ISCTE ◈ Business School
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THE IMPACT OF ATTENTION ON WINES' PURCHASE INTENTION:
THE MODERATING ROLE OF AWARDS AND CONSUMPTION SITUATIONS

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- Spine -

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ABSTRACT

On every supermarket shelf, wines compete for consumers' attention, which is decisive in consumers' final choice. This investigation aims at clarifying the impact that wines' labels have on individuals' attention and how that can determine purchase intention. Simultaneously, it is evaluated the impact and the role that quality perceptions and desire have on inducting purchase behaviors. Besides, it is investigated the role of wine awards and the consumption situation as moderators of such relationships.

Thirty-nine individuals participated in an experiment based on a 2 x 2 design (awarded/not awarded x self-consumption/social-consumption). For each scenario individuals' attention, perceptions of quality, desire and purchase intentions were recorded.

Data from eye-tracking shows that, the amount of attention given to a bottle is determinant of individuals' purchase intentions, a relationship that increases in significance for bottles with awards and for when consumers are buying wine for a consumption situation involving a social environment. Also, both quality perceptions and desire were confirmed to positively influence wines' purchase intentions.

It was verified that attention moderates the relationship between quality perception and purchase intention in the case of awarded wines.

Nevertheless, for self-consumption situations, desire is more determinant for purchase intentions, while for social consumption situations quality perception is more significant, due to the increased weight that individuals give to quality when buying for those situations.

By using an eye monitoring method, this thesis brings fresh and new insights to the wine industry by highlighting the impact that wines' labels and different consumption situations have on individuals' attention and purchase intention.

Keywords: Wine; Eye-tracking; Wine Awards; Consumption Situation

JEL Classification

M30 – General

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RESUMO

Em qualquer prateleira de supermercado, diferentes garrafas de vinho competem pela atenção dos consumidores, a qual é decisiva na escolha final dos mesmos. Esta investigação visa esclarecer o impacto que os rótulos dos vinhos têm na atenção dos indivíduos e como esta, a perceção de qualidade e o desejo podem determinar a intenção de compra. Simultaneamente, é avaliado o papel que os prémios e as situações de consumo têm como moderadores de tais relações.

Trinta e nove indivíduos participaram numa experiência, baseada num desenho 2 x 2 (premiado/não premiado x consumo-próprio/consumo social). Para cada cenário, a atenção, perceção de qualidade, desejo e intenção de compra foram registados.

Os dados recolhidos através de eye-tracking evidenciam que a atenção dada a uma garrafa é determinante na intenção de compra do indivíduo, a qual aumenta no caso de garrafas com prémios e quando os consumidores compram para uma situação de consumo social.

Verificou-se ainda que a perceção de qualidade e o desejo influenciam a intenção de compra de vinho e que a relação entre esta e a perceção de qualidade é moderada pela no caso de vinhos premiados.

Para situações de consumo próprio, o desejo é mais provável de determinar a intenção de compra, enquanto que para situações de consumo sociais a perceção de qualidade é mais importante.

Através do uso de um método de monitoramento ocular, esta dissertação traz novos conhecimentos à indústria do vinho, colocando em evidência o impacto que a presença de prémios e as diferentes situações de consumo têm na atenção e intenção de compra dos indivíduos.

Palavras-chave: Vinho; Eye-tracking; Vinhos Premiados; Situação de consumo

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1. INTRODUCTION

Historically perceived as a beverage of the wealthy and the elite of society and used for religious purposes, the production and consumption of wine has always been deeply present in the World. Notwithstanding, it was one of the first goods to be traded beyond national borders, establishing the preliminary roots for what it is still today a very profitable business (Bisson, Waterhouse, Ebeler, Walker and Lapsley, 2002; Orth, Lockshin and D'Hauteville, 2007).

Since its early days, wine's quality was measured as a function of its origin and the vineyard in which it was produced, sold in the proximity of those or otherwise exported to aficionado wine drinkers worldwide (Bisson *et al*., 2002; Orth *et al*., 2007). Today, that picture has changed. Intended at satisfying an upper global demand for the product, the small and traditional character associated to wines' production and marketing has been abandoned. Wine is now sold across the globe through different retailers and it is possible to assist to a growing displacement of wine professionals' focus towards a more management and marketing oriented and not as much focused on viticulture and enology, as it used to be (Orth *et al*., 2007).

Nonetheless, the global contours of todays' wine industry were and are due to a progressive evolution and disrupt in geography. Up until the late 90's, the wine market was mostly dominated by Western European countries namely France, Italy, Spain, Portugal and Germany. These so called "Old World" (OW) countries were responsible for the large bulk of production and consumption of wine in the World. Yet, more recently, this frame has acquired a new outline, laid on the emergence of "New World" (NW) wine countries – Australia, USA, Chile, Argentina, South Africa, New Zealand–, which production, consumption and exportation volume is not of small significance and has contributed to boost wine international trade (Barrena and Sanchez, 2009; Mariani, Pomarici and Boatto, 2012; Orth *et al*., 2007). Moreover, and contrarily to the "Old World" countries, the latter have been imposing new consumption patterns – for example, while in France wine marketers' effort is focused on conquering the more young and feminine segments of the population, in the USA the big concern is in addressing older generations and in attaining a more masculine imagine to wine, evidencing how wine consumption can differ according to distinct cultures (Orth *et al*., 2007).

The emergence and acquaintance of a more active role in the wine industry from these new wine producers and consumers have also altered the way marketing strategies used to be

designed, which have radically moved from the typical enhancement and highlight of the place of origin to focus on distributing quality wines at attractive prices, in line with consumers' preferences and tastes and in the design of promotional activities to increase brand and grape variety awareness (Barrena and Sanchez, 2009; Orth *et al*., 2007). Consequently, the competition in the wine sector has become fiercer than ever and the European wine market has been the one to suffer the most, registering a constant decay in terms of wine consumption over the past years (Barrena and Sanchez, 2009). Still, the designation of origin continues to be one of the attributes impacting the most the consumers choice and their purchase intention, and as such it continues to be an element deeply present in wine marketing strategies (Aranda, Gómez and Molina, 2015; Barrena and Sanchez, 2009; Batt and Dean, 2000; Johnson and Bruwer, 2007).

According to the literature, the wine consumer itself has also been changing as well as its consumption patterns. More knowledgeable and demanding, evident in his preference for high quality products, wine consumers have been imposing constant adaptations from the industry (Bisson *et al*., 2002). Additionally, it appears that there is a growing preference for drinking wine outside home, breaking the old wine role connected with the Mediterranean diet, but in a more infrequent basis (Barrena and Sanchez, 2009; Treloar and Hall, 2004).

Barrena and Sanchez (2009) revealed the symbolic and emotional dimension that arises from the consumption of wine and how it may help shaping different consumers' profile. More than their knowledge of the product, the authors found out that Spanish consumers' choices can be as well affected by consumers' knowledge of themselves. Reportedly, younger segments tend to give more importance to a wine's prestige value and how it can heighten one's social status. Oppositely, for older consumers, wines' value resides on its social catalyst character, helping them to interrelate and evoke old and nostalgic moments (Barrena and Sanchez, 2009).

However, and regardless the culture, age or demographics, one could state that the true essence of wine, and the reason underlying this product success around the globe, lies on the product's ability to create pleasant and enjoyable sensory experiences (Bisson *et al*., 2002). Above all, that is what consumers look for when buying a bottle of wine.

Nevertheless, an important issue remains to be discussed: the quality control's shift from the producers to the consumers. In the past, a wine's quality was controlled by producers, and consumers felt uncultivated or unsophisticated if they didn't like a specific wine. Yet, today societies are characterized by increasingly informed and knowledgeable consumers, who know what they like and what they want. Thus, and in the words of Bisson *et al*. (2002: 696)

"*a wine producer in the twenty-first century requires a thorough appreciation of human behavior and product choice*".

Beyond the intrinsic quality of the product, or, in other words, a wine's flavor and smell, consumers are also influenced by the extrinsic quality of it: the package, label, origin, price, etc. These multitude of attributes that can influence one's perception of quality and impact choices and judgment decisions thereafter aggravates producers job in marketing their products. Notwithstanding, there is also an increasing concern with health and the purchase of sustainable products, which is predicted to add an extra complexity to the production and distribution of wine (Bisson *et al*., 2002).

Considering that a single bottle of wine is characterized not only by a wide diversity of attributes but as well by how each attribute/category may vary within itself it is not a surprise that wine is considered one of the most complex product-categories in the market. As a result, it is possible to find thousands of different wines in the market, which adds confusion as well as doubt and risk in how the product should be marketed. To surpass such barrier, there is urgency in investigating and understanding how consumers react to different marketing stimuli, which of those have a higher weight in their purchase decision and how producers' business strategies should be designed.

Despite the ups and downs or the radical transformations that have been shaping the global wine market, at a slower or higher rate, the industry continues to grow, both in terms of value and volume. Indeed, on a 15 years temporal space, international wine trade raised by 75% in volume and doubled in value (Pomarici, 2016).

According to data from MarketLine, countries from the Asia-Pacific region - China India, South-Korea and Singapore - were the ones that contributed the most for the market's global growth in recent years (Marketline, 2017). In fact, these new-comers are starting to learn about wine as a product and introducing new ways to drink it. Nonetheless, the economic recovery in certain key wine markets, particularly in the Western Europe, was as well a major determinant for the boost in wine volume growth in the region (Passport, 2017). The region also benefited from the shifts in consumption preferences. For example, in Spain, consumers are increasingly concerned for quality cues, in which the designation of origin emerges as the most important. On the other hand, the increasing desire for local products have boosted the niche market of fortified wine and vermouth in Portugal (Passport, 2017).

Wine consumption has in fact been increasing throughout the years worldwide. However, Western Europe is still the region that registers the highest consumption per capita - in 2016, Europe accounted for 48% of the global wine market value, followed by the Asia-Pacific

region, responsible for 29% (Marketline, 2017). The persistence of Europe as the leading country in terms of wine consumption may be justified as well by the fact that it has a well-established wine market and that alcohol consumption is strongly rooted in its culture (Marketline, 2017). Nonetheless, a vast number of reports on the industry anticipate and forecast a positive growth of the global wine market, both in terms of value and volume.

Worldwide hypermarkets and supermarkets are the preferred and the most used distribution channels to purchase wine (Marketline, 2017; Zidda, Haert and Lockshin, 2008). However, wines can vary in numerous attributes and aspects. In fact, wines can be still or sparkling, may vary in type – red, white, green or blush -, in its ingredients or even its acidity/sweetness. Additionally, the country, region, vineyard and year in which they are produced can as well vary substantially and emerge as a differentiation factor, as well as the brand-name or price. Together, all of these factors result in a tremendous assortment of distinct wines available to the consumers, and thus perpetuating the question of how a producer/company can differentiate its products in an over-crowded shelf. For that to happen, it is crucial a clear understanding of consumer behavior. In that sense, the marketing field has suffered an astonishing evolution in recent years and is evolving towards a greater understanding of how consumers react and behave according to the most diverse stimuli, by seizing techniques that grant a more reliable and accurate picture of how the human being's cognitive system can process information coming from all five senses (Guerreiro, Rita and Trigueiros, 2015; Laeng, Suegami and Aminihajibashi, 2016; Liao, Corsi, Chrysochou and Lockshin, 2015; Ridgway, Dawson and Bloch, 1989).

For years, marketers have been using sensory stimuli to influence and activate purchase, by triggering an imaginary sensory experience (Elder, Schlosser, Poor and Xu, 2017). For example, Pantene, a shampoo brand, encourages consumers to think and imagine how their hair will look like after using the brand's products, by incorporating in its slogans subtle cues that trigger an imagined experience – 'Hair so healthy that it shines'. The birth of neuromarketing have been further sustaining and exploiting these strategies and it has authenticated the existence of visual, gustatory, auditory, haptic and olfactory imageries by unveiling the impact that sensory imagery has on the brain's activity and how it resembles the sensory experience (Elder *et al*., 2017).

Applying the contributions of neuroscience into marketing becomes indeed valuable to accomplish a better knowledge and sense of how consumers behave and to what they react to in any industry or market, tools that increase in value when applied to studying for example the wine market, strongly perceived and characterized by a vast complexity.

"Wine is a beverage. Wine is a socialization tool or a way to celebrate an event. Wine tells us about the history and culture of a country. Wine is a symbol of prestige." (Lockshin and Corsi, 2012: 16), still, different from other products, the consumption of wine can almost be compared to the consumption of aesthetic products. It has the power to evoke and trigger both an emotional reaction, linked with pleasure and enjoyment, as well as a cognitive response, reflected in the capacity of evaluating its quality (Charters and Pettigrew, 2005).

Thus, at the purchase moment, the consumer tries to develop a sense and feeling of how a specific wine will better suit his needs and preferences to assist him in his final choice (Durrieu and Bouzdine-Chameeva, 2008). Acquiring a deeper insight of what are the underlying stimuli of consumer's behavior and what triggers and influences their choices continues to be determinant for an effective marketing strategy and remains crucial in the field of wine marketing (McCutcheon, Bruwer and Li, 2009).

The inherent complexity of wine as a product, justified by the bulk of brands competing in the market, the fact that its production is highly dependent of natural and uncontrolled conditions, which may conditionate quality and supply, an extensive roll of cues and attributes that influence its purchase and the singular consumer behavior that characterizes this category, claim for further research and investigation on product behavior choice.

In this sense, it is beholden that consumers' perception of quality and liking of a certain product is key in influencing and determining their choices. Quality by itself comprehends a multitude of aspects, intrinsic and extrinsic, that act together in modelling consumers' expectations (Jover, Montes and Fuentes, 2004). However, to which regards food products, and, in particular, wine, individuals are obliged to judge its quality through extrinsic cues, considering their inability of tasting the beverage at the purchase moment. Simultaneously, individuals' decision-making process is embodied with a considerable degree of complexity, being composed by distinct steps and influenced by many sources of information. Regardless, it has been acknowledged that individuals' beliefs on which product better suit their needs is attached to the mutual concurrence of ones' affective and cognitive system (Ng, Chaya and Hort, 2013).

