Openness to change, Self-transcendence, Conservation. Benevolence: preservation and enhancement of the welfare of people with whom one is in frequent personal contact (helpful, honest, forgiving, loyal, responsible). Tradition: respect, commitment and acceptance of the customs and ideas that traditional culture or religion

provide the self (humble, accepting my portion in life, devout, respect for tradition, moderate). Conformity: restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms (politeness, obedient, self-discipline, honouring parents and elders). Security: safety, harmony and stability of society, of relationships, and of self (family, security, national security, social order, clean, reciprocation of favours). Power: social status and prestige, control or dominance over people and resources (social power, authority, wealth, preserving my public image). Achievement: personal success through demonstrating competence according to social standards (successful, capable, ambitious, influential). Hedonism: pleasure and sensuous gratification for oneself (pleasure, enjoying life, self-indulgence). Stimulation: excitement, novelty, and challenge in life (daring, a varied life, an exciting life). Self-direction: independent thought and action-choosing, creating, exploring (creativity, freedom, independent, curious, choosing own goals). Universalism: understanding, appreciation, tolerance and protection for the welfare of all people and for nature (broadminded, wisdom, social justice, equality, a world at peace, a world of beauty, unity with nature, protecting the environment).

Figure 1 schematizes Schwartz's (1992) model of relations among ten motivational types of values used in European Social Survey.

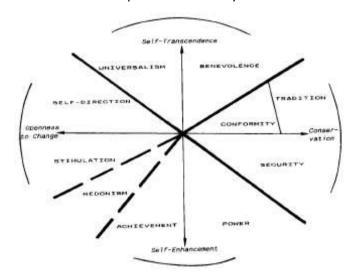


Figure 1: Revised theoretical model of relations among motivational types of values, higher order value types, and bipolar value dimensions. Source: Schwartz, (1992).

Self-enhancement imply achievement and power as motivational values, Self-transcendence refer to benevolence and universalism, Openness to change considers self-determination, stimulation and hedonism as motivational values, Conservation has conformism, tradition and security as its motivational type of values. These four human values (opposing Self-enhancement to Self-transcendence and Openness to Change to Conservation) represent the

higher four values in Schwartz's (1992) hierarchy allying 10 motivational types of values and respective indicators.

These human values justify different behaviours and this is the reason why we deem important to consider them as influencing choices in wine consumption and perception in wine reputation. Also justifying differences between countries, Schwartz's hierarchy (1992) would be useful in an international study of wine reputation.

This literature review commenced with an introductory research to understand the purpose of studying reputation, its facet as a multidisciplinary concept touching several social and study areas such as economy, sociology, among others. Different perspectives were assessed: quality-price, identity and image, individual and collective reputation. But in order to conceptualize our study we also had the need to understand the difficulties in defining and measuring it. In a glimpse, a brief approach to wine reputation to provide some directions about the market we will study. Finally, we introduced the human values construct viewed as the criteria people use to select and justify actions giving us some perspectives on how these values may influence people's choices about wine, to complete our literature review.

CHAPTER 3 – ADOPTED MODEL: FRAME OF REFERENCE

Following the analysis about how white and red wines are perceived by Portuguese

consumers, we will apply the Corporate Character Scale (Davies, Chun, Da Silva, & Roper,

2004) with its 49 items, to measure wine reputation. Our goal is to assess the extent to which

white/red wine can be described through certain human characteristics. The scale will be

constructed based on a likert scale with 5 points, where 1 represents "Totally agree" and 5

stands for "Totally disagree".

Bearing in mind Schamel (2006) concerning the subjectivity of consumer preferences

(influenced by marketing, advertising, brands and brand loyalty potential) we intend to use

Wine Spectator ranking (colour, aroma, taste, balance, complexity and aging potential) to

portray the evaluation of white wine by national consumers towards red wine.

Because human values unify the assorted interests of all sciences concerned with human

behaviour, and as a criteria people use to select and justify actions (Schwartz, 1992), we

assessed the relationship between respondents' values and their associations to wine.

This study will also be based on quality assessment and consumers' sensory evaluations

through Robert Parker Rating System (2001) items with a scale of 100 point starting at 50.

95-100 Classic: a great wine;

**90-94 Outstanding**: a wine of superior character and style;

**85-89 Very good**: a wine with special qualities;

80-84 Good: a solid, well-made wine;

**75-79 Mediocre**: a drinkable wine that may have minor flaws;

50-74 Not recommended.

Though we are not going to use a 100 point scale because we intend to obtain information on

what consumers consider important when choosing or preferring a wine, instead of qualifying

wines. We will use a likert scale with 5 points to infer agreement on statements about the

items referred in Parker's ranking to infer overall quality.

In terms of awarding points, Roberts Parker's scoring system works as follows:

- Wine's general **colour and appearance** merit up to 5 points.

- The aroma and bouquet merit up to 15 points (depending on the intensity level and

dimension of the aroma and bouquet as well as the cleanliness of the wine).

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- The **flavour and finish** merit up to 20 points (depending on the intensity of flavour, balance, cleanliness, depth and length on the palate).
- The overall quality level or potential for further evolution and improvement—aging—merits up to 10 points.

Source: Parker Points®. Retrieved from https://www.erobertparker.com/info/legend.asp

In order to be visually easier to understand our study, we present a schema with our proposal for frame of reference:



Figure 2: Adopted Model: Frame Of Reference

#### **CHAPTER 4 - OBJECTIVES AND FORMAL HYPOTHESIS**

Here we present the research objectives and formal hypothesis.

#### 4.1. Research Objectives

We developed a descriptive research so we may describe consumers' preferences according to their profile and perceptions.

Therefore, we defined three research objectives:

- 1. To identify the quality attributes valued by consumers when choosing wine
- 2. To understand the differences in red and white wine reputation, i.e., to identify which attributes are recognized in each of these products
- 3. To compare consumers' preferences according to their values

#### 4.2. Formal Hypothesis

Aiming to amplify this study in the form of a descriptive research we have developed formal hypothesis. The hypotheses of which we started are based on the literature review, yearbooks from several entities related to wine sector, professionals' opinions and also on theoretical framework discussed along this research.

- a) Red wine is thought to have higher quality when compared to others
- b) People spend the same amount of money regardless of favourite type of wine
- c) White wine is thought to be the favourite among feminine public
- d) Red wine has a taste that pleases the elder consumer more
- e) People whose favourite type of wine is white wine are more adventurers
- f) People whose favourite type of wine is white wine are more self-confident
- g) Women who consume wine consider themselves as independent

#### **CHAPTER 5 - CONTEXT OF RESEARCH**

Our context of research represents a national and an international preview.

#### 5.1. National Data

The International Organization of Vine and Wine (OIV) and Institute of Vine and Wine (IVV) agree on the consecutive worldwide decline of wine consumption although there are some statements about less but high quality wine consumption.

In Portugal, wine consumption per capita (about 45 litters / inhabitant / year) and agricultural area allocated to grapes for wine (over 4000 hectares) are significant enough to justify this analysis (IVV, retrieved from www.ivv.min-agricultura.pt).

Other relevant data to justify the relevance of this concern is that Portugal is the 8th country in the world with the largest area of vineyards, 10th largest exporter in the world (International Organization of Vine and Wine [OIV], 2010), 2nd place in consumption per capita (only preceded by France and considering that Europe represents about 70% of total global consumption). National Statistics Institute (NSI) disclosed data with information referring to 2009, with forecasts for 2007-2008 slightly over the verified data.

| Campaign    | Consumption (hl/Year) |
|-------------|-----------------------|
| 2008 / 2009 | 4514                  |
| 2007/2008   | 4568                  |

Source: NSI – Wine consumption in annual hl for 2007/2008 and 2008/2009 (Balance of Supply Plant Products. Retrieved from www.ine.pt.)

Table 5.1.1.: NSI's statistics

| Campaign    | Consumption per capita (I/ hab/year) |
|-------------|--------------------------------------|
| 2008 / 2009 | 44,90                                |
| 2007/2008   | 45.40                                |

Source: NSI – Annual wine consumption per capita for 2007/2008 and 2008/2009 (Balance of Supply Plant Products. Retrieved from www.ine.pt.)

#### 5.1.1. Portuguese Market Organisation

Grape varieties are categorized according to the colour of its skin. Here we present Portuguese native grape varieties: Alvarinho (white), Arinto / Pedernã (white), Encruzado (white), Fernão Pires / Maria Gomes (white), Loureiro (white), Aragonês / Tinta Roriz (red), Baga (red), Castelão (red), Touriga Franca (red), Touriga Nacional (red), Trincadeira / Tinta Amarela (red). Enlightened by Market Common Organisation for Wine, a restructuring of vineyards is being carried out, so values of planted areas and types of varieties are slightly ambiguous.

Currently, the following hectares are already restructured and catalogued.

| Region                    | Area (Ha) |
|---------------------------|-----------|
| Minho                     | 1.033     |
| Trás-os-Montes            | 118       |
| Douro                     | 1.091     |
| Beiras                    | 197       |
| Estremadura               | 244       |
| Ribatejo e Terras do Sado | 190       |
| Alentejo                  | 698       |
| Algarve                   | 10        |
| Total                     | 3.582     |

Table 5.1.1.1.: Hectares restructured Source: IVV, 2009. Retrieved from www.ivv.min-agricultura.pt Consult Annex I for legal denominations in the national market and context.

#### 5.2. International Data

#### 5.2.1. European Union Vineyard

The development of the European Union vineyard has been affected by the implementation of new community regulations. This common market structure allows wine producers to receive a permanent desertion premium based solely on those individuals seeking subsidies within the framework of a budgetary quota, allowing the overall grubbing up of 175 mha over 3 years. This procedure was implemented after the 2008 harvest and the current results are: Spain is the main country affected, with a reduction in its vineyard of 31 mha (-2.8%), the Italian vineyard suffered an overall reduction estimated to be 14 mha (-1.7%), France reduced its vineyard by a further 12 mha, Portugal and Greece by 1 mha.

#### 5.2.2. Wine Production

2010 production, like 2007 and 2008 is one of the lowest wine productions in the last fifteen years in EU. Trends for the rest of the world in 2010 are: USA with 19.6 Miohl, Chile with 8.8 Miohl, Argentina with 16.3 Miohl, South Africa with 9.2 Miohl, and Australia with 11,2 Miohl.

#### 5.2.3. Global Wine Consumption in 2010

Due in particular to global economic crisis, consumption in 15-EU proofed a particularly significant decrease between 2008 and 2009. International Wine and Spirit Research (IWSR) however predict an increase in consumption from 2010 to 2015. The next tables show wine consumption tendency in EU and in the rest of the world. Annual statistics reports on the world vitiviniculture situation in 2009 and 2010 explain these numbers and circumstances.

|                                   | Germany            | Aubula          | Oleece         | Opaili              | rrance         | Italy          | rontugai    |                 |
|-----------------------------------|--------------------|-----------------|----------------|---------------------|----------------|----------------|-------------|-----------------|
| 2009 Provisional                  | 20250              | 2400            | 3029           | 11271               | 29304          | 24600          | 4515        |                 |
| 2010 Forecast                     | 20205              | 2400            | 2955           | 10600               | 29438          | 24500          | 4447        |                 |
| Difference 2010 / 2009            | -45                | 0               | -74            | -671                | 134            | -100           | -68         |                 |
|                                   |                    |                 |                |                     |                |                |             |                 |
|                                   |                    |                 |                |                     |                |                |             |                 |
|                                   | Belg.+Lux.         | Denmark         | Ireland        | e Netherlar         | Finland        | Sweden         | UK          | EU-15           |
| 2009 Provisional                  | Belg.+Lux.<br>3108 | Denmark<br>1890 | Ireland<br>684 | e Netherlar<br>3460 | Finland<br>597 | Sweden<br>2010 | UK<br>12680 | EU-15<br>119798 |
| 2009 Provisional<br>2010 Forecast | _                  |                 |                |                     |                |                |             |                 |

Table 5.2.3.1.: Developments in EU wine consumption (Unit: mhl). Source: Castellucci F. (2011). Annual statistics report on the world vitiviniculture situation in 2010. Retrieved from www.oiv.org

| Year                               | 2008 to be published | 2009 Provisional | 2010 Forecast |
|------------------------------------|----------------------|------------------|---------------|
| USA (new series)                   | 27950                | 27250            | 27110         |
| Switzerland                        | 2911                 | 2885             | 2900          |
| Argentina                          | 10677                | 10342            | 9714          |
| Chile                              | 2339                 | 2605             | 3118          |
| Brazil                             | 3265                 | 3508             | 3500          |
| South Africa                       | 3558                 | 3384             | 3467          |
| Australia                          | 4921                 | 5198             | 5325          |
| New Zealand                        | 874                  | 917              | 905           |
| Czech Republic                     | 1974                 | 2006             | 2034          |
| Total monitored outside<br>the EU* | 58469                | 58095            | 58073         |

Table 5.2.3.2.: Wine consumption in several countries outside the EU (Unit: Millions of hl). Source: Castellucci F. (2011). Annual statistics report on the world vitiviniculture situation in 2010. Retrieved from www.oiv.org

#### **CHAPTER 6 – METHODOLOGY**

In this chapter we present type of methodology, sample design and data collection and questionnaire structure.

