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Characterization of the consumer market and motivations for the consumption of craft beer

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Abstract

Purpose – The purpose of this paper is to determine the demographic characteristics and habits of craft beer consumers, as well as to identify the motivational factors for consumption.

Design/methodology/approach – Data were collected through questionnaires applied to 316 Brazilian craft beer consumers, and results were evaluated descriptively and by multivariate statistics.

Findings – The results of the survey revealed that there is a growing market segment with different buying habits and behaviors compared to traditional beer consumers. Demographically, it was found that these consumers are an attractive part of the beer market in terms of age, schooling and, more importantly, in terms of income, factors that indicate the probability of continued growth in the sector.

Research limitations/implications – The research was limited to craft beer consumers in the metropolitan region of Belo Horizonte/MG, Brazil.

Practical implications – The results obtained are important, as they can help new craft breweries, as well as help established industry managers to create strategies related to marketing four Ps in order to increase the consumption of its products, with competitive advantages to the market.

Originality/value – This research presents the characteristics of the consumers of craft beer, a market segment in evident rise in Brazil, about which there are few studies. In addition, it provides valuable information to both the new beverage manufacturers as well as to the already established entrepreneurs in the market so that they can increase the consumption of their products in a strategic way.

Keywords Marketing, Differentiation, Motivations, Craft beer, Market segment

Paper type Research paper

Introduction

In recent years, there has been a notable change in the behavior of a portion of beer consumers, who have been more aware, sophisticated and demanding about the emerging beverage culture in terms of desired quality and consumption habits. These represent a segment that takes into account the characteristics and quality of the ingredients used in the preparation of the beverage and that is willing to pay more than the conventional market price for these differentiated products, known as craft beers (Ascher, 2012; Assobirra, 2012;



Murray and O'Neill, 2012; Aquilani *et al.*, 2015; Sebrae, 2015; Gómez-Corona, Lelievre-Desmas, Buendía, Chollet and Valentin, 2016).

Craft beers are produced on a small scale through a slower fermentation process compared with traditional brews (Brewers Association, 2017). In addition to focusing on differentiation, craft brewers are committed to product innovation. They interpret historical styles with unique innovations and develop exclusive, unprecedented formulas. Thus, one of the main factors distinguishing craft beers from other traditional beers is the various types of beer that are carefully developed, giving a better aroma and flavor to the drink (Kleban and Nickerson, 2012; Brewers Association, 2017).

In this scenario, there has been an increase in production and consumption of craft beer in several countries with different customs and traditions such as the USA, Italy, France, Mexico, Brazil and others. Brazil currently ranks third in world beer production, having produced 14.0 billion liters in 2014 in comparison with the 13.5 billion liters produced in 2013, representing an average annual growth of around 5 percent in the last ten years. In November 2016, due to the intensification of the economic crisis that the country faced, beer production dropped by 3.6 percent in relation to the same month in 2015. However, the expectation is that in 2017, there will be a gradual resumption of growth in this sector, since, in terms of consumption, the country has a lot to grow, only occupying the 27th place in the per capita ranking, with an average of 66.9 liters per year in 2014 (CervBrasil – Associação Brasileira da Indústria da Cerveja, 2015, 2016a, b). According to the Brazilian Beer Industry Association (CervBrasil – Associação Brasileira da Indústria da Cerveja, 2013), the so-called special beers, which encompass the craft beer, imported and premium-category industries, occupy 5 percent of the market; however, the remarkable growth potential of the sector is expected to double the number of sales in the next five years.

Despite still occupying a small portion of the national beer market, the average growth recorded in the sale of craft beers in 2014 was 40 percent (Moreira, 2015), demonstrating that the sector has been driven by a combination of factors, e.g. beer quality, market availability, competitive prices (Kleban and Nickerson, 2012) and hyperdifferentiation of opportunities and effects, coupled with the appreciation of sensoriality and the search for pleasure in consumption (Clemons *et al.*, 2006; Sebrae, 2015).

Considering that beer is the most consumed alcoholic beverage in Brazil (Sebrae, 2015) and that this sector has potential for growth in the country, represented mainly by these new market segments, such as craft beer, it is of great importance for the industry to turn its attention to and understand the behavior of this type of consumer to meet their needs and their wishes.

Researchers have already demonstrated the importance of studying the characteristics of this new and promising market segment (Murray and O'Neill, 2012; Aquilani *et al.*, 2015; Sebrae, 2014, 2015; Gómez-Corona, Escalona-Buendía, García, Chollet and Valentin, 2016; Gómez-Corona, Lelievre-Desmas, Buendía, Chollet and Valentin, 2016). However, there is still a lack of literature data on the factors that influence this changing trend in behavior of groups of Brazilian traditional beer consumers in search of a more sophisticated and differentiated drink – craft beer – as well as studies describing the demographic characteristics of this niche market. In addition, there is little information on the sensory characteristics of craft beer such as appearance, taste, aroma, transparency, foam, among others (Morado, 2009), which are determinants for the choice and acceptance of the beverage together with the non-sensory characteristics inherent to the product and also those inherent to the consumer, which are present at the time of purchase and that directly influence their motivation and attitude.

