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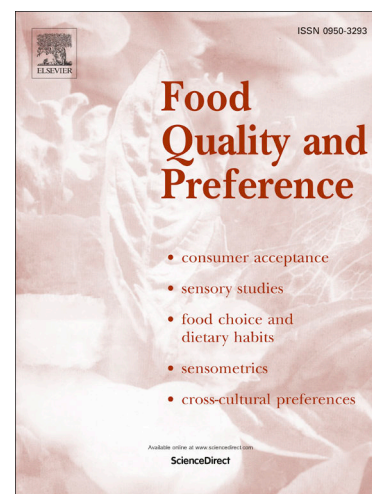
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# **Using Food Choice Questionnaire to explain Millennials' attitudes towards craft beer**

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## **ABSTRACT**

This study investigated the relationship between Millennials' attitudes towards drinking craft beer and food choice factors grounding the Food Choice Questionnaire (FCQ) to explore consumer priorities and concerns towards this alcoholic beverage. A survey was administered online to five craft beer thematic groups on Facebook (N = 273 craft beer enthusiasts), including FCQ's items and items assessing attitudes towards drinking craft beers. Correlation analysis after defining the factor structure of the FCQ that best describes the sample indicated that sensorial appeal, mood and (online)convenience had a positive association with attitude towards drinking craft beer; weight control, instead, discourages the consumers' attitude towards drinking craft beer. Results confirmed the validity of the FCQ and pinpointed as craft breweries must consider these factors both in designing their products and tailoring communications strategies.

**Keywords** – Craft beers; FCQ; Food choice motives; Attitudes; Millennials.

**Paper type** - Full-length articles.

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## 1. Introduction

Craft beer (referred to here as CB) is experiencing a historic growth period and is entering the mainstream of the culinary world. The raising consumers' interest in CBs was emphasised by Smith et al. (2017), who noted as this is increasingly prompt fine dining restaurants to stocking rare beer and offer draught and bottle lists in pairing with foods, overcoming the well-recognised pizza and beer pairing (Harrington et al., 2008). Cardello et al. (2016) indicated that consumers have begun to be increasingly attracted by new and novel beer's styles and flavours offered by craft breweries and microbreweries, eschewing mass-produced beers for their mainstream flavour profile. This affinity of consumers to a wide variety of CB flavours and styles, and this new tendency of CB and food pairing in fine restaurants, brewpubs and breweries, have rapidly prompted the industry of mass-marked beer to rethink their industrial strategies by acquiring small scale and independent breweries and changing their marketing communications strategies (Zwanka, 2018).

As opposed to the mass-market beers, the CB market mainly tends to cater to a population segment with high income, falling at the higher end of 21-35 range age, and distinguished by a high level of education (Jaeger et al., 2020; Zwanka, 2018). In this light, defined as those born from 1980 to 2000 (IPK International, 2016), Millennials are considered a homogeneous age group of people exposed to specific historical experiences that shaped their understanding and interpretation of the world, leading to consistent patterns also in eating and drinking attitudes and behaviours. They are described as being individualistic, sophisticated, well educated, technology savvy and more technologically connected than the preceding generation, and consider the Web as one of their primary sources of information (Calvo-Porrall & Pesqueira-Sanchez, 2019;

Gurău, 2012). According to Thompson & Gregory (2012), Millennials are highly responsible, independent and consumption-oriented. This generational cohort is attracted to small family businesses, seek brands that provide quality at a fair price (Thach & Olsen, 2006), and are seeking out authenticity, naturalness, tradition and innovation, all elements characterising the concept of “craft” (Rivaroli et al., 2021). Given that beer consumers are far savvier about CB purchases than a few years ago, and taking into account that Millennials represent roughly 18% of Europeans in 2020 falling in the legal drinking age (Eurostat, 2021), craft breweries, restaurants and brewpubs should be aware of the main motives of Millennials’ attitudes towards CBs to stay on-trend and attract new customers. According to the Theory of Planned Behaviour (Ajzen, 1991), attitudes are an essential predictor of intended behaviours such as drinking CB. On this premise, this study aimed to assess the correlation between Millennials’ attitudes towards drinking CB and their CB’s choice motives grounding on Steptoe et al.’s (1995) food choice determinants. To our knowledge, there are no previous studies that have explored how these choice factors are reflected in attitudes towards drinking CB. Exploring this aspect might be essential to advance knowledge about consumers’ disposition towards drinking CB and help marketing practitioners to assist craft breweries, restaurants, and brewpubs to market efficiently.

## **2. Theoretical framework and hypotheses**

Among the different approaches to investigate consumers’ food choices, Steptoe et al. (1995) developed a multidimensional measure for evaluating the motives behind them. The Steptoe et al.’s (1995) Food Choice Questionnaire (FCQ) has been validated in different European countries (see, for example, Markovina et al., 2015; Pieniak et al., 2009; Prescott et al., 2002, among others), and it is composed of 36 items representing

nine dimensions of food, including *health, mood, convenience, sensory appeal, natural content, price, weight control, familiarity, and ethical concerns*. Each dimension includes 3-6 items rated on a four-point scale of importance and referred to a daily decision about what to eat and drink, although other studies used a different point scale with similar end-point anchors (see, for example, Dowd & Burke, 2013; Markovina et al., 2015; Pieniak et al., 2009; Rankin et al., 2018, among others). Considering that every food product's success can be related to specific consumers' motivations, these research questions arise: are consumers' attitudes towards drinking CB (referred to here as ATT) and drink choice motives linked? Which of them? In which measure? Having mentioned the relevance of examining how CB choice motives are reflected in ATT, the association between FCQ dimensions and ATT was examined considering the extant literature on CB drinking behaviour. It was preferred to describe a potential motivation in discussing our findings for other dimensions that have been difficult.

## 2.1. Health

Improving *health* is one of the main motivations ranking on the top determinants of food choice motives (see, for example, Allès et al., 2017; Dorard & Mathieu, 2021; Jaeger et al., 2021, among others), especially over the Covid-19 lockdown (Jaeger, Vidal, et al., 2021; Snuggs & McGregor, 2021). Although the caution in attributing health benefits to alcohol consumption itself is undoubtedly needed, the beneficial effects of moderate consumption of beer in some disease prevention, such as atherosclerosis and cardiovascular disease, have been demonstrated (Leskošek-Čukalović, 2016; Marcos et al., 2015; Morimoto-Kobayashi et al., 2016). However, despite CB is a beverage rich of health compounds (see, for example, Baiano, 2021; Horn et al., 2021, among others), moderate consumption of this beverage does not have



the same health reputation and relevance as other alcoholic beverages such as red wine (Sluik et al., 2014; Wright et al., 2008b). Wright et al. (2008a), examining beer consumers' perception of health attributes, reported that beverage healthiness has little impact on beverage choice. Instead, Chrysochou (2014) reported that health is one of the most important motives behind purchasing light beer. Betancur et al. (2020) pointed out similar results, reporting that despite beer providing some essential nutrients, it is not considered for its health-related properties. The above discussion leads us to predict a positive ATT-*health* correlation (H1).

