

## WOMEN AND MEN: WINE CONSUMPTION HABITS

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**Abstract:** Wine consumption shows an upward trend at the beginning of the 21st century. Due to favourable climate conditions, there are several wine regions located in Slovakia famous for wine and wineries recognized on the domestic and international market as well. In our study, we would like to present the wine consumption habits in Komárom district, located in the wine region of Southern Slovakia. Our study addresses an attention to possible differences in wine consumption habits of male and female consumers. We have analysed the data gained from 478 anonymous questionnaires in our primary research. The questionnaire survey took place in February – March 2018. The statistical analysis highlights the fundamental differences of male and female wine consumers.

**Keywords:** wine consumption habits, consumption by gender, Komárno district, Slovakia, primary research.

### 1 Introduction

The alcohol consumption has become more and more homogeneous worldwide over the past decades. It means that beer, wine and distilled drinks are consumed worldwide. We can see that the social composition of consumers differs in case of different alcoholic products, but more and more overlaps can be recognized among the social status of the consumers. The lifestyle differences of consumers are also crucial. There are more wine consumers than regular consumers of beer or distilled drinks. Based on these facts, we can categorize wine as drink for daily consumption (Brunner – Siegrist, 2011).

According to Hajdú Istvánné, the age group over sixty can be considered a target group for wine consumption, but the young generation of wine consumers is important as well. Considering the education degree, consumers with both high and low education degree consume wine, but have different wine consumption culture. In terms of settlement types, the wine consumption is the highest in small towns, followed by villages in countryside and the big cities (Hajdú, 2004).

The frequency of wine consumption also greatly affects the amount of wine consumed. According to international trend, the number of frequent wine consumers is shrinking. The experts are conducting extensive marketing research to determine the factors that might influence the wine consumption. Consumers refusing wine drinking fall into two categories. The members of the first group simple do not like the taste or smell of the wine. The members of the second group refuse alcohol consumption, so they oppose excessive drinking of alcoholic beverages (Jaeger – Danaher – Brodie, 2010). Development and acceptance of western patterns of consumption, as well as the place of purchasing wine is extremely dynamic. The expansion of hyper- and supermarkets and the tendency of disappearing small shops is an unstoppable process. This trend is observed on international level as well. The losers in the competition are the small-sized ABC shops. They are not big enough to offer a wide variety of products and not small enough to provide unique services and operate as wine shops (Hajdú, 2005).

### 2 Characteristics of wine consumption

The frequency of wine consumption significantly affects the amount of consumption. The balanced and regular wine consumption is the most sympathetic phenomenon for the wine industry. According to international trend, the number of regular wine consumers is shrinking (Pérez Magarino – Ortega Heras – González Solé, 2011). According to Dula, Mészáros and Rohály, wine consumers can fall into 4 groups based on motivation. Gourmet consumers rank first (18%). This group is mainly formed by senior managers, entrepreneurs and intellectuals. They mostly purchase wine in specialist shops and refuse to buy wine in the hypermarkets. They are relatively critical about their shopping habits. They taste and buy both domestic and foreign

products. They are followed by a group of sophisticated wine drinkers (25%). They are higher income individuals in higher positions, but skilled workers can also be found among the group members. By decreasing age of individuals, more and more consumers fall into this category. They compare the prices of specialist shops to those at the hypermarkets and make their decision based on price comparison. These consumers are attracted by various events and wine festivals. It is important for them to choose the right wine for the right occasion. The group of ordinary wine consumers (32%) can be classified as a heterogeneous group. They consume wine rarely, but if they do, their buying habits follow the routine, so they prefer the brands they have tried and have good experience with. These consumers buy the most wine. The last group is formed by lazy wine consumers (25%). They often replace wine with other alcoholic beverages. They do not respect wine, quality is not a motivating factor for them (Dula – Mészáros – Rohály, 2012).