In this sense, market research is one of the most important subjects to study consumer behavior. Consumer demographic information; customer expectations; satisfaction, habits and attitudes toward products, and motives that lead them to buy are pieces of

information used to quantify or understand consumer relationships and can be obtained through questionnaires commonly termed “uses and attitudes,” applied by marketing agencies. These questionnaires provide important results for the industries to organize themselves regarding the necessary actions to be executed in the present and for planning the future, ensuring decisions and investments based on secure information (Samara and Barros, 2007; Gonçalves *et al.*, 2013; Gómez-Corona, Escalona-Buendía, García, Chollet and Valentin, 2016).

In this context, the objective of this work was to undertake a market investigation to identify the demographic characteristics and habits of craft beer consumers as well as their motivations for consumption, generating solid information for the industry to draw up possible strategies to expand this market segment as well as to meet the needs and wishes of current consumers.

Materials and methods

Sample and data collection

A total of 316 volunteers from the metropolitan area of Belo Horizonte/MG, Brazil, were randomly recruited to participate in the study. They were interviewed between October 18 and November 21, 2014. To respond to the questionnaire, the volunteer had to be a consumer of craft beer and be over 18 years old.

The interviews were held at points of sale of craft beers such as pubs, fairs, bars and restaurants located in the city of Belo Horizonte/MG and at the 4th Uaiktoberfest – craft beer festival held in Nova Lima/MG, a city belonging to the metropolitan region of Belo Horizonte. The choice of this region was based on the fact that it is located in the southeast of Brazil, one of the regions of largest and consumption of special beers, such as craft beers, and on the expectation of finding results consistent with the habits of consumers of a city with market and product diversity.

For the definition of the sample size, a confidence level of 95 percent and a sample error margin $E = 0.06$ were used, considering an infinite population where the proportion of favorable (p) and unfavorable (q) to the attribute searched were unknown, being therefore considered 0.50 in both cases. Thus, for the population of the municipality analyzed, the minimum sample size was defined by (Malhotra, 2006):

$$n = \frac{q \times p \times Z^2}{E^2} \Rightarrow n \cong 267 \quad (1)$$

where n = number of respondents; $Z = 1.96$ (quantile level at a confidence level of 95 percent); $p = 0.5$ (50 percent consume craft beer); $q = 1 - p$ (50 percent do not consume craft beer); $E = 0.06$ (level of sample precision or sample error).

Respondents were questioned through a semi-structured questionnaire about the demographic characteristics of the interviewees, consumption habits, as well as factors that motivate the consumption of the drink, as shown in Table I. The questions were prepared based on studies with consumers of craft beer, available data on consumption and factors that motivate the consumption of beer, as well as other studies that approached the market research (Arruda *et al.*, 2009; Kleban and Nickerson, 2012; Murray and O'Neill, 2012; CervBrasil – Associação Brasileira da Indústria da Cerveja, 2013, 2014).

Prior to the application of the questionnaires, a pre-test was carried out with ten people to detect issues of difficulty understanding or contradictory, confusing and poorly formulated questions. To prevent bias and tendentiousness in the choices, we opted for the use of non-hierarchical circular cards of symmetrical dimensions for the respondents to point out their choices. Care was taken to vary the position of the card upon introducing it.

Parts I and III ^a	Content of the questions Part II ^b
Sex, age, marital status, education, income, people dependent on the income	1. Consumption by habit
What do you understand of craft beer?	2. Consumption for pleasure
What are the locations where you most consume craft beer?	3. Consumption alone
With which elements do you relate the consumption of craft beer?	4. I consume and recommend to friends
Characteristics of craft beer that you do not like	5. Consumption because of its differentiated flavor
Frequency of craft beer consumption	6. Consumption at home with family
Factors that hinder increased consumption	7. Consumption to unwind with friends
Which attributes do you observed at purchase?	8. Consumption to relax
Which type of craft beer do you most like?	9. I believe that craft beer unites people
	10. I believe the craft beer is harmful to one's health ^c
	11. I believe that craft beer consumption is associated with good food
	12. I produce craft beer for my own consumption
	13. I am interested in producing craft beer

Notes: ^aOpen and closed questions with responses according to each question; ^baffirmations evaluated on a structured five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree); ^cquestion that requires inversion of the scores

Table I.
Summary of the
questions presented
to the craft beer
consumers

Analysis of results

The evaluation was initially carried out by a descriptive exploratory analysis of the data from the questionnaires applied to the craft beer consumers to observe the behavior regarding distribution, frequency and variability of the data. Cross-tabulations were also performed to determine relationships among categorical variables. In addition, the chi-square test of adherence (χ^2) was performed to obtain the preference for the types of craft beer. All of these operational procedures of analysis were performed using the licensed version of the Statistical Package for the Social Sciences 15.0® software.

Correspondence analysis was applied to visualize the relationships between elements associated with craft beer and categories formed by consumers. This is a descriptive/exploratory technique designed to examine contingency tables with two entries containing correspondence measures between the rows and columns. Using this technique, variables of the rows and columns are represented spatially, providing a visual representation of the data (Greenacre and Belsius, 1994; Ten Kleij and Musters, 2003). Principal component analysis was also performed to visualize the relationships between the motivators of craft beer consumption and categories formed by consumers. The multivariate statistical analysis was performed using procedures of the SAS software version 9.1, licensed to the Federal University of Viçosa in 2009.

