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Abstract of the Diploma Thesis

Statistical Analysis of Beer Consumption Preferences of Selected Age Group in the Czech Republic

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Summary

This thesis is divided into theoretical and practical part. The first part is devoted to the methodology and theoretical foundation. The primary emphasis is placed on marketing research, beer and consumer behaviour. Subchapter marketing research involves the rules of questionnaire survey creation and sampling. The next subchapter examines beer from different points of view. The history worldwide, as well as in the Czech Republic is explored here, too. This part also analyses fruit beer. After that, the practical part is focused on the evaluation of the survey. Based on the results, the stated hypotheses are either failed to reject or rejected. SAS analytics software outputs are to be included, as well. Next, the most interesting results are discussed in the part results and discussion. These results are then concluded and some recommendations are given as well. Finally, last parts are the list of sources and appendices. Part references lists all used resources. Appendices include mainly the graphical evaluation of the questionnaire survey.

Keywords

Preference, beer, consumer, factor, the Czech Republic, statistical analysis, hypothesis

Objectives

This diploma thesis deals with an assessment of beer consumption preferences. Specifically, attention is given to a chosen age group 18 - 29 with a particular focus on fruit beer. The assessment is carried out by own questionnaire survey. Moreover, SAS analytics software is used in order to analyse obtained data. The main sense is to find out and assess the factors influencing the chosen age group's consumer behaviour. This selected age group is to be compared to the other age group(s), as well. The partial aim is then to test the stated hypotheses statistically. Lastly, the random sample is compared to other research done in this field.

Methodology

The assessment of factors influencing consumer behaviour is carried out by own questionnaire survey. Firstly, the hypotheses are formulated. While testing hypothesis H_0: *there is no dependency between the observed characters*, two tests can be used: a χ^2 independence

test and Fisher's factorial test. Then, an appropriate survey is to be constructed. The dataset is analysed using categorical data analysis. SAS analytics software is being implemented at this stage. Moreover, the methods for a proportional reduction of error (PRE) are also used for detailed and accurate analysis.

Results and Discussion

Graph 1 - Age Group 18 - 29: Frequency of Beer Drinking
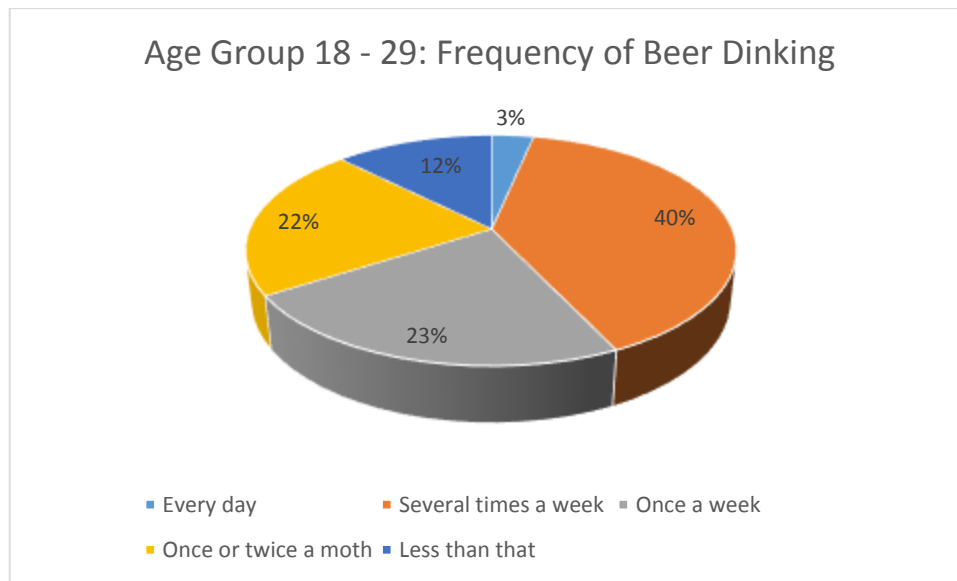
Source: own processing

The results indirectly prove that selected group 18 – 29 have different beer preferences in comparison to the population. The word indirectly is used due to weak dependency on age (Cramer's V never exceeded 0.3 which is the edge of medium strong dependency). Moreover, the value of asymmetric lambda C|R was never different from zero. This fact indicates no information for prediction.

Specifically, the following hypotheses were rejected:

- *H_0: It is expected, that there is no dependency between age and fruit beer consumption.*
- *H_0: It is expected, that there is no dependency between age of beer consumer and his or her attitude to follow his or her favourite brand on social network.*
- *H_0: It is expected, that there is no dependency between age of beer consumer and his or her preferred serving of beer.*
- *H_0: It is expected, that there is no dependency between gender and beer consumption.*

- *H_0: It is expected, that there is no dependency between education and beer consumption.*
- *H_0: It is expected, that there is no dependency between economic status and fruit beer consumption.*
- *H_0: It is expected, that there is no dependency between gender and beer consumption of a certain type.*
- *H_0: It is expected, that there is no dependency between change in income and change in beer consumption.*

The comparison to other research actually rejects all stated hypotheses, that is to say, people from the sample drink significantly more. This is the case of both beer and radlers. One of the possible explanations may be the fact that people consuming beer found more attractive to participate in the survey.

All in all, 420 respondents filled the questionnaire in. Specifically, 337 of them belonged to the selected age group. 52 percent were females while 48 percent were males. Over a half of these respondents lived in a city with a population exceeding one thousand inhabitants. 88 percent of interviewees were of Czech nationality. Lastly, 259 participants of this survey have not finished their studies yet.

Next, 91 percent of respondents drank beer, whereas four-fifths of the people that filled the questionnaire out had tried fruit beer. The most favourite beer brands were Pilsner Urquell and Velkopopovický Kozel. Furthermore, the most preferred type of beer was light beer and we can also state that the draft beer was the most popular form of serving. The most important criteria were taste, own experience and type. We may also observe that the price played relatively greater role for age group 18 – 29. Finally, fruit beer drinkers mainly preferred grapefruit flavour. Furthermore, beer non-drinkers argued that they did not like beer and that they mostly consumed cocktails.

Based on the results stated above, one of the possible recommendations is to distinguish among age groups and to emphasize on specific age group, for instance, age group 18 – 29. This age does not hesitate to give a 'like' to his or her favourite beer brand. Therefore, if these people proved they had given such 'like', they could have received a discount when buying beer. This would require an interconnection among beer producers, pubs and customers, but nowadays, it is possible. Moreover, the breweries would realise who their clients are. Such relationship building would benefit everyone.

Next, the most favourite brands such as Pilsner Urquell and Velkopopovický Kozel do not produce any fruit beer. However, this age group likes it. Since the price plays a greater role for this age group, an introduction of radler made by Kozel would probably bring positive feedback. Thus, advice is to include such fruit beer in Kozel's portfolio.

Finally, due to prioritizing draft beer by this age groups, beer companies could also offer fruit syrups and juices and supply them to the pubs. Beer consumers could have mixed fruit beer then on their own in variable proportions. In general, such fancy approach could have been perceived more positively by females. Moreover, we cannot forget about them because this research proved that the fruit beer was consumed by them to the same extent as by males.

Selected Resources

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