### 2.1 Wine market in Slovakia

In current territory of Slovakia, winery has a history of over 2000 years. According to archaeologists, the first local wine-growing activity dates back to the Celtic period. The Romans, who created new wine yards played an important role in the local success of wine yards. The industry started a slow and steady development (Matosková-Gálik, 2014).

According to data of the Slovak Statistical Office in 2013, almost 300 wine yards and wine making companies were registered in the country. The size of wine yards in Slovakia is almost 12,000 hectares. About 10, 000 hectares are already producing crops. According to the research of the Slovak Statistical Office, the quantitative indicators of wine production in Slovakia show a steady increase between 2004 and 2013 (Eurostat, 2014).

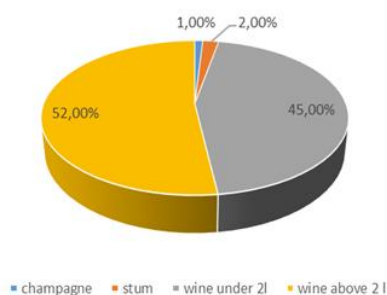
Table 1: Annual wine production in Slovakia

	2004	2008	2009	2010	2011	2012	2013
Wine production (hl)	451	421	321	348	446	436	586
White wine	502	156	106	354	308	511	266
Red wine	273	234	146	126	172	168	237
	525	797	353	924	123	805	009
	149	174	166	218	268	254	347
	170	877	600	051	987	014	685

Source: own editing according to the data of the Slovak Statistic Office

It can be clearly seen that the production has increased by almost a third, while production of white wine has declined. The structure of the Slovak wine industry is constantly changing and the white wine is increasingly replaced by other types of wine. The Slovak wine industry takes limited part in fruit wine production. The wine export and import of Slovakia showed a varied picture in the past decade. According to data of the Slovak Statistical Office, the exports of wine increased by 103.6% in 2013, while the import almost quadrupled (Matosková-Gálik, 2014).

Figure 1: Slovak wine export projected to different types of wine, 2012



Source: own editing according to the data of the Slovak Statistic Office

Slovakia has 6 wine growing areas, 40 wine growing districts and 603 wine villages. The differences between the regions are determined by the quality of wine and the grape. The six wine regions of Slovakia are the following (Vinohradské oblasti Slovenska, online):

- Lesser Carpathian wine region (Malokarpatská vinohradnícka oblasť)
- Nitra wine region (Nitrianska vinohradnícka oblasť)
- South Slovak wine region (Južnoslovenská vinohradnícka oblasť)
- Central Slovak wine region (Stredoslovenská vinohradnícka oblasť)
- East Slovak wine region (Východoslovenská vinohradnícka oblasť)
- Tokaj wine region (Slovenská vinohradnícka oblasť Tokaj)

The territorial division in Slovakia is quite unique, practically the entire southern region of the country is dominated by wine growing regions, while conditions in the north are not favourable for wine yards. Local wine regions often cover those areas that have no long history in wine growing. Žitný ostrov (Csallóköz) is one of the good examples, since the countryside is flat, conditions are not appropriate for wine yards. The best known wine-region of Slovakia is the historically known Carpathian wine region with Bazin and Modor. The activity of the best known Slovak wine producers is connected to this region. In the southern part of Nitra wine region, dominated by Hungarian population along the river Hron, Vráble and Levice have established a strong wine culture, similarly to the Central Slovak wine region. The eastern part of the country is covered by the East Slovak wine region and the wine region of Tokaj. About half of the vineyards in Slovakia are concentrated in the most ideal wine growing areas of Štúrovo and Strekov. In terms of climate condition and the quality of soil, these areas are proved to be excellent (Borigo, 2009, online).