Results and discussion

Demographic characteristics of respondents

The demographic characteristics of craft beer consumers are shown in Figure 1. Of the 316 consumers who participated in this study, 34.8 percent were female and 65.2 percent were male, and these were predominantly unmarried. The same scenario was observed through a survey conducted by Sebrae (2014) with consumers of craft beer from the city of Juiz de Fora, which revealed that 57.0 percent of drinkers are male, 63.0 percent of whom are single. Gómez-Corona, Escalona-Buendía, García, Chollet and Valentin (2016) and Aquilani *et al.* (2015) also observed similar results when studying Mexican and Italian craft beer

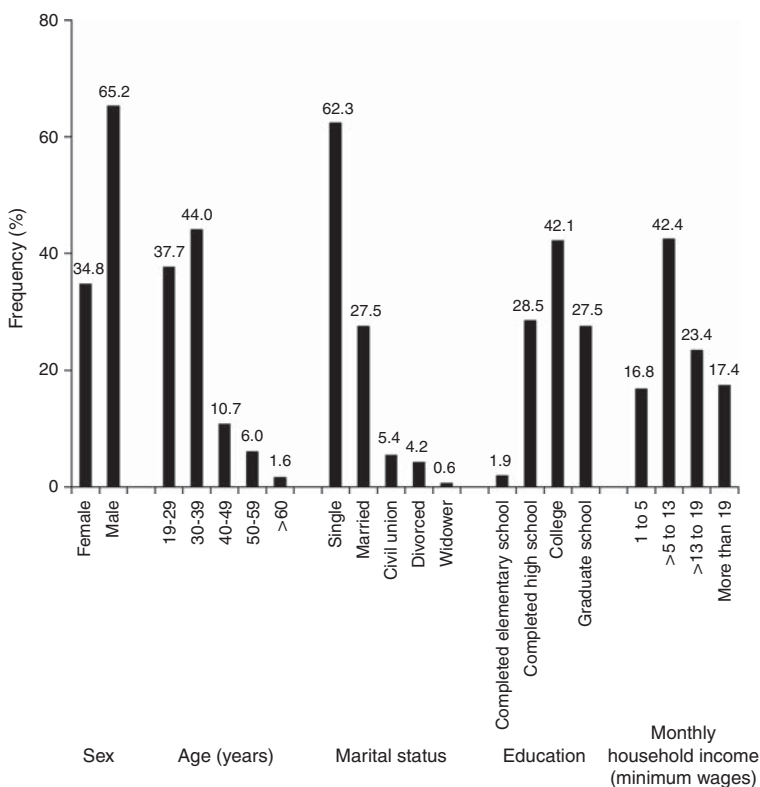


Figure 1.
Profile of craft
beer consumers
participating
in the study

consumers, respectively, which consist mainly of males (77.78 and 60.3 percent). Although the majority of consumers were male, there was a significant participation of women in the study. According to Bassaneze (2007), women have also become a representative class for breweries, with new consumption habits often resulting from the fact that they are currently financially independent and even heads of household. In addition, there has been an increase in the number of female sommeliers in the brewery market because craft beverages are increasingly attracting this audience (Sebrae, 2015).

The interviewees are aged between 19 and 65 years, with an average of 33 years and a standard deviation of 9.0 years, 81.7 percent of whom are aged between 19 and 39 years (Figure 1). This result is in agreement with the data available in the literature. According to Gómez-Corona, Escalona-Buendía, García, Chollet and Valentin (2016), 63.89 percent of Mexican consumers are between 25 and 35 years old. Aquilani *et al.* (2015) found that 65.2 percent of Italian consumers are between 18 and 33 years old. Of the consumers living in Juiz de Fora, 41.0 percent are also young people aged 20-29 years (Sebrae, 2014) and, in the USA, the age group of consumers who most appreciate craft beer is composed of young people aged 21 and 30 years (Ascher, 2012). These results indicate the probability of continued growth in this segment inasmuch as these youngsters become addicted to this type of beer and, when they constitute a family, they pass these habits on to their children, generating new consumers and lovers of craft beer.

A total of 69.6 percent of consumers had at least a college degree, of which a portion had post-graduate education. In terms of monthly family income, 42.4 percent of the participants reported earning between 5 (R\$ 3,621.00) and 13 (R\$ 9,412.00) minimum wages, and 40.8 percent

of consumers said they had an income of over 13 minimum wages, and for 54.8 percent of the interviewees, up to two people depend on this income. A similar result was observed among the drinkers in Juiz de Fora (Sebrae, 2014), of whom 34.0 percent had higher education and 48.8 percent had a family income between R\$ 2,500 and R\$ 10,200; and among Americans from Alabama, of whom 72.0 percent have a Bachelor's degree or post-graduate education and approximately 63.0 percent have an annual income of over US\$ 75,000 (Murray and O'Neill, 2012). This demonstrates that this market segment is composed of individuals who, for the most part, have high purchasing power and a high level of education.