## 2.2. Mood

Previous studies revealed the bi-directional influence between drink intake and *mood* (Köster & Mojet, 2015); this latter was here conceived as a diffuse and pervasive affect state that emerges without an apparent cause and affects the individual's perception and motivation behaviours (Desmet, 2015; Scherer, 2005). Moreover, according to Thayer (1990), the mood is conceptualised as a long-lasting psychological state that may appear and persist in the absence of specific stimuli and maybe not be covert to other persons. Fukuda et al. (2020) indicated that beer's bitter components might benefit consumers' mood state. Moreover, alcohol craving might be associated with good or bad moods (Dinc & Cooper, 2015; Ghiță et al., 2019). Considering that *mood* has been shown to determine attitude towards drinking an alcoholic beverage, including craft beer (Gabrielyan et al., 2018), a positive ATT-*mood* linkage seems likely (H2).

## 2.3. Convenience

Among Italians and Germans respondents, in Rivaroli, Lindenmeier et al.'s (2019) study, a positive and significant correlation between ATT and facilitating factors of purchasing CB attributable to *convenience* was found ( $r = 0.58$ ;  $p < 0.01$  and  $r = 0.37$ ;  $p$

< 0.01 for Italians and Germans respectively). In contrast, Beckman et al. (2020) have found that convenience did not affect visitors' satisfaction attending a Brewfest in North Miami, Florida, USA. Overall, a moderate positive ATT-*convenience* correlation was assumed (H3).

#### 2.4. Sensory appeal

Previous studies have suggested the relevant role of *sensory appeal* in foods and beverages preference and choice (see, for example, Jaeger, Roigard, et al., 2021; Rankin et al., 2018, among others). Calvo-Porrà et al. (2018) and Betancur et al. (2020) reported that product-based attributes are the consumers' key factors driving them during the beer selection. Chrysochou (2014), Donadini et al. (2014), Aquilani et al. (2015), and Gabrielyan et al. (2018) all reported that taste and hoppiness (i.e., sweetness and bitterness) have a positive and significant effect on consumers' attitude towards beer. It is worth highlighting that visual details such as beer's colour, packaging and labelling, as well as container type, are all key predictors of consumers' beer interest, though it is unclear how this attribute influences beer choice itself (Van Doorn et al., 2019). Overall, this may point to a solid and significant ATT-*sensorial appeal* linkage (H4).

#### 2.5. Natural content

According to Rankin et al. (2018), consumers' perception of food *naturalness* may motivate food choice, and Jaeger, Roigard, et al. (2021) mentioned a direct positive association between natural product interest and health. The findings from Caporale & Monteleone (2004) pointed out that consumers are aware of the naturalness of the "organic beer" and the positive effects of organic technology on consumer health. In the same vein, Donadini & Porretta (2017) reported that consumers are fascinated by

brewers who naturally brew a beer. Moreover, Carbone & Quici (2020) observed that the sense of “naturalness and genuineness” is one reason why consumers demand CBs. In light of this evidence, we predict that a positive ATT-*natural content* connection may be likely (H5).

## 2.6. Price

*Pricing* is another crucial food choice determinant. Malone & Lusk (2018), in a study about preferences for beer brands, argued that consumers might use price as a proxy for quality. Previous studies into consumers’ attitudes towards the luxury beer market suggested price as an influential motivation for the consumers’ luxury value perception and choice’s motivation (Thomé et al., 2016; Williams et al., 2019). In the study conducted by Carbone & Quici (2020) for understanding tendencies of the Italian demand for CB, it was found that consumers are willing to spend more for CBs than for the mainstream beers. In light of this evidence, a positive ATT-*price* relationship may be likely (H6).

## 2.7. Weight control

Low-carbohydrate diets have become attractive worldwide after the medical evidence of a beneficial effect on cardiovascular risk factors and weight control effectiveness (Dansinger et al., 2005; Dong et al., 2020; Freire, 2020; Gardner et al., 2007). Evidence provided by low-carb diets had a considerable influence also on consumers’ attitudes towards drinking beer, considering that beer’s consumption has been frequently associated with the risk of obesity (Lecube et al., 2020) and most low-carb diets suggest substituting red wine for beer (Kim & Joo, 2014). For these reasons, the beer industry adapted its offers introducing “light beers” brewed to cut most of the calories and carbs found in regular beers. Chrysochou (2014) findings, who explored the consumer’s light

beer choices' motives, revealed that weight control and health are essential determinants. On these premises, a negative *ATT-weight control* relationship is likely, but how strongly this linkage will be is unclear (H7).

## 2.8. Familiarity

*Familiarity*, conceived by Park & Lessig (1981) as a subjective evaluation of knowledge about a product based on previous experience, is an important determinant in the food and beverage choice, specifically shaping appropriateness of use evaluations. Giacalone et al. (2015) and Cardello et al. (2016) reported that individuals perceived “novel”, “unusual”, and “complex” beer as more appropriate for a special occasion and dining events rather than for everyday situations and attending sports events. Malone & Lusk (2018) found a negative willingness to pay for beer familiarity, finding that some participants preferred an unfamiliar beer. Considering that the proliferation of CB's styles, ingredients, sensory attributes and brand images could embrace the CB drinkers need to discover new flavours (Aquilani et al., 2015; Donadini & Porretta, 2017; Waldrop & McCluskey, 2019), a negative *ATT-familiarity* correlation seems likely (H8).

## 2.9. Ethical concern

The conscious and deliberate decision to make consumption choices to reward organisations for their good deeds (Crane et al., 2004), such as the environmental aspects of packaging, are undoubtedly crucial aspects of certain consumers' food purchasing decisions. Ethical purchasing motives (e.g., helping the environment) have been associated with breweries investments in energy-efficient and low-carbon brewing practices (Carley & Yahng, 2018). In the same vein, Waldrop & McCluskey (2019) reported that consumers who regularly purchase CB and care about the environment

have a higher willingness to pay for organic beer. Again, Lee et al. (2020) pointed out that breweries' adoption of different water conservation practices increases the purchasing intentions for CBs. Thus, there was evidence to suggest that *ethical motive* exerts its role in CB's purchasing decisions but, as pointed by Jaeger, Roigard et al. (2021), considering that consumers can be forced to make the trade-off between different food choice factors during the purchasing process, factors that are considered as secondary importance will likely be ranked down in a list of priority. In light of these thoughts, a weaker, rather than stronger, positive relationship between ATT and *ethical concerns* is likely (H9).