1.1. RESEARCH PROBLEM

Most buying decisions are made while shopping and in a split of seconds, without much thought or consideration (Russo and Leclerc, 1994). However, and the previous sneak peek on the evolution of the wine industry and the key aspects associated to wines' sales, made

possible to realize the arduous process through which consumers go by while purchasing wine.

From the multitude of cues and situational aspects that can influence choice and wines purchase intention such as the production region and year, brand, price, package, smell, taste, etc., the wine's label is considered one of the most important ones, given the array of information that provides and its capability of attracting and suggesting sensory experiences and the wines' quality. Liking a wines' label may be the first step in determining wine choice, it has the ability to suggest *"beauty, taste and satisfaction"* (Laeng, Suegami and Aminihajibashi, 2016: 329), and it is also crucial on the formation of quality expectations and on triggering desire to acquire the product. As such, it is possible to state that the decision-making process associated to the purchase a bottle of wine is highly guided by visual cues, which leads us to conclude that individuals' visual attention may play a huge role in the buying-process.

Indeed, visual attention is critical throughout the buying process and its analysis can be reflective of consumers' attention, information seeking and brand choice (Pieters and Warlop, 1999) and thus relevant for a better application of marketing efforts.

So far, most research on the antecedents of wine purchase, and specifically about wines' labelling and packaging, relies upon questionnaires in which participants are asked to evaluate a certain statement, according to their opinions and beliefs, typically in a Likerty type scale (Corduas, Cinquanta and Ievoli, 2013), interviews and focus groups (Charters and Pettigrew, 2007) However, these measures are based on the assumption that people are honest and capable of describing their own cognitive process, which is not entirely true given that the decision-making process is often influenced by a number of subconscious components, unaware to the individual and as such may lead to biased conclusions. Consequently, little attention has been given to the autonomic reactions that emerge as a consequence of environmental stimulus and how those may be reflected in ones' purchase intention likelihood and the ones that have tried to do it are still scarce and of little dimension (Lockshin and Corsi, 2012).

This research intends to integrate in a single model the impact that wines' labels have on the formation of quality perceptions and desire and how those are reflected on individuals' attention level and ultimately on their purchase intention. Simultaneously, it is investigated the role of wine awards and the consumption situation as moderators of such relationships.

To do so, it is considered that the usage of neuromarketing techniques and measurements are the most reliable way to measure individuals' autonomic reactions as the one of attention.

As such, this investigation uses a high-end eye-tracking equipment to gather objective data on how consumers view and process a visual stimulus. According to Rebollar *et al*. (2015) it is a low invasive technique that allows the researcher to get a vision of individuals' unconscious mechanisms when viewing a products' label.

1.2. DISSERTATION FRAMEWORK

So far it has been highlighted the development of the wine sector across the years and its constant growth throughout the same, as well as the main research problem and objectives of the present investigation.

Following it is briefly reviewed the literature existent on the subject, with particular emphasis on consumer behavior and the relevance of deepening one's knowledge on it, particularly concerning the purchase of wine. Then, it is reviewed the literature on some of the most relevant drivers in shaping individuals' perception of wine quality - wines' packaging and label, region of origin, presence of awards and price - as well as on some situational and individual factors that may interfere in the decision-making process, such as the product-use situation or the perceived risk. Moreover, this chapter also explores the role of attention on consumer behavior and decision-making.

Afterwards, it is modeled the research framework and articulated the respective hypotheses, which are leveraged on the previous literature and constructed under the beliefs of the S-O-R theory. This framework was considered the one that best suits the purpose of the investigation, since it internalizes how individuals' responses and behaviors towards a particular environmental stimulus is mediated by an internal organismic activation, either consciously or unconsciously.

Further, the investigation continues with a description of the methodology used. Since the research relies upon a sensorial method, it is given great attention to this chapter, in which it is not only described the specifications and advantages of the method but also what steps were taken to ensure the most valid results

The dissertation ends with a detailed analysis and discussion of the results using a PLS-SEM approach, which are thoroughly reviewed and bring new insights taking into account the existent literature. On a final note, a conclusion is presented where it is acknowledged some inherent limitations of the research as well as suggestions for further research on the topic.

2. LITERATURE REVIEW

2.1. THE WINE INDUSTRY AND ITS RELEVANCE

Wine is an exquisite commodity, deeply rooted in the culture and heritage of some countries and increasingly acquiring a significant role in the culture of others. Such beverage has been subtly conquering consumers' hearts and placing itself as a drink of preference among them, which, adding to the complex nature that characterizes it, makes wine such an interesting topic to study. Notwithstanding, wine's sensory and emotional character has been highly recognized in the literature, and its appreciation and enjoyment has been slightly compared to the appraisal of aesthetic art forms (Charters and Pettigrew, 2005).

For years that it is being recorded a strengthening and intensification of the competition in the wine sector, such that a massive number of both national and international players characterizes the global wine market, which in turn is pushing the beverage to the top of the most consumed drinks in the word (Dal Bianco, Boatto, Caracciolo and Santeramo, 2016).

The global wine market panorama has suffered some important and key determinants changes throughout time, and what used to characterize the world wine market is not the same anymore. Simultaneously, the increasing consumers' expertise on the category had turned them more demanding and more eager for quality (Bisson *et al.*, 2002).

Traditionally, a few European countries, namely France, Italy, Spain, Portugal used to control and dominate most of world's wine production and consumption, a position that was challenged and obliged them to restructure their production and marketing strategies with the emergence of the so called "New World" (NW) wine countries, such as the USA, Australia, New Zealand, Chile, Argentina and South Africa (Morrison and Rabellotti, 2017).

According to Morrison and Rabellotti (2017: 423) "*what triggered the initial success of NW wine producers was a combination of changes in the international market concerning the main traditional consumers, the opening of new opportunities in countries where wine traditionally had not been widely drunk, and a revolution in the distribution system*". In fact, the consumption fall in traditional wine producing countries, where wine used to be perceived as a beverage simply best suited for accompanying a meal, and where price was more important than quality, the growing demand for wine from new and inexperienced consumers worldwide and the appearance of a network of improved distribution channels, were determinant for the raise and establishment of those countries in the global wine industry (Morrison and Rabellotti, 2017).

Due to its strong roots in winemaking, for a long period, some European countries controlled, almost completely, the wine industry, recording, in the 1960's, 63% of the total

wine produced in the world (Morrison and Rabellotti, 2017). It was a period portrayed by broad and steady national markets, where most production was absorbed domestically. Yet, later on, the combined decay of consumption in those countries along with the emergence of "New Word" wine countries, as the United States, Australia and Chile, resulted in a more competitive global market, in which consumers strived for quality (Bisson *et al*., 2002; Morrison and Rabellotti, 2017).

The shift towards a true appreciation of wine and its intrinsic quality induced a search for more expensive and finest wines both in the US market as well as in the European one, which, even though have helped to decrease consumption in terms of volume, the same did not apply when observed in terms of value (Morrison and Rabellotti, 2017).

Along with an increased search for quality, the discovery of wine's health benefits was as well determinant to boost consumption worldwide. Since 1991, scientific investigations into disclosing the power of wine as a mean to prevent several common diseases are increasing. Due to its natural antioxidants, a moderate consumption have also proven to be helpful in increasing infections' resistance (Bisson *et al*., 2002).

After decades of diminishing market share, since the mid-2000s, Old World countries have been recording an increase, in value, of their exports and reversing the described situation. For Morrison and Rabellotti (2017) this is the result of a careful investment in new technologies and in the modernization of processes and marketing strategies. Thus, in the current days, the disparity between Old and New World countries has started to narrow down. Yet, one should not disregard the increasing significance of Asian countries in the international wine market, particularly the Chinese market, which has been recording an outstanding increase of its domestic consumption. Even though it still has a low per capita consumption, the same does not apply to total domestic consumption, which, in fact, in the last decade, has grown faster than in any other country (Morrison and Rabellotti, 2017).

Currently, there is an increasingly focus on marketing wines by enlightening their quality, while, at the same time, offering them at an affordable price. Indeed, wines' prices can go from a few dollars to hundreds or thousands of dollars. However, and regardless the price, a common dominator motivates consumers' wine purchase – the search for a pleasurable sensory experience -, which starts to be built as soon as the purchase moment (Charters and Pettigrew, 2005).

There is extensive evidence in the literature with respect to how individuals' purchase intention can be influenced and motivated by their autonomic behavior (Barrena and Sanchez, 2009). Thus, comprehending how products' design and marketing strategies, and in particular

those of wine, can evoke those and impact consumers' final choice is a topic of extreme importance to a better suitable differentiation strategy, especially when considered that the bulk of wines' sales is generated by supermarkets and discount chains – the distribution channel of election in what concerns wines' purchase (Barrena and Sanchez, 2009).

2.2. UNDERSTANDING CONSUMER BEHAVIOR – WHY IS IT IMPORTANT?

Understanding consumer behavior and its branches is of critical importance and significance for any company or industry. The weight that it possesses in the marketing area is vindicated by the vast spheres in which it touches. Indeed, consumer understanding lies on the bottom of any good marketing strategy.

Contrary to what once was thought, consumer behavior is beyond the simple interaction between consumers and their purchase of goods and/or services. In truth, it encompasses an array of distinct and largely influential variables that interact with each other and are present during the whole buying course (Hall, Lockshin and O'Mahoni, 2001).

Comprehending which variables are significant for each product category, why and how they interact and what is their relative weight in the purchasing decision can help to the construction of a profound knowledge on what influences consumers' purchase intention, which consequently ends up impacting the way marketing strategies are designed. To sum up, as better as it is the understanding of consumer behavior, better will be the grounds to support future decisions on sales and supply chain management, promotions, etc. (Lockshin and Hall, 2003).

Nevertheless, to reach such knowledge, an additional idea becomes important to introduce and scrutinize. Indeed, a full analysis of consumer behavior comprehends the concept of perception, which, accordingly to Berčík *et al*. (2016: 97) is resumed to the "*process where the individual selects, organizes and interprets stimuli into a meaningful and continuous image*", it is, mostly, an unconscious process by which the consumer will interpret and even distort the stimuli received in his path of purchasing a product. Accessing the 'hidden responses' of the buyer, through the use of neuromarketing methods, consent the design of a thorough mapping of his behavior.

The area in question conquers a prominent interest when applied to the wine industry. Produced, sold and consumed all across the globe, wine, in terms of purchase decision, is considered one of the most complex products existent in the market (Lockshin and Hall, 2003). In one of their articles, Lockshin and Hall (2003) go as far as comparing wines'

complexity as a product to the automobiles sector, pointing as the only difference the fact that wine is purchased on a more recurrent level.

2.3. PERCEIVED QUALITY

Understanding which product characteristics lead to a higher quality inference in the consumers' mind is a powerful tool to design more suitable marketing strategies. In the words of Lawless (1995: 196) *"quality is bound to consumer perception, opinion and attitude"* and it is in fact a critical factor involved in consumers' decision process at the buying moment.

However, and despite its relevance and extensive study, it remains impossible to define quality in a single and unique concept or in reaching a consensus on how it can be measured (Lawless, 1995). In fact, it is possible to find several perspectives in the literature regarding this concept.

Traditionally, quality is defined as a unitary characteristic, determined by market performance, and that influence buyers' acceptance level (Lawless, 1995).

Zeithaml (1988), following the work of several authors, separates the concept into two domains: objective and perceived. The first refers to the verifiable and assessable technical superiority or excellence of a product/service, while the second is dependent on each individuals' judgments and assessment of that same excellence based on pre-determined notions or standards.

Ophuis and Trijp (1995) explore the concept of food quality in an integrated approach, considering aspects as perception, product, person and place/context as determinants of the overall perceived quality. The authors reiterate that quality is dependent both on the product objective characteristics but also on the person that is evaluating them or the consumption-context to which the product is bought.

Perceived quality is usually pinpointed as having a more active role in influencing consumers' purchase intention (Richardson, Dick and Jain, 1994), which justifies its importance for the current study.

In order to evaluate quality, consumers need to have at their disposal an array of cues capable of signing the excellence of the product, thus the process of quality perception may be interpreted as comprising two stages: before consumption, in which it is formed a quality expectation, and upon consumption, when quality performance is evaluated. Both formed on the bases of quality cues and attributes (Steenkamp and Trijp, 1996).

Indeed, prior to consumption, consumers use the informational stimuli available to judge quality, based on the belief that they are a good indicator of the actual's performance of the

product. This quality cues are distinguished between intrinsic and extrinsic. Intrinsic cues are the ones that are an integrative part of the product and impossible to change without affecting the physical product, it can be the products' appearance, color, shape, size, among others. On the other hand, extrinsic cues are usually linked to marketing efforts, they are related to the product but can easily be changed without physically modifying the product, for example, the price, brand name and production information (Ophuis and Trijp, 1995; Steenkamp and Trijp, 1996; Zeithaml, 1988).

2.4. THE INFLUENCE OF PERCEIVED QUALITY ON PURCHASE INTENTION

Differently from most consumer goods, the wine market is portrayed by an uncountable number of distinct brands, production regions/origins, labels, shapes, types and prices (Mueller, Lockshin, Saltman, and Blanford, 2010), making the consumer's choice unexpected difficult, which will in turn rely on a large variety of cues and other drivers to make a decision (McCutcheon *et al*., 2009).

