

## Slovak Young Adults and Their Beer Consumption Habits

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**DOI: <https://doi.org/10.15414/isd2022.s3.13>**

### **Abstract**

*Intense alcohol consumption among young adults is considered as an issue in general. Thus, in depth understanding of the consumption habits of this age group is needed. The drinking habits are different not only based on the age group but on the type of alcohol beverage and country. Therefore, the article deals with the beer consumption habits of Slovak young adults which were examined in the form of questionnaire survey conducted on the sample of 726 individuals. Statistical analysis enclosed significant differences between young adults of various income, relationship status and place of living in the set of ten beer factors out of which amount respondents can drink at single occasion, beer likeness and frequency of drinking beer were identified as most important. The results of the article are beneficial for beer producer companies in terms of marketing strategy, and on the other hand, for appropriate policy creation, as the effects of alcohol on young consumers are not the same as they are on adults.*

**Keywords:** young adults, preferences, beer, drinking habits

**JEL Classification:** L26, M14, K22, L53

### **1. Introduction**

The habits of alcohol consumption differ based on various aspects, such as the age group, as beer consumption is considered primarily as a drink for the younger generations, while older age groups traditionally prefer wine or spirits (Penina, 2017). Three main categories are known when it comes to age groups of the youth: adolescents (puberty or 12–17 years), young adults (18–25 years), and later adults (26–39 years). The categorisation based on Arnett J. J. (2000) is a bit different, since young adulthood typically covers ages 18–29. The article focuses on young adults aged 18–26, as this age group is considered as an especially vulnerable target for beer consumption, as they are a key target for marketing and advertising, as the majority of alcohol products are promoted as proper drinks for social events such as festivals, parties and other occasions. Based on Connolly et al. (1994) young men who consume beer were mostly aware of beer advertisements and were most likely to be targeted by beer promotions. In addition, the drinking habits of young adults are influenced not only by the media but also by peer pressure, that is suggested in several studies (Ding L. et al., 2018, Borsari 2001, Korte et al. 2012). Also, in various researches alcohol consumption is analyzed in depth that emphasizes psychological aspects (Brewer et al., 2017, Kirouac & Witkiewitz, 2017) and even sensory evaluation (Medoro et al., Viejo et al., 2019). According to Borsari et. al. alcohol consumption within a group is not a personal choice, but rather an obligation to protect the loyalty and harmony of the group. When it comes to drinking habits, they are formed based on various factors such as monthly income, place of drinking, relationship status or place of living. Affordability or monthly income is a significant factor which affects alcohol consumption. When income rises, alcohol consumption can rise, since as alcohol beverages become more affordable for people (Nelson, 2013). Therefore, there are several researches that analyse alcohol consumption in economic or market terms (Madsen & Wu, 2016, Colen & Swinnen, 2016, Morgan et al., 2020). Various studies,

examine that certain rural-to-urban migrants consume less alcohol products due to a protective effect of rural backgrounds or economic limitations (Quisumbing, 2020). According to Macinko (2015) drinkers are slightly more likely to reside in urban areas than in rural ones. Understanding the consumer habits and which beverages are the most consumed among young adults has implications for policy and intervention works, which can be improved by concentrating on the beverages that are the most frequently consumed ones (Stern, 2017).

## 2. Data and Methods

At the preparation stage of our research, the study of relevant scientific sources in the field of beer consumption among young adults was included. Acquired knowledge was used in the phase of creating a questionnaire as the main research method. This was conducted in the online form using Google Forms platform distributed by social media among consumers of various characteristics. In total, 735 answers were received. After exclusion of incomplete answers and subsequent data adjustment (Munk, et al., 2013) the sample was narrowed to 726 answers.

The questionnaire consisted of three sorting questions (SQ1, SQ2 SQ3) related to consumer's income, relationship status and place of living and 10 questions of "beer factors" (BF1-BF10) related to their preferences connected with consumption of beer:

