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PROFILING BEER CONSUMERS FOR BREWERY MANAGEMENT

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10.1 Introduction

Beer is one of the oldest and most consumed alcoholic beverages, being part of the daily diet of millions of people. More specifically, beer is today the most widely consumed alcoholic beverage worldwide, accounting a 78.2% of the alcoholic beverages' market share (Gomez-Corona et al., 2016). In addition, new trends are taking place in the brewery sector, such as the increase of beer consumption at home, the increase of the awareness of beer quality among consumers, along with a higher demand for new flavors and varieties and the increasing demand for craft and specialty beers (Kleban and Nickerson, 2012). So, beer consumers are gradually altering their consumption and purchasing behavior. On the other hand, prior studies highlight that food and beverage consumption habits and patterns remain stable over time (Köster and Mojet, 2007; Van Trijp and Van Kleef, 2008).

In this context, it seems interesting to examine whether there are consumer segments in order to propose and develop products targeting the different demands and preferences in beer consumption. Moreover, it is critical that brewers identify and understand consumer segments and their consumption patterns in order to better target different priorities and preferences. Such beer consumers segmentation would allow brewers to tailor their beers to the identified consumer segments.

Despite a consumer-based segmentation could be extremely effective in differentiating among beer consumers, there is scarce research on the presence of consumer typologies regarding beer consumption that could be used in order to classify the beer market into different segments. Consequently, in this study, we develop a clustered-based segmentation of beer consumers, focusing on consumer-based, product-based, and situational or consumption context variables. Then, the obtained results are used to propose different brewery marketing strategies and marketing actions.

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10.2 The European Brewery Sector

The European breweries produced more than 390 million of beer hectoliters in 2012, being the EU the second largest world beer producer (The Brewers of Europe, 2012); thus producing more beer than the US (230 million hectoliters) and with a smaller production of beer compared to China (443 million hectoliters), as reported by Berkhout et al. (2014a, b). Further, in year 201 a total amount of 357 million of hectoliters of beer were consumed in the EU; and consequently, the average beer consumption was of approximately 108.1 beer liters per consumer and year (Berkhout et al., 2014a, b). However, some disparities are found in the average of beer consumption between European countries, since Eastern and Central European countries consume more beer than Southern European countries.

The EU accounts more than 5000 brewing companies in 2014 (The Brewers of Europe, 2014) and the total sales of the brewery sector were approximately 111 billion Euros in 2012. Similarly, the brewery production and consumption engendered nearly 51.5 billion Euro of value added for the EU economy (Berkhout et al., 2014a, b). Moreover, in 2013 nearly two million of direct and indirect employments were created by the brewery sector in the EU.

The world's major brewing companies are located in the EU, but this sector also includes numerous small and mid-sized-independent breweries, as well as a great number of microbreweries. So, the European brewery sector is characterized by a huge diversity, driving a great variety in beer brands, styles; and in general terms, in the beer assortment offered to consumers. Regarding the type of beer offered into the marketplace, there is an increasing concentration of mainstream industrial brewers producing only few beer styles and numerous small and microbreweries offering craft and special beers (Donadini and Porretta, 2017).

The brewing sector also has an important social impact, in addition to the great economic impact. More precisely, the European beer companies jointly invest approximately 1 billion Euro in order to support a broad range of activities (Berkhout et al., 2014a, b), ranged from culture and arts, sport events, shows and exhibitions, conservation of the environment, community events, or even charity actions.

The EU beer sector has previously been characterized by product innovation to meet the increasing consumer demand for new products. The rise in the number of small and mid-sized breweries in many EU countries was a key factor in order to enhance the consumer interest in beer as a product category, driving also great interest in the wide diversity of beer styles and engendering awareness of the place of beer in the European gastronomy. Accordingly, the EU brewery sector developed new beer brands and styles, through product innovation, reacting positively to this new trend.

10.2.1 The Consumption of Beer

Alcohol consumption has been the focus of numerous interdisciplinary studies like sensory analysis (Leliévre et al., 2008), psychology (Valentin et al., 2007), and marketing (Choi and Stack, 2005), highlighting the importance of this type of consumption. In fact, alcoholic beverages are not only beverages, since their consumption comprises a range of positive and negative valuable feelings and motivations (Heath, 1987). In this context, Crowford (1987) suggested that individuals drink alcohol for several reasons. In First place, individuals drink alcohol for social reasons, which refer to social celebrations and obligations, such as parties. Second, alcohol consumption entails intrinsic reasons and hedonic aspects, referring to the pleasure derived from alcohol consumption per se. Finally and third, individuals drink alcohol for psychological reasons related with sensation seeking.

Among these reasons, social reasons and social interaction is considered as the guiding phenomenon for beer consumption. Beer consumption has a strong social and collective aspect, given that the beer social collective consumption may be based on friendship or family ties (Pettigrew, 2003). Similarly, the phenomenon of alcohol consumption among consumers should be considered when examining beer consumption. Among young consumers the consumption of alcohol, such as for example, beer, or wine, takes place as a *social act* (Pettigrew, 2003); and accordingly, appropriate locations for beer consumption are considered as *social institutions* being part of the western cultures.

Finally, it should be noted that beer as a beverage has a low switching cost to other alternative alcoholic beverages such as wine or spirits; thus creating a low elasticity of beer demand.

10.2.1.1 Where is Beer Being Consumed?

A major trend in the brewery sector in the past decades is that consumers are drinking beer at home more frequently than out of home; that is, in pubs, bars, or restaurants (Berkhout et al., 2014a, b). One potential explanation to this new trend could be the increase in the average age of the EU citizens, since it is commonly assumed that older consumers tend to stay at home, compared with younger consumers. However, this trend augmented since 2008 due to the economic crisis and the continuing downturn, given that the austerity measures adopted by many EU countries reduced the disposable income of many European consumers. More precisely, the percentage of beer consumed in bars, pubs, or restaurants slumped from 38% in 2008 to 35% in 2010 in the UE (Berkhout et al., 2014a, b).

The trend toward *home consumption* has a clear negative effect on beer consumption in the hospitality sector and leads to an accelerated shift from on-trade to off-trade sales. The fact that the average consumer price of beer in a bar, pub, or restaurant is higher than in the retail sector is also relevant; and therefore, beer drinkers can save considerably by drinking at home. Furthermore, a higher benefit could be gained when beer is consumed in bars, pubs, or restaurants than being bought in supermarkets and consumed at home.

The reason is that the sale of beer through the hospitality sector entails higher labor intensive than the sale through the retailing system; and accordingly, consumers show a higher predisposition to pay a premium price for beer in a bar, pub, or restaurant rather than in a hypermarket. That is, the sale of beer in the hospitality sector generates higher value added and creates more employment (Berkhout et al., 2014a, b). Hence, the total economic impact of the brewery sector is higher in European countries where beer is mostly consumed out of home than in those countries where beer is mostly sold through the retailing system.