Quality is one of the main purchasing drivers. However, considering that a wine's quality is affected not only by the grapes variety used or the climacteric conditions of the year in which it is produced, but also by the ageing process utilized or how the bottle is stored (Wiedmann, Behrens, Klarmann and Hennigs, 2014) and that it can only be assessed after consumption, it becomes extremely hard for the consumer to evaluate a wine's quality in an objective manner. Instead, the consumer is obliged to use a varied number of sources of information to infer which one better suits his preferences and/or quality requirements (Spiller and Belogolova, 2016). Those sources may come not only by the consumers' previous experiences (Mueller, Osidacz, Francis and Lockshin, 2010) or knowledge about the product itself or the sector (Charters and Pettigrew, 2006; Dodd, Laverie, Wilcox and Duhan, 2005; King, Johnson, Bastian, Osidacz and Francis, 2012), but also by product related factors (Barber and Almanza, 2006; Mueller, Lockshin, Saltman, *et al*., 2010; Sáenz-Navajas, Campo, Sutan, Ballester and Valentin, 2013; Veale, 2008) and recommendations from reliable sources (Dodd *et al*., 2005).

By applying Ophuis and Trijp (1995) perspective it to the wines' sector is commonly agreed that quality is not only related to the product itself (sensory properties, origin, vintage, …), but also to the consumer as well (involvement level, country of origin, expectations, …). It may be even stated that quality can be dependent on the context in which the product is consumed (Sáenz-Navajas, Ballester, Peyron and Valentin, 2014). However, given that the latter occurs only after the product have been bought, it becomes difficult to the producer to

control it in an advantageous way to itself (Sáenz-Navajas *et al*., 2014). Oppositely, understanding how quality perception may vary according to different consumers and/or the indicators that each one may use to infer quality is a significant competence to acquire, considering that it allows a deeper knowledge of how quality perception is formed and therefore the ability and possibility of being improved.

In what regards the product-related factors, and the distinction between intrinsic and extrinsic factors, it can be stated that, in the case of wine, the first have to be with its flavor, smell, and other attributes that are wiped out once it has been consumed (Sáenz-Navajas *et al*., 2014, 2013), while the second are related with the external features of the product, for example, its origin, the label and shape/color of the bottle, the brand, the price, the presence of awards, etc (Sáenz-Navajas *et al*., 2013).

2.5. DRIVERS OF WINES' PERCEIVED QUALITY

Lockshin and Corsi (2012) state that ones' perception of wine quality is strongly influenced by the large bulk of market information available: price, brand, country/region, packaging/label, awards, etc, raising the question of which of these factors are more relevant and critical to the consumer final choice.

Following, it is discussed in more detailed the impact of the most common factors pointed as influencing consumers' quality judgments and purchase intentions.

2.5.1. PACKAGE/LABELLING

In the words of Mueller at al. (2010: 336): "*the first taste is almost always with the eye*", in fact, it seems to be largely acknowledgeable on the academic and industry network the importance that both the packaging and labelling of wine bottles have as drivers on choice and purchase. Thus, it is possible to encounter extensive research and a wide range of academic papers studying the various label dimensions and the influence that each has on the purchase intention of the consumer.

Although Goodman (2009) concluded that labelling is probably at the bottom of the rank regarding wine choice, recent research suggests the opposite. In fact, a lot of research has been made on the colors, on the use of images/text, on the design of labels and it has been proven the influence that they have on preferences and choices and how they may indicate quality. For example, it was found that to what it concerns the label design, consumers tend to think that a traditional and simple label design is more indicative of a higher quality that one that it is more modern or complex (Lockshin and Corsi, 2012; Sherman, S. and Tuten, 2011).

The same can be applied to colors. The simpler, the better. The basic white and black seem to be the colors preferred to what it concerns wine labels, as well as some warm colors as red and orange, which appear to trigger higher purchase intentions, since they are perceived as indicatives of higher quality as well (Lick, König, Kpossa and Buller, 2017).

Yet, considering that it is the bottle's label that conveys a great information on the wine, through verbal (brand, origin, etc) and visual (images, colors, etc) cues, its impact goes as far as influencing flavor expectations, influenced as well by *"the bottle shape, the type of closure (screw or cork), or price"* (Lick *et al*., 2017: 157).

Notwithstanding, it is increasingly relevant to consider the design and aesthetics of a wine label, which are not only valuable to leave a mark on the consumers' mind and become quicker recalled and recognized on future contacts with the brand (Hansen and Christensen, 2007), but also it has the ability to attract and form positive expectations and preferences (Chrea *et al*., 2011; Rocchi and Stefani, 2005) regarding the product or even to create an instant desire to buy the product (Norman, 2004).

2.5.2. PLACE OF ORIGIN

One cannot disagree that the quality of wine is hugely dependent on the region where it is produced. Thus, it is not a surprise that the information regarding the place of origin, as the country and region, is one of the most important cues affecting wine choice, quality perception and purchase intention (Sáenz-Navajas *et al*., 2013). Indeed, on a study pursued in the Australian wine market, it was found out that the wine's origin was the third most decisive feature affecting consumers' choice/purchase decision (Batt and Dean, 2000), Aranda, Gómez and Molina (2015: 2060) suggest that "*the existence of an indicator of origin elevates the image that a consumer has of a product*", results that have been further authenticated on subsequent studies (Johnson and Bruwer, 2007).

Famularo *et al*. (2010) also suggest that the importance inputted to the wine's region of origin is augmented when the consumer is highly involved and/or has acquired a considerable knowledge of the category and its attributes. Thus, as better acquainted as he is on the differences that exist between regions and production origins, the higher will be the consideration and relevance that he will give to the wine's origin at the purchase moment (Famularo *et al*., 2010; McCutcheon *et al*., 2009) and the bigger the influence in his willingness to buy.

2.5.3. AWARDS

A frequent source of information used in consumers' decision process is the presence of seals or certifications of quality on products' packages. These are typically used as a promotional strategy and intend to pass the idea that the product was certified by third parties in which regards its quality.

Parkinson (1975) revealed that products exhibiting these kind of seals are more likely to be chosen and perceived as more desirable in comparison to products that have none.

When applied to the wine industry, one should notice that wine brands have been increasingly acknowledging the impact that a little medal sticker on its wine's label can do for its image and likelihood of being bought. Indeed, research has shown that the exposition of awards or medals in wine's label is typically perceived by consumers as an indicator of the product's quality, and, for that reasoning, it increases the prospect of its purchase (Lockshin, Jarvis, Hauteville and Perrouty, 2006; Morey, Sparks and Wilkins, 2002; Orth, 2007; Schiefer and Fischer, 2008; Smith and Bentzen, 2011), an argument that increases in validity and reliability when considered the study pursued by Lockshin *et al*. (2009) on the drivers of wine choice, in which the authors stated that medals are the third most powerful influencer affecting choice.

Noteworthily, the distress associated with judging wine's quality is often mitigated by the presence of awards/medals (Schiefer and Fischer, 2008). The justification lays on the fact that consumers know that the existence of those result from the assessment of a group of wine tasters' experts and professionals on the product's quality and thus strengthening their confidence at the purchase moment.

Orth and Kraska (2001) investigation on the estimation of prices for wine exhibition awards, in Czeck Republic, have highlighted the importance that the display of medals, both gold, silver and bronze, have on consumer choice and preferences and how it can vary among different consumer segments. The authors concluded that awarded wines tend to be preferred to non-awarded ones and that the importance of those is significantly higher for low frequent buyers of wine or for convenience-oriented ones (Orth, 2007; Orth and Krska, 2001). Nevertheless, it was additionally found that gold medals are the ones that affect the most consumers' preferences (Orth, 2007), or maybe the only ones doing so (Lockshin *et al*., 2006), and that international awards usually have a higher influence than national ones (Orth, 2007; Orth and Krska, 2001).

Yet, the subject at hand may vary as well in significance when considered the involvement level of the buyer. On this matter, and as expected, Lockshin *et al*. (2006)

evidenced that low involvement buyers, typically described as individuals that possess little interest and knowledge of the product, at the purchase moment, are hugely affected by the presence or absence of gold medals, and that their choice, as expected, will relapse on the one that has these medals. The argument is supported by the fact that these consumers often establish a direct connection between the presence of those and perceived quality. On the other hand, high involvement ones, usually considered to be more acquainted and highly enthusiastic about wine, are more prone to disregard the exhibition of those as a determinant factor on their choice (Lockshin and Spawton, 2001).

Moreover, wine exhibition medals not only affect choice, but it may even affect consumers' willingness to pay for a specific bottle of wine, which will indeed increase in the case of the presence of an award. However, and according to the literature, this may not be true in the case of multiple awards or fictitious (awards in which consumers do not trust) ones, especially for highly involved buyers (Neuninger, Mather and Duncan, 2016). Neuninger *et al*. (2017) investigation on consumers' use of wine awards brought valuable insights regarding the widespread of this marketing communication tool. The authors found out that even though there is an increasing skepticism regarding awards, the tool continues to be used and influencing consumers' choices and purchases regardless their level of involvement.

2.5.4. PRICE

When confronted with the impotence of judging quality through the intrinsic attributes of a product or when upfronted with an uninformed buying situation, price usually steps up as the most common used extrinsic cue to infer quality (Spiller and Belogolova, 2016; Zeithaml, 1988). The case of wine is no different, with an extensive supporting literature on the impact and influence that price has on consumers' wine choice and how it is used as an indicator of quality (Ling and Lockshin, 2003; Lockshin *et al*., 2006; Lockshin and Spawton, 2001).

The influence and weight that price may have on the decision choice may however vary, depending on the future consumption situation and the perceived risk associated to it. For example, if the wine is being bought to be offered as a gift and if there is a high-risk perception associated to it, then it is expected that the individual will choose a more expensive wine that he would normally choose. Oppositely, if the wine is purchased with the intent of being consumed at home, on a more relaxed environment, where the risk of doing a bad choice is lower, then low price will be more important (Lockshin *et al*., 2006).

Moreover, the Lockshin *et al*. (2006) study on the importance of price, region, brand and awards as determinants of wine's choice, arguments that price, as medals, has a higher influence on low involvement consumers purchase intention. According to the literature, highly involved consumers are more prone to cognitively process the information regarding the product they are enthusiastic about, they have pleasure in investigating about the product and to participate in events, such as wine fairs. Thus, their purchasing buying decision is based on more complex cues and attributes that the ones typically expected, as it is example the use of the wine's production region, the vineyard, sales person recommendations or wine writers reviews (Hollebeek, Jaeger, Brodie and Balemi, 2007; Lockshin and Spawton, 2001).

Oppositely, when consumers' knowledge of the product category is not significant or when there is not an autonomous interest in learning about wine or relating to it in a meaningful way, it is expected that the sources of influence will happen mostly at the point of sale. Not surprisingly, these consumers, the low involvement ones, are more likely to rely on cues such as price, packaging and brand to base their choice on (Hollebeek *et al*., 2007; Lockshin and Spawton, 2001).

2.5.5. PERCEIVED RISK

Notwithstanding, the wine choice is usually attached to a certain level of perceived risk, which in turns conditionate one's buying behavior. As confirmed by Outreville and Desrochers (2016), the greater the perceived risk, the lower will be the consumer's willingness to buy the product.

These risks may arise from a large spectrum of motives and exert different levels of insecurity and fear on consumers, constraining their behavior. Considering the complex nature of wine and the volume of available information at the purchase moment, the wine's choice risk perception is usually driven and associated to the ambiguous and incertitude beliefs in regard to its quality (Outreville and Desrochers, 2016).

In their work, Lockshin and Hall (2003) highlighted four different sources of risks: financial, linked with the actual price of the wine; physical, that may be connected with a potential hungover; functional concerning its taste, and finally, the social one, which can be associated with the fear of "looking bad" in front of family or friends.

Thus, and in an attempt to minor a regretful decision, the large majority of consumers tend to put in practice risk reduction tactics by basing their choices on cues inferred from the packaging and the bottle's label, for example, or from recommendations. Understanding these

risks and the strategies employed by consumers is critical to influence and increase the purchase intention (Outreville and Desrochers, 2016).

2.5.6. CONSUMPTION SITUATION

One of the key determinants of the purchase intention and one that has been proved to influence the weight that a consumer assigns to each product attribute is the situation/occasion to which the wine is purchased for (Hall *et al*., 2001). Thus, wine buying behavior will suffer adjustments accordingly to the expected consumption situation of the product. Likewise, the product attributes considered and their relative weighting in the purchase decision will be hugely dependent of this particular issue.

According to Hall *et al*. study (2001), to what concerns the consequences of a purchase, and in the particular case of wine, quality and occasion have a critical role in terms of wine choice, being price, taste and variety (red or white wine) the more frequently used attributes to base choice, considering the consumption situation. Moreover, the product-use situation affects one's variety seeking behavior as well. For example, if a consumer is purchasing a wine for a business-related occasion, he is more likely to take a "safe" option and go for one that he already knows and is certain that it is of high quality. Oppositely, if he is buying a bottle of wine to drink wine alone, where the risk of a bad choice is substantial lower, then he is more likely to adopt an 'adventurous' attitude and choose a wine that he doesn't know much about (Hall, *et al* 2001).

The weight of this variable is of no small importance, and it affects, in a great scale, ones' purchase intention and choice. Sherman and Tuten (2011) concluded that consumers are likely to spend 200 percent more in a bottle of wine if the motivation behind it is to offer it as a gift than if it was to be consumed at home, evidencing the significance that it is given to the variable in question.