### 3. Methods

#### 3.1. Participants and procedures

Before collecting data, a power analysis using the G\*Power software v.3.1. (Faul et al., 2009) was conducted to estimate the target sample size. With a significance level of  $\alpha = .05$ , a power level of 0.80, and a medium Cohen's effect size of 0.30, a sample size of 84 respondents was required. Based on a non-probabilistic sampling design and snowball sampling method adopted for data collection (Biernacki & Waldorf, 1981), an online survey was conducted to assess the linkage between Millennials' attitudes towards drinking CB and their CB's choice motives grounding the FCQ factors. Data were collected by carrying out a questionnaire on a convenience sample of craft beer enthusiasts (N = 603) from five well known Italian CB' thematic groups on Facebook ("*Analfabeti della birra*", 2020; "*Birra artigianale e di qualità*", 2020; "*Birra fatta in casa...come iniziare*", 2020; "*Il forum della birra per tutti*", 2020; "*La compagnia della birra*", 2020). After identifying ten craft beer enthusiasts in each thematic group on Facebook available to participating in the survey, 50% women, snowballing technique

was used to diffuse it. Thus, the first interviewee was asked about another person that he/she knows who generally attend the thematic group to participate in the survey, who names another and so forth. The recruitment was stopped when the point of weekly returned questionnaires obtained was less than two, considering it as the saturation level. The online survey was conducted between December 2019 and March 2020, before the COVID-19 pandemic lockdown. So, consumers aged 18 years (i.e., the legal drinking age) or above and residing in Italy were eligible to participate, but only the respondents ranged between 20 and 40 in age were considered in the study. After considering the respondents' generational cohort afferece of respondents (422 over 603 were Millennials), the questionnaire whole completion level referring to food choice motives and ATT along with the duration of answering (i.e., it was retained the answers ranged between 5 and 10 minutes), the final sample size for this research was 273 (i.e., 64.69% of Millennials' responses).

### 3.2. Questionnaires

The interviewees completed a modified version of the Steptoe et al.'s (1995) FCQ to characterise their attitudes towards CB. The well-recognised effectiveness of the FCQ as a basis for ad hoc FCQ-based instrument (Fotopoulos et al., 2009) justifies the use of this tool to assess the relative importance of nine different factors (i.e., health, mood, convenience, sensory appeal, natural content, price, weight control, familiarity, ethical concern) underlying customers' attitudes towards CB. In particular, the modified version here adopted contains 30 statements provided by the original version of the 36-items FCQ because six did not reasonably apply to CB (i.e., *Factor 1 - 22 "Contain a lot of vitamins and minerals"*, *27 "Is high in protein"*, *9 "Is high in fibre and roughage"*; *Factor 3 - 1 "Is easy to prepare"*, *15 "Looks nice"*, *28 "Takes no time to*

*prepare*”), and four statements were adapted because of the alcoholic beverage (i.e., *Factor 3 - 30 “Is good for my skin/teeth/hair/nails etc.”; Factor 7 - 7 “Is low in fat”; Factor 8 - 33 “Is what I usually eat”, 21 “Is like the food I ate when a was a child”*) (Table 2). Moreover, three statements were added: two referring to convenience’s factor (i.e. *“Can be bought online”* and *“Is easy available online”*) and one referring to ethical concern (i.e. *“Is produced in respect of environment and animals”*). The questions motives were evaluated on a seven-point Likert scale, going from 1-Strongly disagree to 7-Strongly agree, and were introduced using the sentence *“It’s important to me that the craft beer I drink during a typical day...”*. Items within each scale were randomised for avoiding possible order effects, and that interviewee may perceive the specific food choice motives investigated.

Attitude towards drinking CB was measured on three individual seven-point Likert scales adapted from (Honkanen & Olsen, 2009), with responses to this sentence *“Thinking about craft beer, consider the following statements:”* ranging from *“I really like it”*, *“I’m feeling satisfied when I drink it”*, and *“Craft beer gives me a pleasant feeling”*. These items or similar have been widely used to measure attitude toward different food-object and/or food behaviour (Honkanen & Olsen, 2009, p. 203).

Furthermore, giving that escapism and sociability of (craft)beer drinking behaviour involve more the affective sphere of attitudes (Gómez-Corona et al., 2017; Williams et al., 2019), these items seem to fit the attitude construct better. The questionnaire ended with a section for collecting the socio-demographic aspects of participants, such as sex, level of education and age.

### 3.3. Data analysis

Data analysis was performed with STATA 14.0 (StataCorp, LLC, College Station, Texas, USA). The first step was to conduct a confirmatory factor analysis (CFA) to confirm that data fit the original FCQ's factorial structure and the single-factor model for attitude towards CB that was assumed. Based on the CFA result, an exploratory factor analysis (EFA) was carried out to define the factor structure of the FCQ that best describe the sample. Each extracted factor's internal reliability, including the ATT construct, was tested using Cronbach's Alpha, and the score for each interviewee was the unweighted average of the item ratings. Afterwards, the correlation analysis was performed on FCQ factor means values and ATT using Pearson's coefficient.

## 4. Results

### 4.1. Sample description

The participants' mean age was  $31.98 \pm 4.26$  years, and most were men (65.20% vs 34.80%). 78.0% of the population were employed full-time, and 49.8% have an academic degree. Table 1 presents the demographic details of the participants involved in the study.

### 4.2. Confirmatory factor analysis

As mentioned previously, the construct validity of the FCQ was tested by CFA. The ratio between chi-square and the degrees of freedom ( $\chi^2/\text{df}$ ), Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA) and Standardized Root Mean Square Residual (SRMR) was considered as criteria to evaluate the model fit. Statistics obtained from CFA were as follows:  $\chi^2/\text{df} = 2.22 < 5$ ,  $\text{CFI} = 0.88 < 0.95$ ,  $\text{RMSEA} = 0.082 > 0.05$ ,  $\text{SRMR} = 0.081 < 0.080$ . EFA was thus performed to define the factor structure that best describes the sample due to the unsatisfactory fit indexes.



Consistent with this approach, the single-factor model for ATT was confirmed, resulting in an acceptable model fit ( $\chi^2/df = 0.00 < 5$ , CFI = 1.00  $\geq$  0.95, RMSEA = 0.00  $>$  0.05, SRMR = 0.00  $<$  0.080).

#### 4.3. Exploratory factor analysis

Factor analysis based on 33 items was performed using principal component analysis with Varimax rotation, resulting in a Keiser-Meyer-Olkin's (KMO) value of 0.801  $\geq$  0.07. Hence, a nine-factor structure was obtained, explaining 71.81% of the variance, and a strong correlation between price and convenience was found (Table 2).

Cronbach's alpha values associated with each factor pointed out good internal reliability, and ATT's construct demonstrated an excellent internal consistency ( $\alpha = 0.80$ ;  $M = 5.86 \pm 1.35$ ). The rank order of food choice motives based on the mean ratings (scale 1–7) of the importance was shown in Figure 1. *Sensory appeal* and *natural content* were ranked as the most important. *Price and convenience* ranked third, followed by *ethical content*, *mood*, *health*, *familiarity* and *convenience online*, whereas *weight control* was ranked least important.

#### 4.4. Correlation analysis

Table 3 shows the Pearson correlation coefficient between ATT and all the FCQ factors. It is noteworthy that  $r$  coefficient levels ranged from “very weak” to “moderate” (Ratner, 2009), highlighting as ATT is a complex cognitive and affective trait of individuals that involves other facets of the CBs' drinking experience. As expected, ATT was positively correlated with *sensory appeal* ( $r = 0.316$ ,  $p < 0.01$ ) and *mood* ( $r = 0.312$ ,  $p < 0.01$ ), despite both  $r$ 's coefficients denoted a moderate, rather than strong, relationship. Positive but weak correlations with ATT were also observed for *convenience online* ( $r = 0.210$ ,  $p < 0.05$ ), *price and convenience* ( $r = 0.204$ ,  $p < 0.05$ )

and *natural content* ( $r = 0.203, p < 0.05$ ) factors, whereas significant but weak negative correlation was found between ATT and *weight control* ( $r = -0.200, p < 0.05$ ).