#### 6.1. Type of Methodology

This is a cross-sectional research, involving two stages: exploratory followed by descriptive.

We started by collecting secondary data through specialized publications, expert blogs (professionals or amateurs). We have also been monitoring national and international wine critics. Through personal contacts and professionals (winemakers, fraternities, resellers) we achieved some primary data to work with.

With the information we have gathered, and the subsequent literature review already presented we were able to identify accurate opportunities of analysis and practical problems to be addressed in order to proceed with the second stage: the descriptive research.

#### 6.2. Sample Design and Data Collection

We conducted a quantitative analysis through surveys (questionnaires) with a convenience sampling. We have organized Portuguese population in regions and relying on our personal contacts, certain entities were asked to disclose our questionnaire (wineries, restaurants, wines hops). These entities were selected for having a public email or Facebook page.

We have chosen the questionnaire because it is the method that offers greater ease to collect data, greater ease to registry data, less financial implications, less time spent in collecting answers. Questionnaires were self-administered, distributed through *Qualtrics* and available for 12 days, in 2 languages (Portuguese and English – annex II and III) to ensure potential international respondents.

#### 6.3. Questionnaire Structure

This questionnaire has 7 sections. Section number one is denominated "You and others" and has 1 question: Human Values in 21 statements defined by Schwartz (1992). Section number two is about "Perception of white and red wine" presenting 6 questions: Corporate Character Scale by Davies et al (2004); level of agreement with 16 statements about preferences and consumption of wine; identifying 5 adjectives to describe both white and red wine with good and bad reputation. "Wine and country-of-origin" is section number three and has 2 questions: identifying countries from which respondents have tasted wines; level of agreement with 12 statements about Portuguese wines. Fourth section is about "Consumption Habits" and collects data with 3 questions: occasion, time of the day and frequency. "Preferences" is the

fifth section with just 1 question concerning preferences on type of wine. Second last section considers 4 questions about "Selecting and Shopping": who usually decides about what wine to have at home, characterising one's knowledge about wine; the importance of 24 items when choosing a wine they don't know; average price of bottles respondents usually buy. Last section is "Personal Data" with 7 topics: age, sex, professional activity, nationality - and district - academic degree and net income patterns.

#### **CHAPTER 7 – RESULTS PRESENTATION AND DISCUSSION**

This chapter presents a description of our sample, followed by data analysis (this analysis was developed using SPSS (Statistical Package for Social Sciences)).

#### 7.1. Sample Characterization

#### 7.1.1. Socio-demographic data

Respondents to this questionnaire are balanced in age (36% have until 25 years old; 34% between 25 and 35 years old and 30% are older than 35 years old) (Figure 3). Our sample is composed by 58% of women and 42% of men (Figure 4). Respondents' geographically distribution is verified in table 7.1.1.1 (approximately 40% living in Lisbon, the remaining group is from all over the country). Professional Activity among our respondents is organized as in figure 5.

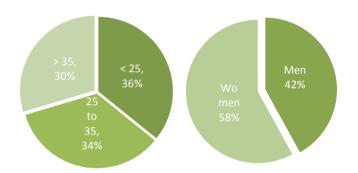


Figure 3: Age Profile (ANNEX VII - Age recoded)

Figure 4: Sex Profile (ANNEX VIII - Sex)

| District  | %    | District          | %   |
|-----------|------|-------------------|-----|
| Lisboa    | 42,1 | Faro              | 0,9 |
| Setúbal   | 7,5  | Nenhum            | 0,9 |
| Porto     | 4,7  | Ponta Delgada     | 0,9 |
| Évora     | 3,7  | Portalegre        | 0,9 |
| Leiria    | 3,7  | Santarém          | 0,9 |
| Beja      | 2,8  | S.Miguel (Açores) | 0,9 |
| Vila Real | 1,9  | Viseu             | 0,9 |
| Cascais   | 0,9  |                   |     |

Table 7.1.1.1.: Geographic Distribution (ANNEX IX - Residence – District)

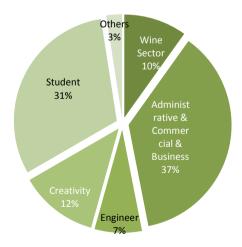


Figure 5: Professional Activity Profile (ANNEX IV Professional Activity)

#### 7.1.2. Human Values

There are Motivational Types of Values to which both genders identify less (or identify below the mean) and they are: Benevolence, Self-Direction, Stimulation and Security. On the opposite line, Motivational Values to which both - men and women – identify more above the mean are: Universalism, Hedonism, Realization, Power and Tradition (this last one, is classified close to zero (0)), meaning, it is not a value to which they attribute importance.

We highlight the fact that women identify more when it comes to Hedonism and Realization. Conformism is not something to which men identify themselves, but women even less.

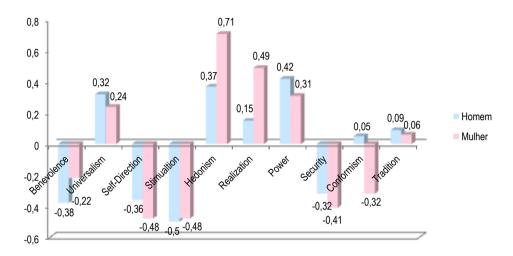
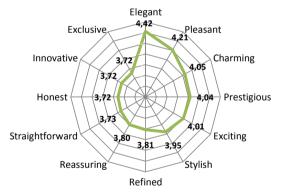


Figure 6: Motivational Types according to Sex (ANNEX V - Human Values - Motivational Types)

#### 7.2. Wine Reputation

Evaluating wine as a person<sup>1</sup>, these are the twelve items highly classified, according to our respondents. From "Elegant" with a mean of 4,42 (Agree) to "Honest", "Innovative" and "Exclusive" with 3,72 (Agree).





Respondents associated wine to the following human characteristics (4 - I agree): Elegance, Prestige, Warmth, Adventure, Boldness, Integrity and Drive. Egotism and Dominance are human characteristics to which people relate wine the less (2 - I disagree). But some of these characteristics could not be associated to a positive nor negative tendency: Conscientiousness, Empathy, Modernity, Technocracy and Snobbery (3 - Do not agree or disagree). (Figure 8 and ANNEX VI).<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Scale from 1(Totally Disagree) to 5 (Totally Agree)

<sup>&</sup>lt;sup>2</sup> Scale from 1(Totally Disagree) to 5 (Totally Agree)

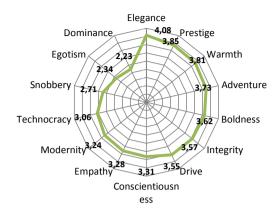


Figure 8: Wine Reputation through Corporate Character Scale (Davies, Chun, Silva, & Roper, 2004)

"Agreeableness" (3,55 – Agree), "Chic" (3,55 – Agree) and "Enterprise" (3,53 – Agree) are the dimensions our respondents considered to describe better wine as a person. "Competence" (3,31 – Do not agree or disagree), "Informality" (3,01) and "Machismo" (2,57) were not considered to describe wine as a person<sup>3</sup>.



Figure 9: Dimensions that describe wine as a person through Corporate Character Scale (Davies, Chun, Silva, & Roper, 2004)

#### 7.2.1. Differences in Red and White Wine

Our first objective is to identify quality attributes valued by the consumer in a wine. These mind maps according to colour and good or bad reputation, reveal us how people perceive these products. They are the result of four open questions we included in our questionnaire in order to collect from respondents 5 adjectives to describe red and white wine with good and bad reputation.

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<sup>&</sup>lt;sup>3</sup> Scale from 1(Totally Disagree) to 5 (Totally Agree)

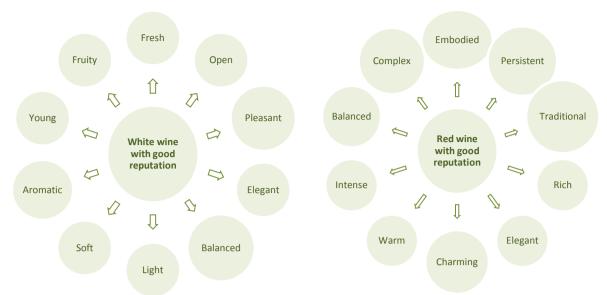


Figure 10: White Wine with Good Reputation

Figure 11: Red Wine with Good Reputation

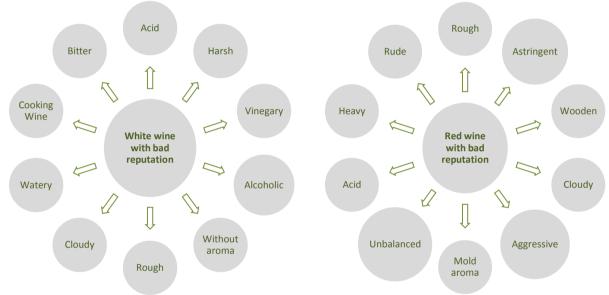


Figure 12: White Wine with Bad Reputation

Figure 13: Red Wine with Bad Reputation

#### 7.2.2. Choosing Wine

Considering the importance of certain elements when people choose a wine they do not know, we represent our conclusions in the following table<sup>4</sup>:

| Item                         | Mean | Item  | Mean |
|------------------------------|------|---|------|
| Taste                        | 4,5  | Vintage   | 3,7  |
| Aroma                        | 4,4  | Experts' critics                                | 3,6  |
| Price                        | 4,1  | Complexity                                      | 3,6  |
| Colour                       | 4,0  | Description on Labels                           | 3,6  |
| Balance                      | 3,9  | Appellation                                     | 3,6  |
| Region Reputation            | 3,9  | Producer Experience                             | 3,5  |
| Design of bottle and package | 3,8  | Innovative product                              | 3,4  |
| Grape Varieties              | 3,8  | Aging Potential                                 | 3,4  |
| Appearance                   | 3,7  | Promotions                                      | 3,4  |
| Country-of-origin            | 3,7  | Relation to the region (geographical proximity) | 3,3  |
| Producer Reputation          | 3,7  | New brand on the market                         | 3,1  |
| Brand                        | 3,7  | Advertising                                     | 3,0  |

Table 7.2.2.1.: Importance of certain elements, when choosing a wine people do not know.

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<sup>&</sup>lt;sup>4</sup> Scale from 1 (Not Important) to 5 (Very Important)

Taste had the highest mean (4,5 in a scale from 1- Not Important to 5 – Very Important). Aroma, Price, Colour, Balance, Region Reputation, Design of bottle and package, Grape Varieties, Appearance, Country-of-origin, Producer Reputation, Brand, Vintage, Experts' critics, Complexity, Description on Labels, Appellation and Producer Experience are important (4) when choosing a wine people do not know. Aging Potential, Producer Experience, Relation to the Region (geographic proximity), Advertising, Promotions, New Brand on the Market and Innovative Product: these are factors that respondents consider indifferent (3) when evaluating a wine they do not know. We enhance the fact that promotions are part of this group, not being emphasized by respondents.

#### 7.3. Hypothesis and its Analysis

Here we present our hypothesis and its analysis.

Hypothesis a) Red wine is thought to have higher quality when compared to others.

To explore if red wine is thought to have higher quality than others we developed a descriptive analysis through frequencies tables.

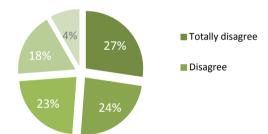


Figure 14: Red wines generally offer higher quality than others. ANNEX X - Red wines generally offer higher quality than others

51% of our respondents claim to disagree with the fact that red wines generally offer higher quality than others. Notice that 23% do not agree or disagree.

