

FACTORS INFLUENCING THE SELECTION OF CRAFT BEER: A FACTOR ANALYSIS AND GENERATIONAL SEGMENTATION IN THE CZECH MARKET

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ABSTRACT

This article presents the results of an empirical study of consumer behavior in the Czech craft beer market. The primary objective was to identify the key factors influencing the selection of craft beer and, based on these factors, to perform a market segmentation analysis. The research was conducted through a quantitative survey combining online distribution via social media platforms and offline distribution using QR codes placed in craft beer pubs in Brno. After the application of screening criteria, a total of 458 respondents aged 18 to 57 years were included in the statistical analysis. Ten formulated hypotheses were tested using non-parametric statistical methods (Pearson's chi-square test, the Mann–Whitney U test, the Wilcoxon signed-rank test, and the Kruskal–Wallis test). The principal analytical method was exploratory factor analysis with Varimax rotation, which extracted four factors explaining 43.45% of the total variance: price sensitivity and conservatism, taste and sensory attributes of beer, authenticity and exclusivity, and social and visual influences. Taste and aroma emerged as the most influential individual determinants of craft beer selection, whereas recommendations from influencers were found to be the least influential. Generational segmentation revealed that Generation Y constitutes the most active market segment, while Generation Z consumes craft beer significantly less frequently. The findings suggest that value-based attributes, such as authenticity and regional origin, outweigh price sensitivity and traditional forms of advertising among craft beer consumers in the Czech Republic.

Keywords: consumer behavior, craft beer, factor analysis, market segmentation, authenticity, storytelling, generational differences, Czech Republic

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1 INTRODUCTION

In recent years, the craft beer market has become one of the most dynamically growing segments of the European brewing industry. In the Czech Republic, the number of craft breweries has nearly tripled since 2013, reaching a total of 508 microbreweries by the end of 2023 (Czech-Moravian Association of Microbreweries, 2025). This growth reflects a broader global phenomenon known as the craft beer revolution, which originated in transformations within the American brewing industry in the mid-1960s and subsequently spread to other regions of the world. The defining characteristic of this transformation is not production volume but rather an emphasis on quality, authenticity, and regional identity of production (Wojtyra *et al.*, 2020).

The growing popularity of craft beer is accompanied by a paradox of globalization. Although consumers have easy access to beer brands from around the world through global distribution networks, demand is increasingly directed toward regional products (Villacreces *et al.*, 2022). This shift reflects changing consumer preferences, particularly among younger generations, who seek authentic, distinctive, and high-quality products. At the same time, industrially produced beer maintains a strong market position primarily due to its lower price and widespread availability, placing small and independent breweries in a competitive environment where they must differentiate themselves from mass-produced alternatives through value-based attributes.

A key distinguishing feature between craft and industrial beer lies in the production process. Craft breweries are typically small and independent enterprises that experiment with ingredients and brewing techniques to achieve unique flavor profiles, whereas industrial breweries focus on standardization and large-scale production (Rosales *et al.*, 2021). Sensory, chemical, and process-related differences between the two categories are comprehensively documented in the review by Baiano (2021).

Within the Czech Republic, the beer market has long represented an important component of both the national economy and cultural heritage. In a study focused on the establishment of craft breweries, Březinová (2021) identified the motivations of brewery founders as well as the structural characteristics of this market segment. Svatošová *et al.* (2021) examined broader factors influencing consumer behavior in the Czech beer market and highlighted, among other findings, reduced price sensitivity among craft beer enthusiasts. International studies focusing specifically on craft beer attributes, such as Lerro *et al.* (2020), employing the Best–Worst Scaling method, identified taste, bitterness, ingredient composition, and regional origin as the most important product attributes. In the Italian context, Pilone *et al.* (2023) demonstrated that consumer preferences vary according to the level of market knowledge and familiarity with the craft beer segment.

From the perspective of psychological mechanisms underlying consumer decision-making, the craft beer segment is strongly influenced by the principles of authenticity (Newman, 2019; Bartsch *et al.*, 2022), the storytelling effect (Ahmed *et al.*, 2024), and the scarcity principle (Goldsmith *et al.*, 2020). Simultaneously, the demographic composition of beer consumers is changing. Livingston *et al.* (2024) and Caluzzi *et al.* (2024) document a gradual decline in alcohol consumption among the youngest generations, a trend that may lead to long-term structural changes within the market.