2.6. ATTENTION'S ROLE ON CONSUMER BEHAVIOR

Most researches on consumer behavior and on how different stimuli affect individuals' decision making are usually based on questionnaires (Corduas *et al*., 2013), or interviews and focus groups (Charters and Pettigrew, 2007), which reflect individuals' conscious assessment of the target object presented. However, these measures are based on the assumption that people are honest and capable of describing their own cognitive process, which is not entirely true, given that individuals' decision-making process is often influenced by a number of

subconscious components, which the individual itself may not even be aware of (Morin, 2011). In this sense, the rise of consumer neuroscience and neuromarketing as disciplines has never been more relevant or of crucial importance. Supported on the technological evolution and on the consequent development of brand new research methods it became possible to assess individuals' autonomic reactions to an external stimulus. Thus, they are seen as exact, accurate, comprehensive and objective assessments and the starting point to achieve a full and transparent comprehension of how humans' minds function (Poels, 2006; Wang and Minor, 2008).

One of the most popular techniques to exploit individuals' choices-making is the one of eye-tracking, which allows the researcher to collect a large bulk of data on how individuals' attention process occurs in time, detached from the participants' consciousness reporting (Pieters and Wedel, 2004; Wedel and Pieters, 2000).

Attention' role is of substantial importance regarding consumer behavior, considering the limited processing capacity of humans' brain, which is unable to process a multitude of stimuli independently, doing it instead in an interrelated and selective way, which may result in biased activations of the brain visual cortex areas (Kastner and Ungerleider, 2001). In other terms, humans' visual system is powerless in which concerns processing information about multiple objects at the same time, thus, competition for neural representation is frequently biased by bottom-up or top-down mechanisms. Bottom-up attention arises due to the visual saliency of the object, resulting from sensory stimulus, while the latter is manifested as an outcome of individuals' objectives and knowledge (Corbetta and Shulman, 2002). Thus, physiological activation is dependent both of the product features and one's inner feelings as well (Guo, Ding, Liu, Liu and Zhang, 2016).

Based on research methods such as the one of eye-tracking there is evidence in the literature that brand choice can be predicted solely by examining individuals' attention towards it, existing a positive relationship between one and another (Pieters and Warlop, 1999). This may not come as a surprise considering that sight is the primary channel to acquire information on a product and thus influencing future interactions and purchase intentions (Guo *et al*., 2016). Indeed, Kastner and Ungerleider (2000) arguments that visual attention guides information search upon the most relevant stimulus and ultimate is responsible for the individual's final purchase decision.

3. THEORETICAL FRAMEWORK

3.1. S-O-R THEORY

A large part of consumers' buying decisions are made while shopping, which implies that the information and remaining cues available in the surrounding environment have a huge impact in shaping consumers' choices (Russo and Leclerc, 1994). Notwithstanding, there is also evidence that environmental stimuli affects individuals' emotional responses and shopping behaviors (Donovan and Rossiter, 1982; Sherman, Mathur and Smith, 1997).

The comprehension of individuals' psychological responses to external stimuli can usually be summarized and clarified according to the Stimulus-Organism-Response (S-O-R) framework, developed by Mehrabian and Russel (1974). The model highlights the impact that environmental stimuli have on individuals' internal organism – consciously or unconsciously -, and the respective consequences on behavior responses (Eroglu, Machleit and Davis, 2001; Mehrabian and Russel, 1974; Sherman, *et al.*, 1997; Wang and Minor, 2008).

3.1.1. STIMULI

On brief terms, according to Sherman *et al.* (1997: 365), the stimuli dimension can be defined as the *"external factors associated with a pending decision"*, representing both *"marketing mix variables and other environmental inputs"*, which together affect and alter the consumers' internal emotions.

However, in a shopping environment, consumers are affected by a multitude of cues competing between each other to capture consumers attention. The degree of complexity and freshness of the environment is defined by uncertainty or information rate and affects individuals' decision-making while shopping (Mehrabian and Russel, 1974). Existing literature on the theme shows that the higher the complexity of the environment the more aroused and excited consumers will be (Donovan and Rossiter, 1982).

3.1.2. ORGANISM

According to the literature, environmental visual cues can affect both individuals' emotions and cognitions (attention, perception, information search, information processing, evaluations and meaning transfer), which will impact consumers' choice decisions. Thus, Lam (2001) extends the original Mehrabian and Russel's theory, which focuses on three dimensions - Pleasure, Arousal and Dominance - to include the role of attention on purchase behavior.

Given the array of environmental stimuli to each one is constantly exposed and the limited processing capacity of the human to evaluate them independently, attention displays a critical role in consumers' decision-making. Indeed, sight is usually the first scent used to scan the environment and the different stimuli present on it. In its work, Shimojo *et al.* (2003) exposes the role that consumers' gaze has on decision-making, stating that it simultaneously reflects and forms someone's preferences. In other terms, a longer gaze instigates a stronger cognitive process which in turn will lead to preference formation – it's the called "gaze cascade effect". Notwithstanding, and in line with the investigations of Russo (1978), Pieters and Warlop (1999) or Lohse (1997), the authors displayed a significant correlation existing between choice and inspection time.

3.1.3. RESPONSE

Finally, individuals' cognitive process, their attention, determines consumers' approach or avoidance behaviors and responses while shopping (Lam, 2001; Mehrabian and Russel, 1974).

Approach behaviors are positive responses to the environment stimuli. Usually are linked with the desire of further staying/exploring those stimuli as well as higher purchase intentions and willing to expend more in the store (Donovan and Rossiter, 1982).

Oppositely, avoidance behaviors are negative responses to the environment, associated with consumers' reluctance in spending money in the store (Donovan and Rossiter, 1982).

3.2. S-O-R THEORY AS A FRAMEWORK FOR THE CURRENT THESIS

The core purpose of this research is to understand the attention's role in mediating wine's purchase intention. To do so, the S-O-R framework is applied to evaluate the impact that an external stimulus has on consumers' cognitive behavior and how it reflects on their willingness to buy the product.

Throughout the literature review some major drivers of wines' perceived quality were highlighted: package/labelling, place of origin, awards, price, perceived risk and consumption occasion and it was briefly explored and discussed the impact of those on the formation of quality perceptions and on decision-making.

Selling a product is closely dependent of a thorough understanding of consumers perceptions, especially to what it concerns their perceptions of quality. Perceived quality can be synthetically defined as the consumers' judgements and beliefs about a products'

excellence or superiority and, given the abstraction level that embodies, functions as a mediator of what individuals expect from the intrinsic characteristics of the product (Ophuis and Trijp, 1995; Zeithaml, 1988). Nevertheless, perceived product quality has been extensively studied regarding its role on consumers' purchase choices, and studies has the ones of Carman (1990), Boulding *et al* (1993) and Tsiotsou (2006) have concluded that individuals' perceptions of quality are a stronger antecedent of their purchase intentions. In the case of wine, and as reviewed, wines' packaging, and in particular wine labels, are determinant in consumers' decision-making process and usually perceived as the first indicator of the products' quality (Piqueras-Fiszman and Spence, 2015). As discussed in the literature review, the colors, images/text, traditional or modern designs of a wine's label are usually used by consumers to infer quality and have been proven to influence preferences, choices and ones' purchase intention (Lick *et al*., 2017; Lockshin and Corsi, 2012; Sherman and Tuten, 2011).

Besides, wines' labels, due to its design and sensory properties, are also able to trigger aesthetic responses by being capable to attract and suggest sensory experiences as well as the wines' quality (Laeng *et al*., 2016; Rocchi & Stefani, 2005). Indeed, attractiveness has been extensively studied in how it connects and influences quality perceptions, mostly due to the "beautiful-is-good" stereotype (Dion, Berscheid and Walster, 1972). For example, Peters-Texeira and Badrie (2005) concluded that consumers are more likely to purchase a product with an attractive package, given that they infer its quality to be higher. On wines' literature it has also possible to find evidence on how the package improves the exterior image of the product and on how it is a direct reflection of quality.

Bloch (1995) highlights how a product's form and design can lead to positive responses such as an immediate liking of the product, a thought that is explored in other studies as a translation on a stronger desire to acquire the product (Chrea *et al*., 2011; Norman, 2004; Thomas and Pickering, 2003). The investigations conducted by Barber and Almanza (Barber and Almanza, 2006) also concluded that wines' packaging has a direct influence on consumers' purchase intention, as such it is expected that the wines' label, by eliciting an aesthetic response on consumers due to its attractiveness will have the same effect. As such, the following three hypotheses are formulated:

H_1: The higher the wine's quality perception, the stronger it is one's purchase intention

H_2: Desire positively influences quality perception

H_3: The higher the wine's desire, the stronger it is one's purchase intention

Notwithstanding, visual attention plays a major role in the decision-making process, being usually oriented to pleasing stimuli in the environment and simultaneously reflecting and influencing consumers' preferences (Shimojo *et al*., 2003). Likewise, research on the impact that visual attention has on brand choice has shown that products to which is given increased attention, or in other words, the ones that are looked longer, are more likely of being chosen and purchased (Pieters and Warlop, 1999). Additionally, it has been proved that wines' preference is positively linked to how long its label is looked at (Laeng *et al*., 2016) and that the capacity of a product to elicit an aesthetic response encompass stronger levels of attention (Bloch, 1995; Lange, Issanchou and Combris, 2000). However, to what concerns perceived quality, studies on image quality and visual attention have shown that quality perceptions are reflected on saccade duration, which tend to be longer in the presence of lower image quality (Vuori, Olkkonen, Pölönen, Siren and Häkkinen, 2004). Additionally, an investigation on consumers' evaluation of apples with external and internal defects has concluded that apples with defects attracted more rapidly consumers' attention, due to higher saliency, yet did not retained their attention, evident in lower fixations (Jaeger *et al*., 2018). Paralleling this situation with the presence of awards in the wines' labels, it is expected that higher quality perceptions are due to some saliency that draws immediate attention but given that are immediate perceived as having good quality will not fixate consumers' attention for long periods.

H_4: Higher perceptions of quality have a negative effect on attention

H_5: Consumers' wine desire will positively influence their level of attention to the bottle

H_6: The higher the attention to a bottle of wine, the higher it is one's purchase intention of it

From the research existent, it is acknowledged that the presence of awards on a wine's bottle tends to lead to higher inferences on quality and mostly to impact the likelihood of its purchase (Lockshin *et al*., 2006; Mueller, Lockshin and Louviere, 2010; Sáenz-Navajas *et al*., 2013). Besides being more likely of being chosen, there is also evidence that products exhibiting an award are perceived as more desirable in comparison to products that have none (Parkinson, 1975). Lockshin *et al* (2006), while investigating consumer sensitivity towards different wine attributes, concluded that the presence of awards is significant in determining purchasing intention but its importance varies across different circumstances and cues. Thus, it is expected that the presence or absence of quality certificates (awards) can amplify or

weaken the impact that the remaining cues have in determining individuals' choice and consequently their purchase intention, thus acting as a moderator of the relationships previously explored.

> H_7: The results of the previous hypothesis will be stronger on bottles with awards rather than in bottles with none

Wine can also be bought for and consumed in the most wide and distinct situations. Indeed, wine can be bought either so one can drink it alone at home, to take to a social meeting (a dinner with family or friends for example), to offer as a gift, etc. On this matter, Orth (2005) has found that consumer's desired benefits will vary across each consumption situations. Thus, if the wine is bought for an anticipated situation involving a social environment, then quality and social benefits will have a heavier weight than if it is bought for self-consumption, where value for money is more important, for example.

On general terms, for anticipated social environments, the product attributes are more thoroughly analyzed, and the product knowledge and experience have a higher weight, which leads us to conclude the presence of a higher conscious process, which in turns can be translated into a more difficult choice experience.

> H_8: The consumption situation to which the wine is bought for (self-consumption vs social consumption) will moderate the relationships previously articulated

Figure 1 is a graphic representation of the conceptual model built under the literature existent and hypothesis previously articulated.
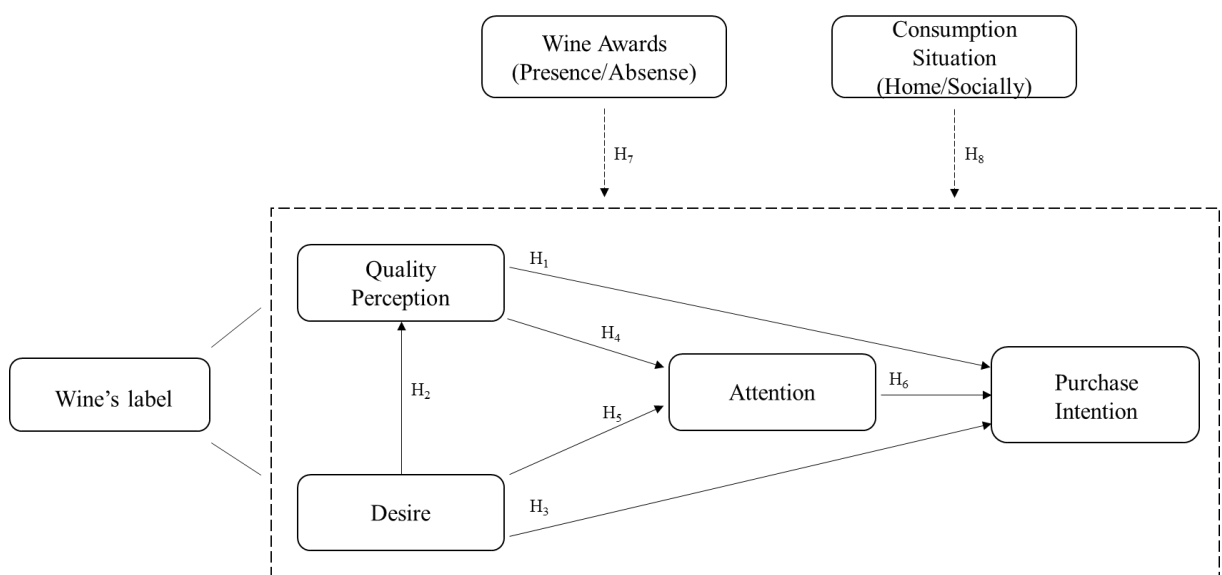
Figure 1 - Conceptual model

4. METHOD
4.1. EYE-TRACKING AS A MEASURE OF ATTENTION

Visual attention is an organismic response that emerges as an autonomic reaction to an environmental stimulus, as such, and to surpass some of the common disadvantages assigned to self-report measures, this research used an autonomic physiologic measure to assess individuals' attention: the eye-tracking.

