

Wine consumption in the city of Recife (Brazil): a study of the relevance of the attributes of the drink at the time of purchase

Consumo de vinhos na cidade do Recife (Brasil): uma pesquisa da relevância dos atributos da bebida no momento da compra

Consumo de vinos en la ciudad de Recife (Brasil): un estudio sobre la relevancia de los atributos de la bebida al momento de la compra

Nayara Diniz¹

Simone Almeida²

Viviane Salazar³

Anderson Gomes de Souza⁴

Resumo: Este estudo, de natureza teórico-empírica, diz respeito à identificação e análise de atributos relevantes no processo de decisão e compra de vinhos para consumidores do Recife. O modelo teórico adotado foi desenvolvido com base na identificação dos atributos do vinho avaliados mais frequentemente em estudos do comportamento do consumidor em diversos países. Consequentemente, com base no trabalho de Goodman et al. (2007), o grau de relevância de cada atributo foi classificado por meio da escala Best-Worst Scaling (BWS). Destarte, a abordagem metodológica adotada foi a quantitativa, cujo método de coleta de dados foi o questionário, adaptado de Forbes (2008) e Groot (2011), administrado em meio a um amostra de 100 consumidores. Os resultados mostraram que, preço, marca, prêmios, teor alcóolico e rótulo frontal atraente foram considerados atributos importantes para os consumidores. No entanto, os atributos decisivos para a

¹ Federal University of Pernambuco (UFPE), Recife, PE, Brazil. Data collection; analysis and interpretation of data; writing of the work.

² Federal University of Pernambuco (UFPE), Recife, PE, Brazil. Design Conception and design of the scientific work; writing of the work.

³ Federal University of Pernambuco (UFPE), Recife, PE, Brazil. Preparation of the scientific paper, critical review of the work.

⁴ Federal University of Pernambuco (UFPE), Recife, PE, Brazil. Critical review; final approval.

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decisão e compra eram outros: variedade da uva, país de origem do vinho, harmonização com alimentos e as informações no rótulo traseiro.

Palavras-chave: Comportamento do consumidor. Vinho. Atributos do produto. Escala Best-Worst.

Abstract: This study is a theoretical-empirical research on the identification and analysis of wine attributes' relevance in the purchase decision process to consumers in Recife. The theoretical framework was developed based on the identification of the most-frequently evaluated wine attributes in consumer behaviour studies in several countries. Subsequently, based on the work of Goodman et al. (2007), the relevance degree of each attribute was classified through the Best-Worst Scaling (BWS). The methodological approach was quantitative in nature, the data collection method was a questionnaire adapted from Forbes (2008) and Groot (2011) and completed by 100 consumers. The results show that price, brand, awards, alcohol by volume and attractive front label were considered important attributes by the consumers. However, the decisive attributes for the purchase decision were others: grape variety, country of origin of the wine, matching with the food and the information on the back label.

Keywords: Consumer behavior. Wine. Product attributes. Scale Best-Worst.

Resumen: El presente estudio es una investigación teórico-empírica sobre la identificación y análisis de la relevancia de los atributos del vino en la decisión de compra del producto de los consumidores de Recife. El marco teórico fue elaborado a partir de la identificación de los atributos del vino más evaluados en estudios sobre el comportamiento del consumidor en diversos países. Luego, en base al trabajo de Goodman et al. (2007) el grado de relevancia de cada atributo fue clasificado por medio del Best-Worst Scaling (BWS). El abordaje metodológico fue cuantitativo y el método de recolección de datos fue un cuestionario adaptado de Forbes (2008) y Groot (2011) y respondido por 100 consumidores. Los resultados indican que precio, marca, premiación, proporción alcohólica y etiqueta frontal atractiva fueron considerados atributos importantes por los consumidores. Sin embargo, los atributos determinantes para la decisión de compra del consumidor fueron otros: variedad de la uva, país de origen del vino, maridaje con la comida y la información contenida en la etiqueta posterior.

Palabras-clave: Comportamiento del consumidor. Vino; Atributos del producto. Escala Best-Worst.

1 INTRODUCTION

The analysis of the world scene of wine-consumption indicates that the United States of America was the largest-consuming country in 2013. However, Italy ranked first among the biggest wine producers surpassing other traditional producing countries, such as Spain and France. In the same year, Brazil ranked sixteenth and nineteenth place

as a consumer and producer of wine, respectively (Wine Institute, 2013a, 2013b).