- SQ1 Monthly Income (1 - Under 300 EUR, 2- Up to 300 EUR)
- SQ2 Relationship Status (1- Single, 2 - In Relationship)
- SQ3 Place of Living (1 - City, 2- Village)
- BF1 Beer Likeness (1- Very weak, 2- Weak, 3- Averagely, 4- Strong, 5- Very strong)
- BF2 Beer Frequency (1- Couple times a year, 2- Once a month, 3- Couple times a month, 4 - Couple times a week, 5- Every day)
- BF3 Place of Drinking (1- Pub, 2- Home, 3- Outdoor activities, 3- Restaurant (with meal), 5- At friend's place)
- BF4 Beer Preferences (1- Tapped, 2- Can, 3- Glass Bottle, 4- Plastic Bottle)
- BF5 Dispose of Cans (1- Mixed waste, 2- Separated waste)
- BF6 Dispose of Glass Bottles (1- Mixed waste, 2- Separated waste, 3- Refund)
- BF7 Dispose of Plastic Bottles (1- Mixed waste, 2- Separated waste)
- BF8 Amount Single Occasion (1- Less than 0,3 l, 2- 0,3-0,5l, 3- 0,5-1,5 l, 4- 1,5-3,5l, 5- 3,5l and more)
- BF9 End Up at the Occasion (1- Single glass, 2- Tipsy, 3- Move to harder alcohol, 4- K.O.)
- BF10 Increased Beer Expenses during COVID 19 pandemic (1- Yes, 2- No)

Included "beer factors" were selected in regard of describing consumer's preferences in drinking beer and their habits towards responsible waste management (dispose of beer packages) and last but not least, in regard of changes in their expenses on beer during pandemic.

After processing the data, the Shapiro-Wilk test of normality was used to determine if a data set is well-modelled by a normal distribution, based on the the null hypothesis is that "sample distribution is normal." Our analysis confirmed non-normal distribution. Therefore, Kruskal–Wallis non-parametric method for testing whether samples originate from the same distribution was applied with the assumption of following null hypothesis  $H_0$  and set of alternative hypothesis derivate from  $H_a$ :

- $H_0$ : There is no difference between young adults in their beer drinking habits.
- $H_1$ : There is a difference between young adults in their beer drinking habits.
  - $H_{1a}$ : There is a difference between young adults according to their monthly income.

- H1b: There is a difference between young adults according to their relationship status.
- H1c: There is a difference between young adults according to their place of living.

For evaluation, the significance level  $\alpha$  was determined at 0.05, i.e. a 5% test error is accepted. If the p-value is  $\leq \alpha$ , then  $H_0$  is rejected at the significance level  $\alpha$  and we accept  $H_a$ . If p-value  $> \alpha$ , then  $H_0$  is not rejected at the significance level  $\alpha$ . Usually, the post hoc test is used for further evaluation of the differences found by Kruskal Wallis test. Since our sorting characteristics (SQ1-3) are dichotomist (have just two possible answers) the usage of post hoc test calculated to counteract the problem of multiple comparisons between the examined questions (Miller, 1996), was not needed. Instead, find differences were further described by cross tabulation of found pairs of sorting questions and beer factors identified as sign of difference.

### 3. Results and Discussion

Drinking habits of young adults in Slovakia can be characterized by their general likeness and preferences of beer, frequency of its consumption, place of drinking, drink amount and also by their habits in the disposing of beer packages (cans, glass bottles, plastic bottles). Recently, also the question of increased expenses on beer during pandemic is increasing.

As the first factor of beer drinking among young adults in Slovakia, the (BF1) Beer Likeness was included in the analysis. The majority of 47.1 % of examined young adults likes beer very strongly and additional 35.1 % strongly. This shows positive attitudes of examined young adults towards beer drinking. Next, beer frequency (BF2) was considered among young adults. There are 34.2% of respondents who consume beer a couple times a month, 32.5% couple times a week, 21.3% couple times a year, 9.5% once a month and 2.5% every day. Therefore, young adults can be considered as frequent consumers of beer. The next factor is the place of drinking (BF3), which represents that the majority of the respondents, 48.5% prefer to consume beer in a pub, 23.8% at home, 12.1% at a friend's place, 9.6% at a restaurant with a meal and 5.8% besides outdoor activities. In fact, young people like to consume beer products while socializing with friends. When it comes to beer preferences in terms of packaging and serving (BF4), there is positive attitude towards tapped beer, which was selected by 83.9% of the respondents. This behaviour can be connected the previous factor (BF3), since young adults prefer beer consumption mainly in pubs. The other beer preferences in terms of packaging and serving are represented by lower percentage, since 8.7% of the respondents prefer can, 6.6% glass bottle and 0.8% plastic bottle. The following tables are connected to sustainability in terms of disposing and recycling. Disposing of cans (BF5) and illustrates that 74.2% of the respondent throw out cans to separated waste and 25.8% to mixed waste. Therefore, young adults are more likely to recycle and care about the environment. On the other hand, while considering the factors connected to waste management (BF5, BF6, BF7) can is the packaging form that is more likely ending in the mixed waste. The next answers about the dispose of glass bottles (BF6) enclosed that, there are only 3.7% of respondents who throw glass bottles into mixed waste. The majority of the respondents are conscious about recycling, since 55.5% chose refund option of glass bottles and 40.8% separated waste option. The last factor that is connected to waste management is the dispose of plastic bottles (BF7). Next factor shows that 87.5% of the respondents throw plastic bottles to separated waste and 12.5% to mixed waste.