Eye-tracking is a non-invasive technique which has already been used in a multitude of different studies and has successfully put in evidence the relationship between eye-movement and individuals' attention (Pieters and Wedel, 2004), memory (Krugman, Fox, Fletcher, Fischer and Rojas, 1994; Wedel and Pieters, 2000) and information processing (Kroeber-Riel, 1984; Lohse, 1997).

This method records both the number of fixations and the respective length of an individual's eyes when exposed to an external stimulus.

The usage of this physiological measure had made possible to investigate how different ad elements can capture and transfer attention (Pieters and Wedel, 2004) or how its success may vary with ad familiarity or originality (Pieters, Warlop and Wedel, 2002), how different package designs may influence consumers' buying decisions attention (Piqueras-Fiszman, Velasco, Salgado-Montejo and Spence, 2013; Rebollar *et al*., 2015) or to improve the comprehension of visual search (Lans, Pieters and Wedel, 2008).

4.2. ADVANTAGES AND DISADVANTAGES

One of the main advantages and benefits of using eye-tracking is that it is a method that cuts rationalized and possible bias responses, fruit of extensive and annoying questionnaires and records instead truth autonomic responses, since participants are unable to control their information-acquisition behavior (Meißner and Decker, 2010).

On the opposite side, eye-tracker equipment and devices can only be used on people with no visual disabilities and it may generate incomplete data scan if the participant has contact lenses or long eye lashes (Holmqvist *et al*., 2010). Also, it requires that the equipment and the participant are aligned, which is not always easy to accomplish in a real-world experiment.

4.3. ANALYSIS OF EYE-TRACKING DATA

Eye-tracking devices are the ultimate technique to assess individuals' attention, either under laboratory conditions or in real-world environments, by recording the x/y location and pupil size data, which ultimately are processed into fixations. On simple terms, it allows the

researcher to understand where an individual is looking at and the path and duration of fixations towards a given object/scene. (Duchowski, 2007; Goldberg and Wichansky, 2003).

The data obtained by the system can usually be summarized into graphical representations, for a simpler and better understanding, such as scan paths, heat maps and shadow maps. The first ones – scan paths - connects the distinct focal points to where the individual glanced at and shows the duration of fixation by the size of each circle – the larger the duration fixation, the larger the circle (figure 2).

Figure 2 - Scan path results of attention

Heat maps represents the glance motion of all the participants together by using a color scale, which become darker (red) as the sum of all the glances in the area increases (figure 3).

Finally, on shadow maps longer glances are perceived as the area becomes more transparent (figure 4).

Figure 3 - Heat map results of attention

Figure 4 - Shadow map results of attention

4.4. EYE-TRACKING IN THE PRESENT RESEARCH

Nowadays, most eye trackers work under a pupil-center/corneal reflection method, which is based upon directing an infra-red (IR) light, hidden in a small camera, to one or both eyes, generating a bright pupil effect, since most of that light is reflected back once it enters the retina. Simultaneously, it is also created a corneal reflection such as a small bright glint. The eye-tracking software identifies both - bright pupil and glint - and calculates the distance between the center of the pupil and the glint, which changes only with eye movements (Duchowski, 2007).

Another key aspect when using an eye tracking device is ensuring that the calibration procedure is correct from the beginning, otherwise it may invalidate all data collected from the participant. The procedure guarantees that an individual's eye movements is aligned with the scene limits, preventing a mismatch between both.

For studies using eye-tracking one can use a fixed or a mobile eye-tracker device. The first one – fixed eye-tracker – requires the installation of an infra-red camera embedded beneath the PC's LCD screen and by sending IR signal to the eyes of the participants records their position using pupil/corneal reflection method (Goldberg and Wichansky, 2003). Moreover, it is the software itself that conducts the calibration procedure. On the other hand, one can also use a mobile eye-tracker, which is nothing more than an eye-tracker installed in glasses. Contrary to the first device, these devices allow the researcher to perform studies in more real shopping environments rather than in stricter laboratory environments, which greatly enhances the results' validity (Goldberg and Wichansky, 2003).

This thesis used a mobile eye-tracker glasses from Ergoneers, which allowed the experience to be conducted in a more real environment.

Among the benefits and multitude of analysis that one can do with the software it is highlighted the possibility of defining specific areas for which the glance behavior is of interest, the so-called *Areas of interest* (AOIs), to which fixations are assigned to. The definition of those allows the researcher to better analyze the glance behavior of the participant into key elements of the experience. In this case AOIs were established with resource to markers, placed strategically in participants' area of vision and without interfering with the experience. Those markers were then linked to the objects of interests – the bottles - and the areas were created.

For the purpose of this study, two AOIs were established, each corresponding to one of the bottles, which made possible the collection of data specifically related to those areas, such as: number of glances, mean glance duration, total glance time, AOI attention ratio, maximum and minimum glance, mean fixation and saccade duration. Considering the research objective, the analysis of individuals' attention was solely done with data of each participant's AOI attention ratio, which measures the percentage of glances at the created AOI in a specific time interval.

5. EXPERIMENTAL DESIGN

5.1. PRE-TEST

As stated, considering the multitude of cues that exist in a wine's label and how each and every one of them may influence one's choice and purchase intention it becomes difficult to isolate or control the weight of each. As such, before the main study, some experimental procedures were tested with a separate small sample of participants (n=17) and evaluated and readjusted before the final application.

This first pre-test focused in evaluating the impact of the label in the expected quality and desire of the participants and allowed the researcher to understand firstly if there were not huge discrepancies between the wine's labels and secondly if there was a particular cue influencing more than the presence of the award and not being considered. The test took approximately 5 min per participant and it had 9 female and 8 male participants, where 88% were between 18 and 24 years old.

From the general sample, 35% stated they consumed wine less than once a month, 24% consumed wine once a month, 12% once every 2-3 weeks, 24% every week and finally only 6%, meaning one person from the sample, admitted to have never consumed wine.

Regarding the experiment itself, firstly participants were instructed to look and examine the four bottles, numbered with alphabet letters (from A to D), 2 with awards and 2 without any award, disposed in a way to stimulate a real shelf scenario. They were then asked to fill in a small questionnaire regarding their expected quality of each, what attributes they value the most when purchasing wine and if there was a specific bottle that stand out from the remain.

Participants' perceived quality of each bottle was measured using a 7 Likert-type scale, from strongly disagree to strongly agree, and the items evaluated were adapted from Yoo, Donthu and Lee research (2000): "X is of high quality", "The likely quality of X is extremely high", "X must be of very good quality" and "X appears to be of very poor quality".

The analysis of the rank-based test Kruskal-Wallis displayed that the perception of quality was not homogenous among the bottles (χ^2 (1) = 1.790, p = .000). Moreover, there is evidence from the sample that the perception of quality is higher for the bottles with awards (F2) than with no awards (F1), considering that the difference of the sample means ranks (F1 = 23.37, F2 = 45.63). These results go in line with the answers provided by the participants when asked, on an open question, if there was a bottle that they consider standing out more than the others and why. Indeed, participants highlighted bottles A and D and provided as justification the presence of an award in its labels. It was also referred that these bottles had a

more attractive label, due to its colors and lettering, even though the other two had the same color palette.

To understand which cues were behind participants' assessment of quality they were asked to rank the typical bottles' attributes from the most to the least important. It was discovered that for most participants the presence of awards and the country and region of origin of the wine come first as the most important and used indicators to infer quality, followed by an attractive label and the brand name.

Thus, to minimize influences from factors which are not the focus of the research, it was only chosen red wines from one of the most well-known wine production regions in Portugal – Alentejo, with no significant differences in terms of the production year. The closure of the bottles is the same, varying only in color -red or blue - yet, and according to the questionnaires' results this feature is the one exerting the least influence in the quality evaluation.

One of the factors often pointed out in the literature has a main influencer in the formation of quality expectations is the brand name of the wine, a cue extremely difficult to control. For the experiment it was chosen bottles from less famous brand names to minimize its possible impact. The pre-test made possible to confirm that, with these bottles, this cue was one of the least used to infer quality expectations and it was not a single time mentioned as exerting a considerable weight for a bottle to stand out from the other.

Oppositely, the attractiveness of the label (colors and images) was one of the attributes ranked as most important when buying a bottle of wine. In this respect it should be noticed that the front label of the wines is white in all cases, varying only in its colors and presence of images. However, and as stated, the mention to these attributes was only made concerning the awarded bottles, which is believed to have exerted the higher influence and not as much the rest of the label.

The questionnaire was also useful to conclude that quality and desire have a more important role when the wine is bought to be consumed in social environments (for example, with friends or family) than when it is bought to be consumed alone. This difference is yet more significative in terms of desire, where it was verified that in average people tend to agree that their desire to acquire a bottle of wine is higher when it is bought to be consumed in a social environment and only somewhat agree with the same statement when it is bought to be consumed alone.

Moreover, it appears that the presence of awards increases both the quality perception and desire, considering that the mean score attributed to the items "The presence of awards

positively influences my perception of quality of a bottle of wine" and "The presence of awards positively influences my desire to purchase that bottle" was 5.71 and 5.24 respectively.

Overall, the test allowed the research to confirm that the bottles chosen to use in the final experiment are distinguished mainly by the presence or absence of an award and that the hypothesis formulated have a strong probability of being valid.

5.2. DESIGN AND PROCEDURE

The existing literature regarding the use of automatic physiologic techniques highlights the importance of conducting the experiment under a controlled environment rather than a shop (Guerreiro *et al*., 2015; Lohse, 1997; Pieters and Warlop, 1999; Reimann, Zaichkowsky, Neuhaus, Bender and Weber, 2010). Indeed, in the latter, consumers are more prone to be affected by a range of different stimuli, different from what the researcher is trying to measure which may jeopardize the internal validity of the results. As such, the present study was performed under laboratory conditions to minimize any kind of distractions.

The experiment was designed to test how individuals' attention impact their purchase intention. Participants were asked under four different scenarios which bottle of wine they would rather buy. A 2 x 2 (awarded/not awarded x self-consumption/social-consumption) within-subjects design was used.

To make the study as real as possible real bottles of wine were presented in a shelf-simulation. However, and as already stated, a wine's label contains a lot of information and each one can influence consumers final decision. To control those drivers, only bottles from the same country and region, the same production year, with similar colors, prices and design (impossible to fully control in a shopping environment) were used.

Previous knowledge of the wine's brand, aesthetics preferences or previous usage can impact wines' consumers perceptions and decisions, thus to minimize biased results and attain more robust conclusions, three different pairs of bottles of wine - table 1 and figure 5 - were used and presented to the same number of participants. Each participant was randomly assigned to one of those and exposed to the two different scenarios.

Table 1 - Bundles of wines used in the experience

Monte da Ravasqueira (Awarded) vs Calatrava (Not awarded)
Montinho São Miguel (Awarded) vs Terra d'Alter (Not awarded)
Portal da Vinha (Awarded) vs Monte dos Pegos (Not awarded)

Figure 5 - Wine bottles used in the experiment

Moreover, in the literature there are numerous examples of how price influences individuals' quality perceptions. In fact, it tends to exist a generalized belief that quality will be higher as price increases, meaning that consumers' perception of price will model the overall quality expectation and even its perception, due to the arise of a placebo effect (Kim and Jang, 2013). Therefore, to eliminate any possible bias, prices were displayed alongside the product but with minimum differences between each other, to guarantee that it would not be a critical determinant.

Bottles were identified with two alphabet letters – A and B – which served as markers as well during the questionnaire. The bottles with an award were always identified with the letter A, while the bottles with no-award were always identified with the letter B. Figure 6 shows an example of one scenario.

Figure 6 - Example of the bottles used in the experiment

In the beginning of the experiment all participants signed a consent form and were informed about the technological apparatus, the timeline and procedures of the experiment.

The participants sat approximately 60 cm from the table where the products were presented and were instructed to limit, to the best of their ability, the movement with their heads, due to the equipment's sensibility.

Following the placement of the eye-tracking equipment, the researcher proceeded to a calibration, which involved 3 steps: adjustment of the eye camera such that the pupil of the participant was in the center of the image, limit the area in which the pupil was to be detected and finally participants were instructed to look at four points, such as the corners of a rectangle, glancing from one to another. Finished this process, the wine bottles were then put on the table, guaranteeing that individuals would only start examining it once the experience started. Participants had approximately 35seg to listen to a pre-recorded audio exposing a consumption situation and to examine the bottles in front of them. After that, they were asked about their purchase intention of each product.

At the end, individuals filled in a final questionnaire to access their perceived quality and desire as well as to control for socio-demographic characteristics of the individuals (gender, age, educational level, household income).

Once again, perceived quality was accessed through a 4 items, adapted from Yoo, Donthu and Lee (2000) research, measured on a 7-point Likert-type scale. Desire regarding the aesthetics appearance of the label was evaluated through five different pairs of adjectives, such as in Hirschman (1986) study: not attractive/attractive; not desirable/desirable; not

arousing/arousing; not beautiful/beautiful and does not make me like this product/makes me like this product. All items rated in a scale from 1 to 7, respectively.

Given that all participants had Portuguese nationality both the audio and the questionnaire were translated to their native language.

Table 2 resumes the items that were used as measurements of each construct.