In 2011, the national winemaking industry ended the year positively even in the midst of the economic crisis in Europe that affected the consumption of Brazilians and the unfavorable exchange rate for exports. At the time, the consumption of fine red wines in the country increased 7.5 percent compared to 2010, the highest sales volume of the de-

cade. In terms of imports, there was an increase of 2,300,000 liters compared with the previous year. Exports of Brazilian wineries already associated with the Wines of Brazil (project carried out by the Brazilian Wine Institute and the Brazilian Trade and Investment Promotion Agency), reached US\$ 3,060,000 in 2011, 33.6 percent more than the previous year (Wines of Brazil, 2011; Wines of Brazil, 2012; IBRAVIN, 2012a; IBRAVIN, 2012b).

But, why are the Brazilians consuming more wine? One of the reasons is the phenomenon of globalization, which facilitated the entry and exit of goods in the country, expanded world trade and, consequently, increased the competition and contributed to the improvement of quality of manufactured products (Fernandes Neto, 2006).

The behavior of the consumer of this drink is changing. Understanding the behavior is critical to market development, given that it is the consumer who determines what and how many products will be acquired. However, identifying the consumer profile, and understand their behavior is not a simple task, since people have different wants and needs, which are influenced by several factors (Kotler, 1998).

Among these factors, the attributes of the product are relevant to understand the consumer's decision-making process (Urdañ & Nagão, 2004, p. 3). Therefore, the marketing researchers tend to explain the consumer's preferences through measurements and analysis of the importance of the attributes at the moment of purchasing (Espartel, 1999).

When consumers buy a product, they

analyze characteristics such as brand, price, packaging, among others, in order to make a final decision. However, the level of influence of the attributes on the consumer varies according to the product and people's profile (Engel et al. 2000). In the case of wine, grape variety, country of origin, alcohol content, and price are some of the attributes that can be taken into account at the time of purchasing (Forbes, 2008; Goodman et al., 2007; Lockshin et al., 2009). A study by Forbes (2008) indicates that the price discount was the most relevant attribute for women at the time of wine purchasing, whilst for men the region of origin was the most mentioned attribute.

There are also other studies which have examined the relevance of the attributes at the time of purchasing (cf. Espartel, 1999; Groot, 2011). However, empirical research on the behavior of the Brazilian consumer is scarce. Therefore, the objective of this study is to analyze the relevance of wine attributes in the decision-making process of purchasing the product for the consumers in Recife, in order to contribute to a better understanding of the wine consumer behavior in the Brazilian market.

2 CHANGES IN THE WINE MARKET

In the 1990s, the stabilization of the Brazilian economy and the opening up to imports, boosted the consumption of fine wines among the middle class (Malheiros, 2006). The increased purchasing power of the middle class, combined with a greater supply of global products enabled the access of that segment of the population to products previ-

ously consumed exclusively by high-income consumers.

However, the globalization process has failed to encourage the consumption of Brazilian fine wines. According to Mello (2002) this reality is justified due to lack of habit of drinking wine and the preference for imported products. The author believes that it is necessary to direct efforts to encourage consumption and change consumers' habits, through advertising campaigns, exhibitions and events (Mansfield, 2002) so that domestic producers can regain and increase their participation in the Brazilian market of fine wines.

On the other hand, the process of standardization of wine – a strategy fought both by producers and consumers of the so-called Old World - has contributed to the democratization of consumption of drink (Roese, 2008). Industrial production technology employed by most wineries in the New World has been responsible for the standardization of the product and mass consumption. In this way, the wine market becomes more diverse because, at the same time, it encompasses the concept of terroir wines of the Old World and the standardization of New World wines – recent wine-producer countries - as well as organic wines (Sloan, 2005) offering consumers a greater variety of products.

In addition to the variety of products available in the market, the rules of etiquette for the consumption of fine wines – such as the knowledge about the proper temperature, the use of specific glasses and notions about pairing wine with food (Roese, 2008) –

require a greater qualification of the consumer for a "correct" buying and tasting. Therefore, the level and requirement of knowledge of these consumers tend to be higher (Mello, 2002).

Furthermore, wine has become trendy. There is a set of services and products available to the middle class aiming at supplying information about the "art of the wine". Courses, tasting workshops, sommelier training, TV shows, and specialized magazines are available so that this new consumer may become a connoisseur (Zortea, 2010).

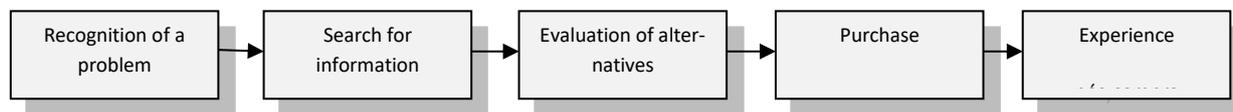
These changes in the production and consumption of wine led to changes in consumer behavior. To understand and identify variations in the behavior of people when buying wines, and future buying trends of this drink, companies need to study consumer behavior, subject that will be discussed in the next section.