Finally, there are interesting differences between the European countries regarding the place of beer consumption; and more precisely, comparing these countries where beer is mostly consumed in bars and pubs and those countries where beer is mostly consumed at home. In general terms, in countries such as Greece, Portugal, Spain, and Greece more than the 60% of beer consumption was consumed out of home, in bars, pubs, or restaurants; while in countries such as Germany, Poland, Estonia, or Lithuania, more than the 80% of the total beer consumption was consumed at home. In addition, there are differences regarding the beer cultural-based consumption: some European countries are predominantly beer consumers such as Germany, Austria, Poland, or the Czech Republic; while other European countries have a strong wine-based consumption such as are Portugal, Spain, and France.

10.2.2 New Trends in the Brewery Sector

In the last decade a growing interest for beer has been noted in several countries, along with some new trends in the brewery sector. One trend is the increase of the awareness of *beer quality* among consumers (Mejlholm and Martens, 2006), and product craftsmanship, which is related with the emergence of *craft breweries* in numerous countries, as an alternative to mainstream beer mass-produced beer (Kleban and Nickerson, 2012; Gomez-Corona et al., 2016). As a consequence, craft beer and specialty beer is becoming increasingly popular among consumers today. When consumers perceive and assess the handicraft nature of beer, an increasing interest in beer style and locally brewed production arises, and consumers become more interested in the territory of beer production since it provides a sense of identity (Donadini and Porretta, 2017).

Other trend is that consumer beer preferences seem to be associated not only with the search for higher quality, but also with the discovery of *new flavors* (Donadini et al., 2016). As a consequence, the breweries' push for innovation demands great research into the raw materials or beer flavors.

So, beer consumers are gradually altering their consumption and purchasing behavior. In this context, it seems that the demands of consumers tend to polarize. On the one hand, consumer taste tends toward softer-taste beers and beer mixes—such as beer and lemonade—and fruit beers; whereas on the other side, there is an increasing demand for premium beers. Over the past years, the brewing industry responded in a positive way in order to meet the consumer demands, offering a wide diverse range of products and product varieties. Other major trend is the greater demand for *specialty beer*, generally characterized by a sweeter taste or by a lower alcoholic graduation. Because of these emerging market trends, the brewery industry is innovating and developing new beer products. One example of this product innovation could be that today some brewers are developing specialty beers in order to better target this specific demand combining the incorporation of a wide range of raw materials (Donadini et al., 2016) and processing and technological advances (Aquilani et al., 2015). Following Donadini et al. (2016) the main advantage of specialty beer is grounded on the authenticity of the product, due to the great variety of raw materials and the experimentation of new combinations of ingredients and flavors.

Finally, there is trend related with the increasing request for support in sustainability issues; in fact, today brewers are concentrating their efforts on the improvement of the sustainability of their brewing processes, while trying to improve their efficiency and their water and energy management.

10.3 Theoretical Foundations

10.3.1 Segmentations of Beer Consumers

Traditionally, demographic and socioeconomic variables have been developed in market segmentation studies to divide the market into consumer groups. However, segmentation analysis based on demographic variables is not the most effective analysis, since individuals in the same segment may have different preferences, attitudes, and lifestyles; and in turn, demographic and socioeconomic segmentation may not reveal consumers' behavior. On the contrary, psychographic variables have been often been used in market segmentation to gain insights into consumers' behavior and consumption patterns.

In the brewery sector, previous research was conducted on beer consumers' segmentation, offering different profiles for the consumption of this beverage. In this context, Gomez-Corona et al. (2016) developed a research using consumer population and demographic characteristics to better understand the benefits and motivations of beer consumption; suggesting that beer consumers could be classified in "*industrial,*" "*occasional industrial,*" and "*craft beer*" consumers. Likewise, brewers generally differentiate their beer products through the sensory characteristics of beer to develop a consumer segmentation analysis. One example is the market segmentation based on product-based attributes developed by Chrysochou (2014) who divided the market into the low-calorie beer, beers "for women," healthy beers, and beers with different levels of alcohol.

However, other consumer-based variables could be used in order to differentiate consumer segments (Cardello et al., 2016), such as product loyalty, familiarity, product image, perceived quality, "*value for money,*" purchase intention, or even the predisposition to pay a premium prices.

10.3.2 Variables Influencing Beer Consumption

Previous literature on the topic supports those factors affecting beer choice and consumption could be divided into three different categories, namely beer attributes—or product-based attributes—consumer-based attributes, and factors related to the purchasing process and consumption situation (Aquilani et al., 2015).

10.3.2.1 Product-Based Attributes

Sensory Attributes

The sensory approach to products targets specific attention to the way in which senses play a determining role in consumption and product preferences. So, consumers can be evaluated and segmented according to their preferences related to beer sensory attributes—such as taste, texture, product aroma, color, or even temperature—since consumers' perception and evaluation of products is mainly influenced by sensory characteristics (Daems and Delvaux, 1997).

In prior research, there are scarce contributions on the analysis of the influence of each one of beer sensory attributes—aroma, flavor, or texture—on consumer behavior and preferences (Aquilani et al., 2015); being *taste* the only beer sensory attribute whose effect was studied. Authors like Choi and Stack (2005) reported that beer consumption choices are a matter of personal taste.

Regarding beer taste, Thompson and Thompson (1996) noted that "*consumers expect to find flavors such as bitterness, texture such as sparkles or physiological quality such as being thirst-quenching. Therefore, a* *beer could be rejected if these expectations are not confirmed.*" Their research provides evidence for the argument that *taste* is a key factor for the growth of the brewery market (Thompson and Thompson, 1996) and should be taken into careful consideration, especially when product characteristics—such as low calorie and low alcohol content—are perceived by consumers to jeopardize taste (Chrysochou, 2014). Similarly, prior research highlights the close relationship between beer flavor and beer perceived quality. More precisely, Donadini et al. (2016) found that specialty beer is chosen for its selection of flavors, which also increased the probability of perceiving beer to be of superior quality to conventional or mainstream beers. In addition, today consumer preferences are strongly connected to the discovery of new beer flavors (Aquilani et al., 2015).

Finally, in this study the beer type or beer style is included, which relates to pilsners, lagers, red beer, dark beer, flavored beers, or free-alcohol beer types. The inclusion of this product-based attribute is based on prior research suggesting that the consumption of special beer and craft beer has increased in the last years (Berkhout et al., 2014a, b).

Nutritional Components and Amount of Alcohol

Beer comprises nutritional characteristics and benefits on consumers who moderately consume beer, since it contains proteins, certain minerals, antioxidants, ethanol, dietary fibers, and even prebiotic compounds (Sohrabvandi et al., 2012); and consequently, some beer consumers pay attention to the health benefits and nutritional components associated with beer consumption. In fact, some consumers have become more aware of the desired quality of beer and consumption habits, as well as the characteristics and nutritional components of beer. Similarly, following Wright et al. (2008), the availability of beer nutritional components information increases the consumer perception of the beer healthfulness; which in turn influences the consumer behavior and purchase decisions (Lee et al., 2006).

Likewise, low-alcohol beverages are perceived as a way to reduce the negative health-related consequences caused by consumption of high amounts of alcohol. In addition, weight management explains why low-alcohol beverages receive great success among health-conscious consumers (Hill and Casswell, 2004). Therefore, weight management and the fact that low-alcohol beverages are a healthier alternative to alcoholic beverages have often been reported as important motives for their consumption (Thompson and Thompson, 1996).