With these results we reject this hypothesis.

Hypothesis b) People spend the same amount of money regardless of favourite type of wine. In order to verify if people spend the same amount of money regardless of favourite type of wine, we have used Kruskall-Wallis test. This test measures the level of association between independent groups towards a numeric variable. After verifying that distribution is not normal we considered using non-parametric tests.

|                         | Red  | Sparkling | White | Fortified | Green | Rosé |
|-------------------------|------|-----------|-------|-----------|-------|------|
| Asymp. Sig. 5€ or less  | ,505 | ,418      | ,322  | ,316      | ,663  | ,508 |
| Asymp. Sig. 5€ to 15€   | ,492 | ,887      | ,607  | ,499      | ,091  | ,104 |
| Asymp. Sig. 15€ to 25€  | ,077 | ,656      | ,304  | ,076      | ,864  | ,289 |
| Asymp. Sig. 25€ to 50€  | ,664 | ,434      | ,716  | ,107      | ,886  | ,316 |
| Asymp. Sig. 50€ or less | ,153 | ,078      | ,598  | ,395      | ,844  | ,721 |

Table 7.3.1.: Relationship between favourite type of wine and money spent.

This hypothesis is accepted through the data analysis of all cases. Average money spent in wine per bottle is the same regardless of favourite type of wine.

ANNEX XI - Type of wine do you prefer \* About the money you spent in wine (Kruskall-Wallis: p > 0,05)

Hypothesis c) White wine is thought to be the favourite among feminine public

Distribution is normal and homogeneity of variances has been verified so we may continue with parametric tests. To analyse if preference of wine differs in sex, we developed a t-student test in order to compare two samples: men and women.

Though we verify some mean differences among women (38,17) and men (43,65), these are not significant (t (78) = 1,116 p=0,268), (ANNEX XII - Type of wine do you prefer \* Sex). This means the matter about white wine being associated to women's favourite is not verified in our sample.

Hypothesis d) Red wine has a taste that pleases the elder consumer more

To analyse if there are mean differences among categories of ages, we developed a Kruskal Wallis test (because all our sub samples' dimensions are inferior to 30 elements we decided to apply a non-parametric test).

Kruskal Wallis: H(2) = 8,109 p = 0,017, so this hypothesis is rejected. To proceed with a more accurate analysis we present mean differences among categories of ages, i.e. our primary claim (red wine has a taste that pleases the elder consumer more).

In the following table we can verify that youth (<25 years old) adopted scale's middle position: do not agree or disagree. All others respondents totally disagree or disagree that red wine has better flavour than others.

|                          | < 25 years old | between 25 e 35 years old | > 35 years old |
|--------------------------|----------------|---------------------------|----------------|
| Totally disagree         | 2              | 13                        | 8              |
| Disagree                 | 8              | 5                         | 8              |
| Do not agree or disagree | 11             | 4                         | 1              |
| Agree                    | 6              | 2                         | 5              |
| Totally agree            | 2              | 3                         | 1              |
| Total                    | 29             | 27                        | 23             |

Table 7.3.2.: Opinion on red wines having better flavour than others according to age ANNEX XIII - Red wines have better flavour than others \* Age

Hypothesis e) People whose favourite type of wine is white wine are more adventurers To answer this hypothesis we have developed a Mann-Whitney Test (to compare independent samples). Again we have decided to apply a non-parametric test because distribution is not normal.

We have proceeded to dichotomization of Human Values indicators "He looks for adventures and likes to take risks. He wants to have an exciting life."

1 – Adventurer, 2 – Not adventurer

(U = 538,000, p = 0,138), therefore we accept the hypothesis that preference of white wine does not differ according to adventurer profile.

ANNEX XIV - People whose favourite type of wine is white wine are more adventurers

Hypothesis f) People whose favourite type of wine is white wine are more self-confident To answer this hypothesis we have developed a Mann-Whitney Test (to compare independent samples: Self-confident and Not self-confident). Again we have decided to apply a non-parametric test because distribution is not normal.

We have proceeded to dichotomization of Human Values indicators "Being very successful is important to him. He hopes people will recognize his achievements."

1 – Self-confident, 2 – Not self-confident

(U = 286,500, p = 0,148), therefore we accept the hypothesis that preference of white wine does not differ according to self-confidence profile.

ANNEX XV - People whose favourite type of wine is white wine are more self-confident

Hypothesis g) Women who consume wine consider themselves as independent.

Does identification with this indicator "It is important to him to make his own decisions about what he does. He likes to be free and not depend on others" vary according to sex? In order to answer this question we have developed a Mann-Whitney test to compare independent samples (men and women). According to these results (U = 727,500, p = 0,483) we are able to verify that there are no significant differences between genders. We may conclude that the willing of being free and the sense of independence has no relation to women who consume wine.

ANNEX XVI - It is important to him to make his own decisions about what he does. He likes to be free and not depend on others.

#### **CHAPTER 8 - CONCLUSIONS**

Our objectives and hypothesis are presented in the following table:

| Objectives   | Constructs            | Hypotheses  |
|--|-----------------------|---|
| Identification of quality attributes valued by the consumer when choosing a wine   | Duality Quality-Price | <ul><li>a) Red wine is thought to have higher quality when compared to others</li><li>b) People spend the same amount of money regardless of favourite type of wine</li></ul>   |
| Understanding the differences in red and white wine reputation, i.e., identifying attributes that are recognized in each of these products | Identity & Image      | c) White wine is thought to be the favourite among feminine public d)Red wine has a taste that pleases the elder consumer more  |
| Comparing consumers' preferences according to their values   | Human Values          | <ul><li>e) People whose favourite type of wine is white wine are more adventurers</li><li>f) People whose favourite type of wine is white wine are more self-confident</li><li>g) Women who consume wine consider themselves as independent</li></ul> |

Table 8.1.: Objectives, Constructs and Hypothesis

Target audience is composed by 107 individuals from Porto to Faro, but only 81 completed the questionnaire. Respondents have from 20 to 66 years old, 58% of women and 42% of man. Most of our respondents work in administrative/commercial or business areas, though a high percentage is a student (31%).

This research cannot be considered to have external validity because respondents were reached through a convenience method. Nevertheless, our conclusions on the matter of reputation of wine, its perception and consumption habits reveal some trends of our society.

51% of our respondents claim to disagree with the fact that red wines generally offer higher quality than others (notice that 23% do not agree or disagree). Landon and Smith (1998) claim that reputation is an indicator on which consumers rely on to infer the quality of a product and to make consumption decisions, so we would conclude that there are no differences on this subject between red and white wine.

Remember that Milgrom & Roberts (1986) brought the concept of price being used by the consumer as a reference of real and expected quality levels. Transporting it to different types of wine we conclude that the average of money spent in wine per bottle is the same regardless of favourite type of wine, i.e. no matter the colour of the wine. It is important to say that we have considered green wine as a type of wine though technically it is a geographic region. Our primary research resulting from the conversations with some professionals allowed us to maintain this option because most people would notice *Vinho Verde* to miss in the list of favourite wines.

According to Lowengart (2010), who identifies several sources of heterogeneity influencing consumer preferences, such as personal differences (gender), we have tried to destroy another myth: white wine is the ladies' favourite. And the truth is: it is not verified in our sample. On the other hand, considering age as another personal difference, elder people do not prefer red wine. But it is important to notice that a high percentage of young people (under 25) answer "Do not agree or disagree" with the fact that red wine has a better taste than other wines.

About Human Values, the literature has guided us to consider pertinent to analyse the fact that preference for white wine would be somehow related to people feeling more adventurer and self-confident. But we have not verified that.

We have also concluded that the willing of being free and the sense of independence has no relation to respondents' gender, i.e. being a woman (in this context of drinking wine) has no relation with the identification of this indicator "It is important to make her own decisions about what she does. She likes to be free and not depend on others."

To our respondents both types of wine with good reputation are considered to be "Balanced" and "Elegant" - white wine associated to "Softness" and "Freshness" while red is supposed to be "Embodied" and "Complex". When it comes to bad reputation: "Rough", "Acid" and "Cloudy" were used to describe both red and white wine. If white wine with bad reputation is "Watery", "Bitter" and "Vinegary", red wine with bad reputation is "Aggressive", "Heavy" and "Rude".

According to the Corporate Character Scale (Davies et al., 2004), respondents describe Wine in general as Agreeable, Chic and Enterprise.

#### **CHAPTER 9 – LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH**

Some limitations of our research refer to convenience sampling implying selection bias and no representativeness. Because we choose to develop a descriptive research, we are aware that some may not accept it as a stand-alone piece of work. Data was collected for a short period of time without proper disclosure of the questionnaire, confirming the fact that we cannot assume external validity. Global Economic Crisis made more difficult people to pay attention to this kind of activity – some organizations disappeared and communication tools (facebook) lost its function towards our research.

We suggest this study to be updated through more recent yearbooks, to update context analysis in order to internationalize this research, collecting data from different countries in all continents. Information such as denominations (Annex I) would need updating due to the recent reorganization of vines and geographic areas with communitarian purpose. But also NSI has more recent yearbooks already launched which could adjust our context. An explanatory study about the causal relation between respondents' nationality and wine preferences and/or wine consumption habits could embody a new set of objectives.

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#### **ANNEX**

#### ANNEX I - Legal Denominations

Source: IVV (Retrieved from www.ivv.min-agricultura.pt)

#### 5.1.1. Official Denomination

Legal denominations intend to secure and safeguard some quality parameters:

Quality Wine Produced in Determined Region (VQPRD) cover Origin Denomination (DO), Controlled Origin Denomination (DOC) and Protected Origin Denomination (DOP). Regional Wine encompasses all of Geographical Indication (IG) and Protected Geographical Indication (IGP). Finally, Table Wines that do not fit in any of the above.

#### a. DO - Origin Denomination

Products whose originality and individuality are inseparable from a certain region, local or traditional name. It identifies wine by its specific characteristics resulting from geographical environment, natural and human factors.

Decreto-Lei nº.212/04, de 23 de Agosto, art. 2º, alínea a)

#### b. DOP - Protected Origin Denomination

Community designation to describe wines whose production, processing and preparation take place in a certain geographical area using recognized and verified know-how.

Regulamento (CE) n.º 1234/2007 do Conselho de 22 de Outubro, com as alterações introduzidas pelo Regulamento (CE) nº 491/2009 do Conselho de 25 de Maio

#### c. DOC - Controlled Origin Denomination

Traditional specific term that can be used in Portugal labelling products with origin designation.

Decreto-Lei nº.212/04, de 23 de Agosto, art. 8º, alínea a)

#### d. Regional Wine

Traditional specific term used to label products with geographical indication.

Decreto-Lei nº.212/04, de 23 de Agosto, art. 8º, alínea b)

#### e. IG - Geographic Denomination

Applicable to products with a geographical indication produced in a specific region, made with at least 85% of local grapes and predetermined grape varieties.

Decreto-Lei nº.212/04, de 23 de Agosto, art. 2º, alínea b)

#### f. IGP - Protected Geographic Indication

Communitarian designation for wines with geographical indication to which is afforded protection according to established rules and integrating a single communitarian registry.

Regulamento (CE) n.º 1234/2007 do Conselho de 22 de Outubro, com as alterações introduzidas pelo Regulamento (CE) nº 491/2009 do Conselho de 25 de Maio

#### g. Table Wine (Wine)

Wines for human consumption that do not fit descriptions above are considered wine.

Regulamento (CE) n.º 1234/2007 do Conselho de 22 de Outubro, com as alterações introduzidas pelo Regulamento (CE) nº 491/2009 do Conselho de 25 de Maio.