Although individual aspects of the craft beer market have been examined in both Czech and international literature, a comprehensive study integrating the identification of key selection factors, the testing of psychological effects, and generational market segmentation has thus far been absent in the Czech context. The primary objective of the present research was to identify the factors influencing consumer behavior in the selection of craft beer in the Czech Republic and, based on these factors, to perform a segmentation of this market. Secondary objectives included describing consumer attitudes and preferences and formulating recommendations for business entities operating in the craft beer sector.

2 METHODOLOGY AND DATA

The empirical study was conducted as a quantitative survey targeting beer and craft beer consumers in the Czech Republic. The questionnaire consisted of 28 questions organized into four sections: consumption frequency and purchasing locations, factors influencing craft beer selection, perceptions of promotional forms and marketing elements, and demographic characteristics. Seventeen questions were closed-ended, two were open-ended, and six item batteries comprised a total of 40 statements evaluated using a seven-point Likert scale (1 = completely unimportant, 7 = very important). Prior to the official launch, a pilot study was conducted, and questions that respondents found difficult to understand were reformulated.

The questionnaire was distributed using a mixed-mode approach. The online version was disseminated through Google Forms via social media platforms, particularly Facebook groups focused on brewing and beer-related interests. An additional offline distribution channel consisted of flyers containing QR codes placed in craft beer pubs located in the center of Brno. Before completing the questionnaire, respondents were informed about the purpose of the study, its anonymous nature, and the distinction between industrially produced and craft beer.

A total of 506 completed questionnaires were collected. To be included in the main analytical sample, respondents had to meet three criteria: be at least 18 years of age, consume beer at least occasionally, and consume craft beer at least occasionally. Thirty-three respondents failed to meet these criteria. An additional 15 respondents aged 58 years and older were excluded due to the non-representatively small size of this age group. Consequently, the final analytical sample consisted of 458 respondents. Generational segmentation was based on the classification developed by the research agency STEM/MARK (2024), distinguishing Generation X (43–57 years), Generation Y (28–42 years), and Generation Z (18–27 years). The quota sampling procedure was designed to achieve a relatively balanced distribution across generations.

Data analysis was performed using Statistica 14 and Microsoft Excel. Ten research hypotheses were formulated and tested using four non-parametric statistical methods selected according to the nature of the variables: Pearson's chi-square test, with the strength of association assessed using Cramér's V; the Mann–Whitney U test for comparisons between two independent groups; the Wilcoxon signed-rank test for paired observations; and the Kruskal–Wallis test for comparisons across multiple groups, followed by post hoc analysis with Bonferroni correction. The hypotheses focused on relationships between beer-type preference and income, purchasing location, consumption frequency, generational cohort, and selected value-related factors (regional origin, environmentally friendly packaging, brewery history, and limited-edition products). The significance level was set at $\alpha = 0.05$. Prior to applying Pearson's chi-square test, assumptions regarding expected cell frequencies were verified according to the recommendations of Bolboacă *et al.* (2011); when these assumptions were not met, adjacent categories were merged. The use of non-parametric methods was motivated by the ordinal nature of the data and the violation of the normality assumption (Field, 2013).

To achieve the primary research objective—namely, identifying the factors influencing consumer behavior—an exploratory factor analysis (EFA) was conducted. The analysis included 31 variables comprising both factor ratings obtained from Likert-scale items and attitudinal statements. Principal component analysis (PCA) with normalized Varimax rotation was employed. The number of extracted factors was determined using the scree plot criterion. Variables with factor loadings of at least 0.60, or those falling slightly below this threshold, were considered relevant indicators of a given factor.

Market segmentation was originally intended to be conducted using cluster analysis. However, due to the insufficient distinctiveness and substantial similarity of the resulting clusters, this approach was rejected. Instead, segmentation was performed based on generational cohorts, which proved to be more interpretable and more accurately reflected differences in consumer behavior.

3 RESULTS

The structure of the research sample corresponded to the demographic profile of craft beer consumers in the Czech Republic. Of the total 458 respondents, 73.9% were men and 26.1% were women. The generational distribution was relatively balanced: Generation Y (28–42 years) was represented by 175 respondents, Generation Z (18–27 years) by 166 respondents, and Generation X (43–57 years) by 153 respondents. Nearly half of the respondents (47.3%) had attained a university degree, while employment was the predominant economic status (67%). In terms of net monthly income, the largest proportion of respondents (25.5%) belonged to the CZK 30,001–40,000 income category.