More precisely, the nonalcoholic beer is a relatively new beverage that is consumed far less than beer and has little appeal to consumers, despite being a healthier alternative (Silva et al., 2016). The main reason for its little appeal could be related to its lack of taste, since prior research shows that free-alcohol beer is perceived as less tasty than regular beer, being the product taste is the main motivation for its consumption (Meillon et al., 2010; Chrysochou, 2014). Other authors report lack of taste as an important drawback for low-alcohol beverages, also influencing perceptions of quality (Meillon et al., 2010). So, free-alcohol beer is perceived as a functional beverage, mainly to avoid alcohol, being a substitute when alcohol is not convenient, such as, for example, when consumers have to drive or want to avoid getting drunk (Silva et al., 2016).

Product Packaging and Labeling

Some product attributes have an unconscious impact on product choice, such as the packaging (Mueller et al., 2010), being also potent cues that trigger other product variables (Sester et al., 2013). Moreover, considering that alcohol consumption relates closely to hedonic behaviors, such attributes may have an even greater impact on consumer preferences and product choices. Nevertheless, the product packaging is also affected by other variables, like the customer product expectations, the attractiveness of the package, or the product appeal (Sester et al., 2013).

Regarding the beer image, previous research shows that a nicer packaging and labels can enhance the experience of drinking beer, even more than the product brand; and that packaging attributes—such as glass format—are nearly 5 times more important as beer flavor for consumers (Silva et al., 2016). In fact, consumers value beer bottles and judge them as unique and authentic (Gómez-Corona et al., 2016).

Beer representations elicited from packaging or tasting evaluation are different: consumers would be more prone to reject a beer from its taste than from the packaging and the bottle (Sester et al., 2013). Furthermore, the consumer propensity to refuse a beer based on packaging is mainly based on past sensorial experiences that affect present choices and motivations (Sester et al., 2013).

In addition, beer packaging materials and volumes change as a reflection of consumers' preferences, culture, climate, and the geographical area where the beer is consumed (Sester et al., 2013). Moreover, the general trend today is toward more environmentally friendly packaging.

Brand Image

Finally, previous literature shows that consumers are also affected by brands in their product evaluations, even more than by the intrinsic and sensory characteristics of the product (Galizzi and Garavaglia, 2012). Similarly, numerous consumers show willingness to pay for brands, suggesting the influence of their past positive experiences in brand consumption (Bronnenberg et al., 2012). Nevertheless, in the present research, the analysis of beer brand image or equity was not incorporated.

10.3.2.2 Consumer-Based Attributes

Regarding consumer-based attributes attitudinal and other cognitive variables are common variables used to differentiate beer consumers. Previous research on beer consumption considered the role of familiarity, previous knowledge, and involvement in beer as influencing beer consumption (Giacalone et al., 2013), as well as product image (Cardello et al., 2016) showing the influence of these psychographic variables in beer consumption. In this study, other consumer-based variables are examined in provide a comprehensive profile of the different beer consumers segments.

Consumer Involvement

Consumers are likely to vary in the importance that they place on beer, thus having different levels of involvement with the product (Zaichkowsky, 1985), ranging from those consumers who are highly involved with the product category to those consumers with low involvement. Likewise, highly involved consumers show higher interest and place more importance on the product, while willing to pay a premium price (Zaichkowsky, 1985) compared to those consumers who are low involved with the product, indifferent, or just occasional consumers.

In the brewery sector, previous studies highlight the conventional or industrial beer consumption as a low involvement product for many consumers, since conventional beer it is a very common product, which could also be perceived and considered as a commodity product category of the beverage sector (Gómez-Corona et al., 2016). On the other hand, craft beer, specialty beer, or premium beer could be considered as a high-involvement product (Aquilani et al., 2015).

Product Loyalty

According to Oliver (1999) product loyalty can be conceptualized as a deep held commitment to rebuy or repatronize a preferred product consistently in the future, despite situational influences or marketing efforts. Similarly, Dick and Basu (1994) noted that product loyalty depends on the psychological disposition of the individual—attitudes and preferences—and on behavioral aspects, such as the repeat patronage. A related concept is brand loyalty, which arises when the consumer acquires a range of positive perceptions and associations to the brand that will later be transformed into commitment (Keller, 1993). Moreover, brand loyalty will be higher when potential consumers have in mind a range of positive favorable brand associations (Keller, 1993).

However, in this study beer brand loyalty is not a variable under analysis.

Product Image

Authors like Cardello et al. (2016) support that variables like product associations or product image could be used for differentiating consumers. Regarding food and drink consumption, prior research notes that eating and drinking experiences are influenced by the establishment of associations that consumers assign when thinking about a specific food or beverage (Thomson et al., 2010). In turn, the individual's response to a food or beverage does not only depend on the product itself, but also on the product associations or product image.

More precisely, beer is perceived as conventional beverage consumed mainly to socialize (Silva et al., 2016). Similarly, beer is perceived as a thirst quencher associated with informal and relaxing occasions, while being a symbol of demarcation between work and nonwork hours, in both eating and noneating social contexts (Pettigrew and Charters, 2006). Finally, and regarding emotions elicited in beer consumption, prior research shows that to feel "*relaxed*" is probably the most common emotional association with beer consumption (Yang et al., 2002).

Product Perceived Quality

Perceived quality could be defined as the consumer's judgment about a product's overall excellence or superiority (Zeithaml, 1988). Likewise, according to Snoj et al. (2004), the product perceived quality results from the comparison of consumer expectations with the actual performance of the product.

In the beer sector, previous research highlights that the importance and awareness of beer quality is growing among consumers (Mejlholm and Martens, 2006). Similarly, prior research reports that the beer quality perception does not only depend on intrinsic sensory attributes, but also on a set of extrinsic attributes of beer (Mouta de Sà et al. 2016).

Furthermore, the beer consumption behavior has changed in recent years, and consumers are paying today more attention to product quality and preferring off-trade consumption (Berkhout et al., 2014a, b). Nowadays, there is an increasing demand for quality beer, characterizing a new wave of beer consumers who are inclined to taste specialty and craft beers (Kraftchick et al., 2014; Donadini et al., 2016). So it seems that today consumer preferences appear to be connected to the search for product quality and product craftsmanship (Aquilani et al., 2015), while some type of beers are perceived as high-quality products, such as the craft beer (Gómez-Corona et al., 2016) or the specialty beer (Kraftchick et al., 2014; Donadini et al., 2016).

Product Familiarity

Product familiarity could be conceptualized as the number of product-related experiences that have been accumulated by individuals (Gómez-Corona et al., 2017). Further, when individuals encounter products and gain experience in evaluating those various aspects of the product, they become highly familiar with the product (Alba and Hutchinson, 1987; Schnurr et al., 2016).