## ANNEX II

Questionnaire in Portuguese

| 1. Você e os outros   |                   |                      |                             |                         |                                    |                      |                              |
|---|-------------------|----------------------|-----------------------------|-------------------------|------------------------------------|----------------------|------------------------------|
| 1.1. Vou descrever-lhe pessoas com diferentes cara  | cterísticas e     | vou pedir-lhe que n  | ne diga em que              | medida cada uma de      | -                                  | ñão parecida consigo |                              |
|   |                   | Exactamente como eu  | Muito<br>parecido<br>comigo | Parecido<br>comigo      | Um bocadinho<br>parecido<br>comigo | Nada parecido comigo | Não tem nada<br>a ver comigo |
| Uma pessoa que dá importância a ter novas ideias e se<br>Gosta de fazer as coisas à sua maneira.                  | r criativo.       |                      |                             |                         |                                    |                      |                              |
| Uma pessoa para quem é importante ser rico. Quer ter  | muito             |                      |                             | П                       |                                    | П                    |                              |
| dinheiro e coisas caras.  Uma pessoa que acha importante que todas as pessoa:                                     | s no mundo        |                      |                             |                         |                                    |                      |                              |
| sejam tratadas igualmente. Acredita que todos devem   |                   |                      |                             |                         |                                    |                      |                              |
| mesmas oportunidades na vida.  Uma pessoa que dá muita importância a poder mostra                                 | r as suas         |                      |                             |                         |                                    |                      |                              |
| capacidades. Quer que as pessoas admirem o que faz.   |                   |                      |                             |                         |                                    |                      |                              |
| Uma pessoa que dá importância a viver num sítio onde seguro. Evita tudo o que possa pôr a sua segurança em        |                   |                      |                             |                         |                                    |                      |                              |
| Uma pessoa que gosta de surpresas e está sempre à pr<br>coisas novas para fazer. Acha que é importante fazer n    |                   |                      |                             |                         |                                    |                      |                              |
| diferentes na vida.   |                   |                      |                             |                         |                                    |                      |                              |
| Uma pessoa que acha que as pessoas devem fazer o que mandam. Acha que as pessoas devem cumprir sempre             |                   |                      |                             |                         |                                    |                      |                              |
| mesmo quando ninguém está a ver.  |                   | _                    | _                           | _                       | _                                  | <del>-</del>         | _                            |
| Uma pessoa para quem é importante ouvir pessoas dif<br>si. Mesmo quando discorda de alguém, continua a que        |                   |                      |                             |                         |                                    |                      |                              |
| compreender essa pessoa.<br>Uma pessoa para quem é importante ser humilde e mo                                    | ndesto            | _                    |                             | _                       | _                                  | _                    | _                            |
| Tenta não chamar a atenções sobre si.   |                   |                      |                             |                         |                                    |                      |                              |
| Uma pessoa para quem é importante passar bons mon<br>Gosta de tratar bem de si.                                   | nentos.           |                      |                             |                         |                                    |                      |                              |
| Uma pessoa para quem é importante tomar as suas pro   | •                 |                      | П                           | П                       |                                    |                      |                              |
| decisões sobre o que faz. Gosta de ser livre e não estar dependente dos outros                                    |                   | Ш                    | Ш                           | Ш                       |                                    | Ш                    | Ш                            |
| Uma pessoa para quem é importante ajudar os que a r<br>Gosta de zelar pelo seu bem-estar                          | odeiam.           |                      |                             |                         |                                    |                      |                              |
| Uma pessoa para quem é importante ter sucesso. Gost   | ta de             |                      | П                           | П                       |                                    | П                    | П                            |
| receber o reconhecimento dos outros.  Uma pessoa para quem é importante que o Governo g                           | aranta a sua      |                      | _                           |                         |                                    |                      |                              |
| segurança, contra todas as ameaças. Quer que o Estad  |                   |                      |                             |                         |                                    |                      |                              |
| de modo a poder defender os cidadãos.  Uma pessoa que procura a aventura e gosta de correr l                      | riscos. Quer      | П                    | П                           | П                       |                                    | П                    |                              |
| ter uma vida emocionante. Uma pessoa para quem é importante portar-se sempre                                      | e como deve       | _                    | _                           | _                       | _                                  | _                    |                              |
| ser. Evita fazer coisas que os outros digam que é errad   | 0.                |                      | Ш                           | Ш                       | Ц                                  |                      |                              |
| Uma pessoa para quem é importante que os outros lhe respeito. Quer que as pessoas façam o que ele diz.            | e tenham          |                      |                             |                         |                                    |                      |                              |
| Uma pessoa para quem é importante ser leal para com   | os amigos.        |                      |                             |                         |                                    |                      |                              |
| Dedica-se às pessoas que lhe são próximas.<br>Uma pessoa que acredita seriamente que as pessoas d                 | evem              |                      | П                           |                         | П                                  | П                    | П                            |
| proteger a natureza. Proteger o ambiente é importante<br>Uma pessoa que dá importância à tradição. Faz tudo o     |                   | _                    | _                           |                         | _                                  | _                    | _                            |
| para agir de acordo com a sua religião e a sua família.   |                   |                      |                             |                         |                                    |                      |                              |
| Uma pessoa que procura aproveitar todas as oportunio<br>se divertir. É importante para ele fazer coisas que lhe d |                   |                      |                             |                         |                                    |                      |                              |
|   | <u> </u>          |                      |                             |                         |                                    |                      |                              |
| 2. Percepção Vinho Branco & Tinto   |                   |                      |                             |                         |                                    |                      |                              |
| 2.1. Imagine um vinho como se fosse uma pessoa, o   | que caracterí     | sticas pensa que o o | descrevem?                  |                         |                                    |                      |                              |
|   | iscordo<br>Imente | 2. Disco             | ordo                        | 3.Não concordo discordo | Nem 4.Co                           | ncordo 5.Cor         | cordo Totalmente             |
|   |                   |                      |                             |                         |                                    |                      |                              |
| Agradável   |                   |                      |                             |                         |                                    |                      |                              |
| Aberto  |                   |                      |                             |                         |                                    |                      |                              |
| Íntegro   |                   |                      |                             |                         |                                    |                      |                              |
| Interessado Reconfortante   |                   |                      |                             |                         |                                    |                      |                              |
| Disponível para ajudar  |                   |                      |                             |                         |                                    |                      |                              |
| Concordante   |                   |                      |                             |                         |                                    |                      |                              |
| Honesto   |                   |                      |                             |                         |                                    |                      |                              |
| Sincero   |                   |                      |                             |                         |                                    |                      |                              |
| De confiança  | $\sqcup$          |                      |                             |                         |                                    |                      |                              |

# Wine Reputation: Are There Differences Between White Wine And Red Wine?

| Socialmente responsável Fixe Na moda Jovem Imaginativo Atual Excitante Inovador Extrovertido Atrevido Fiável Seguro Trabalhador Ambicioso Orientado para o sucesso Dominante Técnico Empresarial Charmoso Com Estilo Elegante Com prestígio Exclusivo Refinado Snob Elitista Arrogante Agressivo Egoísta Egocêntrico Autoritário Controlador Despretencioso Simples Fácil de lidar Masculino Duro |                                     |                        |            |                    |            |            |
|---|-------------------------------------|------------------------|------------|--------------------|------------|------------|
| Agreste   |                                     |                        |            |                    |            |            |
|   |                                     |                        |            |                    |            |            |
| 2.2. Indique, por favor, o seu grau de c  | concordância com as seguintes afirr | nações.<br>1. Discordo |            | 3.Não concordo Nem |            | 5.Concordo |
|   |                                     | Totalmente             | 2.Discordo | discordo           | 4.Concordo | Totalmente |
| Os vinhos tintos geralmente são de melho  | or qualidade que outros vinhos.     |                        |            |                    |            |            |
| O vinho branco é vinho de senhora.<br>Só bebo vinho branco no Verão porque es   | stá mais calor.                     |                        |            |                    |            |            |
| Não me agrada o aroma e paladar intenso<br>O vinho tinto tem melhor sabor que outro   |                                     |                        |            |                    |            |            |
| Prefiro vinho tinto porque posso guardar i  | mais tempo.                         |                        |            |                    |            |            |
| Uma gastronomia mais pesada e elaborad tinto.   | a opriga ao consumo de vinho        |                        |            |                    |            |            |
| Os pratos menos complexos, como grelha acompanhar com vinho branco.   | dos, são os ideais para             |                        |            |                    |            |            |
| Normalmente sirvo o que me apetece beb  | per sem obedecer a nenhuma          | П                      | П          | П                  | П          | П          |
| regra.  A regra vinho tinto para carne e vinho bra  | nco nara neive iá é antiquada       |                        |            |                    |            |            |
| Atualmente já se encontram vinhos muito   |                                     |                        |            |                    |            |            |
| O vinho tinto é mais saudável do que o vir  |                                     |                        |            |                    |            |            |
| Beber vinho tinto é mais elegante do que  | beber vinho branco.                 |                        |            |                    |            |            |
| O vinho tinto é muito caro.   |                                     |                        |            |                    |            |            |
| Pessoas com formação académica superio bebem vinho tinto.   | or e com um bom rendimento          |                        |            |                    |            |            |
| As pessoas que bebem vinho tinto são jov  | rens e modernas.                    |                        |            |                    |            |            |
| 2.2.1. Indique cinco adjectivos qu  | e descrevam para si um vinho bran   | co com boa reputação   | :          |                    |            |            |

| 2.2.2.      | Indique cinco adjectivos que descrevam para si u                                     | um vinho tinto                        | com boa reputaç         | ão:                  |                                |              |                          |
|-------------|--|---------------------------------------|-------------------------|----------------------|--------------------------------|--------------|--------------------------|
| 2.2.3.      | Indique cinco adjectivos que descrevam para si u                                     | um vinho brand                        | co com má reputa        | ação:                |                                |              |                          |
| 2.2.4.      | Indique cinco adjectivos que descrevam para si u                                     | ım vinho tinto                        | com má reputaç          | ão:                  |                                |              |                          |
| 3. 0        | vinho e o seu país de origem.  |                                       |                         |                      |                                |              |                          |
| 3.1. Com    | que frequência costuma consumir vinho dos segui                                      | ntes países:                          |                         |                      |                                |              |                          |
|             | Nunca  |                                       | Rarament                | :e                   | Frequentemente                 |              |                          |
|             | Portugal   |                                       |                         |                      | · 🗆                            |              |                          |
|             | Espanha  |                                       |                         |                      |                                |              |                          |
|             | França   |                                       |                         |                      |                                |              |                          |
|             | Itália 🔲   |                                       |                         |                      |                                |              |                          |
|             | Austrália 🔲  |                                       |                         |                      |                                |              |                          |
|             | Nova Zelândia  |                                       |                         |                      |                                |              |                          |
|             | Argentina  |                                       | $\overline{\Box}$       |                      | П                              |              |                          |
|             | África do Sul  |                                       | ī                       |                      | П                              |              |                          |
|             | EUA  |                                       |                         |                      | П                              |              |                          |
|             | Chile  |                                       |                         |                      | П                              |              |                          |
|             | Outros. Quais?   |                                       |                         |                      |                                |              |                          |
| !           |  |                                       |                         |                      |                                |              |                          |
| 3.2. India  | que, por favor, o seu grau de concordância com as s                                  | seguintes afirm                       | -                       |                      |                                |              |                          |
|             |  |                                       | Discordo     Totalmente | 2. Discordo          | 3.Não concordo Nem<br>discordo | 4.Concordo   | 5.Concordo<br>Totalmente |
| Sá compro   | vinhos de países que já visitei.   |                                       |                         |                      |                                |              |                          |
|             | vinnos de países que ja visitei.<br>vinhos de países dos quais tenho uma boa imagem. |                                       | П                       |                      |                                |              |                          |
|             | nde orgulhar-se de produzir bons vinhos.   |                                       |                         |                      |                                |              |                          |
|             |  |                                       |                         |                      |                                |              |                          |
|             | ortugueses têm boas críticas.  |                                       |                         |                      |                                |              |                          |
|             | ortugueses são de boa qualidade.   |                                       |                         |                      |                                |              |                          |
|             | ortugueses têm boa reputação.  | a alais                               |                         |                      |                                |              |                          |
|             | ortugueses devem ser consumidos em ocasiões esp                                      | eciais.                               |                         |                      |                                |              |                          |
|             | ntrar vinhos portugueses à venda.  |                                       |                         |                      |                                |              |                          |
| _           | m bons vinhos brancos.   |                                       |                         |                      |                                |              |                          |
| _           | m bons vinhos tintos.  |                                       |                         |                      |                                |              |                          |
|             | o os vinhos portugueses aos meus amigos.   |                                       |                         |                      |                                |              |                          |
| Tenno Inter | nção de voltar a comprar vinhos portugueses.   |                                       |                         |                      | Ш                              |              |                          |
| 4. Há       | ibitos de Consumo de Vinho   |                                       |                         |                      |                                |              |                          |
| 4.1. Em c   | que ocasião costuma beber vinho? (escolha todas a                                    | s opções que co                       | onsiderar adequa        | das)                 |                                |              |                          |
|             | Em casa, às refeições  |                                       | Em casa de a            | ımigos               |                                |              |                          |
|             | Em bares, esplanadas e restaurantes  |                                       | Em ocasiões             | especiais (aniversár | rios, casamentos, outras)      |              |                          |
|             | Outros. Quais?   |                                       |                         |                      |                                |              |                          |
|             |  |                                       |                         |                      |                                |              |                          |
| 4.2. Em c   | que altura do dia costuma beber vinho? (escolha to                                   | · · · · · · · · · · · · · · · · · · · |                         |                      |                                |              |                          |
|             | ☐ Ao almoço  |                                       | Ao almoço e             | jantar               | Ao jantar                      |              |                          |
|             | À tarde  |                                       | À noite                 |                      |                                |              |                          |
|             | Outros. Quais?   |                                       |                         |                      |                                |              |                          |
| 4.2 Com     | anno francisco continuo habarriaka 2 Indiana anno                                    |                                       | viaha haha am           |                      |                                |              |                          |
|             | que frequência costuma beber vinho? Indique qua                                      | antos copos de                        | vinno pepe, em i        | media, por mes       |                                |              |                          |
|             | eferências   |                                       |                         |                      |                                |              |                          |
| 5.1. Que    | tipo de vinho prefere? (ordene de 1 - tipo de vinho                                  | que mais gosto                        | o a 6 - tipo de vini    | no que menos gosto   | o de acordo com a sua preferei | ncia)        |                          |
|             | Vinho tinto Vinho branco   |                                       |                         | Vinh                 | o Verde                        |              |                          |
|             | Espumante Fortificado (lico  | roso)                                 |                         | Vinh                 | o Rosé                         |              |                          |
|             |  |                                       |                         |                      |                                |              |                          |
| 6. Esc      | colha e Compras  |                                       |                         |                      |                                |              |                          |
|             | em costuma decidir sobre a compra de vinhos em s                                     | ua casa? (escol                       | lha todas as opçõe      | es que considerar ac | dequadas)                      |              |                          |
|             | O próprio O pai  |                                       | A mãe                   | O cô                 | njuge $\square$                | Outro. Quem? |                          |
|             |  |                                       |                         |                      |                                |              |                          |
| 6.2. No     | que diz respeito ao seu conhecimento sobre vinho                                     | como se descre                        | eve? (Coloque um        | na cruz (X) na opção | com que mais se identifica)    |              |                          |