The survey revealed that 95.5% of respondents consume beer and nearly 93% consume craft beer. When both industrial and craft beer are available in a hospitality venue, 83.4% of respondents choose craft beer, although only 54.8% identify it as their primary preference. The most common place of purchase for craft beer is restaurants and pubs (36.6%), followed by breweries (22.4%) and specialized beer stores (pivotáky). The most frequently reported consumption occasion is informal socializing with friends, cited by 51.7% of respondents.

3.1 Relationship Between Income and Beer Preference

The hypothesis concerning the association between beer-type preference (craft vs. industrial beer) and net personal income was tested using Pearson's chi-square test. The analysis revealed a statistically significant relationship ($\chi^2 = 19.902$; $df = 6$; $p = 0.003$), with a weak-to-moderate effect size (Cramér's $V = 0.220$). Respondents with lower incomes (up to CZK 30,000) were more likely to prefer industrial beer, whereas respondents with incomes exceeding CZK 40,000 exhibited a substantially stronger preference for craft beer.

3.2 Generational Differences in Consumption Frequency

The Kruskal–Wallis test demonstrated statistically significant differences in median craft beer consumption frequency across generations ($H(2, n = 469) = 66.120$; $p < 0.001$). Post hoc analysis with Bonferroni correction confirmed that significant differences existed between Generation Z and both older generations, whereas no significant difference was found between Generations X and Y. Generation Z consumes craft beer significantly less frequently than older generational cohorts.

3.3 The Storytelling Effect

The Mann–Whitney U test was used to compare the perceived importance of brewery history between two groups of respondents: those who identified an engaging brewery story as the most persuasive promotional element ($n = 200$) and all remaining respondents ($n = 258$). The analysis revealed a statistically significant difference ($Z = 5.731$; $p < 0.001$). This finding may be interpreted

as empirical support for the storytelling effect within the craft beer market. Respondents who are more receptive to narrative-based marketing also attribute greater importance to brewery history in their purchasing decisions.

3.4 Evaluation of Selection Factors

The assessment of 40 selection factors using a seven-point Likert scale indicated that taste and aroma constitute the most important factor influencing craft beer choice (mean = 6.11; median = 7; SD = 1.43). Other highly rated factors included originality and uniqueness (mean = 4.98), traditional recipes, ingredient composition, regional origin, and support for local producers. In contrast, recommendations from influencers and celebrities (mean = 1.94), the availability of a non-alcoholic craft beer version, and environmentally friendly packaging were identified as the least important factors.

3.5 Factor Analysis

The scree plot of eigenvalues (see Figure 1) supported the extraction of four factors, which together explained 43.45% of the total variance. The structure of the extracted factors and their principal items are summarized in Table 1.

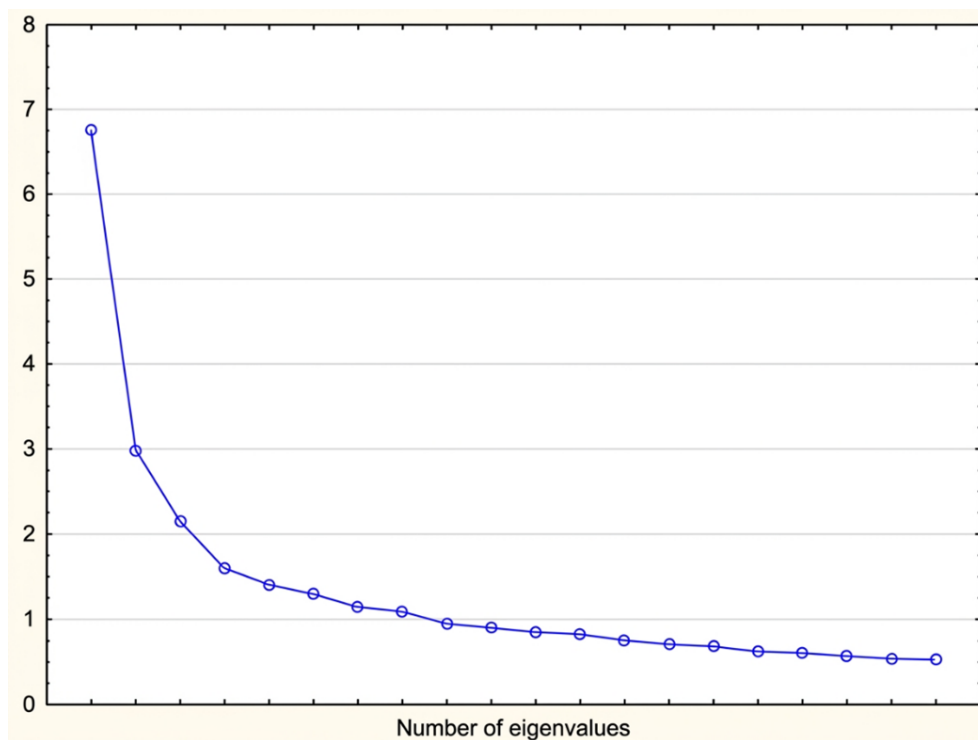


Fig. 1: Scree Plot of Eigenvalues Obtained from the Exploratory Factor Analysis

Source: Questionnaire survey data (n = 458).