Figure 2: Wine regions of Slovakia



Source: Vinohradnícke oblasti Slovenska, online

## 2.2 The Hungarian Wine Market

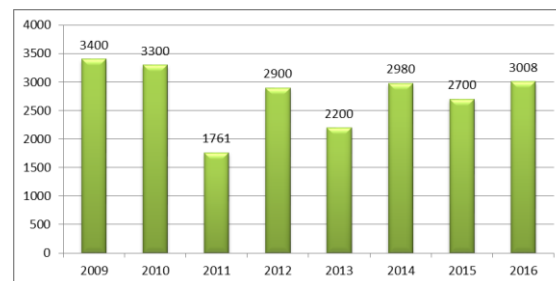
The Hungarian wine and wine culture has a long established history. Due to different types of soil and the appropriate climate conditions, it has always been recognized as a well-known wine producer country in Europe. The wine production and wine culture of the country has been influenced by different historical milestones. The period following the World War II led to a decline in production and so in 1949 collective farms and cooperatives were established. Investments were made into mass production techniques and many poor practices crept in as a quantity was put before the quality. Nowadays, the Hungarian wine growers work on vineyards a bit smaller in size than the average, but can employ experts with excellent theoretical and practical knowledge. This contributes to a key quality of the Hungarian wine. The local wine culture is experiencing the era of Renaissance again, re-occupying its position on the wine map of Europe in the 21<sup>st</sup> century (Ambrus-Csoma-Somlósi, 2003).

Hungary accounts for approximately about 1,9% of the world wine production. It accounts for 2,6% of the EU wine growing areas and 1,1% of the EU wine production. At present, some 180,000 – 200,000 Hungarian families are involved in wine business, nearly the income of 1,9 million people depends on wine-growing. According to statistical data, the vineyards covered 89,6 thousands hectares in 2006. Based on wine production statistics of Hungary (2010-2014), the average wine production reached 2-3 million hectolitres a year (Hegyközségek Nemzeti Tanácsa, online).

It can be declared that the wine growing area in Hungary decreased by 32% between 1992-2006. This fact can be explained by the market and income conditions. Nearly 32,9% of the vineyards are located in Southern Alföld (Southern Great Plain), but the North Hungary region (24,1%) is dominant as well. Southern Transdanubia is represented by 13,4% and Northern Transdanubia by 11,6%. Unfortunately, the location of significant proportion of vineyards is not suitable for quality wine production. In Hungary, 30% of wine produced is considered to be quality wine, the rest enters the market as table wine (Buday-Sántha, 2011).

The Hungarian wine growing is characterized by incredible diversity. Type of the wine is the most important factor regarding the sales. According to territorial distribution of the white wine varieties, the Italian Riesling is ranked the first, followed by Rieslingszilván, Chardonnay, Ottonel Muscat, Hárslevelű, Furmint and Rhine Riesling. Blaufränkisch (Kékfrankos) is the most widespread type of red wine. This is followed in popularity by Zweigelt, Blauer Portugieser (kékportó), Merlot, Cabernet Sauvignon, Franc and Pinot Noir (Gaál – Pardányi, 2006).

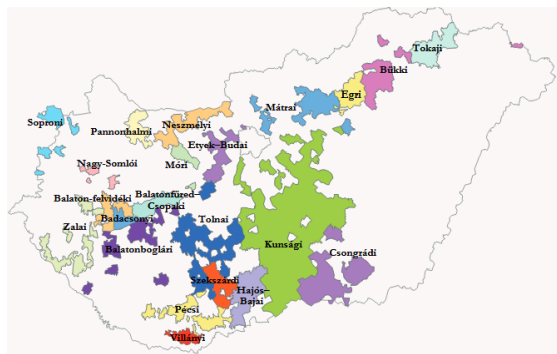
Figure 3: Wine production in Hungary (thousand hectolitres)



Source: own editing according to the data of Hegyközségek Nemzeti Tanácsa

Hungary is located in the heart of the Carpathian Basin. Due to location and climatic conditions, the country has excellent wine-producing regions.