3 CONSUMER'S DECISION-MAKING PROCESS AND THE ATTRIBUTES OF THE PRODUCT

The consumer's decision-making process is divided into stages. For some researchers, this process occurs in five stages (cf. Churchill & Peter 2005; Las Casas, 2010; Hawkins et al. 2007; Shiffman & Kanuk, 2009; Sheth et al., 2001): 1) Recognition of the problem or need; 2) Search for information or pre-purchase search; 3) Evaluation of alternatives; 4) Purchase decision or purchase; 5) Evaluation or post-purchase or post-consumption experience (Figure 1). Other authors add two more stages to the process (cf.

Blackwell et al., 2009), which are consumption and disposal.

Figure 1 - Decision-making process of a buyer



Source: Sheth (2001, p. 486)

Among these stages, two of them seem to be more important to identify and analyze the attributes that have more relevance in the decision-making process for the purchase of a wine: the evaluation of alternatives and the purchase decision

The first stage in the buying decision process is the recognition of a problem. The individuals recognize the problem when there is a need to be met, because they compare their current state with the ideal state and realize that there is a condition of need, discomfort or deprivation either psychological or physical (Stefano et al. 2008). For example, the consumer perceives the need of eating and drinking when they are thirsty or hungry; of buying new clothes when having few clothing items; of calling a friend when missing him or her; or buy a gift when he or she discovers that they will be attending a birthday party at the weekend (Sheth et al., 2001).

After acknowledging the problem, the consumer searches for product information – such as attributes, functions, durability and other aspects, in advertisements, opinions from friends, vendors, etc. - to support the decision-making regarding the available products (Kotler, 1998) and to analyze the alternatives showing the best deal (Las Casas,

2010). Given that each product has different characteristics, the consumer will have to decide which are more important for the assessment (Kotler, 1998). The consumer selects a small number of brands considered acceptable and uses criteria to evaluate each brand and to make the decision to purchase (Shiffman & Kanuk, 2009). Then, the consumer chooses the product that was evaluated positively and effectively purchases (Sheth, 2001: 509). Finally, the consumer evaluates the overall satisfaction with the product, analyzing the post-purchase experience that serves as a feedback mechanism for future purchases (Kotler, 1998).

Product attributes are examined during the assessment of alternatives - third stage of the decision-making process. The attributes are key influencers in purchasing decisions of consumers, so the marketing researchers have a tendency to explain consumer preferences by analyzing product attributes. Furthermore, through the measurement of the degree of relevance of the attributes to customers, the marketing manager can understand consumer thoughts about a particular product or brand (Spartel, 1999).

The choice based on attributes requi-

res the comparison of the product attributes between different brands. Therefore, consumers must have some knowledge about the specific attributes of each product at the time of the purchase, making a decision closer to ideal (Hawkins et al. 2007).

Some attributes are more influential than others (Engel et al. 2000) and this influence varies accordingly with the type of product and/or consumer. The importance of each attribute depends on the evaluation that buyers make of each offered advantage to their satisfaction (Espinoza & Hirano, 2003). Regarding the level of influence of the attributes on the buying decision, these are classified into three types (Espartel, 1999):

1) Salient attributes: attributes that consumers can perceive, however they do not have importance in the buying decision. For example, the design of the bottles of wine can be perceived by consumers, but can be irrelevant at the moment of choosing a wine.

2) Important attributes: assessed as important at the time of purchasing, these attributes do not determine the buying option. In this sense they do not add value to the purchase, because they are present in other similar category of products (Tibola, 2004).

3) Determinant attributes: attributes considered important and influencing the purchasing decision; consumer perceive them as the best option to satisfy their needs and wants (Espinoza & Hirano, 2003). For example, at the moment of choosing a wine for dinner at a restaurant, the pairing of the drink with the food may be determining for that choice.

4 WINE ATTRIBUTES

With regard to wine consumption, studies in different contexts examined the attributes that can influence the consumer's choice behavior. Goodman et al. (2007) identified thirteen elements that influence the behavior of consumption in countries such as Australia, Austria, Brazil, France, Italy, New Zealand and United States. Of the thirteen items identified, eight were product attributes: grape variety; origin of the wine; brand; awards; matching with the food; information contained in the label; attractive front label; alcohol content.