In general terms, it is commonly accepted that consumers have a general aversion to beverages or foods that are too novel; and therefore, may not be willing to adopt the consumption of new food products for this reason (Costa and Jongen, 2006; Van Trijp and Van Kleef, 2008). In this vein, Donadini and Porretta (2017) report that for mainstream conventional consumers who generally drink and demand conventional industrial beer, the new flavors and ingredients offered by craft beers could be too innovative and even a deviation from their familiar sensory experiences. As a consequence, product familiarity could be used for differentiation among consumers, since previous research shows that product familiarity or the lack of familiarity may serve as a differentiator for beer consumers (Cardello et al., 2016). Further, Giacalone et al. (2013) examined the role of product familiarity and found that this variable accounted for differences in beer preferences and consumption, better than did demographic variables.

Willingness to Pay a Premium Price

The severe economic downturn of 2008 has changed the market share of the different beer segments. On one hand, the cheaper beers and private label beers have increased their market share; while on the other hand, premium beer has decreased consumption and its market share. Finally, the superremium beers and specialty beers have also increased substantially their market share, due to consumers regarding specialty products. In this segment of premium-beer, consumers pay more attention to the quality of beer, demanding higher quality and specialty beers (Aquilani et al., 2015) and preferring off-trade consumption (Berkhout et al., 2014a, b). That is, some beer consumers became more inclined to drink less, while spending the same amount for more expensive quality products (Berkhout et al., 2014a, b), and thus willing to pay a premium price. Following Donadini et al. (2016) and Giacalone et al. (2013) to the consumers highly involved with beer the influence of the beer reference price does not mean a big concern.

In addition, product prices are related with the product perceived quality. Accordingly, in the beer sector, higher prices are associated with higher levels of product quality; while lower prices are associated with alternatively lower quality and unpleasant taste (Bredhal, 1999), as well as with more affordable mass-produced beers (Ascher, 2012).

Product "Value for Money"

Following Sirohi et al. (1998) "*value for money*" could be defined as the value that the individual gets for what he/she pays; or as the trade-off between the monetary costs of the product and the benefits received from it (Lapierre, 2000). So, the product price is a key driver influencing the products' "*value for money*" (Snoj et al., 2004).

Regarding beer, lower product prices are usually appreciated by consumers that associate them with low product quality and unpleasant product taste (Bredhal, 1999). Similarly, Ascher (2012) reported that higher prices generally mean better quality or higher product status to the consumer; while lower product prices are associated with more affordable mass-produced drinks. In this vein, the industrial or conventional beer could be perceived as a commodity product of the beverage industry, since it is a very common product, being also considered as a product that can be used to get drunk (Gómez-Corona et al., 2016). Similarly, Donadini and Porretta (2017) reported that consumers of conventional mainstream beer perceive price as a cost they want to minimize. So, conventional or industrial beer has a good "*value for money*" relationship, offering an affordable mass-produced beverage.

10.3.2.3 Consumption Situation and Purchasing Process Variables

The situational context or the appropriateness of a product for specific consumption situations has been used effectively to discriminate products (Schutz, 1994). In this context, it should be highlighted that *drinking* is primarily a social act in most cultures (Heath, 1987); and therefore, the environment and context in which beer is consumed is a relevant aspect. So, when differentiating beer consumers, situational, and consumption contexts should be considered.

First, regarding the context of beer consumption, previous research shows that the *consumption situation* (Giacalone et al., 2013, 2015) and the *consumption moment* are important factors influencing beer preferences and beer consumption (Aquilani et al., 2015). Beer has utility and serves well in multiple consumption situations; and therefore, beer could serve to different segments of consumers fulfilling different needs, such as a beverage to drink at music concerts, at sporting events, at festivals, at home, at parties, when watching TV, and so on.

The consumption situational conditions under which consumers consume beer are quite relevant; distinguishing between consumers that mostly drink beer "out-of-home" and "at home." The main difference between beer consumption "out-of-home" and "at home" is that at home the experience of drinking beer is focused in the beer as the key of the experience; while in the consumption in bars and restaurants the beer becomes an accompaniment to food (Gómez-Corona et al., 2016).

Prior research also suggests that beer consumption can be either a private or a social moment: consumers who prefer private consumption are generally those who do not share their liking; while consumers who share their consumption experience usually belong to reference groups that share the same appreciation toward beer (Gómez-Corona et al., 2016).

Second, the beer *purchasing process* includes the examination and evaluation of different variables, such as the price of the product, the visual design of the package, the product distribution, the product differentiation (Chrysochou, 2014), the type of brand, and the information received about the product (Allison and Uhl, 1964).

10.4 Research Objectives

The new trends in the brewery sector call for an examination of consumer typologies and their behavior that would provide managers with useful insights for developing strategies to appeal consumers today.

For this purpose, the following research objectives are addressed. In first place, this study aims to develop *consumer typologies* or consumer segments in the beer sector using product-based and consumer-based variables. This information will provide useful guidelines for the formulation of strategies in the brewery sector. Second, the study provides and examines the *consumer profiles* of the different consumer groups based on product-based and consumer-based attributes, as well as the consumption situation and sociodemographic characteristics. Finally and third, this research analyzes the main *differences* and *similarities* between the beer consumption subgroups.

10.5 Methodology

10.5.1 Sampling and Fieldwork

An online structured questionnaire was designed in order to understand beer consumption and beer consumption patterns. Fieldwork was conducted through random sampling among consumers residing in Spain in March 2015, which represents a good basis for a beer research, since Spain provides a mature brewery sector.

The research questionnaire was structured in four parts as follows. The first part of the questionnaire consisted on two filter questions about beer consumption and consumer age using "*yes/no*" questions, since the study requires information about beer consumers older than 20 years old. For this reason, participants who do not drink beer or are younger that the required age are screened out. The second part of the questionnaire, gathered information about the consumer-based variables. For measuring consumer-based variables, a Likert-type 5-point scale was developed, meaning 1="*totally disagree*" and 5="*completely agree.*" Similarly, the third part gathered information regarding product-based attributes. The last section of the questionnaire consisted of questions regarding consumption habits and sociodemographic characteristics. A total amount of 598 questionnaires were obtained, gathering 562 valid questionnaires, yielding a sampling error of 4.22% at a confidence level of 95%.

10.5.2 Variables and Measurement Scale

Factors affecting beer choice and consumption were selected according to prior research on the topic (Table 10.1). Accordingly, consumer-based, product-based, and consumption situation variables were considered for the research.