Unexpectedly, for the remaining FCQ motives (i.e., *familiarity, health* and *ethical concerns*), the correlation to ATT did not reach significance (Table 3).

## 5. Discussions

This study explored how the Millennials' attitude towards drinking CB is associated with the choice factors measured by applying Steptoe et al.'s (1995) FCQ. To the best of our knowledge, this research question has not been explored. For this reason, this study tries to cope with this gap in the extant literature. Unexpectedly, the results have shown a weak or moderate association between ATT and FCQ's motives, suggesting that other cognitive and affective factors could affect consumers' attitudes towards drinking CBs with a more robust association.

Contrary to expectations, was not found a significant correlation between ATT and *health*. This result support Betancur et al.'s (2020) findings, which revealed that beer is not considered for its health-related properties and seems in line with the idea that healthiness has little impact on alcoholic beverage choice.

As expected, a consistent and positive correlation between ATT and *mood* was found. The significant result with the increasing importance of ATT as an individual affective state aroused fit with the findings that positive mood is one of the most important factors for consuming CB (Gabrielyan et al., 2018). It is noteworthy as not only does this explanation hold, but the relation ATT-*mood* resulted as one of the most significant. Moreover, mood and *sensory appeal* were significantly and positively correlated ( $r = 0.238, p < 0.01$ ), thus supporting the idea that CB's consumer seeks to live positive drinking experiences grounding on situational and sensorial factors able to enhance their

mood (see, for example, Gómez-Corona et al., 2017; Reinoso-Carvalho et al., 2019; Silva et al., 2019; Viejo et al., 2020, among others).

The studied sample consider the product's *affordability and proximity* as the third main factors for CB choice. This factor results from a combination of the items referring to the original Steptoe et al.'s (1995) factors *price* (“Is not expensive”, “Is cheap”, and “Is good value for money”) and *convenience* (“Is easily available in shops and supermarkets” and “Can be bought in shops close to where I live or work”), suggesting that this motive comprises financial reasons and fast and easy access to with minimal effort. Thus, contrary to the expectations, the price could be a barrier towards ATT for Millennials' CB enthusiasts rather than a quality cue. This finding aligns with other research into food choice that suggested that monetary considerations may represent a relevant reason for not buying some foods or beverages. Whereas, probably motivated by the fact that distance increase beverage costs, as predicted, facilitating buying factors were positively related to ATT as pinpointed in other studies (Beckman et al., 2020; Rivaroli et al., 2019).

Accordingly to what was hypothesised, *sensory appeal* ranked first among factors for CB choice, and there was a positive and significant correlation with ATT. Thus, the present study's results are in line with the existing evidence suggesting that product-based attributes, such as the sensorial aspects of CB, are one of the key factors affecting consumers' attitude towards CB (Aquilani et al., 2015; Betancur et al., 2020; Calvo-Porral et al., 2018; Chrysochou, 2014; G. Donadini et al., 2014; Gabrielyan et al., 2018). *Natural content* was ranked second most important CB choice motive after sensorial appeal and, as expected, was significantly associated with more positive ATT. This result is in line with previous research and also implies that *natural content* is positively

and significantly associated with *health* consumer perception ( $r = 0.392, p < 0.001$ ), as highlighted in extant literature (Caporale & Monteleone, 2004; Carbone & Quici, 2020; Gianluca Donadini & Porretta, 2017). Thus, those who hold a positive ATT want to be aware of its naturalness, which is fundamental for a positive effect on health.

This study's findings corroborate Lecube et al.'s (2020) assumption that beer's consumption is frequently associated with the risk of obesity, and as predicted, *weight control* was significantly and negatively related to ATT. Those for whom weight control was an important food choice motive held a more negative attitude towards CB, thus preferring to reduce alcohol consumption, opting for "light beers" instead of regular (craft) beers, to staying healthy. In the studied sample, *weight control* was significantly correlated with *health* ( $r = 0.472, p < 0.001$ ), whereas no significant correlation was found with the *sensorial appeal* ( $r = 0.002, p \geq 0.1$ ). These findings could suggest that achieving weight loss is a motive for consumers' positive attitude towards (craft)beers with low-calorie content despite their less sensorial appeal, as Chrysochou (2014) pinpointed.

Contrary to the expectation, findings indicated that the product's *familiarity* was unrelated to ATT. This result could indicate that CB's enthusiasts do not necessarily need to prioritise CB's familiarity as a choice motive. Instead, *familiarity* was positively correlated with *convenience* ( $r = 0.359, p < 0.001$ ), pointed out as CB's *familiarity* also includes the consumers' habits and daily purchasing routine.

Though it has predicted a weak positive correlation between ATT and *ethical concern* motive, we have found that this correlation does not exist for the studied sample. This finding corroborates Jaeger, Roigard, et al.'s (2021) consideration, who suggested that when consumers are forced to make the trade-off between different food choice factors,

they will disregard those factors considered as secondary importance during the purchasing process.

The studied population considered *convenience online* as a distinct food choice factor. This food choice motive was generated by recombining convenience's motive's items and was significantly and positively correlated with ATT, pointing out as online food's shopping habit is being consolidated for this cohort, also referring to CB. This finding supports the assumption that Millennials consider the Web as one of their primary sources of food product's information and an easy and convenient way to purchase them, saving money and time (Beckman et al., 2020).

## 6. Conclusions

Findings reveal that those for whom sensorial appeal, mood and convenience were essential food choices presented a more positive attitude towards drinking CB and thus could be more intentioned to purchase it. Weight control, instead, discourages the consumers' attitude towards drinking CB. Thus, craft breweries must consider these factors both in designing their products and during their communications strategies. Results confirm the established validity of the FCQ and suggest that this can be usefully adapted for interpreting the consumers choice motives influencing their attitude towards drinking CB. Internal consistency coefficients of reliability were high for the studied sample, which is in line with other studies supporting the use of the FCQ in different countries and its cross-cultural validity. The findings of this study suggest that despite the FCQ being well recognised as a useful instrument for measuring individuals' food choice motives, it might benefit from some improvements in light of the increasing importance of share of food and grocery purchased online after the COVID-19 pandemic. Our study suggests that convenience online is a well-recognised factor for

interviewees, distinguished by a strong internal consistency. However, considering that the survey was administered online to Millennials on Facebook, the sample could be biased because they are generally technology and internet savvy. In light of this consideration, further research is needed to validate the opportunity to consider this specific factor choice and other age cohorts. Furthermore, the findings need to be confirmed and validated, involving more significant and representative samples.

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### References

- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behaviour and Human Decision Processes*, 50, 179–211.  
<http://www.journals.elsevier.com/organizational-behavior-and-human-decision-processes/>
- Allès, B., Péneau, S., Kesse-Guyot, E., Baudry, J., Hercberg, S., & Méjean, C. (2017). Food choice motives including sustainability during purchasing are associated with a healthy dietary pattern in French adults. *Nutrition Journal*, 16(1), 1–12.  
<https://doi.org/10.1186/s12937-017-0279-9>
- Analfabeti della birra. (2020). *Analfabeti della birra*.  
[https://m.facebook.com/groups/1031308770270037/?ref=group\\_browser](https://m.facebook.com/groups/1031308770270037/?ref=group_browser)
- Aquilani, B., Laureti, T., Poconi, S., & Secondi, L. (2015). Beer choice and consumption determinants when craft beers are tasted: An exploratory study of consumer preferences. *Food Quality and Preference*, 41, 214–224.