Consumer behavior

Table II shows what the participants in the study understand by craft beer. Of the total interviewees, 68.4 percent stated that craft beer is a distinctively flavored beer produced on a small scale (68.4 percent) and of better quality (57.0 percent). Although the Brazilian legislation has no definition about craft beer, Morado (2009), Kleban and Nickerson (2012) and the Brewers Association (2017) characterize craft beer as a distinctively flavored drink

Variable	Consumers
<i>Understanding of what is craft beer^a</i>	
Beer with differentiated flavor	68.4
Beer produced on a small scale	68.4
Beer of higher quality	57.0
Beer made at home	42.7
Beer made with organic ingredients	18.7
Beer not pasteurized	16.5
Beer with artificial aromas	6.0
<i>Location of consumption^a</i>	
At home	60.1
Bars	39.5
Pubs	36.4
Residence of friends	23.7
Restaurants	19.6
Parties	13.6
Clubs	0.9
Others	3.2
<i>Frequency of consumption</i>	
All days	1.6
Up to 3 times per week	13.6
Up to 2 times per week	10.4
Up to once per week	24.7
Once every 15 days	16.1
Once per month	19.6
Once every 3 months	7.0
Once every 6 months	7.0
<i>Main factors that make it difficult to increase craft beer consumption^a</i>	
Price	71.8
Low product availability	69.3
Few advertisements	25.3
Others	11.1
Few brands	8.5

Note: ^aVariable with more than one description per consumer, therefore frequencies greater than 100 percent are observed

Table II.
Understanding and
consumption habits
in relation to craft
beer (values %)

made with better-quality ingredients and on a small scale, which reveals that most of the interviewees understand the meaning of the expression “craft beer” and know how to distinguish this differentiated product from traditional beers.

In a broader context, it can be stated that craft beers differ from traditional ones in that they are produced manually, with greater care in most stages of the process, with little automation. Thus, as a consequence of this meticulous and well-controlled production process, craft beer is obtained according to the characterization pointed out by the majority of the interviewees and in agreement with several specialists in the area.

However, a portion of the participants stated that craft beer is made at home with organic ingredients, unpasteurized and with artificial flavoring. As previously discussed, craft beer is produced on a small scale, but not necessarily in the domestic environment, and these are often produced by microbreweries and craft breweries (Morado, 2009). Organic beers are characterized by being made with ingredients without pesticides or synthetic fertilizers, which is not a necessary condition for a beer to be called a craft. Draught beer (craft and traditional) is a non-pasteurized beverage, but both craft beer and traditional beer are subjected to the pasteurization process (Brasil, 2009). In addition, one of the differences of the beer in question is often being formulated without the addition of adjuncts or artificial ingredients, considering that the Brazilian legislation prohibits the use of artificial flavorings in the beer production process (Morado, 2009). This fact reveals the lack of knowledge by a group of consumers about what actually characterizes the product they are consuming, revealing the need for clear and objective legislation that regulates and defines craft beers, coupled with greater clarification and marketing actions, including advertisements on the term “craft beer.”

As shown in Table II, the domestic environment was indicated as the main place of consumption of craft beer (60.1 percent), followed by bars (39.5 percent) and pubs (36.4 percent). According to the research conducted by Sebrae (2015) with Brazilian consumers of special beers (craft and premium), 96.0 percent of these also consume the beverage at home. According to Brink *et al.* (2011), Ascher (2012) and Assobirra (2012), a factor that influences domestic consumption is that most beers are made available through different distribution channels, which facilitates the purchase of the product and has allowed consumers to enjoy their favorite drink also at home, leading them to prefer domestic consumption.

Of the total number of respondents, 24.7 percent stated that they consumed craft beer with a frequency of up to once a week, and 24.0 percent reported drinking it two to three times per week (Table II). These results show that the consumption of the drink among the interviewees occurs with a greater frequency when compared with the Italian consumer, who consumes the beer mainly on special occasions (45.9 percent), and only 24.5 percent of those said to frequently consume craft beer one to four times per week (Aquilani *et al.*, 2015).

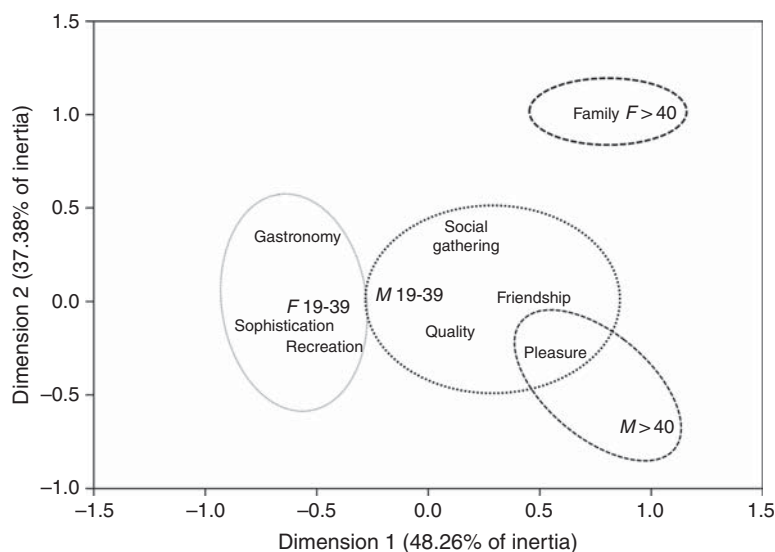
When asked about the two main factors that make it difficult to increase the consumption of craft beer, 71.8 and 69.3 percent of the participants pointed out the price and the lack of availability of the product, respectively (Table II). The selling price of craft beer is still an obstacle that hinders its market expansion and increased consumption by the interviewees. It is important, though, to understand the reasons that lead the production of craft beers to be more expensive than production on the mass beer scale: in addition to the cost pertinent to the raw material quality and the rigorous manufacturing process, microbreweries face a high tax burden (more than 60.0 percent of the total value of the beer) similar to the rates applied to large companies that dominate the market (Paranhos, 2014; Sebrae, 2015).