Table 2 - Variables and indicators used in the questionnaire

Variables	Scale	Reference
Expertise in the sector − I know pretty much about wine − I know how to judge the quality of wine − I think I know enough about wine to feel confident when I make a purchase − I do not feel very knowledgeable about wine − I can tell if a bottle of wine is worth the price or not	1 (Totally disagree) to 7 (Totally agree)	(Flynn and Goldsmith, 1999)
Brand knowledge − I can recognize X among other competing brands − I am aware of x − Some characteristics of X come to my mind quickly − I can quickly recall the symbol of X − I have difficult in imagining x in my mind	1 (Totally disagree) to 7 (Totally agree)	(Yoo and Donthu, 2001)
Perceived quality − X is of high quality − The likely quality of X is extremely high − X must be of very good quality − X appears to be of very poor quality (inv.)	1 (Totally disagree) to 7 (Totally agree)	(Yoo, Donthu and Lee, 2000)
Purchase intention − If you bought a bottle of wine, the probability of buying X is − The probability of considering buying bottle X is − The probability of actually buying X is	1 (Very low) to 7 (Very high)	(Grewal, Monroe and Krishnan, 1998)
Desire/Perceived aesthetics − Not attractive/Attractive − Not desirable/Desirable − Not beautiful/Beautiful − Does not me like this product/Makes me like this product	1 (negative perception) to 7 (positive perception)	(Hirschman, 1986)
Attention	AOI attention ratio – Eye tracking	

5.3. PARTICIPANTS

Through posts on social media platforms, a total of 39 individuals (56% male and 44% female) agreed to voluntarily participate in the study. From these, 74% were aged between 18-24, 15% between 25-34 and 10% had more than 45 years old. Most participants (87%) studied on a university level and the majority have a monthly household income of 2001-2500 or 2500-3000 euros. All had normal or corrected-to-normal vision and no monetary incentives were given to anyone for the participation on the experiment.

Individuals expertise on the products' category was measured through five items, adapted from Flynn and Goldsmith (1999) research, in a 7-point Likert-type scale, ranging from 1 (Strongly disagree) to 7 (Strongly agree). Moreover, the alpha coefficient for the five items was .863, confirming a high consistency and reliability of the variable, with a mean of 3.16 and a standard deviation of 1.42, suggesting that most participants did not have a high knowledge of the product category.

A detailed description of the socio-demographic characteristics of the sample is displayed in table 3.

From the sample, and due to poor posture during the experiment, three individuals had incomplete scan-path data, and as such were discarded from further analysis. Therefore, for analysis purposes, only data from 36 participants was considered valid.

Table 3 – Sample demographics

N = 39	Demographics	%
Gender	Male	56%
	Female	44%
Age	18-24	74%
	25-34	15%
	35-44	0%
	>45	10%
Educational level	Compulsory school	5%
	Vocational training	8%
	University level	87%
Household income	<1000	15%
	1000-1500	18%
	1501-2000	10%
	2001-2500	21%
	2501-3000	23%
	>3000	13%

6. RESULTS

6.1. PRELIMINARY CONTROL CHECKS

Brand equity is frequently pointed as a determinant of wine's purchase intention and as an influencer of consumers' evaluation and decision-making (Lockshin *et al*., 2006). Aaker (1991: 15) defines it as *"a set of brand assets and liabilities linked to a brand, its name and symbol, that add to or subtract from the value provided by a product or service to a firm and/or that firm's customers"* and the result of brand loyalty, name awareness, perceived quality, brand associations, and other propriety assets, as such, playing an important role on consumers' choices.

Considering that the experiment was performed with real products and therefore with brands existing in the market, there was a special concern in mitigating the possible effects of brand equity. As such the Yoo and Donthu (2001) 5 items scale was applied to this study and accessed in a 7-point Likert-type scale, from (1) totally disagree to (7) totally agree to check if there were no significant differences in brand awareness among the bottles. According to Kruskal-Wallis rank sum test participants did not show any noteworthy distinction of awareness between the two sets of brands (χ^2 (1) = 2.113, p = .146). Such results allow the researcher to infer that participants were influenced by what they were being exposed at the moment of the experience in a similar way for both bottles.

6.2. STRUCTURAL MODEL TESTING

To empirically test and analyze the conceptual model and the relationship among constructs, this investigation also used a path modelling technique, more precisely the Partial Least Squares structural equation modeling (PLS-SEM) method developed by Wold (Wold, 1981).

PLS is one of the three approaches to Structural Equation Modelling (SEM), a multivariate data analysis method commonly used to examine both observable and unobservable relationships among latent variables (Garson, 2016). Besides PLS-SEM one could also use Covariance-based SEM (CB-SEM) (Jöreskog, 1973) or, the most recent, Generalized Structured Component Analysis (GSCA) (Hwang and Takane, 2004).

CB-SEM is by default the preferred method to confirm or reject theories through testing different hypothesis. Its usually best-fit for large sample sizes, normally-distributed data and with properly specified models, which is not always easy to verify due to the exploratory

character of most studies, where the relationships among variables are not certain (Hwang, Malhotra, Kim, Tomiuk and Hong, 2010; Wong, 2013).

PLS-SEM, on the other hand, emerges as a good alternative to CB-SEM, considering it does not require assumptions about data distribution, is designed for prediction purposes and is able to work with smaller samples (Hair, Hult, Ringle and Sarstedt, 2017).

Considering the exploratory character of the study and that the sample size satisfies the 1:10 ratio for PLS path analysis (Foo, Lee, Tan and Ooi, 2018; Hair *et al*., 2017) it was considered that PLS-SEM was the best tool for the current study. A two-set approach logic was followed: first, a validation of the measurement model (outer model), followed by the assessment of the structural model (inner model), which it was also examined across the presence and absence of awards and the different consumption situations through multi-group analysis (Lee and Hallak, 2018).

6.3. MEASUREMENT MODEL EVALUATION

6.3.1. REFLECTIVE CONSTRUCTS

This research relies on three aspects to examine the outer model (measurement model): internal reliability, convergent validity and discriminant validity, which are authenticated in accordance to the criteria and guidelines as exposed on table 4.

Table 4 - Measurement model metrics

Assessment	Criteria	Guideline	Reference
Item Reliability	Item loadings	> .70	(Hair, Ringle and Sarstedt, 2011)
Reliability	Cronback's Alpha	> .70	(Nunnally and Bernstein, 1994)
	Inner and outer variance inflation factor	< 10	(Hair, Black, Babin and Anderson, 2010)
Convergent Validity	Composite reliability	> .70	(Hair *et al.*, 2010)
	Average variance extracted (AVE)	> .50	(Fornell and Larcker, 1981; Hair *et al.*, 2010)
Discriminant Validity	Fornell-Larcker criterion	Square root of AVE of each latent variable should be greater than the correlations among the latent variables	(Fornell and Larcker, 1981)
	HTMT ratio	< .90	(Henseler, Ringle and Sarstedt, 2015)

One of the indicators of the construct *Quality Perception* (QP4 - "X appears to be of very poor quality") was deleted from the original model due to its low and negative outer loading (below .4 as recommended). The remain outer loadings are statically significant. The internal reliability was confirmed as both composite reliability and Cronback's Alpha values were above the recommended thresholds (table 5). Moreover, indicators' reliability was established as all outer loadings were higher than .7 (table 5 and 6) and every construct AVE was higher than .5. Nevertheless, collinearity among constructs was assessed through the evaluation of each indicator's variance inflation factor (VIF), exhibited on table 8. Since all fell below the threshold of 10 (Hair, Anderson, Tatham and Black, 1995) any problems with multicollinearity among indicators were disregarded.

Finally, and following Fornell and Larcker criterion and the Heterotrait – Monotrait correlation ratios, it was established that the AVE's square root of each construct was higher than the correlations of all other constructs and that each indicator's loading on its own construct was higher than the cross-loading of all other constructs (table 7), hence discriminant validity within the data was confirmed.

Table 5 - Reliability and validity tests

Constructs	Indicators	Outer loadings	α	CR	AVE
Attention	AOI attention ratio	-[a]	-	-	-
Desire	Des1	.92	.94	.95	.84
	Des2	.93			
	Des3	.90			
	Des4	.92			
Purchase Intention	PI1	.97	.95	.97	.90
	PI2	.95			
	PI3	.93			
Quality Perception	QP1	.95	.95	.97	.90
	QP2	.94			
	QP3	.96			

Note: : [a] -single item construct

Table 6 - Cross-loadings results

	Attention	Des	PI	QP
AOI Attention Ratio	-[a]	.05	.25	.02
Des1	.03	**.92**	.28	.44
Des2	.07	**.93**	.40	.59
Des3	.07	**.90**	.20	.32
Des4	.02	**.92**	.37	.56
PI1	.27	.35	**.96**	.36
PI2	.25	.32	**.95**	.39
PI3	.18	.36	**.93**	.38
QP1	-.02	.54	.38	**.95**
QP2	.09	.49	.39	**.94**
QP3	-.01	.54	.36	**.96**

Note: : [a] -single item construct

Table 7 - Fornell-Larcker criterion analysis and HTMT ratios

	Attention	Des	PI	QP
Attention	-[a]			
Des	.05 (.05)	**.92**		
PI	.24 (.25)	.36 (.36)	**.95**	
QP	.02 (.05)	.55 (.55)	.40 (.42)	**.95**

Note: [a] -single item construct; HTMT ratios in the parentheses

Table 8 - Outer VIF values

	VIF
AOI attention ratio	-
Desire1	4.22
Desire2	3.51
Desire3	3.99
Desire4	3.33
PI1	6.61
PI2	5.41
PI3	3.93
QP1	4.98
QP2	4.38
QP3	5.30

Table 9 - Inner VIF values

	Attention	Des	PI	QP
Attention			1.00	
Des	1.43		1.43	1.00
PI				
QP	1.43		1.43	

6.4. STRUCTURAL MODEL EVALUATION

In PLS-SEM the diverse path coefficients that compose the model can be understood as standardized beta coefficients of ordinary least squares regressions. To examine each path coefficients' significance, it was ran a booststrapping analysis using 5000 bootstrap samples and with a significance level of .05. This procedure encompasses repetitive random sampling through the replacement of the original sample to create a bootstrap sample in order to attain standard errors for hypothesis testing. (Hair *et al*., 2011).

A value of .06 for the Standardized Root Mean Square Residual (SRMR) confirms a good fit of the model, since it falls below the recommended threshold of .08 (Hair *et al*., 2017). Nevertheless, the structural model is also evaluated through its R^2 estimates, standardized path coefficients and p -values.

Figure 7 indicates that 30.2% of changes in quality perception can be solely predicted by one's desire of the wine and it confirms that the proposed model predicts a 24% variance in the intention to purchase. However, the R^2 value of attention leads to the conclusion that quality perception and desire, contrary to what was expected, are weak predictors of the changes in this construct.

Additionally, the model's predictive accuracy can also be assessed by running a blindfolding test to get each construct's Stone-Geisser Q^2 value. A Q^2 value larger than zero for all dependent variables (excluding attention) confirms a high predictive relevancy of the constructs, as indicated on figure 7.

Finally, the results shown in figure 7 confirm that desire has a positive and significant impact on quality perception ($\beta = .55$, $t = 11.86$, $p = .00$), thus as stronger the desire for a bottle of wine, the higher will be its quality perception (H_2 is supported). Moreover, it was as well tested if higher quality perceptions ($\beta = .28$, $t = 3.42$, $p = .00$), desire ($\beta = .19$, $t = 2.00$, $p = .04$) and attention ($\beta = .23$, $t = 2.79$, $p = .01$) levels could result in higher purchase intentions. By analyzing the path coefficients and the t-values and p-values of these relationships, which should be higher than 1.96 and lower than .05 respectively, it was possible to confirm their significance, hence confirming hypothesis 1, 3 and 6. Regarding the path from quality perception to attention, results show that there is a negative relationship among the constructs, however, and contrary to what was expected, it is not a significant one ($\beta = -.006$, $t = .06$, $p = .95$). The same happens with the path from desire to attention which was also proved to be nonsignificant ($\beta = .053$, $t = .54$, $p = .58$), therefore hypothesis 4 and 5 were rejected.
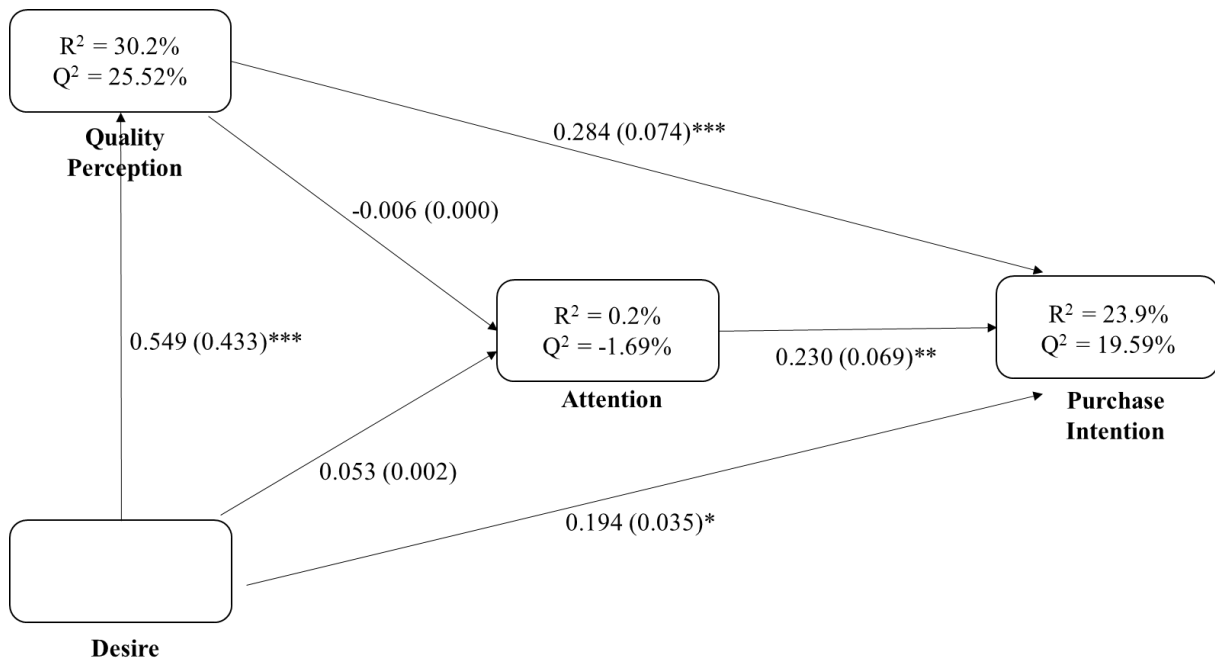
Figure 7 – PLS-SEM results
Note: The ***, **, and * indicate *p*-values less than 0.001, 0.01 and 0.05 respectively. In the parentheses it is indicated the effect sizes (f^2), next to each path coefficient (β)

6.5. MULTIGROUP ANALYSIS

To test the last two hypotheses – H_7 and H_8 - a multigroup analysis was performed to analyze the impact of the moderators of the study (presence/absence of awards and the different consumption occasions to which wine can be bought for) in the structural model.