- <https://doi.org/10.1016/j.foodqual.2014.12.005>
- Baiano, A. (2021). Craft beer: An overview. *Comprehensive Reviews in Food Science and Food Safety*, 20(2), 1829–1856. <https://doi.org/10.1111/1541-4337.12693>
- Beckman, E., Shu, F., & Pan, T. (2020). The application of enduring involvement theory in the development of a success model for a craft beer and food festival. *International Journal of Event and Festival Management*, 11(4), 397–411. <https://doi.org/10.1108/IJEFM-01-2020-0002>
- Betancur, M. I., Motoki, K., Spence, C., & Velasco, C. (2020). Factors influencing the choice of beer: A review. *Food Research International*, 137(May). <https://doi.org/10.1016/j.foodres.2020.109367>
- Biernacki, P., & Waldorf, D. (1981). Snowball Sampling: Problems and Techniques of Chain Referral Sampling. *Sociological Methods & Research*, 10(2), 141–163. <https://doi.org/10.1177/004912418101000205>
- Birra artigianale e di qualità. (2020). *Birra artigianale e di qualità*. [https://m.facebook.com/groups/35898698258/?ref=group\\_browse](https://m.facebook.com/groups/35898698258/?ref=group_browse)
- Birra fatta in casa...come iniziare. (2020). *Birra fatta in casa...come iniziare*. [https://m.facebook.com/groups/203436240146034/?ref=group\\_browse](https://m.facebook.com/groups/203436240146034/?ref=group_browse)
- Calvo-Porrà, C., Orosa-González, J., & Blazquez-Lozano, F. (2018). A clustered-based segmentation of beer consumers: from “beer lovers” to “beer to fuddle.” *British Food Journal*, 120(6), 1280–1294. <https://doi.org/10.1108/BFJ-11-2017-0628>
- Calvo-Porrà, C., & Pesqueira-Sanchez, R. (2019). Generational differences in technology behaviour: comparing millennials and Generation X. *Kybernetes*, 29(11), 2755–2772. <https://doi.org/10.1108/K-09-2019-0598>
- Caporale, G., & Monteleone, E. (2004). Influence of information about manufacturing

- process on beer acceptability. *Food Quality and Preference*, 15(3), 271–278.  
[https://doi.org/10.1016/S0950-3293\(03\)00067-3](https://doi.org/10.1016/S0950-3293(03)00067-3)
- Carbone, A., & Quici, L. (2020). Craft beer mon amour: an exploration of Italian craft consumers. *British Food Journal*, 122(8), 2671–2687. <https://doi.org/10.1108/BFJ-07-2019-0476>
- Cardello, A. V., Pineau, B., Paisley, A. G., Roigard, C. M., Chheang, S. L., Guo, L. F., Hedderley, D. I., & Jaeger, S. R. (2016). Cognitive and emotional differentiators for beer: An exploratory study focusing on “uniqueness.” *Food Quality and Preference*, 54(July), 23–38. <https://doi.org/10.1016/j.foodqual.2016.07.001>
- Carley, S., & Yahng, L. (2018). Willingness-To-pay for sustainable beer. *PLoS ONE*, 13(10), 1–18. <https://doi.org/10.1371/journal.pone.0204917>
- Chrysochou, P. (2014). Drink to get drunk or stay healthy? Exploring consumers’ perceptions, motives and preferences for light beer. *Food Quality and Preference*, 31(1), 156–163. <https://doi.org/10.1016/j.foodqual.2013.08.006>
- Crane, A., Crane, F. A. A., & Matten, D. (2004). *Business Ethics: A European Perspective : Managing Corporate Citizenship and Sustainability in the Age of Globalization*. Oxford University Press.
- Dansinger, M. L., Gleason, J. A., Griffith, J. L., Selker, H. P., & Schaefer, E. J. (2005). Comparison of the Atkins, Ornish, Weight Watchers, and Zone Diets for weight loss and heart disease risk reduction: A randomized trial. *Journal of the American Medical Association*, 293(1), 43–53. <https://doi.org/10.1001/jama.293.1.43>
- Desmet, P. M. A. (2015). Design for mood: Twenty activity-based opportunities to design for mood regulation. *International Journal of Design*, 9(2), 1–19.
- Dinc, L., & Cooper, A. J. (2015). Positive affective states and alcohol consumption: The



- moderating role of trait positive urgency. *Addictive Behaviors*, 47, 17–21.  
<https://doi.org/10.1016/j.addbeh.2015.03.014>
- Donadini, G., Fumi, M. D., & Newby-Clark, I. R. (2014). Consumers' preference and sensory profile of bottom fermented red beers of the Italian market. *Food Research International*, 58, 69–80. <https://doi.org/10.1016/j.foodres.2014.01.048>
- Donadini, Gianluca, & Porretta, S. (2017). Uncovering patterns of consumers' interest for beer: A case study with craft beers. *Food Research International*, 91, 183–198.  
<https://doi.org/10.1016/j.foodres.2016.11.043>
- Dong, T., Guo, M., Zhang, P., Sun, G., & Chen, B. (2020). The effects of low-carbohydrate diets on cardiovascular risk factors: A meta-analysis. *PLoS ONE*, 15(1), 1–16. <https://doi.org/10.1371/journal.pone.0225348>
- Dorard, G., & Mathieu, S. (2021). Vegetarian and omnivorous diets: A cross-sectional study of motivation, eating disorders, and body shape perception. *Appetite*, 156(September 2020). <https://doi.org/10.1016/j.appet.2020.104972>
- Dowd, K., & Burke, K. J. (2013). The influence of ethical values and food choice motivations on intentions to purchase sustainably sourced foods. *Appetite*, 69, 137–144. <https://doi.org/10.1016/j.appet.2013.05.024>
- Eurostat. (2021). *Population on 1 January by age and sex*.  
<https://ec.europa.eu/eurostat/web/population-demography-migration-projections/data/database>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149–1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Fotopoulos, C., Krystallis, A., Vassallo, M., & Pagiaslis, A. (2009). Food Choice