In order to measure *beer loyalty* a 6-item scale from Yoo et al. (2000) was adapted. Second, to measure *product image*, a 5-item scale was

Table 10.1 Factor Loadings and Reliability Values

Variables	Indicators	Factor Loading	Cronbach Alpha
Product loyalty Yoo et al. (2000)	LEA1: Even if other beverages had similar characteristics, I would prefer beer LEA2: Even if other beverages had features that were similar to beer, I would prefer beer instead LEA3: It makes sense to buy beer, instead of other beverages available in the market LEA4: If I had to buy a beverage, beer would be my first option LEA5: It makes sense to drink beer, instead other beverages available LEA6: I consider myself loyal to beer	0.778 0.761 0.752 0.748 0.686 0.674	0.959
Product image Netemeyer et al. (2004) and Pappu et al. (2005)	IMG1: I have a good image of beer IMG2: I have a good image of individuals that drink beer IMG3:I associate some specific characteristics of beer immediately IMG4: Beer has personality IMG5: Beer is interesting	0.801 0.776 0.760 0.650 0.573	0.940
Perceived quality Yoo et al. (2000) and Pappu et al. (2005)	PQAL2: Beer offers reliable quality PQAL4: Beer has excellent characteristics PQAL1: Beer has higher quality and attributes PQAL3: Brand X offers trustworthy quality	0.666 0.626 0.604 0.604	0.932
Product familiarity Yoo et al. (2000)	FAM1: Beer is familiar to me FAM3: Beer comes immediately to mind when I think about beverages FAM2: I know about beer	0.831 0.823 0.685	0.769

Table 10.1 Factor Loadings and Reliability Values—cont'd

Variables	Indicators	Factor Loading	Cronbach Alpha
Premium price Netemeyer et al. (2004)	PRE1: I am willing to pay a premium price for beer, rather than for other beverages PRE2: I want to pay more for a beer, rather than for other beverages	0.859 0.771	0.875
Purchase intention Netemeyer et al. (2004)	INT1: I would buy beer INT2: It is likely that I would by beer INT3: I will buy beer in the next month	0.675 0.671 0.562	0.960
Value for money Lassar et al. (1995) and Netemeyer et al. (2004)	VM1: Beer has a good relationship "*value for money*" VM2: Beer offers high value, compared to its price	0.659 0.636	0.850

adapted from Netemeyer et al. (2004) and Pappu et al. (2005). In third place, the beer *perceived quality* was measured using a 4-item scale adopted from Yoo et al. (2000) and Pappu et al. (2005). Then, following Yoo et al. (2000) the beer *familiarity* was considered using a 3-item scale. For measuring the willingness to *pay a premium price* for beer the scale proposed by Netemeyer et al. (2004) was used. Likewise, in order to examine the purchase intention, a 3-item scale proposed by Netemeyer et al. (2004) was considered. Finally, the product *value for money* was measured using the scales proposed by Lassar et al. (1995) and Netemeyer et al. (2004).

Furthermore, beer product attributes, consumption habits, and sociodemographic characteristics were also considered. So, the preferred beer sensory attributes were investigated such as flavor, color, taste, texture, alcoholic degree, and appearance. Regarding the beer type or style, participants were asked about their preferred beer style relating to pilsner, lager, red, dark, flavored beer, or even free-alcohol beer. In addition, consumer preferences concerning frequency of consumption and place of consumption—out of home or at home—were also investigated. These variables and attributes would profile beer consumption patterns and may be relevant factors in determining distinguishable beer consumer segments.

10.5.3 Data Analysis

10.5.3.1 Factorial Confirmatory Analysis

A factorial analysis was performed on the items related from literature related to beer consumption, in order to determine whether these factors could be grouped under general characteristics (Hair et al., 2010). For this purpose, the 31 selected items were subjected to factorial confirmatory analysis, through Varimax rotation in order to extract factors. According to Hair et al. (2010) items that failed to load 0.50 or higher on one factor, or that loaded higher than 0.5 on two or more factors were removed from the scale. Measures of sampling adequacy indicated that the correlation matrix for a 26-item scale was suitable (Bartlett's Test of Sphericity: $\mathcal{X}^2$=19263.87; df=465; P<.000; Kaiser-Meyer-Oklin measure value of sampling adequacy=0.965). Then, Cronbach Alpha values were examined in order to measure the reliability of each factor. The reliability of the factors was acceptable, as results show adequate values for Cronbach Alpha coefficients for the all factors, exceeding the commonly accepted recommendation of values higher than 0.70 (Hair et al., 2010). Finally, factorial component analysis of the proposed items identified a seven factor solution using Varimax factor rotation procedure, jointly accounting for 84.48% of the explained variance (Table 10.1). The data analysis was performed with SPSS version 18.

10.5.4 Cluster Analysis

The cluster analysis identifies homogenous groups of individuals (Silayoi and Speece, 2007); thus, allowing a better understanding of consumer behavior. Cluster analysis uses information inherent in the factor scores, dividing the observations so that observations with similar factor score are grouped together into clearly identifiable groups (Chatfield and Collins, 1980). Therefore, cluster analysis aims to allocate observations into clearly identifiable groups.

In this study, to determine the adequate number of clusters, a two-step cluster procedure was carried out as suggested by Hair et al. (2010). In the first step, a hierarchical cluster analysis was conducted through the Ward's method, providing a range of possible cluster solutions, being ideal for exploratory cluster analysis. A four-cluster solution was indicated by the dendrogram. In the second step, in order to confirm this exploratory solution a k-means cluster analysis is developed. Specifying a four-cluster solution, the cluster centers converged. Then, the F ratios computed through the ANOVA test revealed that the four clusters identified differ significantly on each one of the items.

Then a *discriminant analysis* reported that the four canonical discriminant functions accounted for the 91.2% of the variance, the four functions were statistically significant and means of functions differed across the four identified clusters. So, beer consumers are classified correctly according to the cluster analysis.

The four-cluster solution showed that we obtained four groups of consumers regarding beer consumption behavior, comprising 234 individuals in Cluster 1; 150 individuals in Cluster 2; 82 individuals in Cluster 3, and 96 consumers in Cluster 4.

10.5.4.1 Manova Analysis

Considering the results and the segments obtained from the cluster analysis, a Manova test was conducted to discriminate differences among the consumer segments and to validate the obtained cluster solutions (Hair et al., 2010). The proposed analysis enables to differentiate consumers based on their consumption behavior and patterns while examining whether their beer consumption behavior varies across the identified segments.

The Manova analysis was run on the entire set of considered variables—product loyalty, image, perceived quality, product familiarity, disposition to pay a premium price, purchase intention, and product "*value for money*," while the factors or independent variables were the four consumer clusters. The overall multivariate tests were significant for the four clusters identified (Table 10.2), revealing different behavior across the four consumer clusters. In addition, *post hoc* analysis was developed using the Tukey test (Hair et al., 2010), which reported significant differences between the four identified clusters for all items under research, providing validation for the results from the previous cluster analysis.

The Manova test revealed significant differences among consumers for product loyalty, product image, product familiarity, product

Table 10.2 Multivariate Manova Tests

Manova test	Value	*F*	*df*	Sig.
Pillai's trace	1.703	21.693	1587	0.000
Wilks' λ	0.031	36.107	1587.475	0.000
Hotelling's trace	12.159	66.580	1577	0.000
Roy's largest root	10.840	179.197	529	0.000