The next feature is connected to the amount of beer consumed by one occasion (BF8). Almost half of the respondents, 48.2% consume 0.5l - 1.5l of beer per one occasion, 21.6% of young adults consume 0.3 - 0.5 l, 21.1% 1.5 - 3.5 l, 6.3% less than 0.3 l and 2.8% 3.5 l and more. According to responses for the factor of how respondents end up by one single occasion of beer consumption shows factor BF9. More than half of the results, 65.4% of the respondents become

tipsy, 22.6% drink just a single glass of drink, 9.8% of young adults start with beer but then move to other alcoholic drink that contains more percentage of alcohol, such as spirits, and 2.2% of the respondents end up drunk. The last factor is connected to the beer expenses during the COVID-19 pandemic. Since most of the food and beverage products have become more expensive during this period, also beer should be considered. The perspective of young adults on the beer expenses (BF10) illustrates that 95.9% of the respondents did not experience higher expenses for beer products and 4.1% answered yes. After examining the frequencies of beer factors (BF1-BF10) includes in this study of beer consumption habits, the statistically analysis of differences between set groups of young adults (groups of differ monthly income, relationship status and place of living) was included.

Initially, the differences between young adults who earn more and less than 300 EUR monthly were examined. Table 1 shows outcomes of Kruskal-Wallis test which find two significant differences between these two groups of young adults: BF2 Beer Frequency (Asimp sig. = 0.038) and BF8 Amount Single Occasion (Asimp sig. = 0.011). In case of other beer factors, the Assimp sig. value was up to 0.05 which indicates no statistically significant difference. Therefore, **we can accept the alternative hypotheses H1a for BF2 and BF8** and reject the null hypothesis H0. In case of other factors, we are accepting the null hypothesis (H0) of no statistically significant difference between young adults.

**Table 1: Statistically Significant Differences According to Monthly Income**

	BF1	BF2	BF3	BF4	BF5	BF6	BF7	BF8	BF9	BF10
<b>Kruskal-Wallis H</b>	0.549	4.316	0.220	0.772	0.598	1.387	0.490	6.466	0.444	1.356
<b>Asymp. Sig.</b>	0.459	<b>0.038</b>	0.639	0.380	0.439	0.239	0.484	<b>0.011</b>	0.505	0.244

Source: Own calculations

Found statistically significant difference between young adults who earn more than 300 EUR monthly and who earn less we can describe in connection with frequency of beer drinking thorough table 2. This shows difference in case of consumers who drink beer every day since just 6 of them are from group of lower income and two times more of them from the higher income group.

**Table 2: SQ1 Monthly Income \* BF2 Beer Frequency Crosstabulation**

		BF2 Beer Frequency					Total
		1	2	3	4	5	
Monthly Income	1	81	35	112	102	6	336
	2	74	34	136	134	12	390
Total		155	69	248	236	18	726

Source: Own calculations

Also, statistically significant difference was found between young adults of various income in the amount of beer they drink at single occasion. The differences are visible (Table 3) mostly in case of those who can drink 1.5-3.5 litres of beer at once and even more in case of those who can drink 3.5 litres and more at once.

**Table 3: SQ1 Monthly Income \* BF8 Amount Single Occasion Crosstabulation**

		BF8 Amount Single Occasion					Total
		1	2	3	4	5	
Monthly Income	1	26	76	169	60	5	336
	2	20	81	181	93	15	390
Total		46	157	350	153	20	726

Source: Own calculations

The first part of research of statistically significant differences between young adults shows that their consumption is affected by their income since higher income group declare stronger likeness of beer and bigger amount they can drink at single occasion.

Table 4 represents the outcomes of Kruskal-Wallis test with four significant differences between these groups of young adults: BF1 Beer Likeness (Asimp sig. = 0.013), BF2 Beer Frequency (Asimp sig. = 0.040), BF8 Amount Single Occasion (Asimp sig. = 0.0060) and BF9 End Up Single Occasion (Asimp sig. = 0.001). The Assimp sig. value was up to 0.05 for the other beer factors, which indicates no statistically significant difference. **We can accept the alternative hypotheses H1b for BF1, BF2, BF8 and BF9** and reject the null hypothesis H0. In case of other factors, we accept the null hypothesis (H0) of no statistically significant difference between young adults.