A PLS-MGA analysis shows how the paths in the model are affected among different groups. In this kind of analysis there aren't any distributional assumptions, however, the test requires that the groups under analysis to have similar sample (Henseler *et al.*, 2015).

According to Henseler *et al.* (2009), at a 5% error level, PLS-MGA results can be comprehended and interpreted through the p values' analysis. If the p value is below .05 or above 0.95, it is possible to confirm that there is a significant difference of a particular PLS-SEM path coefficient among groups, considering that in the first case the bootstrapping results are higher for group one and in the latter the opposite is true. Nevertheless, one should know that PLS-MGA results only provide an explanation on how the relationships of the model change according to different moderating effects and not about mean values.

Regarding the presence of awards in the wine bottles, and as indicated in table 10, the results show that the path coefficient of attention to purchase intention is higher for awarded bottles (β = .39, p = .00) than for non-awarded bottles (β = .05, p = .71). Moreover, it is also verified that there is a significant difference of the presence/absence of awards in the relationship between quality perception and attention, which is more significant when an award is present in the wines' label (β = -.24, p = .05) rather than in its absence (β = .09, p = .41). Finally, the relationship between desire and quality perception is significant in both cases (awarded and non-awarded wines), however, the permutation p-value of this relationship does not allow us to state that the impact of one is stronger than the other, even though it is speculated that the impact in question would be stronger for awarded wines than for non-awarded, given that the permutation p-value is .94, which is almost .95. Overall, H_7 is partially confirmed as it shows that there are some relations that are moderated by the presence of awards.

Table 10 - Structural relationships across the presence/absence of awards

	β Non awarded	β Awarded	*p*-value Non awarded	*p*-value Awarded	$\Delta \beta$	permutation *p*-value
Attention -> Purchase_Intention	.05	.39	.71	**.00**	.35	**.97**
Desire -> Attention	.04	.15	.78	.31	.11	.72
Desire -> Purchase_Intention	.19	.22	.20	.15	.03	.55
Desire -> Quality Perception	.47	.61	**.00**	**.00**	.14	.94
Quality Perception -> Attention	.09	-.24	.41	**.05**	.34	**.02**
Quality Perception -> Purchase_Intention	.32	.28	**.00**	.02	.04	.39

Concerning the consumption situation, table 11 exposes how some relationships are significantly different across different consumption situations. The results show that both the quality perception ($\beta = .36$, $p = .00$) and attention ($\beta = .45$, $p = .00$) influence more one's purchase intention when the wine is bought to be consumed in a social environment than if the intention is of self-consumption, which presents values of ($\beta = .13$, $p = .27$) and ($\beta = -.01$, $p = .93$) respectively. However, if the wine is bought for self-consumption the path of desire to purchase intention is more significant ($\beta = .39$, $p = .00$) than in the other case ($\beta = .03$, $p = .80$). It should also be noticed that desire influences quality perception in both situations, yet no significant difference exists among that difference. Overall, three different paths of the model are moderated by the consumption situation, which partially confirms H8.

Table 11 - Structural relationships across different consumption situations

	β Self-consumption	β Social envrionment	*p*-value Self-consumption	*p*-value Social environment	$\Delta \beta$	permutation *p*-value
Attention -> Purchase_Intention	-.01	.45	.93	**.00**	.46	**.99**
Desire -> Attention	.09	.02	.45	.87	.07	.35
Desire -> Purchase_Intention	.39	.03	**.00**	.80	.36	**.03**
Desire -> Quality Perception	.55	.55	**.00**	**.00**	.00	.51
Quality Perception -> Attention	-.17	.13	.15	.33	.30	**.95**
Quality Perception -> Purchase_Intention	.13	.36	.27	**.00**	.23	**.95**

6.6. OVERVIEW OF THE CONCEPTUAL MODEL

Based on the analysis done over the structural model and on the multigroup results it was possible to support or reject the hypothesis constructed throughout the literature review. Table 12 resumes, in a visual way, what hypothesis, from the designed conceptual model, were supported, partially supported or rejected.

Table 12 - Hypothesis results

Hypothesis	*Decision*
H_1 – The higher the wine's quality perception, the stronger it is one's purchase intention	Supported
H_2 – Desire positively influences quality perception	Supported
H_3 – The higher the wine's desire, the stronger it is one's purchase intention	Supported
H_4 – Higher perceptions of quality have a negative effect on attention	Rejected
H_5 – Consumers' wine desire will positively influence their level of attention to the bottle	Rejected
H_6 – The higher the attention to a bottle of wine, the higher it is one's purchase intention of it	Supported
H_7 – The results of the previous hypothesis will be stronger on bottles with awards rather than in bottles with none	Partially supported
H_8 – The consumption situation to which the wine is bought for (self-consumption vs social consumption) will moderate the relationships previously articulated	Partially supported

7. DISCUSSION

The primary basis of this study lays down on the S-O-R theory, focusing on how individuals' visual attention may mediate their purchase intention. As such, the aim was to empirically investigate the impact that an external stimulus - as it is the label of a bottle of wine - has on individuals' desire and formation of quality perceptions, how those are translated and guide visual attention patterns and finally, to understand what motivates higher purchase intention levels. These connections and relationships were also examined under the light of two different moderators – presence of awards and anticipated consumption situations - which have been proved to impact and affect wines' decision-making process.

On a first level, given by a positive and significant correlation path, the results show that wines' labels impact individuals' desire, which consequently affects their quality perception of the wine. Therefore, it may be inferred that the aesthetics of a wines' label not only directly increases the likelihood of the wine being bought, but it may also accomplish the same effect through the impact that it has on forming positive quality perceptions, which also leads to higher purchase intentions.

Nevertheless, purchase intention was proven to be highly affected by individuals' wine desire, their quality perceptions and attention levels to the bottle of wine. These conclusions go in line with the literature and put in evidence the weight that wines labelling has on ones' expectations and choices (Lange *et al*., 2000; Lick *et al*., 2017; Lockshin and Corsi, 2012; Pieters and Warlop, 1999; Sherman, S. and Tuten, 2011; Wedel and Pieters, 2000). As Barber and Almanza stated: *"consumers shop with their eyes"* (2006: 85) and it is widely recognized the impact and influence of the visions' role on the product-buying experience. Indeed, vision is usually the first scent entering in scene and the one responsible for examining and receiving information on the product, hence affecting consequent behaviors (Fenko, Schifferstein and Hekkert, 2010; Guo *et al*., 2016).

Moreover, when a moderator is introduced in the model some relationships become stronger and more significant while others lose their relevance. Awards, seals or certifications of approval have long been recognized as an important source of product-information and with a significant weight in consumers' decision-making (Parkinson, 1975; Schiefer and Fischer, 2008). Besides, since they are typically granted by third-parties/experts of the sector to products that meet certain standards, they tend to act as an indication of the wine's overall quality (Neuninger *et al*., 2017), to influence the attractiveness of a bottle of wine and individuals' attention levels.

Nevertheless, the results of this investigation evidence a mediating effect of attention when awards are present in the wines' label, in which situations quality perception will have a negative and significant impact on attention and attention will also have a stronger effect on purchasing intentions. It is also curious to look at the effect of quality perception to attention in the absence of awards in which it appears to exist a positive relationship. These conclusions add fresh insights and different perspectives to the existing literature, in which there is evidence that products with higher saliency - in this case, wine labels with awards - attract more rapidly consumers' attention but do not retain it for longer periods (Jaeger *et al*., 2018; Vuori *et al*., 2004), in other words, one can state that as quality perception increases, attention decreases in the bottles with awards, while in the absence of those there is no significant relation. Regardless, the role of visual attention on purchase intention cannot be disregarded, since it plays a major role on influencing consumers' preferences, choices and purchase acts (Laeng *et al*., 2016; Pieters and Warlop, 1999; Shimojo *et al*., 2003), which is strengthen in the presence of awards.

Additionally, Belk (1974, 1975) highlighted the relevance that different situational aspects have on consumer behavior and on marketing efforts. One of those had to be with the consumption situation, or in other words, if a product was bought for self-consumption, or for an anticipated consumption situation where other people were involved. In fact, a study conducted by Sherman and Tuten (2011) concluded that if a bottle of wine is bought to offer to someone else, consumers are inclined to spend 200 percent more than if it was intended at self-consumption, which reveals how much the consumers' decision-making process may be affected by this variable (Fennell, 1978). Therefore, this investigation also looked at the consumption situation as a moderator of wines' decision making and individuals' autonomic behavior.

On the subject exposed above, this thesis confirms that the impact of quality perception and attention on purchase intention only exists when the wine is bought for an anticipated consumption situation involving a social environment. These results go in line and endorse the belief that there is a higher concern about quality and social benefits when the wine is bought to offer or to be drank socially rather than when it is bought for self-consumption (Hall *et al*., 2001; Outreville and Desrochers, 2016). Also, it also corroborates the conviction that the visual component of a bottle, in this case, the label, increases in importance for anticipated situations involving reference groups (Hirche and Bruwer, 2014), since it is expected that consumers will spend more time analyzing the wines in those cases.

Nevertheless, it was found that desire is more important and leads to higher purchase levels if the wine is bought to be consumed alone than if it is intended to drink in a social environment. Such results bring a new light to how the perception of risk may act as an enabler of certain purchases, in other words, one could say that if the risk of choosing a wine with less quality is taken from the equation, then individuals are more willing to buy a bottle not because it has an award (which is frequently associated to higher quality and more important for occasions with a social environment) but because they are simply searching for a wine for their personal enjoyment (Hirche and Bruwer, 2014).

8. CONCLUSION

Typically, on every supermarket, anyone can find an array of brand choices regardless the product category. However, once one enters in the wines' aisle this range of options increases substantially. This, alongside with the fact that the wine market is a highly fragmented one - that is, the product that it is less advertised and that is impossible to judge its quality until it is consumed - makes the wines' decision-making process one of the most difficult and complex ones, forcing consumers to rely on multiple cues, information from others, previous knowledge, etc, to make their choice.

This research used a combination of self-report and psychophysiological measures to access how uncontrolled reactions, such as the one of visual attention, may affect individuals' wine choice behavior. Given the complexity of the product and the array of cues that according to the literature have been proved to impact and affect ones' quality perception and consequently purchase intention, and in the impossibility of studying all, due to time constraints, this study only focused on the impact of a wine's label as a whole, if it was endorsed or not an award and if it was meant to be consumed in a social environment or by oneself. However, it is believed that the same study could be applied to other extrinsic cues, such as price, shape of the bottle, origin, colors, etc.

Regardless, a 2 x 2 (awarded/not awarded x self-consumption/social-consumption) factorial design experiment was implemented to assess the objective of the study, in which consumers were asked about their purchase intention, perceived quality and desire of the wine bottles. Besides, individuals' attention, specifically their attention ratio to each bottle, was also measured using an eye-tracking equipment.

Concerning the statistical analysis and respective findings, this investigation used a path modelling technique of PLS-SEM. The benefits of using such procedure are various, though it is stood out the fact that it makes possible the examination of both observable and unobservable relationships among variables. Therefore, it was possible to test the proposed conceptual model and understand how each and every variable connects with each other and how those relationships can be strengthen/weakened by the introduction of moderators.

In line with literature, it was confirmed that attractive wines' labels, reflected on one's desire to acquire it, also impacts perceptions of quality and both – quality perception and desire – lead to positive purchase intents. Nevertheless, it was established that consumers' cognitive level can as well determine a higher willingness to buy, with higher levels of attention registering higher purchase levels.

The presence of awards is translated in an impact in terms of attention. In fact, in the absence of awards, quality perception has a positive effect on attention, mostly because individuals feel the need to pay closer attention to the wine label to assess its perceived quality, however not translated in higher purchase intentions. On the other hand, in the presence of awards, a negative and significant effect is registered from quality perception to attention, confirming that if perceived quality exists in an immediate way, individuals do not feel the need to fixate their attention on that bottle for long periods. Despite all, on those cases, attention leads to higher purchase intention. Thus, this research reinforces the effectiveness of awards as a marketing tool.

The findings also suggest that for consumption situations involving a social environment, consumers are more concerned with the quality of wine, which is translated in purchase intention as higher it is the perceived the quality of the wine. Oppositely, for self-consumption situations purchase intention is mainly determined by consumers' desire of the wine. Moreover, attention also plays a major role when comparing different consumption situations, having a much stronger impact on purchase intention when the wine is bought for an anticipated consumption situation with a more social character.