Regarding the second factor, despite the increasing number of virtual stores, bars, pubs, specialized emporiums, restaurants and supermarkets that include some craft beer labels in their portfolio (Kleban and Nickerson, 2012), a portion of the interviewees

reported that the lack of specialized places near their residences that sell the product makes access to the purchase difficult, which prevents increased consumption of the product. Addressing the lack of product dissemination, a smaller percentage of the respondents stated that the few advertisements are also an important factor in this case (Table II). Other factors such as lack of time, lack of opportunity, low alcohol consumption and fear of becoming an alcoholic were mentioned by the participants, and some affirmed that there is no factor that hinders the increase in consumption of the drink, stating that they just do not do it for the sake of choice.

Figure 2 presents the main elements to which the groups of respondents usually relate the craft beer. The drink was associated with quality, mainly by participants of the male gender aged 19 to 39 years, confirming that the high quality of raw materials used in the beverage production that often follow the Beer Purity Law (*Reinheitsgebot*) characterizes products of better perceived quality by consumers (Morado, 2009). Aquilani *et al.* (2015) and Gómez-Corona, Escalona-Buendía, García, Chollet and Valentin (2016) found that Italian and Mexican beer consumers, respectively, also regard craft beer as being of higher quality than commercial beer because of the raw materials used for its manufacture and its overall quality.

When compared with the female participants, male respondents showed a greater association between the “pleasure” element and consumption of craft beer, revealing the feelings of satisfaction and contentment as stimulated by the drink. Moreover, women between 19 and 39 years old stood out for associating the beverage with gastronomy and sophistication (Figure 2). According to Santarneck (2011) and Sebrae (2015), this new trend in consumption of specialty beers, including craft beers, is driven by a gastronomic front that addresses the differentiated appreciation of beer in a low intake for a better perception of its aromas and flavors, as well as to harmonize these sensory properties with different dishes.



Notes: *F* 19-39: consumers of the female gender aged between 19 and 39 years; *F* >40: consumers of the female gender aged over 40 years; *M* 19-39: consumers of the male gender aged between 19 and 39 years; *M* >40: consumers of the male gender aged over 40 years

Figure 2. Relationship between groups of craft beer drinkers and elements they associate with the beverage

It is worth mentioning that the association of craft beer with social information such as friendship, leisure, relaxation, social interaction and family is made by both men and women of different age groups, demonstrating its role as an element capable of bringing people together in diverse occasions and environments. According to CervBrasil – Associação Brasileira da Indústria da Cerveja (2014, 2016a), the act of drinking beer evokes an imaginary universe of meanings that goes beyond the act of consuming a drink, symbolizing integration and joy, so much that it is not possible to dissociate the presence of the drink from moments of a meeting of friends, lovers or family; the sheer pleasure of drinking; meeting up for old time's sake; or just to relax at the end of an exhausting day at work. Thus, it is observed that craft beer is consumed by consumers of both genders to satisfy physiological, psychological and social needs.

When questioned about the existence of some characteristic in craft beer that they do not like, more than half of the consumers (51.9 percent) said none. A total of 48.1 percent of the respondents stated that they do not particularly like the high price (22.5 percent) and the taste of some craft beers (16.8 percent), noting that “some craft beers are very strong, others very sweet and with exotic flavors with which the taste is not accustomed; sometimes the bitter taste is excessive and the alcohol content is very high.” Other characteristics pointed out in smaller proportions by them were little availability, lack of standardization, texture and coloration.

The attributes considered the most important by the respondents in the choice of craft beer were, in descending order, quality (53.8 percent), type (35.1 percent), brand (24.1 percent) and price (21.5 percent). A study carried out by Sebrae (2015) confirms these results, since consumers of special beers take into account quality, style, price, recommendation and innovation as criteria in their decision of purchasing the beverage.

According to Assobirra (2012), consumers have become more aware and demanding regarding the emerging beer culture, mainly in terms of the desired quality of the product, as observed in the choice behavior of the participants in this study. This is the attribute to which they attach more importance. Similar results were found by Aquilani *et al.* (2015), who found that Italian consumers attributed greater importance, among several characteristics of the beverage being evaluated, to the perceived quality of the product.

The type of beer is associated with sensory characteristics of the drink such as consistency, color, aroma, bitterness and flavor, and it is considered the second attribute of greatest importance by consumers in the selection of a beer. According to Kleban and Nickerson (2012), the diversity of types of craft beer attracts consumers who are looking for a beverage flavor revolution. This is a factor that exerts great influence in the process of choosing the beer and, according to Sester *et al.* (2013), it is a very important attribute, since consumers expect to find specific flavors, characteristics of bitterness, texture, brightness, among others, and the beer can even be rejected if these expectations are not met.

The brand was considered the third most observed attribute in the choice of craft beer. According to Kleban and Nickerson (2012), building successful beer brands is a step-by-step process that takes into account several factors such as beer quality, competitive market availability, marketing and special offers. For Bronnenberg *et al.* (2012), the choice of products based on their brands may reflect the influence of past experiences, which reflects the association of all of the above-mentioned aspects. Kotler and Armstrong (2007) reported that consumers learn to act on their product expectations. When expectations about a particular brand are positively confirmed, the consumer is satisfied and remains faithful to it as long as their perception of quality is proven, which is the most important attribute in defining the choice of a craft beer.