Figure 4: Wine regions of Hungary



Source: Magyarország borvidékei, 2014, *online*

Despite the fact that the area of vineyards has been declining recently, the number of wine regions in Hungary is growing. The wine region classification in Hungary is regulated by law. According to this, a total of 7 wine regions (Balaton wine region, Danube wine region, Eger wine region, Northern Transdanubian wine region, Pannon wine region, Sopron wine region, Tokaj wine region) and 22 sub-regions can be found in the country. Three of them are located in the Great Hungarian Plain, 6 in Northern Transdanubia, 5 in Balaton region, 4 in Southern Transdanubia and the rest of 4 in North Hungary. The privatization of the wine sector that began in 1989 has been completed, but many wine factories have remained state-owned and the Hungarian state remained the stakeholder in the business. Formerly operating under the name of Tokaj Kereskedőház Zrt., Grand Tokaj covers an area of 300 hectare vineyards still in state ownership. Grand Tokaj is a guardian and protector of the national wine making traditions, bearer of the title of a UNESCO World Heritage site and famous for Tokaji Aszú (Ambrus-Csoma-Somlósi, 2003).

### 3 Research Objectives and Methodology

The purpose of this study is to assess the wine consumption habits of residents in Komárno district. Our goal is to conduct a comparative analysis that focuses on analysing the habits of male and female consumers. It is particularly important for us to know, how much the male and female consumers are interested in wine culture; the wines of which country, wine region and what types of wine the consumers prefer; how often, at what price and where do they make their purchases.

The respondents of the survey were made up of adult residents from Komárno district. The questionnaire survey was conducted online and the respondents were the residents living in Komárno district in form of a Facebook online community. This is the reason why our research sample cannot be considered transparent, since reaching the older age group of customers proved to be difficult online. The online questionnaire was sent to 2355 members of the Facebook group. A total of 478 responses were submitted during the two month research period (February-March, 2018). It represents a 20,30% response rate, which is an acceptable ratio for effective data collection in case of similar research. The respondents are rather reluctant to participate in this kind of questionnaire survey, despite ensuring the anonymity of the respondent asked. 58% of our respondents were women, while 42% were male respondents, which is considered to be an appropriate ratio to conduct comparative analysis. MS Excel and SPSS statistical programme were used for analysis.

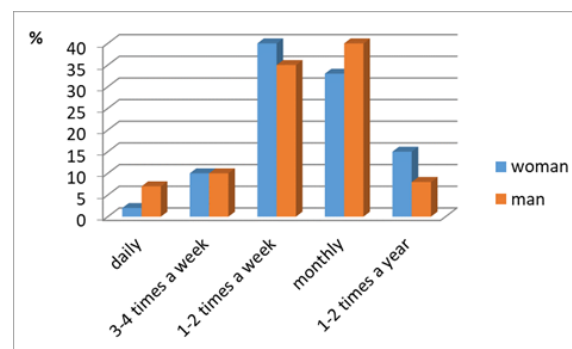
### 4 Research Results

Before introducing the results of the in-depth analysis, we would like to introduce the research sample. 42% of the female respondents are aged 18-25, 32% of them are aged 26-36, 8% represent the age group of 37-47, 16% are aged 48-58 and only

2% belong to the age group over 58. Very similar was the age distribution of male respondents. 36% of the male respondents are under 25, 39% of them are between 26-36, 15% are aged 37-47, 8% belong to the age group of 48-58 and only 2% of them are over 58. Nearly half of the respondents are from Komárno, the rest of them are residents of other settlements in Komárno district. Therefore, our research sample is suitable for conducting comparative analysis of wine consumption of the urban and rural residents, which we have an intention to realize in the future. In terms of education degree of examined group of genders, our sample is proved to be balanced. Very close proportion of respondents (36-35%) have secondary school degree and master degree gained at colleges or universities. The lowest number of respondents are represented by those with low qualification and post-graduate degree. The qualification degree of our respondents determines their income. Among the male respondents, we could observe a higher proportion of respondents with high income. Over 1000 EUR income was registered only with 5% of female respondents, while this ration stood at 23% with men. The average income of female respondents was around 500-600 EUR, while the average income of male respondents was between 601-700 EUR. The Chi-Square Test of gender and income categories shows a significant correlation between the two variables.