- Questionnaire (FCQ) revisited. Suggestions for the development of an enhanced general food motivation model. *Appetite*, 52(1), 199–208.  
<https://doi.org/10.1016/j.appet.2008.09.014>
- Freire, R. (2020). Scientific evidence of diets for weight loss: Different macronutrient composition, intermittent fasting, and popular diets. *Nutrition*, 69, 110549.  
<https://doi.org/10.1016/j.nut.2019.07.001>
- Fukuda, T., Obara, K., Saito, J., Umeda, S., & Ano, Y. (2020). Effects of Hop Bitter Acids, Bitter Components in Beer, on Cognition in Healthy Adults: A Randomized Controlled Trial. *Journal of Agricultural and Food Chemistry*, 68(1), 206–212.  
<https://doi.org/10.1021/acs.jafc.9b06660>
- Gabrielyan, G., Marsh, T. L., McCluskey, J. J., & Ross, C. F. (2018). Hoppiness Is Happiness? Under-fertilized Hop Treatments and Consumers' Willingness to Pay for Beer. *Journal of Wine Economics*, 13(2), 160–181.  
<https://doi.org/10.1017/jwe.2018.26>
- Gardner, C. D., Kiazand, A., Kim, S., Stafford, R. S., Balise, R. R., Kraemer, H. C., & King, A. C. (2007). and LEARN Diets for Change in Weight and Related Risk Factors Among Overweight. *The Journal of the American Medical Association*, 297(9), 969–978.  
<http://jama.jamanetwork.com/article.aspx?doi=10.1001/jama.297.9.969>
- Ghiță, A., Teixidor, L., Monras, M., Ortega, L., Mondon, S., Gual, A., Paredes, S. M., Urgell, L. V., Porrás-García, B., Ferrer-García, M., & Gutiérrez-Maldonado, J. (2019). Identifying triggers of alcohol craving to develop effective virtual environments for cue exposure therapy. *Frontiers in Psychology*, 10(JAN), 1–11.  
<https://doi.org/10.3389/fpsyg.2019.00074>

- Giacalone, D., Frøst, M. B., Bredie, W. L. P., Pineau, B., Hunter, D. C., Paisley, A. G., Beresford, M. K., & Jaeger, S. R. (2015). Situational appropriateness of beer is influenced by product familiarity. *Food Quality and Preference*, 39, 16–27.  
<https://doi.org/10.1016/j.foodqual.2014.06.012>
- Gómez-Corona, C., Escalona-Buendía, H. B., Chollet, S., & Valentin, D. (2017). The building blocks of drinking experience across men and women: A case study with craft and industrial beers. *Appetite*, 116, 345–356.  
<https://doi.org/10.1016/j.appet.2017.05.026>
- Gómez-Corona, Carlos, Escalona-Buendía, H. B., Chollet, S., & Valentin, D. (2017). The building blocks of drinking experience across men and women: A case study with craft and industrial beers. *Appetite*, 116, 345–356.  
<https://doi.org/10.1016/j.appet.2017.05.026>
- Gurău, C. (2012). A life-stage analysis of consumer loyalty profile: Comparing Generation X and Millennial consumers. *Journal of Consumer Marketing*, 29(2), 103–113. <https://doi.org/10.1108/07363761211206357>
- Harrington, R. J., Miszczak, D. C., & Ottenbacher, M. C. (2008). The impact of beer type, pizza spiciness and gender on match perceptions. *PASOS Revista de Turismo y Patrimonio Cultural*, 6(2), 173–188.  
<https://doi.org/10.25145/j.pasos.2008.06.014>
- Honkanen, P., & Olsen, S. O. (2009). Environmental and animal welfare issues in food choice: The case of farmed fish. *British Food Journal*, 111(3), 293–309.  
<https://doi.org/10.1108/00070700910941480>
- Horn, P. A., Pedron, N. B., Junges, L. H., Rebelo, A. M., da Silva Filho, H. H., & Zeni, A. L. B. (2021). Antioxidant profile at the different stages of craft beers

- production: the role of phenolic compounds. *European Food Research and Technology*, 247(2), 439–452. <https://doi.org/10.1007/s00217-020-03637-2>
- Il forum della birra per tutti. (2020). *Il forum della birra per tutti*.  
[https://m.facebook.com/groups/703082893211911/?ref=group\\_browse](https://m.facebook.com/groups/703082893211911/?ref=group_browse)
- IPK International. (2016). ITB world travel trends report 2016/2017. In *Itb World Travel Trends Reports Report*.
- Jaeger, S. R., Roigard, C. M., Hunter, D. C., & Worch, T. (2021). Importance of food choice motives vary with degree of food neophobia. *Appetite*, 159(November 2020), 105056. <https://doi.org/10.1016/j.appet.2020.105056>
- Jaeger, S. R., Vidal, L., Ares, G., Chheang, S. L., & Spinelli, S. (2021). Healthier eating: Covid-19 disruption as a catalyst for positive change. *Food Quality and Preference*, 92(March). <https://doi.org/10.1016/j.foodqual.2021.104220>
- Jaeger, S. R., Worch, T., Phelps, T., Jin, D., & Cardello, A. V. (2020). Preference segments among declared craft beer drinkers: Perceptual, attitudinal and behavioral responses underlying craft-style vs. traditional-style flavor preferences. *Food Quality and Preference*, 82(January), 103884.  
<https://doi.org/10.1016/j.foodqual.2020.103884>
- Kim, M., & Joo, H. H. (2014). What makes you grab low carb beers? *Applied Economics*, 46(13), 1526–1534. <https://doi.org/10.1080/00036846.2013.877572>
- Köster, E. P., & Mojet, J. (2015). From mood to food and from food to mood: A psychological perspective on the measurement of food-related emotions in consumer research. *Food Research International*, 76(P2), 180–191.  
<https://doi.org/10.1016/j.foodres.2015.04.006>
- La compagnia della birra. (2020). *La compagnia della birra*.

- [https://m.facebook.com/groups/50678870026/?ref=group\\_browse](https://m.facebook.com/groups/50678870026/?ref=group_browse)
- Lecube, A., Sánchez, E., Monereo, S., Medina-Gomez, G., Bellido, D., Garcia-Almeida, J. M., Martinez De Icaya, P., Malagon, M. M., Goday, A., & Tinahones, F. J. (2020). Factors Accounting for Obesity and Its Perception among the Adult Spanish Population: Data from 1,000 Computer-Assisted Telephone Interviews. *Obesity Facts*, 13(4), 322–332. <https://doi.org/10.1159/000508111>
- Lee, N. M., Callison, C., & Seltzer, T. (2020). Sustainable Beer: Testing the Effects of Water Conservation Messages and Brewery Type on Consumer Perceptions. *Journal of Food Products Marketing*, 26(9), 619–638. <https://doi.org/10.1080/10454446.2020.1854915>
- Leskošek-Čukalović, I. J. (2016). Beer as an Integral Part of Healthy Diets: Current Knowledge and Perspective. In V. Nedović, P. Raspor, J. Lević, V. Tumbas Šaponjac, & G. V Barbosa-Cánovas (Eds.), *Emerging and Traditional Technologies for Safe, Healthy and Quality Food* (pp. 111–144). Springer International Publishing. [https://doi.org/10.1007/978-3-319-24040-4\\_7](https://doi.org/10.1007/978-3-319-24040-4_7)
- Malone, T., & Lusk, J. L. (2018). An instrumental variable approach to distinguishing perceptions from preferences for beer brands. *Managerial and Decision Economics*, 39(4), 403–417. <https://doi.org/10.1002/mde.2913>
- Marcos, A., López Díaz-Ufano, M., & Pascual Fuster, V. (2015). ¿El consumo moderado de cerveza podría incluirse dentro de una alimentación saludable? *SEMERGEN - Medicina de Familia*, 41, 1–12. [https://doi.org/https://doi.org/10.1016/S1138-3593\(15\)30006-X](https://doi.org/https://doi.org/10.1016/S1138-3593(15)30006-X)
- Markovina, J., Stewart-Knox, B. J., Rankin, A., Gibney, M., de Almeida, M. D. V., Fischer, A., Kuznesof, S. A., Poínhos, R., Panzone, L., & Frewer, L. J. (2015).