**Table 4: Statistically Significant Differences According to Relationship Status**

	BF1	BF2	BF3	BF4	BF5	BF6	BF7	BF8	BF9	BF10
<b>Kruskal-Wallis H</b>	6.238	4.210	2.429	0.740	2.146	1.879	0.425	7.459	10.623	0.085
<b>Asymp. Sig.</b>	<b>0.013</b>	<b>0.040</b>	0.119	0.390	0.143	0.170	0.514	<b>0.006</b>	<b>0.001</b>	0.771

Source: Own calculations

There is a weak statistically significant difference between young adults who are single and who are in relationship in connection with beer likeness that is presented in table 15. 165 of the single respondents and 177 of the respondents in relationship like beer very strongly but the difference can be observed in the case of weak (2) and average (3) level of beer likeness (Table 5).

**Table 5: Crossable – SQ2 Relationship Status \* BF1 Beer Likeness Crosstabulation**

		BF1 Beer Likenes					Total
		1	2	3	4	5	
Relationship Status	1	13	17	14	111	165	320
	2	14	38	33	144	177	406
Total		27	55	47	255	342	726

Source: Own calculations

Next, relationship status in connection with beer frequency is illustrated in table 6. There is statistically significant difference between singles who drink beer a couple of times a year (66 respondents) and respondents in relationship (89 respondents), there are two times more respondents in relationship who drink beer once a month than singles. On the other hand, 11 single respondents and 7 in relationship drink beer daily.

**Table 6: SQ2 Relationship Status \* BF2 Beer Frequency Crosstabulation**

		BF2 Beer Frequency					Total
		1	2	3	4	5	
Relationship Status	1	66	22	107	114	11	320
	2	89	47	141	122	7	406
Total		155	69	248	236	18	726

Source: Own calculations

Relationship status in connection with the consumed amount by single occasion is represented in table 7. 63% of the respondents who consume 0.3 – 0.5l by one occasion is single and 36% in relationship, 40% of the respondents who consume 1.5 – 3.5l by one occasion are single and 60% are in relationship. Therefore, there is a stronger statistically significant difference.

**Table 7: SQ2 Relationship Status \* BF8 Amount Single Occasion Crosstabulation**

		BF8 Amount Single Occasion					Total
		1	2	3	4	5	
Relationship Status	1	17	57	158	80	8	320
	2	29	100	192	73	12	406
Total		46	157	350	153	20	726

Source: Own calculations

Table 8. illustrates the connection of relationship status and how respondents end up by one single occasion of alcohol drinking. There is statistically significant difference between young adults who are single and who are in relationship in connection with who they end up by a single occasion of alcohol drinking. 68.75% of the respondents are single and 31.25% in relationship who end up drunk, 34.75% are in relationship and 65.25% in relationship who drink just one glass of drink by one single occasion.

**Table 8: SQ2 Relationship Status \* BF9 End Up Single Occasion Crosstabulation**

		BF9 End Up Single Occasion				Total
		1	2	3	4	
Relationship Status	1	57	215	37	11	320
	2	107	260	34	5	406
Total		164	475	71	16	726

Source: Own calculations

The next part of research of statistically significant differences between young adults shows that their consumption is affected by their relationship status since respondents in relationship re more likely to consume beer, single young adults drink more frequently, respondents in relationship drink more alcohol by one occasion and two times more respondents end up drunk by one occasion of drinking.

The Kruskal-Wallis test in table 9 denotes three significant differences between the groups of young adults: BF1 Beer Likeness (Asimp sig. = 0.006), BF4 Beer Preferences (Asimp sig. = 0.036) and BF5 Dispose of cans (Asimp sig. = 0.000). The Assimp sig. value was up to 0.05 for the other beer factors, which indicates no statistically significant difference. **We can accept the**

**alternative hypotheses H1c for BF1, BF4 and BF5** and reject the null hypothesis H0. In case of other factors, we accept the null hypothesis (H0) of no statistically significant difference between young adults.