Regarding price, the results demonstrate that this is not the most important attribute observed in the choice of craft beer. This can be explained by the fact that this segment of the market is made up of consumers interested in exploring new and different beer flavors,

which can be evidenced by the greater importance they attach to the quality and type of beer in the purchase of the product and their willing to pay prices (Nielsen News Release, 2007; Brager and Greco, 2011; Ascher, 2012). For beer experts, higher prices are associated with higher levels of quality (Ascher, 2012), while lower prices are associated alternatively with lower-quality beer, unpleasant taste (Bredahl, 1999), as well as with more accessible, mass-produced beverages (Ascher, 2012). However, it is important to note that although price is not the deciding factor in the choice of a product, many consumers value the combination of quality and price, which can be evidenced by the fact that a portion of respondents reported that high prices are characteristics they do not like in the product and also because they point to it as a hindrance to increased consumption of the beverage.

The results of the χ^2 test of adherence for the consumers' responses in relation to the types of craft beer they like best revealed a significant difference ($p \leq 0.01$) between expected frequencies, with the Pale Ale type being the most appreciated, followed by the Pilsner and Weissbier types. In the Pale Ale category, participants indicated the Indian Pale Ale (6.6 percent) and Pale Ale (24.1 percent) as the most accepted, whereas in the Weissbier category, the individuals reported liking the "Wheat" (0.6 percent) and Weissbier (15.5 percent) types.

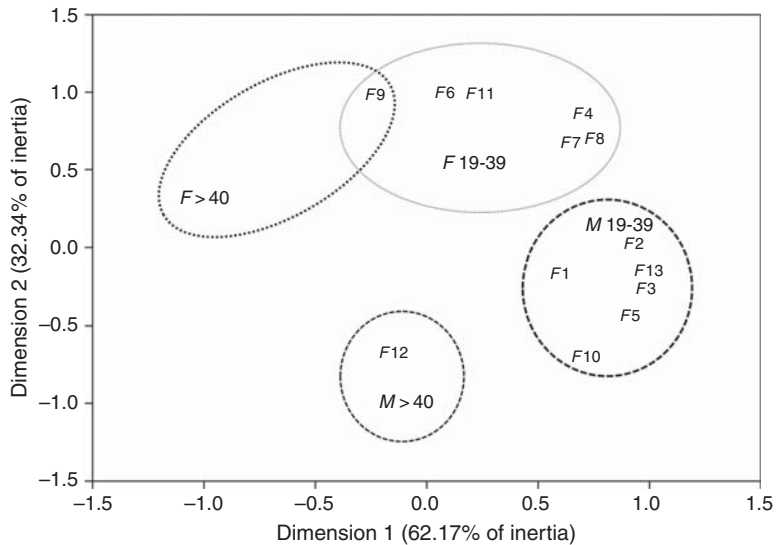
Currently, there are several types of beer, which differ in the use of raw material as well as in characteristics during the production process such as cooking time and temperature, fermentation and maturation (Soares, 2011), resulting in varied sensory traits. The results of the cross-tabulation between the variables "sex" and "type of craft beer that consumers like best" revealed that men prefer the Pale Ale type, while women most appreciate the Pilsner type.

Motivations for consumption

Figure 3 shows the relationship between different groups of consumers and their main motivators for consuming the drink. Men in the age range between 19 and 39 years were found to consume the drink for reasons related to the sensation of pleasure, to enjoy a different flavor, whereas women in the same age group consume craft beer for the idea of combining it with good gastronomy and to relax in the company of family members or friends, giving an aggregating effect to the craft beer (a factor that also motivates women aged over 40 years). In addition, this group is also highly motivated to recommend it to friends.

The younger males also reported to be strongly motivated to drink craft beer by habit and alone and showed to be highly interested in producing it (Figure 3). This group of consumers, in special, does not believe the drink does any harm to health, since they attributed the lowest average for this variable, suggesting that this is an important factor to discourage them from consuming. Men over 40 years old, however, are motivated to produce craft beer for own consumption, considering this activity also a hobby and one of their passions.

Many authors have confirmed the importance of these variables pointed out by the interviewees as motivators for the consumption of craft beer. As discussed earlier, beer drinking symbolizes integration and joy, coupled with moments of encounter with friends and family, to unwind or relax at the end of a tiring day at work (Cervbrasil – Associação Brasileira da Indústria da Cerveja, 2014, 2016a). According to Tierney-Jones (2011), beer unites people, inspires sociability and awakens a whole new dimension of sensory contemplation. Kleban and Nickerson (2012) argued that the "flavor revolution" is the main reason for consuming craft beer. Murray and O'Neill (2012) found that American consumers not only have high satisfaction in consuming and producing the beverage but also are motivated to recommend the product to others. In a recent study in Mexico, craft beer consumption emerged as an experienced-based product; the goal toward consumption was not functional but symbolic as a desire to build identity and



Notes: F19-39: Consumers of the female gender aged between 19 and 39 years; F >40: Consumers of the female gender aged over 40 years; M 19-39: Consumers of the male gender aged between 19 and 39 years; M >40: Consumers of the male gender aged over 40 years; F1: consumption by habit; F2: consumption for pleasure; F3: consumption alone; F4: I consume and recommend to friends; F5: consumption because of its differentiated flavor; F6: consumption at home with family; F7: consumption to unwind with friends; F8: consumption to relax; F9: I believe that craft beer unites people; F10: I believe the craft beer is harmful to one's health; F11: I believe that craft beer consumption is associated with good food; F12: I produce craft beer for my own consumption; F13: I am interested in producing craft beer

Figure 3. Relationship between motivators for consumption of craft beer and groups of craft beer drinkers (PCA)

distinction (Gómez-Corona, Escalona-Buendía, García, Chollet and Valentin, 2016). Furthermore, Sohrabvandi *et al.* (2012) highlighted the nutritional characteristics of beer as well as its benefits for consumers who drink it moderately, since it contains protein, B vitamins, certain minerals, phenolic compounds (antioxidants), ethanol, dietary fibers and even prebiotic compounds.