Table 10.3 Results for the Four-Cluster Group Solution of Beer Consumers

		Cluster Means				Tukey test	
Variables	**Indicators**	**Cluster 1 (*n*=234)**	**Cluster 2 (*n*=150)**	**Cluster 3 (*n*=82)**	**Cluster 4 (*n*=96)**	***F*-Value**	**Significance (*P*<.005)**
Loyalty	LEA1	1.94	1.20	3.34	4.56	436.710	0.000
	LEA2	2.10	1.21	3.76	4.75	475.121	0.000
	LEA3	1.62	1.09	3.07	4.62	583.084	0.000
	LEA4	1.62	1.12	3.39	4.73	657.814	0.000
	LEA5	2.50	1.45	3.54	4.77	357.381	0.000
	LEA6	1.43	1.11	3.20	4.37	558.177	0.000
Image	IMG1	3.21	2.19	3.88	4.58	224.448	0.000
	IMG2	3.08	1.83	3.56	4.71	309.285	0.000
	IMG3	2.85	1.84	3.51	4.56	291.992	0.000
	IMG4	3.42	2.15	4.00	4.77	217.723	0.000
	IMG5	3.15	1.95	3.88	4.71	330.364	0.000
Perceived quality	PQAL1	3.32	2.11	4.02	4.79	346.888	0.000
	PQAL2	3.38	2.31	3.78	4.67	191.675	0.000
	PQAL3	3.48	2.40	4.24	4.78	259.369	0.000
	PQAL4	3.13	2.13	3.85	4.67	301.072	0.000
Familiarity	FAM1	4.87	4.39	4.85	4.90	19.557	0.000
	FAM2	3.96	2.84	4.68	4.92	111.543	0.000
	FAM3	4.44	3.91	4.68	4.97	34.008	0.000
Premium price	PRE1	1.55	1.09	1.61	2.77	90.913	0.000
	PRE2	1.60	1.19	2.15	3.33	156.910	0.000
Purchase intention	INT1	2.76	1.48	3.78	4.83	369.111	0.000
	INT2	2.67	1.33	3.66	4.71	376.938	0.000
	INT3	2.35	1.25	3.68	4.81	496.987	0.000
Value for money	VM1	2.82	2.20	3.68	4.46	197.388	0.000
	VM2	2.82	1.97	3.54	4.38	241.294	0.000

perceived quality, beer purchase intention, the willingness to pay a premium price, and the "*value for money*." In addition, the analysis supports significant differences regarding the beer consumption patterns (Table 10.3). Finally, the Manova analysis did not find evidence of gender differences among beer consumers; but evidence was found on significant differences on age. So, there is an age effect on beer consumption (Table 10.4).

Table 10.4 Results for the Four-cluster Group Solution of Beer Consumers: Individual and Consumption Patterns

		Cluster Means				Tuckey test	
Variables	Indicators	Cluster 1 (n=234) (%)	Cluster 2 (n=150) (%)	Cluster 3 (n=82) (%)	Cluster 4 (n=96) (%)	F-Value	Significance (P<.005)
Frequency consumption	Once a year	7.7	6.7	–	–	15.935	0.000
	Occasionally	43.6	33.3	39.0	18.8		
	Once a week	28.2	24	19.5	25.0		
	Several times a week	13.7	26.6	39.0	39.6		
	Daily	6.8	9.3	2.4	16.		
Place consumption	At home	12.8	14.7	59.2	45.8	30.981	0.000
	Out of home	87.2	85.3	40.8	54.2		
Beer preferred attributes	Taste	78.6	77.3	53.7	66.7	6.154	0.000
	Color	1.7	5.3	9.8	12.5		
	Texture	11.1	4.0	12.2	8.3		
	Aroma	6.0	12.0	19.5	10.4		
	Alcohol graduation	2.6	1.5	4.9	2.1		
Beer type	Pilsner	64.1	66.7	48.8	70.8	6.582	0.000
	Red beer	4.3	4.0	–	4.2		
	Dark beer	6.0	6.7	7.3	4.2		
	Flavored beer	12.0	8.0	4.9	4.2		
	Free alcohol beer	6.0	9.3	22.0	6.3		
	Lager	7.7	5.3	17.1	10.4		
Age	20–25	60.3	76	19.5	8.3	84.997	0.003
	26–30	10.1	6.7	12.2	43.8		
	31–35	11.8	8.0	17.1	14.6		
	36–40	9.3	5.3	7.3	8.3		
	41–45	6.7	1.3	14.16	6.3		
	46–50	0.9	2.7	26.8	10.4		
	51 and older	0.9	–	2.4	8.4		
Gender	Male	39.9	57.3	29.3	43.8	1.561	0.198
	Female	60.1	42.7	70.0	56.3		

Note: Results are presented in percentages.

10.6 Results

A clustered-based typology of beer consumers is presented, offering an overview of the characterization of beer consumers in terms of beer consumption patterns and beer preferences. The obtained findings report four beer consumer types, reflecting substantial differences in their consumption.

10.6.1 Cluster 1: "Occasional-Social Consumers"

This cluster represents the 41.64% of the sample, being the biggest cluster in number of beer consumers ($n=234$). The findings from this segment reveal that the majority of consumers belong to the age group 20–25 years old (60.3%), being 39.9% male and 60.9% female consumers. These consumers are also the ones who drink beer less often: they are moderate consumers who consume beer occasionally (43.6%), being the frequency of consumption the less frequent compared to the other consumer segments. Interestingly, this group of consumers shows the highest consumption out of home (87.2%).

On the other hand, this group has a low product loyalty and low purchase intention toward beer, while having a moderate positive product image and perceived quality.

So, this consumer group consumes beer occasionally or several times per week out of home, being disloyal to the product. It seems that this group of consumers socializes when drinking beer and could be characterized by social beer consumption, or even by weekend consumption, being "*occasional social consumers.*" This occasional social-beer consumers entail a social component of beer drinking that is strongly triggered by the consumption situation or context: socialization. Similarly, this group of consumers is likely to share beer with friends and peers in places that provide social experiences out-of-home, being beer one of other multiple elements for consumption, such as food or snacks. This is coherent with the fact that *taste* is the more important product attribute for this consumer group (78.6%)

Likewise, "*occasional-social consumers*" show a low purchase intention toward beer, and the reason may be the low switching cost of beer for this group, since it is easy and it does not entail costs switching to other beverages for socializing. Furthermore, this group of consumers show low product involvement, with a low product loyalty: beer does not play a central or key role in the daily routines. Consequently, they could be described as having a balanced or moderate relationship with beer consumption. Finally, what differences "*occasional-social consumers*" from "*millennial weekend drinkers*" is that occasional consumers have a better product image, higher loyalty, and more positive product perceived quality.

10.6.2 Cluster 2: "Millennial Weekend Drinkers"

This cluster represents the 26.69% of the sample ($n=150$) and is characterized by their low loyalty to beer and poor product image. The results obtained indicate that the majority of these consumers are 20–25 years old (76%) including more male consumers (57.3%). Most of the beer consumers included in this group are "*millennials*," and since "*millennials*" are characterized as being brand and product disloyal (Thompson and Gregory, 2012), this group is named as "*millennial weekend drinkers*." In addition, most of the consumers in this segment drink beer out-of-home (85.3%) occasionally or several times a week. So, it seems that these young consumers may be drinking beer at bars, cafeterias, and pubs.

In addition, this group of consumers show the lowest values for the product perceived quality, since they have not evinced great interest in product quality or beer attributes. That is, this consumer group does not believe that beer has high quality and positive attributes, and also they do not consider beer as offering a reliable quality. Therefore, it can be assumed that beer is perceived as a *commodity* product belonging to the beverage category for this group, being also considered as a product that can be used to "*get drunk*." Maybe, the drunkenness effect is explicitly and directly searched by this group of young consumers.