## Wine Reputation: Are There Differences Between White Wine And Red Wine?

|  | □ Não tenho qualquer conhecimento sobre vinhos       □ Tenho pouco conhecimento sobre vinhos         □ Tenho um razoável conhecimento sobre vinhos       □ Tenho muito conhecimento sobre vinhos |                             |                        |                    |                       |  |
|--|--|-----------------------------|------------------------|--------------------|-----------------------|--|
|  |  | e vinhos                    |                        |                    |                       |  |
| Sou um especialista sobre vinho  | OS   |                             |                        |                    |                       |  |
| 6.3. Na escolha de um vinho que não conhece, cl<br>1 – Nada Importante; 5 – Muito Importante | assifique o grau de impoi  | rtância dos seguintes elem  | entos:                 |                    |                       |  |
|  | 1.Nada Importante  | 2.Pouco Importante          | 3.Indiferente          | 4.Importante       | 5.Muito Importante    |  |
| Aparência  |  |                             |                        |                    |                       |  |
| Equilíbrio   |  |                             |                        |                    |                       |  |
| Sabor  |  |                             |                        |                    |                       |  |
| Cor  |  |                             |                        |                    |                       |  |
| Aroma  |  |                             |                        |                    |                       |  |
| Castas   |  |                             |                        |                    |                       |  |
| Complexidade   |  |                             |                        |                    |                       |  |
| Potencial de Envelhecimento  |  |                             |                        |                    |                       |  |
| Experiência do Produtor  |  |                             |                        |                    |                       |  |
| Reputação do Produtor  | $\overline{\Box}$  |                             | П                      |                    |                       |  |
| Ano  |  |                             |                        |                    |                       |  |
| Reputação da Região  |  |                             |                        |                    |                       |  |
| Relação com a Região (proximidade geográfica)  | ] [  |                             |                        |                    |                       |  |
| País de Origem   |  | П                           |                        |                    |                       |  |
| Denominação de Origem Controlada (DOC)   |  |                             |                        |                    |                       |  |
| Descrição do vinho no rótulo   |  |                             |                        |                    |                       |  |
| · ·  |  |                             |                        |                    |                       |  |
| Design da Embalagem / Garrafa  |  | <u>=</u>                    |                        |                    |                       |  |
| Marca  |  |                             |                        |                    |                       |  |
| Publicidade  |  |                             |                        |                    |                       |  |
| Preço  |  |                             |                        |                    |                       |  |
| Promoções  |  |                             |                        |                    |                       |  |
| Marca nova no mercado  |  |                             |                        |                    |                       |  |
| Produto Inovador   |  |                             |                        |                    |                       |  |
| Críticas dos especialistas (artigos na imprensa, rankings ou competições)                    |  |                             |                        |                    |                       |  |
| 6.4. No que diz respeito ao dinheiro que gasta en  | n vinho, em média, o nre   | co das garrafas que compr   | a situa-se em          |                    |                       |  |
| oi-i ito que dir respeito do animeiro que gasta en   | Nunca  | Raramente                   | Frequentemente         |                    |                       |  |
| 5€ ou menos  |  |                             | . 🗆                    |                    |                       |  |
| de 5€ a 15€  |  |                             |                        |                    |                       |  |
| de 15€ a 25€   |  |                             |                        |                    |                       |  |
| de 25€ a 50€   |  | $\bar{\sqcap}$              | Ī                      |                    |                       |  |
| 50€ ou mais  |  |                             |                        |                    |                       |  |
| Dados Pessoais   |  |                             |                        |                    |                       |  |
| Idade  | Cove   | Fem Masc                    |                        |                    |                       |  |
| Profissão  | Sexo   | i eiii 🔲 iVldSC             |                        |                    |                       |  |
| Nacionalidade  | Se a sua naci  | onalidade é Portuguesa, er  | n que distrito reside? |                    |                       |  |
| Indiana and form   |  | - ,                         |                        |                    | -                     |  |
| Indique, por favor, o seu grau de escolaridade.  |  | Ensino Preparatório (9ºa    | ano) ou Secundário —   |                    |                       |  |
| Até Ensino Básico (6ºano) Licencia   | tura   | (12ºano)                    | mio) ou secundario     | Pos-graduação / Me | estrado/ Doutoramento |  |
| Indique, por favor, o seu rendimento médio líquido   | mensal.  |                             |                        |                    |                       |  |
| ☐ Inferior a 500€ ☐ De   | 500€ a 1000€   | ☐ De 1001€ a 1500€          |                        | De 1501€ a 2000€   |                       |  |
| Caso esteja interessado em receber a síni  | tese dos resultados deixe  | -nos o seu email. Obrigado. |                        |                    | ı                     |  |
|  |  |                             |                        |                    |                       |  |

#### ANNEX III

Questionnaire in English – exported from Qualtrics

This survey intends to collect data for a Marketing Master final thesis, which theme respects alcoholic drinking and consumption, namely wine. We thank you in advance for your collaboration. Please select the idiom in which you prefer to answer this questionnaire. Q1.1 Here we briefly describe some people. Please read each description and think about how much each person is or is not like you.

| how much each person is or is not like you.  |                          |                   |                      |                            |                    |                           |
|--|--------------------------|-------------------|----------------------|----------------------------|--------------------|---------------------------|
|  | Very much<br>like me (1) | Like<br>me<br>(2) | Somewhat like me (3) | A little<br>like me<br>(4) | Not like<br>me (5) | Not like me<br>at all (6) |
| Thinking up new ideas and being creative is important to him. He likes to do things his own original way. (1)  | 0                        | 0                 | 0                    | •                          | 0                  | 0                         |
| He thinks it is important that every person in the world be treated equally. He wants justice for everybody, even for people he doesn't know. (3)      | •                        | 0                 | •                    | O                          | o                  | <b>o</b>                  |
| It's very important to him to show his abilities. He wants people to admire what he does. (4)  | •                        | <b>o</b>          | <b>O</b>             | O                          | 0                  | O                         |
| It is important to him to live in secure surroundings. He avoids anything that might endanger his safety. (5)  | •                        | <b>o</b>          | 0                    | 0                          | o                  | <b>o</b>                  |
| He believes that people should do what they're told.<br>He thinks people should follow rules at all times, even<br>when no-one is watching. (7)        | <b>O</b>                 | <b>o</b>          | O                    | •                          | o                  | O                         |
| It is important to him to listen to people who are different from him. Even when he disagrees with them, he still wants to understand them. (8)        | <b>O</b>                 | 0                 | O                    | •                          | o                  | O                         |
| It is important to him to be humble and modest. He tries not to draw attention to himself. (9)   | 0                        | 0                 | O                    | O                          | O                  | O                         |
| Having a good time is important to him. He likes to "spoil" himself. (10)  | •                        | 0                 | •                    | O                          | 0                  | o                         |
| It is important to him to make his own decisions about what he does. He likes to be free and not depend on others. (11)                                | •                        | 0                 | •                    | •                          | <b>o</b>           | · •                       |
| He looks for adventures and likes to take risks. He wants to have an exciting life. (15)   | •                        | 0                 | •                    | O                          | 0                  | o                         |
| It is important to him always to behave properly. He wants to avoid doing anything people would say is wrong. (16)                                     | •                        | 0                 | •                    | •                          | 0                  | 0                         |
| It is important to him to be loyal to his friends. He wants to devote himself to people close to him. (18)   | •                        | 0                 | •                    | O                          | 0                  | 0                         |
| He strongly believes that people should care for nature. Looking after the environment is important to him. (19)                                       | •                        | <b>o</b>          | 0                    | •                          | o                  | o                         |
| He seeks every chance he can to have fun. It is important to him to do things that give him pleasure. (21)   | •                        | <b>o</b>          | 0                    | •                          | o                  | <b>o</b>                  |
| It is important to him to be rich. He wants to have a lot of money and expensive things. (23)  | o                        | <b>o</b>          | <b>o</b>             | O                          | 0                  | O                         |
| Tradition is important to him. He tries to follow the customs handed down by his religion or his family. (25)  | •                        | <b>o</b>          | 0                    | •                          | o                  | <b>o</b>                  |
| It is important to him to get respect from others. He wants people to do what he says. (28)  | o                        | <b>o</b>          | <b>o</b>             | O                          | 0                  | O                         |
| Being very successful is important to him. He hopes people will recognize his achievements. (30)   | <b>o</b>                 | <b>o</b>          | <b>o</b>             | O                          | 0                  | O                         |
| It's very important to him to help the people around him. He wants to care for their well-being. (32)  | <b>o</b>                 | 0                 | O                    | O                          | 0                  | O                         |
| It is important to him that the government ensures his safety against all threats. He wants the state to be strong so it can defend its citizens. (35) | •                        | o                 | •                    | O                          | o                  | <b>o</b>                  |
| He likes surprises and is always looking for new things to do. He thinks it is important to do lots of different things in life . (43)                 | •                        | O                 | •                    | •                          | o                  | o                         |

Q2.1 Imagine a wine as a person. Which characteristics would you use to describe "him"?