In the world there are thousands of grapes varieties. For Galvão (2004) the grapes can be classified into two categories: non *Vitis vinifera* grapes, also called table grapes, and *Vitis vinifera* grapes, suitable for the production of fine wines. The varieties of grapes in the traditional wine production regions such as France, Italy, Portugal, and Spain, have been naturally selected over time and adapted to local conditions of soil, climate, and farming practices. Over time these species of vines were taken to other places, such as countries in the New World. In some cases the adaptation of species was perfect, sometimes even exceeding the quality of the original strains, in others, the fruits developed features that differ from the original (Pinto, 2009).

The country of origin is another attribute that has influence on the evaluation of a product (Guilhoto, 2001; Giraldo & Ikeda, 2007). People have stereotypical images of each country, and use these images as

sources of information to assist them in selecting the product to be acquired. The country of origin is considered an important factor for buyers of wine, because the product has links with its origin. However, a variety of grape grown in different regions produce wines with different flavors (Lattey et al., 2007).

The brand is another very important assessment criterion, because it reflects the significant value that each product has to its consumers (Ruão & Farhangmer, 2000), as well as being the main source of competitive advantage for an organization (Louro, 2000). The image that consumers have about a particular brand is built through a set of functional, economic, and emotional or psychological values (Barbosa, 2009; Louro, 2000).

The medals and awards are also important attributes which influence consumer's preference, as they act as an indicator of product quality (Lockshin & Hall, 2003). When a wine is award-winning it means that it was rated favorably by experts in relation to other wines. This signals to the purchaser that the wine is of high quality and is able to be positively perceived by other people (Mueller, 2009).

Pairing wine with food is intended to enhance the flavor of both. When in harmony, wine and food provide a far greater pleasure than when tasted separately (Queiroz, 2009). However, for a perfect matching, wine and food need to be compatible. To this end, it is necessary to know the wines and know the preparation of the dish with which the wine will be paired (Pinto, 2009).

The wide range of wines offered sig-

nify for some consumers too many decisions. To assist them, the back label can provide more information about a particular wine (Lockshin & Hall, 2003). According to McGarry & Thompson (2010), the labels containing information about the flavors and aromas of the wine influence more than others without these data.

Alcohol is an important component of the wine as it is responsible for its preservation and quality. In addition, it provides a burning taste sensation and heat. The higher the alcohol content, the greater are these sensations. Information about the alcohol of the wine is always present on the label, it can be expressed in percentage (%) or GL and may range from 7 to 15 % (or 7 to 15° GL) of the total (Pinto, 2009), except in fortified wines like port wine, prepared from wine spirits which have an alcohol content of around 20 to 22 GL (or 20 to 22%) (Miranda, 2001).

Another important attribute, but not reported in the survey of Goodman et al. (2007), is price. Among all products that consumers have acquired in the course of their lives, many of them were chosen by their cost (Engel et al. 2000) having a strong degree of influence on the buying decision of wines (cf. Magistris et al., 2011; Guerra, 2005; Johnson & Bastian, 2007; McGarry & Thompson, 2010).

5 WINE CONSUMER BEHAVIOR

For oenologists, wine quality is related to certain production parameters, such as the method of grape vine growing, quantity of sugar of the fruit, among others. This

perception of quality differs from that of the consumers', who consider the quality of a wine according to their preferences and individual tastes. To analyze consumer preferences, the marketing and production teams can target the types of wines for different categories of consumers, or relocate an existing wine brand to improve sales. It can also be verified if consumers prefer more or less acidity, if they are more prone to choose a wine by its price, or for the brand, etc. (Lattey et al., 2007).

In France, a traditional wine producer and consumer country, the three most referred relevant attributes in the choice of this drink were: pairing with the food, the wine country of origin, and prior knowledge of the product. In Italy, the three favorite items were: previous tasting of wine, pairing with the food, and country of origin, respectively (Goodman et al., 2007). In Spain, the price factor was assessed positively, although consumers cared more about pairing wine and food and the country of origin (Magistris et al., 2011). In Portugal, wine consumers have tended to choose wines with lower prices (Guerra, 2005). However, Hungarian consumers valued taste, quality, and country of origin of the wine (Szabo & Szeles, 2006). The most valued attributes by Austrians were: grape variety, prior wine-tasting, and country of origin (Goodman et al., 2007). In Australia, the most important attributes in the decision of buying a wine were: prior knowledge of wine, recommendation, and grape variety (Goodman et al., 2007). A more detailed analysis by types of consumers indicated that the region of origin and the winemaker's re-

putation were more important to consumers of high specialization in wine, while for less knowledgeable consumers of the drink, the style of wine and the price had more relevance to product choice (Johnson & Bastian, 2007).