Likewise, "*millennial weekend drinkers*" show a low purchase intention toward beer, may be because the low switching cost of this beverage, since it is easy and it does not entail costs when switching to other beverages such as wine or spirits, when the purpose of the consumers is "*to get drunk*." Moreover, this group of consumers show low purchase intention and the lowest predisposition to pay a premium price for beer, which is coherent with their purpose of drinking an alcoholic beverage which can be easily substituted by other beverages. This characteristic is coherent with the fact that "*millennial weekend drinkers*" do not care about product quality, since "*every beer is fine to get drunk*."

What differences "*millennial weekend drinkers*" from consumers in Cluster 1—"*occasional-social consumers*"—is that occasional consumers have a better product image, as well as higher beer perceived quality. Therefore, and considering the characteristics of this consumer group, store brand beers or private label brand beers could be a good product option in order to target this market segment, who seek for low prices and are not highly concern about product quality.

10.6.3 Cluster 3: "Homelike Circumspect Women"

This cluster represents the 14.59% of the sample ($n=82$), and in turn, they account for the smallest segment of the sample. The findings from this segment highlight that it has the highest number of female consumers (70%) belonging to the age group 46–50 years old, having a great tendency to consume beer at-home (59.2%), while demanding free-alcohol beer. In addition, this consumer group drinks beer occasionally (39%) and several times a week (39%).

This segment of consumers is formed mostly by women who consume beer at home, and are not willing to pay more for the product, since they show a low willingness to pay a premium price for beer. In addition, the medium level of loyalty and importance given to product quality suggests a pragmatic consumption behavior. However, the members of this group have a high product purchase intention, while showing a positive product image. Consequently, this consumer group could be characterized as having a balanced or moderate relationship with beer consumption. So, these consumers could be described as private *circumspect* beer consumers; and given that the great majority of these consumers are female, this cluster is labeled as "*homelike circumspect women*."

This segment was the greater at-home consumers, suggesting that this group of beer consumers is not involved with social activities that imply drinking—or drinking for socialization—but they show moderate beer consumption. Similarly, this group of consumers shows the highest demand for beer without alcohol.

These findings are in line with previous research supporting that low-alcohol beverages are more appealing to female consumers (Thompson and Thompson, 1996; Chrysochou, 2014). More precisely, prior studies highlighted the key relevance of sociodemographic characteristics regarding the consumption of alcohol-free beer, demonstrating that women are more likely to drink free-alcohol beer (Chrysochou, 2014). Moreover, female beer consumers are more health conscious and show higher interest toward light food products, being health the underlying motive for this type of beer consumption (Chrysochou, 2014).

10.6.4 Cluster 4: "Beer Lovers"

This consumer cluster represents the 17.08% of the sample (n = 96), being characterized by their high involvement with beer. This cluster includes mostly 26–30 years old consumers (being the 43.8% of the sample) who consume beer several times a week.

This consumer group is labeled as "*beer lovers*" because these consumers are beer enthusiasts who appreciate and value the quality and intrinsic attributes of beer and are also strongly loyal to the product. Similarly, "*beer lovers*" are willing to pay premium prices for beer, while showing a higher purchase intention, compared to other groups. This is coherent with previous research that highlights that "*beer lovers,*" who consider quality to be important, are paying less attention to price, and are more likely to taste and purchase specialty and craft beers (Aquilani et al., 2015). According to Donadini and Porretta (2017) these consumers could be demanding a more boutique, unique, and premium beer product in order to indulge themselves with pricier and special beers varieties. All these factors enable the brewery companies to set higher prices for beer.

These consumers exhibit *high involvement* with beer, and this means that this cluster is characterized by the desire of exploring new taste experiences and new beer varieties (Gomez-Corona et al., 2016). More precisely, highly involved consumers choose alternative beers in order to express their preferences for taste and individuality and to build a more a unique identity (Choi and Stack, 2005). Drawing on the involvement literature (Petty and Cacioppo, 1984), it is coherent that this group considers beer important in their lives, being highly interested in the product and more likely to search for highly differentiated beers and interested in trying new beers and flavors (Donadini and Porretta, 2017). Similarly, this cluster of consumers may feel the desire for more knowledge about the beer they consume and new tasting experiences and also to move off from the industrial and conventional beer consumption.

Consequently, this group of beer consumers may shop at specialized beer stores, since they may be highly interested in craft beers, beer produced in small scale or beer that has a limited production or nonindustrial beer (Aquilani et al., 2015).

Therefore, this segment constitutes a great market opportunity for specialty and craft beers, which have different sensory characteristics to conventional mainstream beers (Fig. 10.1).

10.7 Implications for Brewery Management

The segmentation results suggest that marketing beer based on consumer segmentation would be a beneficial strategy for brewers. The obtained findings draw interesting highlights for brewers and beer marketers about how to attract and appeal the identified consumer segments.

In this context, an example of beer brands targeting each one of the four identified consumer segments are presented in Fig. 10.2. Likewise, brewers could think and manage beer as four differentiated products, instead of considering beer as one single individual item.

In first place, brewers targeting the "*occasional-social consumer*" segment should keep in mind their low product involvement and product loyalty and that for this group beer is mostly consumed in moments of socialization. Due to these consumption characteristics, beer could be considered has having a low switching cost to other

Attributes	Cluster profiles			
	Occasional-social consumers	**Millennial weekend drinkers**	**Homelike circumspect women**	**Beer lovers**
Price	Not willing to pay a premium price for beer	Cheapest price possible	Not willing to pay a premium price for beer Seeking "value for money"	Willing to pay a premium price for high quality products
Product characteristics	Taste is the preferred beer attribute	Beer perceived as a commodity product category Taste is the preferred beer attribute	Demand free-alcohol beer Taste, followed by aroma are the most preferred beer attributes	Willing to taste new flavors, textures and beer varieties Seeking for craft and specialty beers
Quality	Moderate quality perception	Do not perceive product quality or positive attributes	Pragmatic consumption	They perceive and value the product quality, characteristics and positive attributes
Consumer characteristics	Good product image Low switching costs to other beverages Drinking for socialization	Low consumer involvement with beer	Mostly women	High product image High product loyalty Strongly involved with beer
Consumption context	Out of home Beer being consumed with food and snacks	Out of home	Consumption at home	At-home and out-of-home consumption

Fig. 10.1 Cluster characteristics.

alternative beverages such as wine or spirits for these consumers. That is, in such a social consumption context it is easy and it does not entail costs switching to other beverages. Consequently, brewers could try to increase beer switching costs improving the product image and perceived quality.

For this group of consumers, brewers should consider that beer is a clear symbol of demarcation between *being at work* and *not being at work*, as well as the importance of the social context of consumption. Similarly, and considering that previous research shows that "*feeling relaxed*" is probably the most popular emotional association with beer consumption (Yang et al., 2002), brewers should also emphasize the emotional experience of "*feeling relaxed*" or "relaxation" as the main appeal factor in communication campaigns. Hence, relaxation and socialization could be the key attributes to be remarked when targeting the "*occasional-social beer consumers.*" So, brewers should emphasize trough communication and marketing campaigns that beer is the most adequate and appropriate beverage to socialize and to feel "*relaxed*" when not being at work.