Overall, this thesis, by the means of eye-tracking analysis, brings fresh and new insights on how individuals' visual attention to wine labels impacts the formation of quality expectations and desire and how that it is reflected on increased purchase intention levels. Additionally, it offers an integrated view of how different product characteristics and situational aspects impact individuals' decision-making process, which may be of crucial importance to optimize marketing strategies concerning wine. Nevertheless, it also puts in evidence the benefits and gains associated to the use of psychophysiological measures to assess individuals' autonomic reactions. As such, it is thought that wine producers can benefits from the insights provided by eye-tracking measures to refine their communication strategies, either by highlighting product characteristics, as it is the case of the awards, or to communicate their products for different consumption situations.

9. LIMITATIONS AND FUTURE RESEARCH

Throughout the investigation there was always a constant concern at ensuring that no unwanted cues could affect consumers' emotions and choices. To the best of the investigator's capability, the majority of the factors were controlled – wine from the same origin, year and bottles of the same color – a pre-test was performed to test the bottles side by side and its respective cues in order to guarantee that one was not standing out more than another. However, small cues as the brand name and price were available, and even though there was an effort to guarantee that the brand was not well-known, and that price was similar among bottles, small differences may affect the participants' attention and decisions.

Commonly, the use of neuroscience and experimental methods are associated with sample sizes much smaller than when dealing with others that use objective measurements. This is strongly justified by the inherent difficulty associated to the evaluation of these methods. Replicating this research with a larger sample size would make possible to strengthen the results obtained and explore others perspective paths in the model.

Additionally, this research is also limited by the sample used. Since the experiment was only possible to perform in the academic environment and with a limited schedule, most of the participants belong to a younger age range. As such, the conclusions are biased to wine "novices", considering the low expertise level in the sector of the sample. In this sense, it would be interesting to replicate the experiment with a more diversified group of participants and access if results would still be sustained or even if they could have more relevance in terms of explained variance.

Although the present study focused on the wines' label, due to time constraints, most cues were controlled. On future research, a more detailed analysis of the label could be pursued to comprehend which label features and stimuli are more critical in defining quality perceptions and in influencing aesthetic preferences.

Moreover, this research only focused on the attentions' role as a mediator of the impact of an external stimulus on purchase intention. However, environmental visual cues can also affect individuals' emotional state, which is commonly perceived as being the result of the interaction of three orthogonal dimensions – pleasure, arousal and dominance (Mehrabian and Russel, 1974). Therefore, it is suggested that, in future investigations, besides attention, the impact of affective responses on wines' purchase intention may also be explored, thus combining the use of eye-tracking with other psychophysiological methods such as electrodermal activity (EDA), a skin conductance procedure frequently used to study and determine emotional arousal with a great accuracy (Kroeber-Riel, 1979).

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11. ANNEXES

11.1. QUESTIONNAIRE – PRE-TEST

Quality Perception of a Bottle of Wine

This test/survey is being carried out for the development of a master thesis, in Marketing, which focuses in understanding which wine extrinsic cues may influence one's purchase intention.

Usually, wine packaging, and in particular the label, has a huge role in influencing purchaser's expectations about the wine. In that sense, and to understand which attributes may stand out, in this first part of the test you are expected to look at the bottles in front of you (you can touch and examine them) and then answering the following questions.

1. In a scale of 1(strongly disagree) to 7 (strongly agree) please state if you agree or not with the following statements regarding bottle A.

	1	2	3	4	5	6	7
'A' is of high quality	○	○	○	○	○	○	○
The likely quality of 'A' is extremely high	○	○	○	○	○	○	○
'A' must be of very good quality	○	○	○	○	○	○	○
'A' appears to be of very poor quality	○	○	○	○	○	○	○

2. In a scale of 1(strongly disagree) to 7 (strongly agree) please state if you agree or not with the following statements regarding bottle B.

	1	2	3	4	5	6	7
'B' is of high quality	○	○	○	○	○	○	○
The likely quality of 'B' is extremely high	○	○	○	○	○	○	○
'B' must be of very good quality	○	○	○	○	○	○	○
'B' appears to be of very poor quality	○	○	○	○	○	○	○

Quality Perception of a Bottle of Wine

3. In a scale of 1(strongly disagree) to 7 (strongly agree) please state if you agree or not with the following statements regarding bottle C.

	1	2	3	4	5	6	7
'C' is of high quality	○	○	○	○	○	○	○
The likely quality of 'C' is extremely high	○	○	○	○	○	○	○
'C' must be of very good quality	○	○	○	○	○	○	○
'C' appears to be of very poor quality	○	○	○	○	○	○	○

4. In a scale of 1(strongly disagree) to 7 (strongly agree) please state if you agree or not with the following statements regarding bottle D.

	1	2	3	4	5	6	7
'D' is of high quality	○	○	○	○	○	○	○
The likely quality of 'D' is extremely high	○	○	○	○	○	○	○
'D' must be of very good quality	○	○	○	○	○	○	○
'D' appears to be of very poor quality	○	○	○	○	○	○	○

5. Rank the attributes, from the most to the least imporant, in which you base your answers on/that are more important to you when buying a bottle of wine?

Instruções de pergunta: *Change the order according to your preferences (1 - most important, last - less important)*

Presence of awards

Country of origin

Region of origin

Attractive label (Colors,Images, etc)

Brand name

Alcohol level

Description on the back label

Closure (Cork, Screw, etc)

Production year

6. From the bottles presented, do you consider that there is a particular one that stands out from the others? If yes, briefly explain why.

Quality Perception of a Bottle of Wine

7. In general terms, please state on a scale of 1 (strongly disagree) to 7 (strongly agree), if you agree or not with the following statements:

	1 2 3 4 5 6 7
Quality is more important to me when I buy a bottle to offer to someone else or to take to a friend's/family's dinner	○○○○○○○
Quality is more important to me when I buy a bottle just to consume at my home alone.	○○○○○○○
My desire to buy a specific bottle of wine is higher when I buy a bottle to offer to someone else or to take to a friend's/family's dinner	○○○○○○○
My desire to buy a specific bottle of wine is higher when I buy a bottle to consume at my home alone.	○○○○○○○
The presence of awards in a wine's label positively influences my quality perception of it	○○○○○○○
The presence of awards in a wine's label positively influences my desire to purchase it	○○○○○○○

8. Wine consumption frequency

○ Every week
○ Once every 2-3 weeks
○ Once a month
○ Less than once a month
○ Never

9. Gender

○ Male
○ Female

10. Nationality

Quality Perception of a Bottle of Wine

11. Age

○ 18 - 24

○ 25 - 34

○ 35 - 44

○ 45 - 54

○ > 55

Thank you for your cooperation!

11.2. AUDIOS' TRANSCRIPTION

11.2.1. FIRST AUDIO/CONSUMPTION SITUATION

Start by imagining that you want to purchase a bottle of wine just for your own pleasure, so that you may enjoy a glass of wine, alone, in the comfort of your own. You have as an option the two bottles in front of you.

20seg break

Thank You

11.2.2. SECOND AUDIO/CONCUMPTION SITUATION

Now imagine that a friend of yours is giving a dinner at his place tonight and has invited some other friends as well. You do not want to go empty hands and not offering anything, so you want to get a bottle of wine to offer him. You have as an option the two bottles in front of you.

20seg break

Thank you

11.3. QUESTIONNAIRE - EXPERIENCE

Emotions and Wine

This survey aims at evaluating and measuring your perceptions throughout the experience.
The 1st and 2nd sections of the questionnaire are related with the situation that you've heard, and the last two are more general.

*Obrigatório

1st Consumption situation

Please answer to the following questions solely considering what you've heard.
(Imagine that you want to buy a bottle of wine just for your own pleasure. Just so you can consume it in the comfort of your home without anyone else.)

1. **On a scale of 1 (very low) to 7 (very high), please state your opinion regarding each of the following statements about bottle A** *

   Marcar apenas uma oval por linha.

	1	2	3	4	5	6	7
If you bought a bottle of wine, the probability of buying bottle A is	○	○	○	○	○	○	○
The probability of considering to buy bottle A is	○	○	○	○	○	○	○
The probability of actually buying bottle A is	○	○	○	○	○	○	○

2. **On a scale of 1 (very low) to 7 (very high), please state your opinion regarding each of the following statements about bottle B** *

   Marcar apenas uma oval por linha.

	1	2	3	4	5	6	7
If you bought a bottle of wine, the probability of buying bottle B is	○	○	○	○	○	○	○
The probability of considering to buy bottle B is	○	○	○	○	○	○	○
The probability of actually buying bottle B is	○	○	○	○	○	○	○

2nd Consumption situation

Please answer to the following questions solely considering what you've heard.
(Imagine that one of your friends is giving a dinner at his place tonight and has invited other friends as well. You do not want to go empty hands and not offering anything, so you decide to get a bottle of wine.)

3. **On a scale of 1 (very low) to 7 (very high), please state your opinion regarding each of the following statements about bottle A** *

   Marcar apenas uma oval por linha.

	1	2	3	4	5	6	7
If you bought a bottle of wine, the probability of buying bottle A is	○	○	○	○	○	○	○
The probability of considering to buy bottle A is	○	○	○	○	○	○	○
The probability of actually buying bottle A is	○	○	○	○	○	○	○

4. On a scale of 1 (very low) to 7 (very high), please state your opinion regarding each of the following statements about bottle B *
Marcar apenas uma oval por linha.

	1	2	3	4	5	6	7
If you bought a bottle of wine, the probability of buying bottle B is							
The probability of considering to buy bottle B is							
The probability of actually buying bottle B is							

Quality perception and desire

5. On a scale from 1 (Totally disagree) to 7 (Totally agree), please choose your degree of agreement with the following statements about bottle A *
Marcar apenas uma oval por linha.

	1	2	3	4	5	6	7
A is of high quality							
The likely quality of A is extremely high							
A must be of very good quality							
A appears to be of very poor quality							

6. Choose the degree of agreement considering the bottle's label of A *
Marcar apenas uma oval.

Not attractive 1 2 3 4 5 6 7 Attractive

7. Choose the degree of agreement considering the bottle's label of A *
Marcar apenas uma oval.

Not desirable 1 2 3 4 5 6 7 Desirable

8. Choose the degree of agreement considering the bottle's label of A *
Marcar apenas uma oval.

Not beautiful 1 2 3 4 5 6 7 Beautiful

9. Choose the degree of agreement considering the bottle's label of A *
Marcar apenas uma oval.

Does not make me like this product 1 2 3 4 5 6 7 Makes me like this product

10. On a scale from 1 (Totally disagree) to 7 (Totally agree), please choose your degree of agreement with the following statements about bottle B *

Marcar apenas uma oval por linha.

	1	2	3	4	5	6	7
B is of high quality	◯	◯	◯	◯	◯	◯	◯
The likely quality of B is extremely high	◯	◯	◯	◯	◯	◯	◯
B must be of very good quality	◯	◯	◯	◯	◯	◯	◯
B appears to be of very poor quality	◯	◯	◯	◯	◯	◯	◯

11. Choose the degree of agreement considering the bottle's label of B *

Marcar apenas uma oval.

	1	2	3	4	5	6	7	
Not attractive	◯	◯	◯	◯	◯	◯	◯	Attractive

12. Choose the degree of agreement considering the bottle's label of B *

Marcar apenas uma oval.

	1	2	3	4	5	6	7	
Not desirable	◯	◯	◯	◯	◯	◯	◯	Desirable

13. Choose the degree of agreement considering the bottle's label of B *

Marcar apenas uma oval.

	1	2	3	4	5	6	7	
Not beautiful	◯	◯	◯	◯	◯	◯	◯	Beautiful

14. Choose the degree of agreement considering the bottle's label of B *

Marcar apenas uma oval.

	1	2	3	4	5	6	7	
Does not make me like this product	◯	◯	◯	◯	◯	◯	◯	Makes me like this product

General

15. On a scale from 1 (Totally disagree) to 7 (Totally agree), please state your degree of agreement with the following statements about bottle A *

Marcar apenas uma oval por linha.

	1	2	3	4	5	6	7
I can recognize A among other competing brands	◯	◯	◯	◯	◯	◯	◯
I am aware of A	◯	◯	◯	◯	◯	◯	◯
Some characteristics of A come to my mind quickly	◯	◯	◯	◯	◯	◯	◯
I can quickly recall the symbol or logo of A	◯	◯	◯	◯	◯	◯	◯

16. **On a scale from 1 (Totally disagree) to 7 (Totally agree), please state your degree of agreement with the following statements about bottle B** *

Marcar apenas uma oval por linha.

	1	2	3	4	5	6	7
I can recognize B among other competing brands	○	○	○	○	○	○	○
I am aware of B	○	○	○	○	○	○	○
Some characteristics of B come to my mind quickly	○	○	○	○	○	○	○
I can quickly recall the symbol or logo of B	○	○	○	○	○	○	○

17. **On a scale from 1 (Totally disagree) to 7 (Totally agree), please state your degree of agreement with the following statements** *

Marcar apenas uma oval por linha.

	1	2	3	4	5	6	7
I know pretty much about wine	○	○	○	○	○	○	○
I know how to judge the quality of wine	○	○	○	○	○	○	○
I think I know enough about wine to feel confident when I make a purchase	○	○	○	○	○	○	○
I do not feel very knowledgeable about wine	○	○	○	○	○	○	○
I can tell if a bottle of wine is worth the price or not	○	○	○	○	○	○	○

18. **Gender** *

Marcar apenas uma oval.

- ○ Male
- ○ Female

19. **Age** *

Marcar apenas uma oval.

- ○ 18 - 24
- ○ 25 - 34
- ○ 35 - 44
- ○ >45

20. **Educational level** *

Marcar apenas uma oval.

- ○ Compulsory school
- ○ Vocational training
- ○ University level

21. Household income *

Marcar apenas uma oval.

- ◯ < 1000
- ◯ 1000 - 1500
- ◯ 1501 - 2000
- ◯ 2001 - 2500
- ◯ 2501 - 3000
- ◯ > 3000

Com tecnologia
Google Forms