Tab. 1 Extracted Factors and Their Key Items with Factor Loadings

Factor	Key Items (Factor Loadings)	Explained Variance
F1 – Price Sensitivity and Conservatism	price (0.672); I choose beer based on price (0.703); I prefer well-known and easily available beers (0.649)	21.77%
F2 – Taste and Sensory Attributes	taste and aroma (0.639); I select beer carefully (0.711); I prefer bitter beers (0.649); I prefer a strong and full-bodied flavour (0.712)	9.62%
F3 – Authenticity and Exclusivity	regional origin (0.709); support for local producers (0.638); seasonal offerings (0.626); limited editions (0.590)	6.90%
F4 – Social and Visual Influences	packaging design (0.605); recommendations from friends/family (0.575); recommendations from influencers (0.657)	5.16%

Source: Authors' own calculations based on questionnaire survey data (n = 458).

3.6 Generational Segmentation

Generation Y emerged as the most active market segment. Among respondents in this age group, 37.8% consume craft beer several times per week, and more than half spend over CZK 500 per month on craft beer purchases. This generation places particular emphasis on sensory characteristics, authenticity, and small independent breweries. Generation X exhibits stable consumption habits and a strong preference for regional origin and support for local producers. Generation Z represents the least active segment; its members consume craft beer irregularly, demonstrate greater price sensitivity, and more frequently prefer well-known and easily accessible brands. This tendency may be related to their lower average income, as more than half of Generation Z respondents reported a monthly income below CZK 20,000.

4 DISCUSSION AND CONCLUSIONS

The identification of key factors influencing craft beer selection confirmed the dominant role of sensory attributes. The finding that taste and aroma constitute the most influential factor is consistent with the results of Lerro *et al.* (2020), who, using the Best–Worst Scaling method, demonstrated that flavor-related characteristics form the core of consumer evaluations. Likewise, the importance of traditional recipes, ingredient composition, and the production process aligns with the characterization of the craft beer segment as a quality-oriented form of production (Villacreces *et al.*, 2022; Baiano, 2021).

The statistically significant relationship between beer-type preference and income level complements and confirms the findings of Steinbach *et al.* (2023), according to which price is one of the principal reasons why consumers who primarily prefer industrial beer consume craft beer only occasionally. Furthermore, a statistical test (Wilcoxon signed-rank test) demonstrated that respondents who prefer craft beer attach greater importance to regional origin than to price. This finding is consistent with the conclusions of Svatošová *et al.* (2021), who reported that price is not a decisive criterion for craft beer enthusiasts. Thus, value-based attributes—namely authenticity and local provenance—outweigh price sensitivity among consumers who are oriented toward quality and product storytelling.

The finding of significantly lower craft beer consumption among Generation Z corresponds with international studies documenting declining alcohol consumption among the youngest cohorts (Livingston *et al.*, 2024; Caluzzi *et al.*, 2024). This trend represents a structural challenge for the entire segment, as Generation Z will constitute the core of the beer market in the coming decades.

In contrast, the hypothesis derived from the study by Nieto-Villegas *et al.* (2024), which suggested that consumers with positive attitudes toward sustainability would prefer both craft beer and environmentally friendly packaging, was not supported in the Czech context. Respondents who preferred craft beer did not assign significantly greater importance to environmentally friendly packaging than consumers who preferred industrial beer. This finding suggests that conclusions drawn from sustainability-focused studies are not automatically transferable across markets and require contextual verification.

Among the most important psychological mechanisms identified in the study were the storytelling effect and the principle of authenticity. The storytelling effect was supported by a statistically significant relationship between preference for narrative-based promotion and the importance assigned to brewery history as a selection criterion, which is consistent with theoretical assumptions regarding the influence of storytelling on brand relationships (Ahmed *et al.*, 2024). The principle of authenticity, as conceptualized by Newman (2019) and Bartsch *et al.* (2022), emerged in the analysis as an independent extracted factor (F3 – Authenticity and Exclusivity), encompassing regional origin, support for local producers, and exclusive product offerings. The scarcity principle (Goldsmith *et al.*, 2020) was supported by the finding that regular consumers attributed greater importance to limited-edition products than occasional consumers.