- Food4Me study: Validity and reliability of Food Choice Questionnaire in 9 European countries. *Food Quality and Preference*, 45, 26–32.  
<https://doi.org/10.1016/j.foodqual.2015.05.002>
- Morimoto-Kobayashi, Y., Ohara, K., Ashigai, H., Kanaya, T., Koizumi, K., Manabe, F., Kaneko, Y., Taniguchi, Y., Katayama, M., Kowatari, Y., & Kondo, S. (2016). Matured hop extract reduces body fat in healthy overweight humans: A randomized, double-blind, placebo-controlled parallel group study. *Nutrition Journal*, 15(1), 1–13. <https://doi.org/10.1186/s12937-016-0144-2>
- Park, C. W., & Lessig, V. P. (1981). Familiarity and Its Impact on Consumer Decision Biases and Heuristics. *Journal of Consumer Research*, 8(2), 223.  
<https://doi.org/10.1086/208859>
- Pieniak, Z., Verbeke, W., Vanhonacker, F., Guerrero, L., & Hersleth, M. (2009). Association between traditional food consumption and motives for food choice in six European countries. *Appetite*, 53(1), 101–108.  
<https://doi.org/10.1016/j.appet.2009.05.019>
- Prescott, J., Young, O., O'Neill, L., Yau, N. J. N., & Stevens, R. (2002). Motives for food choice: A comparison of consumers from Japan, Taiwan, Malaysia and New Zealand. *Food Quality and Preference*, 13(7–8), 489–495.  
[https://doi.org/10.1016/S0950-3293\(02\)00010-1](https://doi.org/10.1016/S0950-3293(02)00010-1)
- Rankin, A., Bunting, B. P., Póinhos, R., Van Der Lans, I. A., Fischer, A. R. H., Kuznesof, S., Almeida, M. D. V., Markovina, J., Frewer, L. J., & Stewart-Knox, B. J. (2018). Food choice motives, attitude towards and intention to adopt personalised nutrition. *Public Health Nutrition*, 21(14), 2606–2616.  
<https://doi.org/10.1017/S1368980018001234>

- Ratner, B. (2009). The correlation coefficient: Its values range between 1/1, or do they. *Journal of Targeting, Measurement and Analysis for Marketing*, 17(2), 139–142.  
<https://doi.org/10.1057/jt.2009.5>
- Reinoso-Carvalho, F., Dakduk, S., Wagemans, J., & Spence, C. (2019). Not just another pint! The role of emotion induced by music on the consumer's tasting experience. *Multisensory Research*, 32(4–5), 367–400. <https://doi.org/10.1163/22134808-20191374>
- Rivaroli, S., Lindenmeier, J., Hingley, M., & Spadoni, R. (2021). Social representations of craft food products in three European countries. *Food Quality and Preference*, 93, 104253. <https://doi.org/10.1016/j.foodqual.2021.104253>
- Rivaroli, S., Lindenmeier, J., & Spadoni, R. (2019). Attitudes and Motivations Toward Craft Beer Consumption: An Explanatory Study in Two Different Countries. *Journal of Food Products Marketing*, 25(3), 276–294.  
<https://doi.org/10.1080/10454446.2018.1531802>
- Scherer, K. R. (2005). What are emotions? and how can they be measured? *Social Science Information*, 44(4), 695–729. <https://doi.org/10.1177/0539018405058216>
- Silva, A. P., Voss, H. P., van Zyl, H., Hogg, T., de Graaf, C., Pintado, M., & Jager, G. (2019). Effect of adding hop aroma in beer analysed by temporal dominance of sensations and emotions coupled with temporal liking. *Food Quality and Preference*, 75(January 2018), 54–63.  
<https://doi.org/10.1016/j.foodqual.2019.02.001>
- Sluik, D., Van Lee, L., Geelen, A., & Feskens, E. J. (2014). Alcoholic beverage preference and diet in a representative Dutch population: The Dutch national food consumption survey 2007-2010. *European Journal of Clinical Nutrition*, 68(3),

- 287–294. <https://doi.org/10.1038/ejcn.2013.279>
- Smith, S., Farrish, J., McCarroll, M., & Huseman, E. (2017). Examining the Craft Brew Industry. *International Journal of Hospitality Beverage Management*, 1(1).  
<https://doi.org/10.34051/j/2019.3>
- Snuggs, S., & McGregor, S. (2021). Food & meal decision making in lockdown: How and who has Covid-19 affected? *Food Quality and Preference*, 89(October 2020), 104145. <https://doi.org/10.1016/j.foodqual.2020.104145>
- Step toe, A., Pollard, T. M., & Wardle, J. (1995). Development of a Measure of the Motives Underlying the Selection of Food : the Food Choice Questionnaire Department of Psychology , St George ’ s Hospital Medical School , London. *Appetite*, 25, 267–284.
- Thach, E. C., & Olsen, J. E. (2006). Market segment analysis to target young adult wine drinkers. *Agribusiness*, 22(3), 307–322. <https://doi.org/10.1002/agr.20088>
- Thayer, R. E. (1990). *The Biopsychology of Mood and Arousal*. Oxford University Press.
- Thomé, K. M., Pinho, G. da M., Fonseca, D. P., & Soares, A. B. P. (2016). Consumers’ luxury value perception in the Brazilian premium beer market. *International Journal of Wine Business Research*, 28(4), 369–386.  
<https://doi.org/10.1108/IJWBR-09-2015-0043>
- Thompson, C., & Gregory, J. B. (2012). Managing Millennials: A Framework for Improving Attraction, Motivation, and Retention. *The Psychologist-Manager Journal*, 15(4), 237–246. <https://doi.org/10.1080/10887156.2012.730444>
- Van Doorn, G., Timora, J., Watson, S., Moore, C., & Spence, C. (2019). The visual appearance of beer: A review concerning visually-determined expectations and



- their consequences for perception. *Food Research International*, 126(September), 108661. <https://doi.org/10.1016/j.foodres.2019.108661>
- Viejo, C. G., Villarreal-Lara, R., Torrico, D. D., Rodríguez-Velazco, Y. G., Escobedo-Avellaneda, Z., Ramos-Parra, P. A., Mandal, R., Singh, A. P., Hernández-Brenes, C., & Fuentes, S. (2020). Beer and consumer response using biometrics: Associations assessment of beer compounds and elicited emotions. *Foods*, 9(6). <https://doi.org/10.3390/foods9060821>
- Waldrop, M. E., & McCluskey, J. J. (2019). Does information about organic status affect consumer sensory liking and willingness to pay for beer? *Agribusiness*, 35(2), 149–167. <https://doi.org/10.1002/agr.21567>
- Williams, A., Atwal, G., & Bryson, D. (2019). Luxury craftsmanship – the emergent luxury beer market. *British Food Journal*, 121(2), 359–370. <https://doi.org/10.1108/BFJ-02-2018-0092>
- Wright, C. A., Bruhn, C. M., Heymann, H., & Bamforth, C. W. (2008a). Beer and wine consumers' perceptions of the nutritional value of alcoholic and nonalcoholic beverages. *Journal of Food Science*, 73(1). <https://doi.org/10.1111/j.1750-3841.2007.00606.x>
- Wright, C. A., Bruhn, C. M., Heymann, H., & Bamforth, C. W. (2008b). Beer consumers' perceptions of the health aspects of alcoholic beverages. *Journal of Food Science*, 73(1), 12–17. <https://doi.org/10.1111/j.1750-3841.2007.00574.x>
- Zwanka, R. J. (2018). Beer Uses and Attitudes in the Craft Era. *Journal of International Food and Agribusiness Marketing*, 32(1), 1–12. <https://doi.org/10.1080/08974438.2018.1533508>