In the United States, the prior knowledge of the wine (Goodman et al., 2007), recommendation (Goodman et al., 2007; Lewis, 2010), the grape variety (Goodman et al., 2007; Lewis, 2010) and the wine's country of origin (Lewis, 2010) are the factors that most influence the consumer purchase decision. While in Brazil, the brand was cited as the most important attribute when choosing a wine, followed by prior knowledge and wine and food matching (Goodman et al., 2007).

After the review of research conducted in other countries, the next section presents the methodology used to identify the relevance of the attributes of wine in the purchase of the product to the consumer of the RMR, by presenting the research approach, data collection instruments, procedures for sample definition, and also the technique employed for data analysis, as well as the limitations of the research.

6 METHODOLOGY

When looking at studies conducted in other countries, the quantitative approach has been more used to research consumer preferences in relation to the attributes of a product. Within this approach, the methods which are more adopted were the Ranking, the Matching Method and the Likert scale.

However, more recently, the Best-Worst scaling has been suggested, since it allows to study a large set of attributes in the fastest and easiest way, avoiding the fatigue of respondents that may cause inconsistent and distorted results (Groot, 2011).

Through the Best-Worst Scaling instrument (or BWS, invented by Jordan Louviere in 1987, also called the Maximum Difference Scaling, or MaxDiff), the respondents are asked to indicate among the alternatives the best, or the most important, and the worst, or the less important product attribute (Groot, 2011). In this way, the researcher can identify the maximum difference between the preferences or the degree of importance that the consumer assigns to a given attribute (Erdem, et al., 2010). In this method the respondents may not like or dislike of all attributes. The objective is to identify the importance weight that each attribute has in relation to the others (Lockshin et al., 2009).

BWS questionnaires are relatively easy to be understood by the majority of respondents, because people think more easily the items when these are situated in extremes than evaluate through scales that order them in different degrees of importance or preference (Sawtooth Software, 2007). The important feature of the method is that the scale is free and there is no response style, relevant aspect for cross-cultural research (Sawtooth Software, 2007). These features determined the use of this method in several studies on consumer behavior.

To achieve the objectives of this work we elaborate a wine's attributes scale based on the research of Goodman et al. (2007). The following attributes were considered:

grape variety; origin of the wine; brand; awards; matching with the food; information contained in the label; attractive front label; and alcohol content. The items - prior knowledge of wine; recommendation of someone; promotional display at the store; information on the shelf; and reading on wine - were withdrawn because they are not considered product attributes. We decided also to add the item price, which other studies have considered as having a high degree of influence on purchasing decisions (cf. Magistris et al., 2011; Guerra, 2005; Johnson & Bastian, 2007; McGarry & Thompson, 2010), totaling nine attributes to be measured.

7 DATA COLLECTION INSTRUMENT

The data collection instrument used in this work was the questionnaire with multiple choice closed questions, adapted from the research of Forbes (2008) and Groot (2011) and elaborated by the Survey Monkey (online survey software).

The end result was a questionnaire with 15 questions divided into three parts. The first part was composed of four socio-demographic questions such as age, income, education and gender in addition to a question about the frequency of consumption of wine. The second part was composed of a five-point Likert scale, ranging from strongly disagree (1) to strongly agree (5). The third and last part consists of questions based on BW scaling, in which consumers chose only the most and least important item among the possible combinations of attributes.

The construction of the BWS requires

the determination of the set of choices and the amount of possible combinations between the attributes. According to Groot (2011) the experiment must have at least three alternatives or options to choose from in each set and not exceed six alternatives, because the quality of consumer response decreases when the number of alternatives increases. Chrzan and Patterson (2006) recommend a greater number of sets with fewer items per question and Orme (2005) proposes that the number of alternatives per choice set must not exceed half of the total number of attributes because, hypothetically, a larger number of items per set results in lowest precision to the items of intermediate importance or preference.

Taking into consideration the comments made by Orme (2005), the number of alternatives per combination used in this study was four. Half of the total number of attributes searched (9) corresponds to a decimal number (4.5) and as the number of alternatives in the set must be less than or equal to half of the total number of attributes each question on the questionnaire presented a set with four alternatives, which also meets the recommendations of Groot (2011), Chrzan and Patterson (2006).

To define the number of choice sets (Ncsets) this study used a function of the total number of attributes evaluated.

Figure 2 – Ncsets formula

$$Ncsets = kR / n$$

Source: Groot (2011, p. 107).

In Figure 2, "k" represents the total number of attributes to be studied (9), "n" is

the number of alternatives in each set of choices (4) and "R" the number of times that each attribute is displayed through the set of choice to each individual, hence $Ncsets = 9R/4$. But it is still necessary to determine "R". According to Groot (2011) there are not works of a scientific nature addressing this issue and to avoid respondents' fatigue, he decided to repeat each attribute 4 times through sets of choice ($R = 4$), resulting in 9 combinations with 4 attributes each, wherein all attributes will appear equal and repeatedly 4 times.