**Table 9: Statistically Significant Differences According to Place of Living**

	BF1	BF2	BF3	BF4	BF5	BF6	BF7	BF8	BF9	BF10
<b>Kruskal-Wallis H</b>	7.465	0.294	2.999	4.385	16.690	2.736	0.381	2.867	0.184	1.619
<b>Asymp. Sig.</b>	<b>0.006</b>	0.588	0.083	<b>0.036</b>	<b>0.000</b>	0.098	0.537	0.090	0.668	0.203

Source: Own calculations

The next aspect is the connection between the place of living and beer likeness that is illustrated in table 10. There is no statistically significant difference between the two aspects in most of the cases, for example 53.5% of the respondents who drink beer everyday lives in a city and 46.5% in a village. The only exception is in the case of young adults who drink beer a couple times a month, 22.9% lives in a city and 77.1% in a village. In this case there is a statistically significant difference.

**Table 10: SQ3 Place of Living \* BF1 Beer Likeness Crosstabulation**

		BF1 Beer Likeness					Total
		1	2	3	4	5	
Origin	1	14	24	11	121	183	353
	2	13	31	36	134	159	373
Total		27	55	47	255	342	726

Source: Own calculations

The connection between the place of living and beer preferences is showed in table 11, where there is statistically significant difference between the preference of canned beer of young adults living in city (34.92%) and in village (65.08%). In the case of beer packed in glass bottle, plastic bottle are tapped there is no statistically difference based on the place of living.

**Table 11: SQ3 Place of Living \* BF4 Beer Preferences Crosstabulation**

		BF4 Beer Preferences				Total
		1	2	3	4	
Origin	1	307	22	21	3	353
	2	302	41	27	3	373
Total		609	63	48	6	726

Source: Own calculations

Based on the results in table 12, there is statistically significant difference between the place of living and dispose of cans. In the case of separation of cans 67.42% of young adults who separate are living in a city and 80.69% in a village.

**Table 12: SQ3 Place of Living \* BF5 Dispose of Cans Crosstabulation**

		BF5 Dispose of cans		Total
		1	2	
Origin	1	115	238	353
	2	72	301	373
Total		187	539	726

Source: Own calculations

The last part of the research of statistically significant differences between young adults shows that their consumption is affected by their place of living since the majority of respondents who drink beer a couple of times a month, prefers beer in can and separate canned beer lives in a village.

However, there are several targeting opportunities, in the case of beer producers, targeting based on the age group is essential in the 21<sup>st</sup> century, mainly to strengthen the responsibility of the brewing industry. Therefore, this topic has a very close relation to the CSR activities of the brewing companies. Even though, there are various studies that are dealing with CSR activities in the food and beverage industry (Nirino et al. 2019, Sokil et al. 2020), topics oriented on the importance of CSR in the brewing industry have their limitations. Therefore, further and deeper research is needed.

#### 4. Conclusion

In conclusion, the article was dealing with the beer consumption preferences of Slovak young adults (aged between 18-26). Since beer is considered as a drink of socialisation, it is essential to understand the consumer behaviour of this age group that spends a considerable time with friends and peers. Therefore, it can provide suggestions to strategic decision-making in terms of marketing, business and policy creation. As it resulted from the research, most of the respondents consume beer a couple of times a month (34.2%) or a couple of times a week (32.5%), that proves that beer is a common drink among this age group. There are three aspects that needed to be considered: monthly income, relationship status and origin. Based on the research the consumption of young adults is affected by their income since higher income group declare stronger likeness of beer and bigger amount they can drink at single occasion. Next, respondents in relationship are more likely to consume beer, single young adults drink more frequently, respondents in relationship drink more alcohol by one occasion and two times more single respondents end up drunk by one occasion of drinking. The last part of the research showed that consumption habits are affected also by the place of living since the majority of respondents who drink beer a couple of times a month, prefers beer in can and separate canned beer lives in a village. In addition, beer consumption has a broader aspect – social, cultural, economic and therefore environmental, as well. Based on the article young adults are conscious about recycling, since 87.5% of the respondents throw plastic bottles to separated waste, 55.5% chose refund option of glass bottles and 74.2% of the young adult respondents throw out cans to separated waste. Based on the results of this paper, it is recommended for breweries in Slovakia to strengthen their CSR activities that are considered important to this generation, and therefore to apply such marketing communication strategy that supports the awareness of young adults of them. Therefore, the outcomes can help to create a sufficient strategy to target this age group based on their monthly income, relationship status and place of living, and increase their sales responsibly.



## Acknowledgements

This work was supported by the Scientific Grant Agency of the Ministry of Education of the Slovak Republic (ME SR) under the contract No. VEGA-1/0525/2; by Research Agency under contract No. 073/2020/OPII/VA NFP313010V336.

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