## Food choice motives affecting Millennials' attitudes towards craft beer

### Tables and Figures

**Table 1. Sample description**

Data collected	N	%
<b>Sex</b>		
Male	178	65.20
Female	95	34.80
<b>Age group (years)</b>		
25-29	84	30.77
30-34	99	36.26
35-40	90	32.97
<b>Education level</b>		
University	136	49.82
High school	115	42.12
Middle School	19	6.96
Primary school	5	1.10
None	-	-
<b>Occupational status</b>		
Student	20	7.33
Unemployed	-	-
Looking for work	40	14.65
Employed	213	78.02

Table 2. Adapted FCQ's structure.

Number	Items	Loading	Variance explained <sup>(a)</sup>	Cronbach alpha	Mean ( $\pm$ SD)	Rank order <sup>(b)</sup>
<b>Factor 1</b>	<b>Mood</b>		<b>11.03</b>	<b>0.88</b>	3.99 ( $\pm$ 1.43)	5 <sup>^</sup>
26	Help me relax	0.82				
31	Makes me feel good	0.81				
13	Cheers me up	0.81				
16	Help me cope with stress	0.80				
34	Help me to cope with life	0.75				
<b>Factor 2</b>	<b>Sensory appeal</b>		<b>8.87</b>	<b>0.84</b>	5.97 ( $\pm$ 1.08)	1 <sup>^</sup>
18	Has a pleasant texture	0.86				
14	Smells nice	0.84				
25	Looks nice	0.81				
4	Tastes good	0.69				
<b>Factor 3</b>	<b>Health</b>		<b>8.09</b>	<b>0.89</b>	3.76 ( $\pm$ 1.66)	6 <sup>^</sup>
30 <sup>(d)</sup>	Is good for my body	0.85				
29	Keeps me healthy	0.85				
10	Is nutritious	0.84				
<b>Factor 4</b>	<b>Ethical concern</b>		<b>7.91</b>	<b>0.80</b>	4.55 ( $\pm$ 1.43)	4 <sup>^</sup>
-- <sup>(b)</sup>	Is produced in respect of environment and animals	0.81				
19	Is packaged in an environmentally friendly way	0.80				
32	Has the country of origin clearly marked	0.75				
20	Comes from countries I approve of politically	0.64				
<b>Factor 5</b>	<b>Natural content</b>		<b>7.85</b>	<b>0.87</b>	5.38 ( $\pm$ 1.48)	2 <sup>^</sup>
23	Contains no artificial ingredients	0.85				
5	Contains natural ingredients	0.85				
2	Contains no additives	0.78				
<b>Factor 6</b>	<b>Price and convenience</b>		<b>7.53</b>	<b>0.75</b>	4.71 ( $\pm$ 1.16)	3 <sup>^</sup>
6	Is not expensive	0.75				
11	Is easily available in shops and supermarkets	0.69				
36	Is cheap	0.68				
	Can be bought in shops close to where I live or work	0.58				
35						
12	Is good value for money	0.52				
<b>Factor 7</b>	<b>Weight control</b>		<b>7.46</b>	<b>0.77</b>	2.26 ( $\pm$ 1.16)	9 <sup>^</sup>
17	Helps me control my weight	0.81				
3	Is low in calories	0.77				
7 <sup>(d)</sup>	Is low in alcohol content	0.69				
24	Keeps me awake/alert	0.46				
<b>Factor 8</b>	<b>Familiarity</b>		<b>6.91</b>	<b>0.75</b>	3.14 ( $\pm$ 1.46)	8 <sup>^</sup>
33 <sup>(d)</sup>	Is what I usually drink	0.78				
8	Is familiar	0.78				
21 <sup>(d)</sup>	Is like the first beer I drank	0.65				
<b>Factor 9</b>	<b>Convenience online</b>		<b>6.16</b>	<b>0.95</b>	3.53 ( $\pm$ 1.89)	7 <sup>^</sup>
-- <sup>(c)</sup>	Can be bought online	0.95				
-- <sup>(c)</sup>	Is easily available online	0.94				

(a) Variance explained after rotation.

(b) Rank order based on the mean ratings (scale 1–7) of the importance.

(c) Item added.

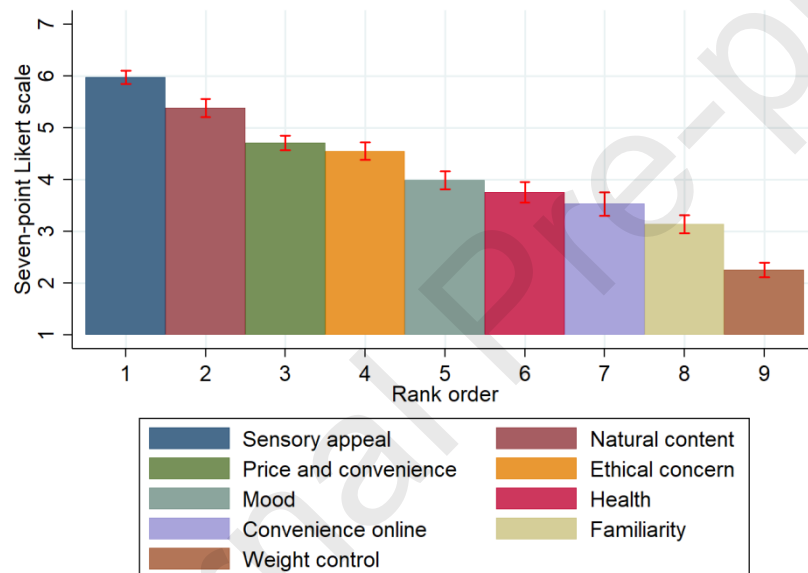
(d) Item modified.

**Table 3. Results from correlation analysis between ATT and food choice motives.**

Food choice motives	Corr.	<i>p</i> -value <sup>(a)</sup>
Mood	0.312	***
Sensory appeal	0.316	***
Health	-0.016	ns
Ethical concern	0.024	ns
Natural content	0.203	*
Price and convenience	0.204	*
Weight control	-0.200	*
Familiarity	0.086	ns
Convenience online	0.210	*

ns  $p \geq 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

<sup>(a)</sup> Bonferroni-corrected.

**Figure 1. The rank order of food choice motives.**

**Using Food Choice Questionnaire to explain Millennials' attitudes towards craft beer**

## HIGHLIGHTS

- The validity of the FCQ's factor structure was confirmed, and it appears to be a reliable research instrument.
- Sensorial appeal, mood and (online)convenience had a positive association with attitude towards craft beer.
- Weight control, instead, discourages the Millennials' attitude towards drinking craft beer.
- Craft breweries must consider these factors in designing their products and tailoring communications strategies.