With regard to promotional activities, the findings clearly favored experiential forms of communication. The most persuasive promotional elements identified by respondents were collaborations between craft breweries and local businesses (mean = 4.94), brewery visits accompanied by beer

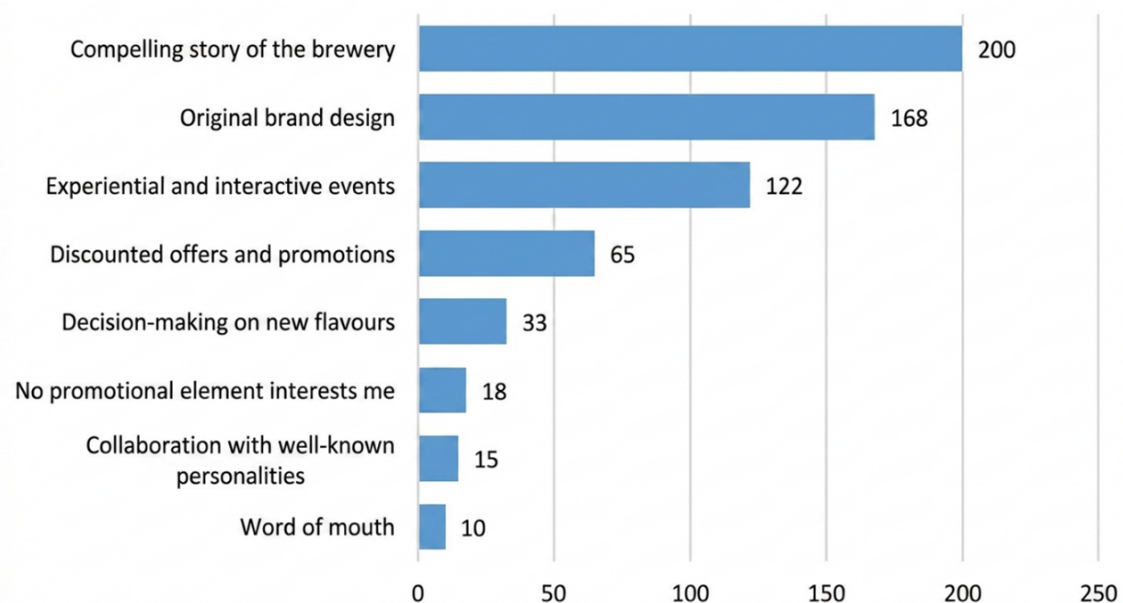


Fig. 2: Most Preferred Promotional Elements of Craft Beer (n = 458)

Source: Questionnaire survey data (n = 458).

tastings (4.87), and participation in beer festivals (4.78). In contrast, recommendations from influencers, newspaper advertising, and billboards were evaluated as relatively unpersuasive. These findings suggest that effective craft beer marketing relies primarily on authentic experiences and direct interaction with the brand rather than on traditional mass advertising.

The study is subject to several limitations. The purposive sampling strategy does not permit generalization of the findings to the entire population of beer consumers in the Czech Republic. The online mode of data collection may have underrepresented older generations with lower levels of technological familiarity, which ultimately led to the exclusion of respondents aged 58 years and older. The substantial representation of respondents from the South Moravian Region and the Vysočina Region may have influenced certain results, such as brand preferences. Furthermore, the research employed an exclusively quantitative design, which may have overlooked deeper consumer motivations and emotional dimensions of decision-making. Future research should therefore incorporate qualitative interviews and behavioral experiments to provide more robust testing of psychological effects, particularly the availability heuristic (Shah *et al.*, 2012), which received only partial support in the present study.

The principal managerial implication for businesses operating in the craft beer market is the need to focus promotional activities on experiential marketing, authentic brand storytelling, and the sensory quality of the product. Generation Y represents the key target segment, while Generation X constitutes a stable segment characterized by a preference for tradition and local provenance. In contrast, attracting Generation Z requires a combination of affordable offerings and inclusive experiential formats. Craft beer consumers do not perceive the product merely as a beverage but rather as an experience characterized by quality, narrative, and authenticity.