| Q2.1 Imagine a wine as a po | Q2.1 Imagine a wine as a person. Which characteristics would you use to describe "him"? |              |                              |           |                   |  |  |
|-----------------------------|---|--------------|------------------------------|-----------|-------------------|--|--|
|                             | Totally Disagree (1)  | Disagree (2) | Do not agree or disagree (3) | Agree (4) | Totally Agree (5) |  |  |
| Friendly (1)                | O   | 0            | O                            | 0         | O                 |  |  |
| Pleasant (2)                | 0   | •            | O .                          | •         | O .               |  |  |
| Open (3)                    | 0   | 0            | O .                          | •         | O                 |  |  |
| Straightforward (4)         | 0   | 0            | O .                          | •         | O                 |  |  |
| Concerned (5)               | 0   | •            | O .                          | •         | O .               |  |  |
| Reassuring (6)              | 0   | •            | O .                          | •         | O .               |  |  |
| Supportive (7)              | 0   | •            | O .                          | •         | O .               |  |  |
| Agreeable (8)               | 0   | •            | O .                          | •         | O .               |  |  |
| Honest (9)                  | 0   | •            | O .                          | •         | O .               |  |  |
| Sincere (10)                | 0   | <b>o</b>     | 0                            | 0         | 0                 |  |  |
| Trustworthy (11)            | 0   | <b>O</b>     | 0                            | 0         | 0                 |  |  |
| Socially Responsible (12)   | 0   | O            | O .                          | 0         | 0                 |  |  |
| Cool (13)                   | 0   | <b>o</b>     | O                            | 0         | O .               |  |  |
| Trendy (14)                 | O .   | 0            | O .                          | •         | O .               |  |  |
| Young (15)                  | 0   | 0            | O .                          | •         | O .               |  |  |
| Imaginative (16)            | 0   | 0            | O .                          | •         | o                 |  |  |
| Up-to-date (17)             | 0   | 0            | O .                          | •         | 0                 |  |  |
| Exciting (18)               | 0   | <b>o</b>     | O .                          | •         | 0                 |  |  |
| Innovative (19)             | 0   | <b>o</b>     | •                            | •         | 0                 |  |  |
| Extrovert (20)              | 0   | •            | •                            | 0         | o                 |  |  |
| Daring (21)                 | 0   | •            | •                            | 0         | 0                 |  |  |
| Reliable (22)               | 0   | •            | •                            | <b>o</b>  | 0                 |  |  |
| Secure (23)                 | 0   | 0            | <b>O</b>                     | 0         | 0                 |  |  |
| Hard working (24)           | 0   | 0            | <b>O</b>                     | 0         | 0                 |  |  |
| Ambitious (25)              | 0   | 0            | <b>O</b>                     | 0         | 0                 |  |  |
| Achievement Oriented (26)   | 0   | 0            | 0                            | 0         | 0                 |  |  |
| Leading (27)                | 0   | •            | •                            | <b>o</b>  | o                 |  |  |
| Technical (28)              | 0   | •            | •                            | <b>o</b>  | o                 |  |  |
| Corporate (29)              | 0   | •            | •                            | <b>o</b>  | o                 |  |  |
| Charming (30)               | 0   | •            | •                            | •         | o                 |  |  |
| Stylish (31)                | 0   | •            | 0                            | <b>o</b>  | o                 |  |  |
| Elegant (32)                | 0   | •            | •                            | •         | •                 |  |  |
| Prestigious (33)            | 0   | •            | •                            | •         | •                 |  |  |
| Exclusive (34)              | 0   | •            | •                            | •         | 0                 |  |  |
| Refined (35)                | 0   | •            | •                            | 0         | 0                 |  |  |
| Snobby (36)                 | 0   | •            | •                            | 0         | 0                 |  |  |
| Elitist (37)                | 0   | 0            | 0                            | 9         | 0                 |  |  |
| Arrogant (38)               | 0   | 0            | 0                            | <b>O</b>  | 0                 |  |  |
| Aggressive (39)             | 0   | 0            | 0                            | 0         | 0                 |  |  |
| Selfish (40)                | 0   | 0            | 0                            | 0         | 0                 |  |  |
| Inward-looking (41)         | 0   | 0            | 0                            | 0         | 0                 |  |  |
| Authoritarian (42)          | 0   | 0            | 0                            | 9         | 0                 |  |  |
| Controlling (43)            | 0   | 0            | 0                            | 0         | 0                 |  |  |
| Casual (44)                 | 0   | 0            | 0                            | 0         | 0                 |  |  |
| Simple (45)                 | 0   | 0            | 0                            | 0         | 0                 |  |  |
| Easy-going (46)             | 0   | 0            | 0                            | 9         | 0                 |  |  |
| Masculine (47)              | 0   | 0            | 0                            | 0         | 0                 |  |  |
| Tough (48)                  | 0   | 0            | 0                            | 9         | 0                 |  |  |
| Rugged (49)                 | •   | •            | 0                            | •         | •                 |  |  |

Q2.3 Please, indicate your level of agreement with the following statements:

|  | Totally<br>Disagree<br>(1) | Disagree<br>(2) | Do not agree<br>or disagree<br>(3) | Agree (4) | Totally<br>Agree (5) |
|--|----------------------------|-----------------|------------------------------------|-----------|----------------------|
| Red wines generally offer higher quality than others. (1)                          | 0                          | 0               | •                                  | 0         | 0                    |
| White wine is a lady's wine. (2)   | 0                          | •               | •                                  | O .       | o                    |
| I only drink white wine in the summer when temperatures are higher. (3)            | 0                          | O               | •                                  | <b>o</b>  | 0                    |
| I dislike the intense aroma and flavor of red wines. (5)                           | 0                          | 0               | •                                  | O .       | o                    |
| Red wines have better flavour than others. (7)                                     | 0                          | O .             | •                                  | O .       | o                    |
| I prefer red wine because I can keep it longer. (8)                                | 0                          | O .             | •                                  | O .       | o                    |
| A heavier cuisine and complex gastronomy obliges to a red wine as a companion. (9) | 0                          | O               | •                                  | <b>o</b>  | 0                    |
| Less complex cuisine such as grilled are perfect to have with a white wine. (10)   | 0                          | O               | •                                  | <b>o</b>  | 0                    |
| Usually, I drink what I feel like without obeying any rule. (12)                   | 0                          | 0               | •                                  | O .       | o                    |
| Red wine for meat and white wine for fish is old fashioned. (13)                   | 0                          | •               | •                                  | O .       | o                    |
| Nowadays we can find rather good wines with appealing prices. (14)                 | 0                          | <b>o</b>        | •                                  | <b>o</b>  | 0                    |
| Red wine is healthier than white wine. (15)  | 0                          | 0               | •                                  | O .       | o                    |
| Drinking red wine is more stylish than drinking white wine. (20)                   | 0                          | O .             | •                                  | O .       | o                    |
| Red wine is very expensive. (21)   | 0                          | O .             | •                                  | O .       | o                    |
| Graduated people and with a superior income drink red wine. (22)                   | 0                          | O               | •                                  | <b>o</b>  | 0                    |
| People who drink red wine are young and modern. (23)                               | 0                          | O .             | •                                  | O .       | o                    |

- Q2.3.1 Indicate 5 adjectives to describe a white wine with good reputation. Q2.3.2 Indicate 5 adjectives to describe a red wine with good reputation.
- Q2.3.3 Indicate 5 adjectives to describe a white wine with bad reputation.
- Q2.3.4 Indicate 5 adjectives to describe a red wine with bad reputation.

## Q3.1 Indicate how much wine do you consume from this country.

|                    | Never | Rarely | Frequently |
|--------------------|-------|--------|------------|
| Portugal (1)       |       |        |            |
| Spain (2)          |       |        |            |
| France (3)         |       |        |            |
| Italy (4)          |       |        |            |
| Australia (5)      |       |        |            |
| New Zealand (6)    |       |        |            |
| Argentina (7)      |       |        |            |
| South AFrica (8)   |       |        |            |
| USA (9)            |       |        |            |
| Chile (10)         |       |        |            |
| Other. Which? (11) |       |        |            |

## Q3.2 Indicate your level of agreement with the following statements:

|   | Totally<br>Disagree<br>(1) | Disagr<br>ee (2) | Do not agree<br>or disagree<br>(3) | Agre<br>e (4) | Totally<br>Agree (5) |
|---|----------------------------|------------------|------------------------------------|---------------|----------------------|
| I only buy wines from countries I have visited. (1)               | 0                          | <b>O</b>         | 0                                  | 0             | O                    |
| I only buy wines from countries of which I have a good image. (2) | O                          | <b>o</b>         | O                                  | 0             | o                    |
| Portugal should be proud of producing good wines. (3)             | 0                          | <b>o</b>         | O .                                | 0             | o                    |
| Portuguese wines have good critics. (4)                           | 0                          | <b>o</b>         | O                                  | 0             | o                    |
| Portuguese wines have high quality. (5)                           | 0                          | <b>o</b>         | O                                  | 0             | o                    |
| Portuguese wines have a good reputation. (6)                      | 0                          | <b>o</b>         | O                                  | 0             | o                    |
| Portuguese wines should be consumed in special occasions. (7)     | 0                          | <b>o</b>         | O                                  | 0             | o                    |
| It is easy to find Portuguese wines for sale. (8)                 | 0                          | <b>o</b>         | O                                  | 0             | o                    |
| Portugal has good white wines. (9)                                | 0                          | <b>o</b>         | O                                  | 0             | o                    |
| Portugal has good red wines. (10)                                 | 0                          | <b>o</b>         | O                                  | 0             | o                    |
| I recommend Portuguese wines to my friends. (11)                  | 0                          | <b>o</b>         | O                                  | 0             | o                    |
| I intend to buy Portuguese wines once again. (12)                 | 0                          | O                | 0                                  | 0             | O .                  |

| Q4.1 In which occa         | asion do you usually                                  | drink wine? Choos   | se all correct answer                           | S  |                     |
|----------------------------|---|---------------------|---|--|---------------------|
|                            | eals (1)<br>ns (anniversaries, ma<br>                 |                     | s and restaurants (2                            | 2) At frien<br>Other. Which? (5)         | ds' houses (3)<br>) |
| At lunch (1)               | of the day do you us<br>At night (2)                  | Lunch and dinner (  |   |  | fternoon (5)        |
| Q4.3 How often d           | lo you usually drink v                                | wine? Please indica | ate how many glass                              | es (monthly averag                       | e).                 |
| Q5.1 What kind of Red wine | wine do you prefer?<br>Sparkling                      |                     | referred type of wine to<br>Fortified (liqueur) | • • • • •                                |                     |
| •                          | decide about what w<br>Father (2)                     |                     | e? Choose all correc<br>Spouse                  |  | Other. Who? (5)     |
| , ,                        | knowledge about wo which you identify t               | ,                   | describe yourself?                              |  |                     |
| I am an expert on v        | nowledge about wine wine themes.  owledge about wine. |                     | I have a reasonal have little knowle            | ole level of knowled<br>dge about wines. | lge about wine. I   |

Q6.3 When choosing a wine you don't know, classify importance of following elements:

|  |                   | 1                       | į.              |                  | 1                     |
|--|-------------------|-------------------------|-----------------|------------------|-----------------------|
|  | Not Important (1) | Little<br>Important (2) | Indifferent (3) | Important<br>(4) | Very<br>Important (5) |
| Appearance (1)   | 0                 | 0                       | 0               | 0                | 0                     |
| Balance (2)  | 0                 | 0                       | 0               | 0                | 0                     |
| Taste (3)  | 0                 | 0                       | 0               | 0                | 0                     |
| Colour (4)   | · ·               | 0                       | O .             | 0                | •                     |
| Aroma (5)  | · ·               | 0                       | O .             | 0                | O .                   |
| Grape Varieties (6)  | · ·               | 0                       | O .             | 0                | •                     |
| Complexity (7)   | 0                 | 0                       | 0               | 0                | O                     |
| Aging Potential (8)  | · ·               | 0                       | O .             | 0                | •                     |
| Producer Experience (9)  | · ·               | 0                       | O .             | 0                | •                     |
| Producer Reputation (10)   | · ·               | 0                       | O .             | 0                | •                     |
| Vintage (11)   | · ·               | 0                       | O .             | 0                | •                     |
| Region Reputation (12)   | · ·               | 0                       | O .             | 0                | •                     |
| Relation to the region (geographical proximity)                  | · ·               | 0                       | O .             | 0                | •                     |
| Country-of-Origin (14)   | 0                 | · ·                     | O .             | 0                | •                     |
| Appellation (DOC) (15)   | 0                 | · ·                     | O .             | 0                | •                     |
| Description on labels (16)                                       | · ·               | 0                       | O .             | 0                | O .                   |
| Design of bottle and package (17)                                | · ·               | 0                       | O .             | 0                | O .                   |
| Brand (18)   | · ·               | 0                       | O .             | 0                | O .                   |
| Advertising (19)   | · ·               | 0                       | O .             | 0                | O .                   |
| Price (20)   | 0                 | · ·                     | O .             | 0                | •                     |
| Promotions (21)  | 0                 | · ·                     | O .             | 0                | •                     |
| New brand on the market (22)                                     | O .               | · ·                     | O .             | 0                | •                     |
| Innovative product (23)  | · ·               | 0                       | O .             | 0                | O .                   |
| Experts' critics (press articles, rankings or competitions) (25) | •                 | 0                       | •               | 0                | <b>O</b>              |

Q6.4 About the money you spent in wine, please indicate bottles' average price you usually buy. (Euros and US Dollars)

|   |                                   | Never | Rarely | Frequently |
|---|-----------------------------------|-------|--------|------------|
| 0 | 5€ (\$7) or less (1)              |       |        |            |
| 0 | from 5€ (\$7) to 15€ (\$20) (2)   |       |        |            |
| • | from 15€ (\$20) to 25€ (\$34) (3) |       |        |            |
| 0 | from 25€ (\$34) to 50€ (\$67) (4) |       |        |            |
| • | 50€ (\$67) or more                |       |        |            |

Age

Sex Male (1) Female (2) Professional Activity

Nationality

If your nationality is Portuguese, please indicate you residence district.