Fig. 10.2 Beer brands and products targeting each consumer cluster.

Moreover, this cluster assigns great importance to the product taste, while showing a high preference for flavored beer, thus seeking for product-based sensory attributes. For this reason, brewers should emphasize the aspect of beer taste in their marketing and promotion campaigns, while keeping in mind that these consumers associate drinking beer—and drinking experiences—with informal and relaxing occasions and contexts.

Finally, the brewers and beer managers should bear in mind that the majority of these consumers belong to the age group of 20–25 years old; and for this reason they are digital natives with a full immersion degree with technology. Therefore, internet and online social networks should be used as marketing and communication platforms in order to communicate with this consumer segment.

The "*millennial weekend drinkers*" is characterized as being a group of young consumers, who drink beer out-of-home, with low product loyalty, low purchase intention, as well as a poor product image and poor product perceived quality. Considering that they exhibit a price sensitive behavior, store brand beers, or private label brand beers are a good product option in order to target this group of consumers, since they seek for low prices, while not being highly concerned about product quality.

In addition, brewers and managers should also consider the main characteristics of this cohort when designing and developing marketing campaigns. Millennials is a unique consumer group, with a full immersion degree with technology, being strongly influenced by technology and the internet (Palfrey and Gasser, 2008). Similarly, communication technology, online social networks, and other communication platforms are massively used by millennials (Lenhart et al., 2010). For this reason internet and online social networking should be used to develop beer marketing actions to target this consumer group (Thompson and Gregory, 2012). So, social networking will allow brewers to communicate and keep in touch with this consumer group, establishing relationships.

On the other hand, previous research describes the "*millennial*" cohort as being materialistic, consumption-oriented, skeptical, and strongly disloyal (Thompson and Gregory, 2012). So, since it is hard to create customer loyalty among them (Reisenwitz and Iyer, 2009), brewers should try to enhance and increase their loyalty to beer through the enhancement of involvement with the product, appealing to product hedonic value. Brewers could also develop loyalty programs through the internet and online social networks.

Finally, and considering their hedonic type of beer consumption, managers and brewers could enhance the hedonic symbolism of beer consumption through communication and advertising campaigns. So, when targeting this consumer group, it would be advisable to pay more attention to the beer hedonic value or to the product taste.

On the other hand, brewers and managers targeting "*homelike circumspect women*" should consider the preference that these consumers have for free-alcohol beers, as well as their tendency to drink beer at home. Moreover, brewers should bear in mind that these consumers have pragmatic beer consumption, not being strongly involved with the product.

For this reason, brewers should focus on the importance that these consumers assign to health and to the consumption of healthy products. That is, given that low-alcohol beverages are perceived as healthier alternatives to the regular ones, marketing strategies for free-alcohol beer should place more emphasis on the low calorie content, and less on the low alcohol content of beer (Chrysochou, 2014).

In addition, this consumer segment places great importance to the product taste; and in turn, the success and growth of the free-alcohol beer market depends largely on the beers tasting equally as good as their regular alcohol counterparts. Considering the negative beliefs about taste from consumers who have never tried free-alcohol beer, product trials and other direct marketing and promotional efforts that stimulate first trial are recommended as marketing efforts. More precisely, brewery marketing strategies need to emphasize the aspect of beer taste through communication campaigns and should successfully assure consumers that free-alcohol beer, despite having a low calorie content, taste equally as good regular beer.

Brewers targeting "*homelike circumspect women*" should take into account that calorie content, peer recommendations, and alcohol level have the greatest impact for the selection and consumption of nonalcoholic beer (Chrysochou, 2014).

Finally, brewers could target the "*beer lovers*" segment. This consumer group could be considered as the most attractive, since these consumers are willing to pay a premium price for beer, show a high purchase intention, while being strongly loyal to the product.

Moreover, this segment constitutes a great market opportunity specifically for craft beers and specialty beers, which have different sensory characteristics, different flavors, and higher prices compared to conventional or mainstream beers.

Considering that "*beer lovers*" are strongly involved with the product, brewers could increase the level of consumer involvement developing some marketing actions, such as through innovative packaging, the introduction of new flavors, a wider beer assortment, innovative label design, or unconventional attributes.

The obtained findings could assist brewery managers and established beer manufacturers to promote and communicate beer in order to meet "*beer lovers*" expectations and preferences. Since "*beer lovers*" appreciate the product quality and attributes, superior product quality could be used as a positioning variable.

Targeting this consumer group, it would be advisable to stress the beer higher product quality or special beer characteristics and attributes. Similarly, brewers could develop premium quality beer, specialty beer, or craft beer in order to appeal this consumer segment.

10.8 Conclusions

This research provides comprehensive clustered-based categorization of beer consumer, filling a research gap. That is, a cluster analysis is developed to obtain consumer segments which are then profiled on consumer-based and product-based variables; then, the obtained consumer segments are validated performing a Manova analysis.

The emerged four beer consumer segments have exhibited different consumption behavior. So, the major contribution of this study is providing a clustered-based beer consumers categorization, which may help to better understand the fragmentation of beer consumption behavior. More precisely, the research results provide empirical evidence for a four-cluster solution, detecting beer consumers with different levels of product loyalty, product image, perceived product quality, familiarity with beer, purchase intention, product "*value for money*," and predisposition to pay a premium price.

Accordingly, and considering the obtained findings it can be assumed that beer consumers cannot be interpreted as a homogenous group. In other words, beer consumers are not monolithic, since different consumer typologies have been identified, since findings indicate a four clearly distinct consumer segments, each one reporting different consumption patterns and preferences. Accordingly, the different consumer segments are categorized as "*occasional-social consumers,*" "*millennial weekend drinkers,*" "*homelike circumspect women,*" and "*beer lovers,*" being the last group of consumers the most attractive for brewers, since these consumers are highly involved with the product and show a high predisposition to pay a premium price for beer. Therefore, the obtained findings support that "*not every beer consumer has the same consumption behavior,*" suggesting that each beer consumer segment has its own preferences, needs, and motivations for drinking beer.

Understanding beer consumption patterns and behavior would provide a more complete picture to brewers and beer marketers, in order to target beer consumers. This research suggests that the brewery industry should better target beer consumers considering their distinct *typologies*. More precisely, brewers and managers could develop a market segmentation strategy in order to increase beer consumption, since the obtained results highlight that the consumer segments have different behavior, motivations, and attitudes toward beer. Further, brewery companies could target each consumer segment with a marketing plan tailored to their specific characteristics.

10.8.1 Limitations and Future Research Guidance

This study entails some limitations to be addressed in future research. In first place, the study is limited to some product-based and consumer-based attributes, which creates an opportunity for including other consumption determinants such as brand image, brand loyalty, or psychographic variables such as consumers' lifestyle. Second, it would be challenging for future research to examine if the obtained findings apply to a broader set of beverages, such as wine or spirits. Third and finally, this study was carried out in one single market, and therefore, further research could include other markets and cultures that differ significantly from EU countries in cultural and social trends for wider generalization of research findings.

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