In discussion, please provide a confrontation of the achieved results with previously published papers, author's opinion of established differences, his/her attitude to the results. The discussion section also provides a space to outline the need of further potential solution or importance for the development of science, society or practice.

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REFERENCES

- AHMED, S. *et al.* 2024. Crafting emotional engagement and immersive experiences: Comprehensive scale development for and validation of hospitality marketing storytelling involvement. *Psychology & Marketing*. 41(7), 1514–1529.
- BAIANO, A. 2021. Craft beer: An overview. *Comprehensive Reviews in Food Science and Food Safety*. 20(2), 1829–1856.
- BARTSCH, F., ZEUGNER-ROTH, K. P., KATSIKEAS, C. S. 2022. Consumer authenticity seeking: conceptualization, measurement, and contingent effects. *Journal of the Academy of Marketing Science*. 1–28.
- BOLBOACĂ, S.D. *et al.* 2011. Pearson-Fisher chi-square statistic revisited. *Information*. 2(3), 528–545.
- BŘEZINOVÁ, M. 2021. Beer industry in the Czech Republic: Reasons for founding a craft brewery. *Sustainability*. 13(17), 9680.

- CALUZZI, G. *et al.* 2024. „Ninety per cent of the time when I have had a drink in my hand I'm on my phone as well”: a cross-national analysis of communications technologies and drinking practices among young people. *New Media & Society*. 26(10), 6120–6140.
- ČESKOMORAVSKÝ SVAZ MINIPIVOVARŮ. 2025. O nás. *Českomoravský svaz minipivovarů*. [Accessed: 27. 4. 2025] <https://www.minipivo.cz/cz/o-nas/>
- FIELD, A. 2013. *Discovering Statistics Using IBM SPSS Statistics*. 4th Edition. London: SAGE Publications.
- GOLDSMITH, K., GRISKEVICIUS, V., HAMILTON, R. 2020. Scarcity and consumer decision making: Is scarcity a mindset, a threat, a reference point, or a journey? *Journal of the Association for Consumer Research*. 5(4), 358–364.
- LERRO, M., MAROTTA, G., NAZZARO, C. 2020. Measuring consumers' preferences for craft beer attributes through Best-Worst Scaling. *Agricultural and Food Economics*. 8, 1–13.
- LIVINGSTON, M. *et al.* 2024. Youth drinking in decline: Recent developments and future priorities. *Drug & Alcohol Review*. 43(3).
- NEWMAN, G. E. 2019. The psychology of authenticity. *Review of General Psychology*. 23(1), 8–18.
- NIETO-VILLEGAS, R., BERNABÉU, R., RABADÁN, A. 2024. Effects on beer attribute preferences of consumers' attitudes towards sustainability: The case of craft beer and beer packaging. *Journal of Agriculture and Food Research*. 15, 101050.
- PILONE, V., DI PASQUALE, A., STASI, A. 2023. Consumer preferences for craft beer by means of artificial intelligence: are Italian producers doing well? *Beverages*. 9(1), 26.
- ROSALES, A. *et al.* 2021. Craft beer vs industrial beer: chemical and sensory differences. *British Food Journal*. 123(12), 4332–4346.
- SHAH, A.K., MULLAINATHAN, S. a SHAFIR, E. 2012. Some consequences of having too little. *Science*. 338(6107), 682–685.
- STEINBACH, J., BURGARDT, V. C. F., MACHADO-LUNKES, A. 2023. Perceptions, attitudes, and motivational factors for consumers and nonconsumers of traditional and craft beers. *Journal of Sensory Studies*. 38(2), e12813.
- STEM/MARK. 2024. Generace Y je velkorysá vůči starším, generace Z přináší naději pro planetu . *Stemmark.cz*. Praha. [Accessed: 27. 4. 2025] <https://stemmark.cz/generace-y-je-velkorysa-vuci-starsim-generace-z-prinasi-nadeji-pro-planetu>
- SVATOŠOVÁ, V., KOSOVÁ, P. a SVOBODOVÁ, Z. 2021. Factors influencing consumer behaviour in the beer market in the Czech Republic. *Czech Journal of Food Sciences*. 39(4).
- VILLACRECES, S., BLANCO, C. A., CABALLERO, I. 2022. Developments and characteristics of craft beer production processes. *Food Bioscience*. 45, 101495.
- WOJTYRA, B. *et al.* 2020. Geography of craft breweries in Central Europe: Location factors and the spatial dependence effect. *Applied Geography*. 124, 102325.

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