Based on these guidelines, all the possible combinations were drafted, that is, to distribute the nine attributes in choice sets in a balanced way. As each attribute must have the same chance of being selected, all should appear the same number of times in the questionnaire (Sawtooth Software, 2007).

8 SAMPLING

For this survey the wine consumers in Recife represent the universe. Since it would be impossible to study the entire population due to time and resources limitations, the solution was to select a smaller group of this universe, but it was the most representative possible. According to Gil (2002) an adequate sample with a 95.5 percent confidence coefficient for a population of more than 100,000 people and with a margin of error of plus or minus 10 percent is equal to 100 people.

After assembling, pre-testing and reviewing the questionnaire, the access links to the software Survey Monkey were sent by e-mail and made available on the social net-

work, via online messages or invitation to participate in the event.

9 DATA ANALYSIS METHOD

To analyze the data collected by the BW scaling, initially we calculated the level of importance of each attribute, which is the

number of times respondents indicated each attribute as more important (Countbest) minus the number of times that this same attribute was considered less important (Countworst). The Countbest and Countworst found for each of the nine attributes of this study are set out in Table 1.

Table 1 – Countbest and Countworst

	Countbest	Countworst
Grape variety	195	40
Origin of the wine	164	22
Pairing with food	184	65
Information on the back label	132	37
Price	71	83
Brand	50	129
Awards	47	171
Alcohol content	37	176
Front label	20	177

Source: Data analysis

From then on it was calculated the Standard Score, which is the level of importance divided by the number of times that each attribute appears in combination multiplied by the number of questionnaires returned, as you can see in the following equation:

Figure 3 – Standard Score formula

$$\text{Standard Score} = \frac{\text{Count}_{\text{best}} - \text{Count}_{\text{worst}}}{4n}$$

Source: Goodman (2005, p. 6)

After the application of the equation, the results are displayed in tables in the following section.

10 RESULTS

The sample studied was dominated by consumers aged between 18 and 35 years and the amount of female and male respondents was balanced (47 percent female and 53 percent male). Most of the consumers surveyed have a college degree (60 percent) and in relation to the family income, the majority of respondents (44 percent), belongs to the class C i.e., the income is between 4 to 10 minimum wages (MW), according to the definition of social class adopted by the Brazilian Institute of Geography and Statistics (IBGE). While class D (family income of 2 to 4 MW) is represented by 19 percent of the participants

of the search. In relation to the frequency of consumption of wine in Recife, most consumers drink wine only once a month or very rarely.

11 RELEVANCE OF THE WINE ATTRIBUTES TO CONSUMERS IN RECIFE

The Best-Worst scaling identified the degree of relevance of the attributes in relation to their influence on the decision of buying a product. This study adopts the classification of Espartel (1999) which classifies the attributes as: a) important – those assessed

as important at the time of the choice of the product, but that does not determine the purchase - and b) determinant - those attributes able to influence the consumer's purchasing decisions.

After the analysis of the data collected through the BW scaling, 5 (five) out of the 9 (nine) attributes examined had a negative significance level and so they have been classified only as important (Espartel, 1999: 35). They are: price, brand, awards, alcohol content and attractive front label as presented in Table 2.

Table 2 – Wine attributes classified as important by the BW scaling

Attributes	Level of relevance	Standard score
Price	-12	-0,03
Brand	-79	-0,1975
Awards	-124	-0,31
Alcohol content	-139	-0,3475
Attractive front label	-157	-0,3925

Source: Data analysis

Price is among the attributes negatively indicated by most respondents, although it was the most important among the 5 attributes listed in Table 2, given that it obtained a default score close to zero. By analyzing the answers of the items that measure

the importance of price in the purchase decision we realize that it is not a very significant attribute for the sample researched as depicted in Table 3.

Table 3 - Exploratory hypotheses for the price attribute

Exploratory hypothesis	1	2	3	4	5	Number of answers
Wines are expensive	12%	23%	36%	24%	5%	100
Low price is important in the purchase of wine	17%	25%	24%	28%	6%	100
I don't like high-alcohol wines.	19%	18%	29%	21%	13%	100
I've already bought wines because of the attractive front label.	33%	30%	8%	23%	6%	100
I prefer awarded wines.	17%	20%	34%	22%	7%	100
I know many wine brands.	4%	24%	28%	30%	14%	100

Source: Data analysis

Only 29 percent of the respondents consider wines expensive, while 35 percent of them disagree or strongly disagree with that opinion. Low influence of the attribute price to consumers of this sample is even more explicit when the results show that 42 percent of respondents disagree or strongly disagree that the low price is an important aspect in the purchase of this drink. This result differs from that observed in research done by Guerra (2005) in Portugal, where consumers prefer to buy wine with low prices.