Please indicate your academic degree Pre-high School (1) High School (2) Associate / Bachelor (3) Master/ Doctoral (4)

Please notify your monthly net income (Euros and US Dollars).

- O Inferior to 500€ (\$680) (1)
- O From 1501€ to 2000€ (\$2038 to \$2716) (4)
- O From 500€ to 1000€ (\$681 to \$1358) (2)
- O From 1001€ to 1500€ (\$1358 to \$2037) (3)
- O Over 2000€ (\$2716) (5)

## **ANNEX IV Professional Activity**

|   | Wine Sector   | Administrative<br>Commercial<br>Business   | Engineer   | Creativity  | School    | Others        |             |
|---|---|--|--|---|-----------|---------------|-------------|
|   | Analista de<br>Marketing<br>Coordenadora<br>enoturismo<br>Enólogo<br>Escanção<br>Enologia | <ul> <li>Call center</li> <li>Backoffice e Call center</li> <li>Administrativa</li> <li>Chefe Serviços</li> <li>Aposentada</li> <li>Direcção Vendas</li> <li>Director Comercial</li> <li>Comercial</li> <li>Gestor Comercial</li> <li>Gerente / Gestor</li> <li>Export Manager</li> <li>Economista</li> <li>Empresário</li> <li>Consultoria</li> </ul> | <ul> <li>Eng. Agrónoma</li> <li>Engenheira</li> <li>Gestor de<br/>Produção</li> <li>Qualidade</li> </ul> | <ul> <li>Designer</li> <li>Criativa / Redactora</li> <li>Jornalista</li> <li>Marketing</li> <li>Publicitário</li> <li>Técnica de<br/>Comunicação</li> <li>Técnica de turismo</li> </ul> | Estudante | Saúde Docente |             |
| N | 8   | 30   | 6  | 10  | 25        | 2             | TOTAL<br>81 |

## ANNEX V Human Values - Motivational Types

|       | Benevolence | Universalism | Self-direction | Stimulation | Hedonism | Achievement | Power | Security | Conformism | Tradition |
|-------|-------------|--------------|----------------|-------------|----------|-------------|-------|----------|------------|-----------|
| Men   | -,38        | ,32          | -,36           | -,50        | ,37      | ,15         | ,42   | -,32     | ,05        | ,09       |
|       | 42,0%       |              |                |             |          |             |       |          |            |           |
| Women | -,22        | ,24          | -,48           | -,48        | ,71      | ,49         | ,31   | -,41     | -,32       | ,06       |
|       | 58,0%       |              |                |             |          |             |       |          |            |           |

## ANNEX VI Corporate Character Scale

|     |              | War<br>mth | Empath<br>y | Integr<br>ity | Mode<br>rnity | Advent<br>ure | Boldnes<br>s | Conscient iousness | Drive | Techno<br>cracy | Eleganc<br>e | Prestig<br>e | Snobbery | Egotism | Domina<br>nce |
|-----|--------------|------------|-------------|---------------|---------------|---------------|--------------|--------------------|-------|-----------------|--------------|--------------|----------|---------|---------------|
| Ν   | Valid        | 85         | 85          | 85            | 85            | 84            | 85           | 85                 | 85    | 85              | 84           | 85           | 85       | 84      | 85            |
|     | Missing      | 22         | 22          | 22            | 22            | 23            | 22           | 22                 | 22    | 22              | 23           | 22           | 22       | 23      | 22            |
| Ме  | an           | 3,81       | 3,28        | 3,57          | 3,24          | 3,73          | 3,62         | 3,31               | 3,55  | 3,06            | 4,08         | 3,85         | 2,71     | 2,34    | 2,23          |
| Sto | I. Deviation | ,740       | ,853        | ,829          | ,859          | ,758          | ,947         | ,920               | ,796  | 1,028           | ,674         | ,926         | 1,191    | 1,031   | 1,008         |
| Va  | riance       | ,547       | ,728        | ,687          | ,738          | ,574          | ,897         | ,847               | ,634  | 1,056           | ,455         | ,858         | 1,419    | 1,063   | 1,016         |

## ANNEX VII Age (recoded)

|         |                             | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-----------------------------|-----------|---------|---------------|--------------------|
| Valid   | < 25 years old              | 29        | 27,1    | 35,8          | 35,8               |
|         | between 25 and 35 years old | 28        | 26,2    | 34,6          | 70,4               |
|         | > to 35 years old           | 24        | 22,4    | 29,6          | 100,0              |
|         | Total                       | 81        | 75,7    | 100,0         |                    |
| Missing | System                      | 26        | 24,3    |               |                    |
| Total   |                             | 107       | 100,0   |               |                    |

## ANNEX VIII Sex

|         |        | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|--------|-----------|---------|---------------|--------------------|
| Valid   | Men    | 34        | 31,8    | 42,0          | 42,0               |
|         | Women  | 47        | 43,9    | 58,0          | 100,0              |
|         | Total  | 81        | 75,7    | 100,0         |                    |
| Missing | System | 26        | 24,3    |               |                    |
| Total   |        | 107       | 100,0   |               |                    |

#### ANNEX IX Residence - District

| -                   | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------------------|-----------|---------|---------------|--------------------|
| Valid               | 28        | 26,2    | 26,2          | 26,2               |
| Beja                | 3         | 2,8     | 2,8           | 29,0               |
| Cascais             | 1         | ,9      | ,9            | 29,9               |
| Évora               | 4         | 3,7     | 3,7           | 33,6               |
| Faro                | 1         | ,9      | ,9            | 34,6               |
| Leiria              | 4         | 3,7     | 3,7           | 38,3               |
| Lisboa              | 45        | 42,1    | 42,1          | 80,4               |
| Nenhum              | 1         | ,9      | ,9            | 81,3               |
| Ponta Delgada       | 1         | ,9      | ,9            | 82,2               |
| Portalegre          | 1         | ,9      | ,9            | 83,2               |
| Porto               | 5         | 4,7     | 4,7           | 87,9               |
| Santarém            | 1         | ,9      | ,9            | 88,8               |
| São Miguel (Açores) | 1         | ,9      | ,9            | 89,7               |
| Setúbal             | 8         | 7,5     | 7,5           | 97,2               |
| Vila Real           | 2         | 1,9     | 1,9           | 99,1               |
| Viseu               | 1         | ,9      | ,9            | 100,0              |
| Total               | 107       | 100,0   | 100,0         |                    |

## ANNEX X Red wines generally offer higher quality than others

| N      | Valid    | 84    |
|--------|----------|-------|
|        | Missing  | 23    |
| Mean   |          | 2,56  |
| Media  | n        | 2,00  |
| Mode   |          | 1     |
| Std. D | eviation | 1,293 |
| Varian | ice      | 1,671 |
| Minim  | um       | 1     |
| Maxim  | num      | 5     |

#### Red wines generally offer higher quality than others.

| 1100 1111100 | generally offer higher quality th | an others. |         |               |                    |
|--------------|-----------------------------------|------------|---------|---------------|--------------------|
|              |                                   | Frequency  | Percent | Valid Percent | Cumulative Percent |
| Valid        | Totally Disagree                  | 23         | 21,5    | 27,4          | 27,4               |
|              | Disagree                          | 20         | 18,7    | 23,8          | <mark>51,2</mark>  |
|              | Do not Agree or Disagree          | 19         | 17,8    | 22,6          | 73,8               |
|              | Agree                             | 15         | 14,0    | 17,9          | 91,7               |
|              | Totally Agree                     | 7          | 6,5     | 8,3           | 100,0              |
|              | Total                             | 84         | 78,5    | 100,0         |                    |
| Missing      | System                            | 23         | 21,5    | ĺ             |                    |
| Total        |                                   | 107        | 100,0   |               |                    |

ANNEX XI What kind of wine do you prefer \* About the money you spent in wine, please indicate bottles' average price you usually buy

(HO: average money spent in wine per bottle is equal in all types of favourite wine)

One-Sample Kolmogorov-Smirnov Test

|                        |                   |       |           |       | ampio itoiiii | . J   |       |               |           |            |            |             |
|------------------------|-------------------|-------|-----------|-------|---------------|-------|-------|---------------|-----------|------------|------------|-------------|
|                        |                   | Red   | Sparkling | White | Fortified     | Green | Rosé  | 5€ or<br>less | 5€ to 15€ | 15€ to 25€ | 25€ to 50€ | 50€ or more |
| N                      | _                 | 81    | 81        | 82    | 81            | 81    | 80    | 81            | 81        | 80         | 81         | 81          |
| Normal                 | Mean              | 2,58  | 3,31      | 2,88  | 4,31          | 3,78  | 4,15  | 2,62          | 2,54      | 1,91       | 1,54       | 1,33        |
| Parameters<br>a,,b     | Std.<br>Deviation | 1,942 | 1,505     | 1,435 | 1,663         | 1,458 | 1,584 | ,603          | ,633      | ,679       | ,690       | ,592        |
| Most                   | Absolute          | ,298  | ,161      | ,193  | ,192          | ,141  | ,229  | ,416          | ,382      | ,289       | ,340       | ,429        |
| Extreme<br>Differences | Positive          | ,298  | ,161      | ,193  | ,155          | ,123  | ,154  | ,263          | ,235      | ,286       | ,340       | ,429        |
| Dillerences            | Negative          | -,208 | -,097     | -,100 | -,192         | -,141 | -,229 | -,416         | -,382     | -,289      | -,216      | -,287       |
| Kolmogorov-            | -Smirnov Z        | 2,684 | 1,453     | 1,749 | 1,728         | 1,267 | 2,050 | 3,744         | 3,437     | 2,583      | 3,060      | 3,865       |
| Asymp. Sig.            | (2-tailed)        | ,000  | ,029      | ,004  | ,005          | ,080  | ,000  | ,000          | ,000      | ,000       | ,000       | ,000        |

a. Test distribution is Normal.

H0: distribution is normal.

Only in Vinho Verde we verify the normality of distribution, ( $\alpha$  > 0.05), therefore we consider non-parametric tests for all of the following analysis, referring to this hypothesis.

Test Statistics<sup>a,b</sup>

|             | Red   | Sparkling | White | Fortified | Green | Rosé  |
|-------------|-------|-----------|-------|-----------|-------|-------|
| Chi-Square  | 1,365 | 1,742     | 2,265 | 2,301     | ,822  | 1,356 |
| df          | 2     | 2         | 2     | 2         | 2     | 2     |
| Asymp. Sig. | ,505  | ,418      | ,322  | ,316      | ,663  | ,508  |

b. Grouping Variable: 5€ or less

#### Test Statistics a,b

|             | Red   | Sparkling | White | Fortified | Green | Rosé  |
|-------------|-------|-----------|-------|-----------|-------|-------|
| Chi-Square  | 1,419 | ,240      | ,998  | 1,390     | 4,792 | 4,528 |
| df          | 2     | 2         | 2     | 2         | 2     | 2     |
| Asymp. Sig. | ,492  | ,887      | ,607  | ,499      | ,091  | ,104  |

b. Grouping Variable: 5€ to 15€

## Test Statistics a,b

|             | Red   | Sparkling | White | Fortified | Green | Rosé  |
|-------------|-------|-----------|-------|-----------|-------|-------|
| Chi-Square  | 5,127 | ,843      | 2,384 | 5,158     | ,293  | 2,484 |
| df          | 2     | 2         | 2     | 2         | 2     | 2     |
| Asymp. Sig. | ,077  | ,656      | ,304  | ,076      | ,864  | ,289  |

b. Grouping Variable: 15€ to 25€

#### Test Statistics a,D

|             | Red  | Sparkling | White | Fortified | Green | Rosé  |  |
|-------------|------|-----------|-------|-----------|-------|-------|--|
| Chi-Square  | ,818 | 1,670     | ,669  | 4,474     | ,242  | 2,305 |  |
| df          | 2    | 2         | 2     | 2         | 2     | 2     |  |
| Asymp. Sig. | ,664 | ,434      | ,716  | ,107      | ,886  | ,316  |  |

b. Grouping Variable: 25€ to 50€

#### Test Statistics a,D

|             | Red   | Sparkling | White | Fortified | Green | Rosé |
|-------------|-------|-----------|-------|-----------|-------|------|
| Chi-Square  | 3,757 | 5,092     | 1,029 | 1,857     | ,338  | ,653 |
| df          | 2     | 2         | 2     | 2         | 2     | 2    |
| Asymp. Sig. | ,153  | ,078      | ,598  | ,395      | ,844  | ,721 |

b. Grouping Variable: 50€ or more

b. Calculated from data.