In the next part of our study we will analyse the answers provided by male and female consumers about their wine consumption habits. As a first step, we examined the frequency of wine consumption, as well as we were interested in the price category of wine bought by the respondents.

Figure 4: The frequency of wine consumption by gender



Source: own editing based on primary research

The answers received for the question regarding the frequency of wine consumption show no significant difference between the frequency of wine-consumption of male and female consumers. The majority of respondents consume wine once or twice a week or they consume it once a month. The Pearson's Chi-Square value is 16,79 at a significance level of 0,002, indicating a significant relationship between the two indicators. The value of Cramer V and Lambda is 0,19 and 0,03, which indicates a weak relationship between the two variables. Regarding the price category of wine consumed by the respondents, we did not recognize a significant difference between the respondents. A significant ratio of men and women (54 %, 55%) purchase a bottle of wine at 5-10 euros. Only one-fifth of the respondents showed a willingness to pay higher price for a bottle of quality wine.

87% of our respondents regardless to their gender are considered to be conscious customers, since a high ratio of the respondents are paying attention to the place of the origin of wine they consume. The majority of our respondents regardless to gender prefer the consumption of Hungarian wine (female-79%, male 84%). The ratio of female consumers consuming Slovak wine is 67%, while the ratio of male consumers is 63%. Regarding the place of origin of the wine, male consumers showed an interest in wine from the Czech Republic, Austria, Spain, Portugal, Argentina and Chile (12 %, 8 %, 17 %, 17 %, 15 %, 14 %). The

interest of female consumers in foreign wine was negligible. Significant interest was shown in Italian wine, 25% of female and 34% of male consumers like the Italian wine. The Chi-Square Test, which has a value of 0,00 at 0,987 two-sided significance level, indicates that there is no significant correlation between the origin of wine and the gender of the respondents. The most popular Hungarian wine regions were Neszmély, Villány, Eger and Tokaj. The wine from the South Slovak wine region proved to be the most popular among the respondents (average of the sample 3,35).

Table 2: Occasions for wine consumption

Occasion	Gender	YES %	NO %	Chi-Sq. test	Level of significance	Cramer V
Consuming at home	Woman	68	32	0,68	0,409	
	Man	64	36			
Consuming with friends	Woman	83	17	1,06	0,303	
	Man	79	21			
As a gift	Woman	83	17	1,68	0,195	
	Man	78	22			
To the party	Woman	43	57	1,83	0,176	
	Man	37	63			
For cooking	Woman	27	73	4,83	0,028	0,1
	Man	36	64			
To the wine collection	Woman	5	95	10,38	0,001	0,15
	Man	0	100			

Source: own editing based on primary research

As a result of the research conducted among the male and female consumers, we can assess that regardless to gender the respondents are purchasing wine for consuming at home or with friends, as well as find it a good idea buying a bottle of wine as a gift. Rarely our respondents buy wine to their wine collection or use it for preparing food. By conducting Chi-Square Test, we can identify a significant correlation between cooking/wine consumption and the gender identity, although examining the strength of the correlation between the indicators, a weak relationship can be detected in both cases.

The next question of our research asked the respondents to evaluate 7 factors indicated in our questionnaire regarding their wine consumption habits at home on a scale from 1 to 5 (1-not important at all, 5 – always important). At first, we performed a one-variable analysis, examining the frequency distribution. As a first step, we examined the distribution of answers received for individual statements, using the average, modus and standard deviation indicators. The modus shows the most frequent responses, while standard deviation indicates deviations from the average.