The wine brand and the awards were also attributes negatively indicated by BW scaling and that are not significant to consumers of wine at the time of purchase. This result can indicate the absence or deficiency in the winemakers' marketing plan. Little dissemination and promotion of wine brands and awards can hinder the establishment of the product on the market and the building of a relationship of trust with the consumer to the point of being able to influence the consumer's buying decision.

The analysis of the results of the Likert scale allow us to better understand the consumer's perception about these two attributes. Only 44 percent of consumers agree or strongly agree that they know many wine brands. And although consumers know a

large number of brands, the level of relevance of brand attribute was not positively classified by consumers. The attribute awards was assessed through the sentence "I'd rather have awarded wines", the results indicate low relevance of this attribute given that only 29 percent of consumers agree or strongly agree with this statement.

The alcohol content of the wine was also ranked as an important attribute. In relation to consumer considerations in terms of alcohol, the results from the Likert scale show that 29 percent of consumers are indifferent, while 34 percent dislike high-alcohol wines.

Finally, the attractive front label is the least important attribute. The low relevance of the front label can also be observed in the results of the Likert scale since 66 percent of consumers disagree or strongly disagree totally of the sentence "I've already bought wine just because it featured an attractive front label".

Four out of the nine wine attributes were positively assessed by the consumers surveyed, and thus they were considered determinant for the purchase of the drink, they are: variety of grape, wine origin, matching with the food, and back label information, as results shown in Table 4.

Table 4 – Wine attributes classified as determinant by the BW scaling

Attributes	Level of relevance	Standard Score
Grape variety	155	0.3875
Origin of the wine	142	0.355
Matching with the food	119	0.2975
Information on the back label	95	0.2375

Source: Data Analysis

The analysis of the determinant attributes for consumers in Recife revealed that the variety of grape was the most influential attribute when choosing a wine. It is

interesting to note that consumers prefer red to white grapes according to the answers in the Table 5.

Table 5 – Exploratory hypotheses of determinant attributes

Exploratory hypotheses	1	2	3	4	5	Number of answers
Red wine is tastier.	9%	19%	24%	23%	25%	100
I like to drink wine with food.	3%	8%	10%	42%	37%	100
I think the wine is tastier when matching the food.	4%	7%	23%	29%	37%	100
I read the information on the back label to buy a wine.	7%	10%	20%	34%	29%	100
The information on the back label help me to know the wine better.	3%	5%	18%	46%	28%	100
The international wines are tastier than the Brazilian wines.	16%	17%	35%	24%	8%	100
The Brazilian wines are as good as the imported.	3%	26%	30%	23%	18%	100
The red wines are easier to match than the white wines.	10%	25%	29%	23%	13%	100

Source: Data Analysis

The origin of the wine is the second most decisive feature for the consumer at the time of purchase. However, the consumer does not have a strong and clear opinion about the quality of national versus international wines as we can see in the results obtained by the Likert scale. In the sentence "The international wines are tastier than the Brazilian wines", 32 percent of consumers surveyed agree or strongly agree, while 33 percent disagree or strongly disagree. On the other hand, 41 percent of the respondents agree or strongly agree that the Brazilian wines are as good as the imported.

The third determinant attribute "matching with the food", confirmed by the results of exploratory hypotheses of the Likert scale, since 79 percent of the respondents like to drink wine with food and 66 percent

think the wine tastes better when harmonized with the food. Although these results indicate that the consumer values pairing wine with the food, there is no evidence that the consumer has enough knowledge to do this correctly. That notion is intensified by observing the Likert scale, because consumers have questions about some important aspects on harmonization. Only 35 percent of consumers demonstrate knowledge that red wines are more difficult to match, when they disagree or strongly disagree with the sentence "red wines are easier to match that whites".

The information on the back label was the fourth determinant attribute to the consumer at the time of purchase. According to the results of the Likert scale, 63 percent of respondents read the information contained

in the back label before buying the wine and 74 percent believe that this information helps to know the wine better. This finding supports the arguments of Lockshin & Hall (2003) that consumers use the information of the back label to choose a wine. In addition, the relevance of the back label for consumers of wine proves the claims of Mello (2002) and Sloan (2005) about the need for the pursuit of consumer knowledge to enjoy the drink better.

12 CONCLUSIONS

The highlight of the conclusive aspects emerging in data analysis makes us return to the general objective of this study: to identify and analyze the relevance of the wine attributes in the buying decision-making process of wine consumers in Recife.