The factors mentioned in this study serve as basis to access and analyze the promotional compound (four Ps of marketing: product, price, place and promotion) of craft beer as well as to disseminate it through advertisements aimed at maintaining the consumers of the drink motivated to consume it and to arouse the curiosity, interest and motivation of those who are not yet adherents to the consumption of the craft beers.

Conclusion

The results obtained through the market research carried out with craft beer consumers from the metropolitan area of Belo Horizonte revealed that the preferences of this segment seem to be related to the discovery of new flavors and the search for high-quality products as well as craft products and that these factors are gradually changing consumer habits and buying behavior. Demographically, it was found that these consumers are an attractive part of the beer market in terms of age, schooling and, more importantly, in terms of income, since craft beer has a higher price than commercial beers.

From the managerial point of view, the results obtained such as the attributes considered most important at the moment of purchase of the beverage, the factors that motivate them to consume the product, the elements related to the craft beer, the frequency and places of consumption, as well as the main factors that hinder increased consumption of beer can help new craft brewers identify the most important factors influencing the choice and consumption of craft beer as well as to highlight preferred distribution channels for consumers.

In addition, these results can help managers of established brewing breweries create strategies to increase consumption of their products by partially changing their characteristics or creating new types of beer in order to serve the portion that still has low consumption of the beverage. As well as to promote their products through marketing actions, including advertisements based on the main associations and motivating factors, in order to establish a clear, objective and attractive communication so that it can arouse the curiosity and interest of even those who still do not consume the product and respond to new expectations and preferences of consumers.

References

- Aquilani, B., Laureti, T., Poponi, S. and Secondi, L. (2015), "Beer choice and consumption determinants when craft beers are tasted: an exploratory study of consumer preferences", *Food Quality and Preference*, Vol. 41, pp. 214-224.
- Arruda, A.C., Minim, V.P.R., Ferreira, M.A.M., Minim, L.A., Silva, N.M. and Soares, C.F. (2009), "Justificativas e motivações do consumo e não consumo de café", *Ciência e Tecnologia de Alimentos*, Vol. 29 No. 4, pp. 754-763.
- Ascher, B. (2012), *Global Beer: The Road To Monopoly*, American Antitrust Institute, Washington, DC, available at: www.antitrustinstitute.org/sites/default/files/Global%20Beer%20Road%20to%20Monopoly_0.pdf (accessed February 10, 2017).
- Assobirra (2012), "Annual report 2011", available at: www.assobirra.it/press/wp-content/ar2012_assobirra1.pdf (accessed February 10, 2015).
- Bassaneze, S. (2007), "Vendas em Alta", *Guia da Cerveja 2007*, Editora Casa Dois, pp. 40-44, available at: www.casadois.com.br/feitas-e-gastronomia/guia-da-cerveja.html (accessed February 10, 2017).
- Brager, D. and Greco, J. (2011), "Millennials redefine the alcoholic beverage landscape", Nielsen Wire, available at: www.nielsen.com/us/en/insights/news/2011/millennials-redefine-the-alcohol-beverage-landscape.html (accessed February 10, 2017).
- Brasil (2009), "Ministério da Agricultura", Secretaria Nacional de Defesa Agropecuária, Decreto no 6.871, Diário oficial da União, Poder executivo.
- Bredahl, L. (1999), "Consumers' cognitions with regard to genetically modified foods. Results of a qualitative study in four countries", *Appetite*, Vol. 33 No. 3, pp. 343-360.
- Brewers Association (2017), "Craft brewer defined", available at: www.brewersassociation.org/statistics/craft-brewer-defined/ (accessed February 2017).
- Brink, M., Gosepa, S., Geerten, K., Oranje, E., Uyterlinde, M., Berkhout, B. and De Wit, W. (2011), "The European beer market, Ernst & Young tax advisors and regioplan policy research", *The Contribution Made by Beer to the European Economy*, Amsterdam, pp. 1-290.
- Bronnenberg, B.J., Dubé, J.-P.H. and Gentzkow, M. (2012), "The evolution of brand preferences: evidence from consumer migration", *American Economic Review*, Vol. 102 No. 6, pp. 2472-2508.
- CervBrasil – Associação Brasileira da Indústria da Cerveja (2013), available at: <http://cervbrasil.org.br/> (accessed September 3).
- CervBrasil – Associação Brasileira da Indústria da Cerveja (2014), "Anuário 2014", available at: <http://cervbrasil.org.br/wp-content/themes/cerv/pdf/anuariofinal2014.pdf> (accessed February 4, 2017).
- CervBrasil – Associação Brasileira da Indústria da Cerveja (2015), "Anuário 2015", available at: http://cervbrasil.org.br/arquivos/ANUARIO_CB_2015_WEB.pdf (accessed February 22, 2017).