Table 3: Considerations taking into account when consuming wine at home

Sequence	Considerations	Average	Modus	Deviation
1.	Proper temperature of wine	3,67	5	1,17
2.	Proper storage of wine	3,62	5	1,24
3.	Choosing the appropriate wine glass	3,49	5	1,49
4.	Quality Control	3,14	3	1,28
5.	Pairing with food	2,67	3	1,25
6.	Aerating of wine	2,43	1	1,40
7.	Order of consuming different types of wine	2,17	1	1,26

Source: own editing based on primary research

Based on the summary of our results, we can assume that most of the respondents always pay attention to proper temperature and storage of wine and choosing the appropriate wine glass when consuming wine at home. Aerating of wine and the proper order of consuming different types of wine proved to be the least important indicators when consuming wine at home. However, it is also clear from the table that the value of standard deviation is higher than 1, which indicates that our respondents do not share the same opinion regarding the individual statements.

In the next phase of our research, we intended to map whether difference can be detected between male and female consumers regarding the importance of factors set when consuming wine at home. We used averages as a first step to compare the opinion of two groups of our respondents. Significant differences between the genders were detected in choosing the order of wines served and the control of quality considering the sample average. The above mentioned factors are more important for male than female customers consuming wine at home.

In order to determine whether different results between the two groups are really influenced by different opinion about the factors influencing wine consumption at home, we applied the method of variance analysis, which measures the difference of average between the two groups. Examining the conditions of the variance analysis, we can state that our dependent variables are measured on interval scale. By conducting normality tests, we can assume that our dependent variables do not always follow the normal distribution. To assess the homogeneity we applied the Levene's test. As a result of the test we can state that 3 conditions of the homogeneity do not exist in the following: temperature of the wine, order of the wine served and the process of aeration. The ANOVA table contains 4 factors.

Table 4: ANOVA table about the importance of factors to consider when consuming wine at home (gender perspective)

Factors	F	Sign.
Appropriate wine glass	1,44	0,230
Proper storage of wine	0,00	0,956
Pairing with food	0,05	0,827
Quality control	15,49	0,000

Source: own editing based on primary research

The table clearly demonstrates the significance levels related to responses. It can be concluded that different importance by male and female respondents was dedicated to control of quality. Similar importance regardless to gender of respondents was dedicated to choosing the appropriate wine glass, appropriate storage of wine and matching the food with wine.

#### 4 Conclusions

At the beginning of the 21<sup>st</sup> century, wine and wine consumption continues to play an important economic role not only in Europe and worldwide but in Slovakia and Hungary as well. Consumption of high quality wine is no longer a privilege of the affluent since quality wine has become accessible for a wider scope of consumers. The consumption of wine has democratized since various events, festivals and the increasing number of wine tasting clubs offer a numerous possibility for wine tasting. There has never been such an enormous, diverse and high-quality supply in the history of wine culture.

According to the results of the primary research conducted in Komárno district it can be concluded that significant difference between the wine consumption habits of male and female consumers cannot be detected. Most of the consumers consume wine 1-2 times a week or on monthly basis. Regarding the price of wine bought by consumers, no significant differences can be recognized between male and female customers. The respondents pay 5-10 EUR for a bottle of wine. Regardless to gender, majority of the respondents are considered to be

conscious buyers since they find important the origin of wine they buy. It is likely that due to the geographical position of the district and closeness to the Hungarian border, consumers prefer consuming Slovak and Hungarian wine. Male consumers of the survey are proved to be open in choosing wine with different origin, while female customers seemed to be more reserved. Our respondents, regardless to gender prefer professional attitude to wine consumption, which is explained by the fact that they care about the proper temperature and storage of wine, as well as they pay attention on proper choice of wine glass and choosing the appropriate wine to food served. Aeration and serving order for wines are those aspects the customers can learn more about.

In order to provide a full analysis of the research data, we plan to conduct a comparative analysis about the wine consumption habits of rural and urban consumers. It is necessary to bear in mind that Komárno district, the research was conducted in is a part of one wine region, so there can be more amateur wine makers or respondents related to wine making business. The opinion of these respondents would provide further interesting field of questions related to wine consumption habits of the residents in the region.

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