Variety of grape, wine origin, pairing with the food and information contained in the back label were, respectively, the determinant attributes to the wine consumer in Recife, i.e., those attributes are the most influential in buying decision. Comparing these results with those of the survey made in Brazil by Goodman et al. (2007) the attributes food and wine matching, the origin of the wine, and the grape variety also appear amongst the most relevant attributes. However, in the study by those researchers, the brand emerges as a crucial attribute at the time of purchase – result inconsistent with the survey conducted with consumers in Recife. In the study developed in the capital of Pernambuco, the information on the back label appeared among the determinant attri-

tes, whilst in Goodman et al's. (2007) findings this feature was negatively indicated.

Two attributes are highlighted as crucial both in the countries surveyed by Goodman et al. (2007) (Australia, Austria, Italy, France, New Zealand, United States of America, including Brazil) as in Recife and also in research of other authors as Magistris et al. (2011), Szabo & Szeles (2006), Johnson (2007), Bastian & Lewis (2010), and McGarry and Thompson (2010). They are: the grape variety and the origin of the wine. These two attributes are linked since growing the same wine grape in different places result in distinct wine flavors. According to Forbes (2008: ii) there is a relationship between the origin of the wine and the perception of quality of the product. The grape variety is a very important attribute in the production of the drink as it is responsible for the aroma and flavor of wine (Pinto, 2009: 44).

The grape variety and the origin of wine, peculiar attributes of wine, are determining features in various countries, and should be taken into consideration by winemakers. Further research is necessary to know which is the country of origin of wines and which grape variety are the most consumed in Recife, given that we did not surveyed the opinion about the quality of national and international wines, although the country of origin of the wine have been the second most important attribute. This information should be considered by winemakers, so they will know the consumer's preference in terms of origin of wine and grape variety, to help them in preparing their strategic marketing plan.

Although the price of the product of-

ten helps the buying decision of the consumer (Engel et al. 2000), in this research as well as in Goodman et al.'s (2007) the price was indicated negatively, with little relevance to the wine consumer. Unlike some studies wherein the price was a key attribute on the purchase of wines (Guerra, 2005; McGarry & Thompson, 2010) or was indicated positively (Magistris et al., 2011). Consumers probably use price to narrow down their options given that they set the acceptable price to buy a wine, but this attribute is not a determining factor when buying this drink (Forbes, 2008).

Johnson and Bastian (2007) made an important observation regarding the influence of the price. In their study, the low price was the determining factor for consumers who have less knowledge about wine. Although the relationship between price and level of knowledge of the wine were not examined in this work, it shows that the consumer in Recife is perfecting the art of wine, preferring fines wines to common table wines, searching for more knowledge about the drink, reading the information on the back label and enjoying matching wine with food.

The findings of this study may be relevant for wine producers and merchants to develop strategies capable of influencing consumers, mainly because the world of wine is increasingly competitive (Forbes, 2008).

We conclude that many of the attributes of the product are not determining factors for wine buying decisions of the consumers. Attributes such as the appearance of the label and awards had little influence on the

decision. This result may indicate that such attributes are currently overlooked by the marketing team.

The continuity of this research can help wine industry to meet the profile of its consumers, while minimizing the risk of losing existing customers, as well as identifying the competitor brands of wines. Thus, it is suggested: 1) To develop research that take into account the specific market segments, allowing companies to know better their consumers and target audience, and be able to develop their products and advertising efficiently; 2) To carry out research on consumer preferences according to the situation of consumption that influence their behavior; 3) Further study on some specific attribute. For example, the country of origin was an attribute of relevance to consumers, but it would be interesting to identify which country the consumer prefers when purchasing a bottle of wine. It can also be studied what kind of information the consumer would like to find on the back label, one of the most important attributes in this research, because according to McGarry and Thompson (2010) the labels containing information about the flavors and aromas of the wine had more positive impact on the purchasing decisions of consumers.

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Information on the authors

Nayara Diniz

Graduated in Hospitality, Administration, Business and Marketing, Federal University of Pernambuco (UFPE). Email: nay_tcd@hotmail.com

Simone Almeida

Master's and PhD in Administration. Professor in the Hospitality and Tourism Department, Federal University of Pernambuco (UFPE). Email: simo-neufpe.almeida@gmail.com

Viviane Salazar

Master's and PhD in Administration. Professor in the Hospitality and Tourism Department, Federal University of Pernambuco (UFPE). Email: viviane_salazar@yahoo.com.br

Anderson Gomes de Souza

Master's and PhD in Administration. Professor in the Hospitality and Tourism Department, Federal University of Pernambuco (UFPE). Email: son_ander@hotmail.com