- CervBrasil – Associação Brasileira da Indústria da Cerveja (2016a), “Anuário 2016”, available at: http://cervbrasil.org.br/arquivos/anuario2016/161130_CervBrasil-Anuario2016_WEB.pdf (accessed March 7, 2017).
- CervBrasil – Associação Brasileira da Indústria da Cerveja (2016b), “Informe Dezembro 2016”, available at: http://cervbrasil.org.br/arquivos/informes/161212-InformeCervBrasil_Dezembro_WEB.pdf (accessed March 7, 2017).
- Clemons, E.K., Gao, G.G. and Hitt, L.M. (2006), “When online reviews meet hyper differentiation: a study of the craft beer industry”, *Journal of Management Information Systems*, Vol. 23 No. 2, pp. 149-171.
- Gómez-Corona, C., Escalona-Buendía, H.B., García, M., Chollet, S. and Valentin, D. (2016), “Craft vs. industrial: habits, attitudes and motivations towards beer consumption in Mexico”, *Appetite*, Vol. 96 No. 1, pp. 358-367.
- Gómez-Corona, C., Lelievre-Desmas, M., Buendía, H.B.E., Chollet, S. and Valentin, D. (2016), “Craft beer representation amongst men in two different cultures”, *Food Quality and Preference*, Vol. 53, pp. 19-28.
- Gonçalves, A.C.A., Ferreira, M.A.M., Minim, L.A. and Minim, V.P.R. (2013), “Pesquisa de Mercado Aplicada à Indústria de Alimentos”, in Minim, V.P.R. (Ed.), *Análise Sensorial: estudos com consumidores*, 3rd ed., Vol. 9, Editora UFV, Cap, Viçosa, pp. 231-274.
- Greenacre, M. and Belsius, J. (1994), *Correspondence Analysis in the Social Sciences*, Academic Press, Amsterdam.
- Kleban, J. and Nickerson, I. (2012), “To brew, or not to brew – that is the question: an analysis of competitive forces in the craft brew industry”, *Journal of the International Academy for Case Studies*, Vol. 18 No. 3, pp. 59-81.
- Kotler, P. and Armstrong, G. (2007), *Princípios de Marketing*, 12th ed., Pearson Prentice Hall, São Paulo, pp. 1-600.
- Malhotra, N.K. (2006), *Pesquisa de Marketing: uma orientação aplicada*, 4th ed., Bookman, Porto Alegre, pp. 1-720.
- Morado, R. (2009), *Larousse da cerveja*, Larousse do Brasil, São Paulo, pp. 1-357.
- Moreira, I. (2015), “Geladas que valem ouro”, *VEJA BH*, Editora Abril, ano, Vol. 48 No. 8, pp. 22-27.
- Murray, D.W. and O'Neill, M.A. (2012), “Craft beer: penetrating a niche market”, *British Food Journal*, Vol. 114 No. 7, pp. 899-909.
- Nielsen News Release (2007), “Millennials seek new tastes, pay premiums for alcoholic beverages: study”, *Progressive Grocer*, available at: www.progressivegrocer.com/millennials-seek-new-tastes-pay-premiums-alcoholic-beverages-study (accessed March 9, 2017).
- Paranhos, P. (2014), “Por que cervejas artesanais são mais caras: Produção e Impostos”, *Mestre Cervejeiro*, available at: www.mestre-cervejeiro.com/por-que-cervejas-artesanais-sao-mais-caras-producao/ (accessed February 10, 2017).
- Samara, B.S. and Barros, J.C. (2007), *Pesquisa de Marketing: conceitos e metodologia*, 4th ed., Pearson Prentice Hall, São Paulo, pp. 1-272.
- Santarnech, D.G. (2011), “Novos desafios e expectativa positiva”, *Revista Indústria de Bebidas*, São Paulo, ano 10, Anuário 2011.
- Sebrae (2014), “Quem consome cerveja artesanal em Juiz de Fora”, Minas Gerais, available at: www.mg.agenciasebrae.com.br/sites/asn/uf/MG/Quem-consome-cerveja-artesanal-em-Juiz-de-Fora (accessed March 9, 2017).
- Sebrae (2015), “Relatório de Inteligência: Alimentos – Cervejas Artesanais”, available at: www.sebraeinteligenciasetorial.com.br/produtos/relatorios-de-inteligencia/cervejas-artesanais/55c4ad3614d0c01d007ffae (accessed March 7, 2017).
- Sester, C., Dacremont, C., Deroy, O. and Valentin, D. (2013), “Investigating consumers’ representations of beers through a free association task: a comparison between packaging and blind conditions”, *Food Quality and Preference*, Vol. 28 No. 2, pp. 475-483.

- Soares, N. (2011), "Tempo de mudanças", ano 23, n. 205, Revista Indústria de Bebidas, São Paulo.
- Sohrabvandi, S., Mortazavian, A.M. and Rezaei, K. (2012), "Health-related aspects of beer: a review", *International Journal of Food Properties*, Vol. 15 No. 2, pp. 350-373.
- Ten Kleij, F. and Musters, P.A.D. (2003), "Text analysis of open-ended survey responses: a complementary method to preference mapping", *Food Quality and Preference*, Vol. 14 No. 1, pp. 43-52.
- Tierney-Jones, A. (2011), *1001 Cervejas para beber antes de morrer*, Sextante, Rio de Janeiro, pp. 1-960.

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