## ANNEX XII What kind of wine do you prefer \* Sex

(HO: preference of wine has equal distribution among men and women)

|       | Sexo  | N  | Mean Rank | Sum of Ranks |
|-------|-------|----|-----------|--------------|
|       | Men   | 34 | 43,65     | 1484,00      |
| White | Women | 46 | 38,17     | 1756,00      |
|       | Total | 80 |           |              |

| T    | C4-4 | - 4 |    |
|------|------|-----|----|
| rest | Stat | IST | cs |

|                          |          | White             |
|--------------------------|----------|-------------------|
| Most Extreme Differences | Absolute | ,143              |
|                          | Positive | ,143              |
|                          | Negative | ,000              |
| Kolmogorov-Smirnov Z     |          | ,633              |
| Asymp. Sig. (2-tailed)   |          | <mark>,817</mark> |

a. Grouping Variable: Sex

| H0: Distribution is |
|---------------------|
| normal              |
| ۵× 0.05 (0,817),    |
| normality accepted. |
|                     |

|       | -                           | Levene's Test for | or Equality of Variances |
|-------|-----------------------------|-------------------|--------------------------|
|       |                             | F                 | Sig.                     |
| White | Equal variances assumed     | ,432              | <mark>,513</mark>        |
|       | Equal variances not assumed |                   |                          |

H0: homogeneity of variances (Levene test)  $\alpha > 0.05$  (0,513), accept homogeneity

|       |                               | t-test for Equality of Means |        |                     |                    |                          |                          |                           |
|-------|-------------------------------|------------------------------|--------|---------------------|--------------------|--------------------------|--------------------------|---------------------------|
| 1     |                               |                              |        |                     |                    |                          | 95% Confide<br>of the Di | ence Interval<br>fference |
|       |                               | t                            | df     | Sig. (2-<br>tailed) | Mean<br>Difference | Std. Error<br>Difference | Lower                    | Upper                     |
| White | Equal<br>variances<br>assumed | 1,116                        | 78     | ,268                | ,363               | ,326                     | -,285                    | 1,011                     |
|       | Equal variances not assumed   | 1,104                        | 68,380 | ,274                | ,363               | ,329                     | -,293                    | 1,020                     |

H0: preference of wine has equal distribution among men and women  $\alpha > 0.05$  (0.268), therefore H0 accepted.

# ANNEX XIII Red wines have better flavour than others \* Age (HO: average position towards red wine taste is equal in all categories of ages.)

Test Statistics a,D

|             | Red wines have better flavour than others. |
|-------------|--|
| Chi-Square  | 8,109                                      |
| df          | 2  |
| Asymp. Sig. | ,017                                       |

- a. Kruskal Wallis Test
- b. Grouping Variable: Idade4

|                                  |                          | < 25<br>years old | between 25<br>and 35 | > 35 | Total |
|----------------------------------|--------------------------|-------------------|----------------------|------|-------|
| Red wines have<br>better flavour | Totally<br>disagree      | 2                 | 13                   | 8    | 23    |
| than others.                     | Disagree                 | 8                 | 5                    | 8    | 21    |
|                                  | Do not agree or disagree | 11                | 4                    | 1    | 16    |
|                                  | Agree                    | 6                 | 2                    | 5    | 13    |
|                                  | Totally agree            | 2                 | 3                    | 1    | 6     |
| Total                            |                          | 29                | 27                   | 23   | 79    |

Red wines have better flavour than others.

| 1100 | which have better in | avour than outers. |
|------|----------------------|--------------------|
| N    | Valid                | 83                 |
|      | Missing              | 24                 |
| Mea  | an                   | 2,53               |
| Ме   | dian                 | 2,00               |
| Мо   | de                   | 1                  |
| Std  | . Deviation          | 1,300              |
| Var  | iance                | 1,691              |
| Min  | imum                 | 1                  |
| Max  | ximum                | 5                  |

(H0: average position towards red wine taste is equal in all categories of ages.)

P = 0.017, therefore H0 rejected

Red wines have better flavour than others.

|         | Red wines have better flavour than others. |           |         |                  |                       |  |  |  |
|---------|--|-----------|---------|------------------|-----------------------|--|--|--|
|         |  | Frequency | Percent | Valid<br>Percent | Cumulative<br>Percent |  |  |  |
| Valid   | Totally<br>disagree                        | 23        | 21,5    | 27,7             | 27,7                  |  |  |  |
| i       | Disagree                                   | 22        | 20,6    | 26,5             | 54,2                  |  |  |  |
|         | Do not agree or disagree                   | 16        | 15,0    | 19,3             | 73,5                  |  |  |  |
|         | Agree                                      | 15        | 14,0    | 18,1             | 91,6                  |  |  |  |
| i       | Totally agree                              | 7         | 6,5     | 8,4              | 100,0                 |  |  |  |
|         | Total                                      | 83        | 77,6    | 100,0            | İ                     |  |  |  |
| Missing | System                                     | 24        | 22,4    |                  | I                     |  |  |  |
| Total   | ļ  | 107       | 100,0   | 1 '              | İ                     |  |  |  |

|   | ldade4               | N  | Mean<br>Rank |
|---|----------------------|----|--------------|
| Red wines                                 | < 25 years old       | 29 | 49,26        |
| have better<br>flavour<br>than<br>others. | between 25<br>and 35 | 27 | 33,31        |
|   | > 35 years old       | 23 | 36,17        |
|   | Total                | 79 |              |

All samples are inferior to 30 elements so we apply non-parametric tests.

ANNEX XIV People whose favourite type of wine is white wine are more adventurers (HO: White wine preference has equal distribution in adventurers and not adventurers)

One-Sample Kolmogorov-Smirnov Test

|                          |                        | Uma pessoa<br>que procura a<br>aventura e<br>gosta de<br>correr riscos.<br>Quer ter uma<br>vida<br>emocionante |
|--------------------------|------------------------|--|
| Most Extreme Differences | Absolute               | ,195   |
|                          | Positive               | ,195   |
|                          | Negative               | -,142  |
|                          | Kolmogorov-Smirnov Z   | 2,013  |
|                          | Asymp. Sig. (2-tailed) | .001   |

"He looks for adventures and likes to take risks. He wants to have an exciting life."

H0: distribution is normal P< 0,05, so we reject H0, defining the use of non-parametric tests.

**Descriptive Statistics** 

|           | N   | Mean | Std. Deviation | Minimum | Maximum |
|-----------|-----|------|----------------|---------|---------|
| White     | 82  | 2,88 | 1,435          | 1       | 6       |
| Adventure | 107 | 1,32 | ,468           | 1       | 2       |

#### Test Statistics<sup>a</sup>

|                        | White    |
|------------------------|----------|
| Mann-Whitney U         | 538,000  |
| Wilcoxon W             | 2308,000 |
| Z                      | -1,483   |
| Asymp. Sig. (2-tailed) | ,138     |

Ranks

| -     | Adventure | N  | Mean Rank | Sum of Ranks |
|-------|-----------|----|-----------|--------------|
| White | 1         | 59 | 39,12     | 2308,00      |
|       | 2         | 23 | 47,61     | 1095,00      |
|       | Total     | 82 |           |              |

a. Grouping Variable: Adventure

(H0: White wine preference has equal distribution in adventurers and not adventurers)

P = 0,138, therefore H0 accepted

ANNEX XV People whose favourite type of wine is white wine are more self-confident (HO: White wine preference has equal distribution in self-confident and not self-confident)

One-Sample Kolmogorov-Smirnov Test

|                          |                        | Uma pessoa<br>para quem è<br>importante ter<br>sucesso.<br>Gosta de<br>receber o<br>reconhecime<br>nto dos<br>outros. | Branco |
|--------------------------|------------------------|---|--------|
|                          | N                      | 107   | 82     |
| Normal Parameters a,b    | Mean                   | 3,57  | 2,88   |
|                          | Std. Deviation         | 1,074   | 1,435  |
| Most Extreme Differences | Absolute               | ,226  | ,193   |
|                          | Positive               | ,139  | ,193   |
|                          | Negative               | -,226   | -,100  |
|                          | Kolmogorov-Smirnov Z   | 2,334   | 1,749  |
|                          | Asymp. Sig. (2-tailed) | ,000  | .004   |

"Being very successful is important to him. He hopes people will recognize his achievements."

H0: distribution is normal P< 0,05, so we reject H0, defining the use of non-parametric tests.

Test Statistics<sup>a</sup>

**Descriptive Statistics** 

Mann-Whitney Test

|         | N   | Mean | Std. Deviation | Minimum | Maximum |
|---------|-----|------|----------------|---------|---------|
| White   | 82  | 2,88 | 1,435          | 1       | 6       |
| Success | 107 | 1,17 | ,376           | 1       | 2       |

#### Mann-Whitney Test

#### Ranks

|       | Success | N  | Mean Rank | Sum of Ranks |
|-------|---------|----|-----------|--------------|
| White | 1       | 71 | 40,04     | 2842,50      |
|       | 2       | 11 | 50,95     | 560,50       |
|       | Total   | 82 |           |              |

|                        | White    |
|------------------------|----------|
| Mann-Whitney U         | 286,500  |
| Wilcoxon W             | 2842,500 |
| Z                      | -1,447   |
| Asymp. Sig. (2-tailed) | ,148     |

a. Grouping Variable: Success

(H0: White wine preference has equal distribution in self-confident and not self-confident)

P = 0,148, therefore H0 accepted

ANNEX XVI It is important to him to make his own decisions about what he does. He likes to be free and not depend on others \* sex

(H0: average of identification with "It is important to him to make his own decisions about what he does. He likes to be free and not depend on others." is equal to women and men)

One-Sample Kolmogorov-Smirnov Test

|                                      |                | It is important to him to make his own decisions about what he does. He likes to be free and not depend on others. | Sexo  |
|--------------------------------------|----------------|--|-------|
| N                                    |                | 107  | 81    |
| Normal<br>Parameters <sup>a,,b</sup> | Mean           | 3,71   | 1,58  |
|                                      | Std. Deviation | 1,360  | ,497  |
| Most Extreme                         | Absolute       | ,185   | ,381  |
| Differences                          | Positive       | ,185   | ,298  |
|                                      | Negative       | -,151  | -,381 |
| Kolmogorov-Smirnov Z                 |                | 1,916  | 3,431 |
| Asymp. Sig. (2-tailed)               |                | ,001   | ,000  |

a. Test distribution is Normal.

b. Calculated from data.

H0: distribution is normal

P < 0,05, H0 not accepted. Non-parametric test required – Mann-Whitney

#### Ranks

|  | Sex   | N  | Mean Rank | Sum of Ranks |
|--|-------|----|-----------|--------------|
| It is important to him to make                                   | Man   | 34 | 43,10     | 1465,50      |
| his own decisions about what<br>he does. He likes to be free and | Woman | 47 | 39,48     | 1855,50      |
| not depend on others.  | Total | 81 |           |              |

#### Test Statistics<sup>a</sup>

|                        | It is important to him to make his own decisions about what he does. He likes to be free and not depend on others. |
|------------------------|--|
| Mann-Whitney U         | 727,500  |
| Wilcoxon W             | 1855,500   |
| Z                      | -,701  |
| Asymp. Sig. (2-tailed) | ,483   |

a. Grouping Variable: Sex

HO: "It is important to him to make his own decisions about what he does. He likes to be free and not depend on others" distribution is equal for women and men

P = 0,483, therefore H0 accepted