OPINION OF A YOUNG GENERATION FROM POLAND AND CZECH REPUBLIC ABOUT ECOLOGY, FRESHNESS, HYGIENE AND OVERAL LEVEL OF LARGE-SCALE RETAIL STORES

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Abstract

The paper is focused on opinions of young people from Moravian-Silesian Region and the Pomeranian Region about issues related to shopping in large-scale retail stores and a comparison between them. The comparison is stressed on the importance perception of food selection criteria, level of freshness selling goods, cleanliness and hygiene of those outlets.

Keywords: Young Generation, Freshness, Large-scale Retail Stores.

Introduction

Recently, we have been interested in a survey of a sample group about 300 young people from Poland and Czech Republic for the purpose of a research of customer satisfaction in large-scale retail stores. The research is done at the Silesian University in Opava, School of Business Administration in Karvina for the needs of a doctoral thesis. Polish students participating in the survey studied at the University of Gdańsk, Faculty of Management in Sopot and they had come or had lived in Pomeranian Region. Czech students participating in the survey studied at OPF Karvina and they had come or had lived in Moravian-Silesian Region.

Opinions of those young students were valuable for a research mainly for practical purposes. This group from 18 to 26 year-old students – is crucial for the future development of the world. This paper focuses on answers evaluation from questions about environmental responsibility and opinions about goods freshness, clean and hygienic environment in large-scale retail stores.

Characteristics of Generation Y

Why young people – why students? Current "young-adults-generation" is a very specific group based on a presumption that they will be active working group and thus they will determine the direction of the market. It is obvious that this group has essential requirements – especially in the fields of technology… This group is a middle ground between a generation born without computer and a generation used to use computers since 10 years of age.

Generation Y consists of people born between 1980 and late '90s. Some researches would claim even younger people. This is a key group of young people characteristic with relations to material values and the use of new technologies and the Internet. Interesting fact is that the very same group is sensitive to ecological questions. Since their childhood they are led to environmental activities such as a waste sorting or an environmental protection. In comparison to the older generations, they have not used to adapt those values but they have been familiar with them since their childhood. Although the Y Generation if often evaluated in the areas of HR (human resources), it is very important for their shopping and

lifestyle habits. Members of this group tend to spend their free time actively and thus they form excellent group of customers. They claim the Internet as the best source of information and barely visit the retail store personally. It is a reason why they consist of main target of e-commerce advertisement.

Generation Y values speed, and convenience during their contact with companies. Several studies have shown that this group comes to the companies directly much less often than the older generations. The most common form of communication is selected an e-mail. The fact that this generation is used to use the Internet from their childhood, brings some negative aspects. Every year more and more people from Y Generation group have difficulties with concentration. It could be difficult for them to concentrate during phone rings, important document review requests, tons of email to answer and friends' requests to "like it".

This group of people is currently the largest group in the world with more than 1,2 billions, and it looks like it will still grow. They will develop their income and create a force to be the most important age group worldwide.

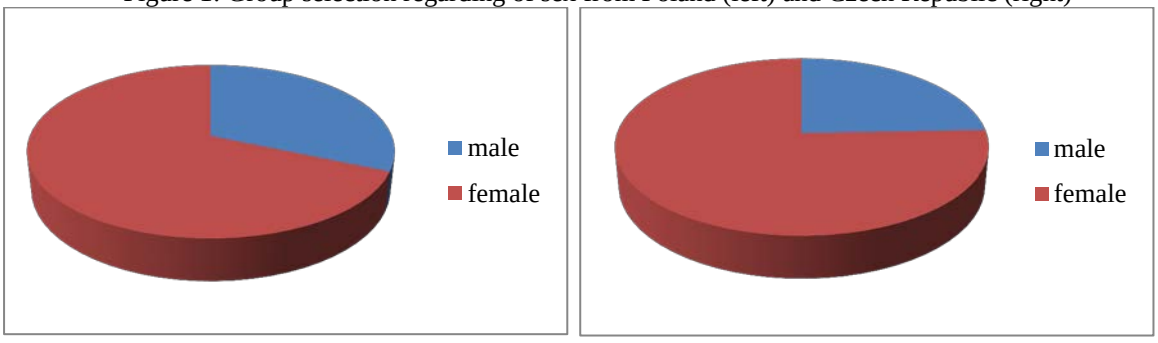
Selection of Locations

For the purposes of this research, the respondents were chosen from the Moravian-Silesian Region and Pomeranian Region. Why these two locations? Even though, those locations are separated by 650 kilometers and one location on the first hand is a seaside tourist area, the other on the other hand is a former Czech black coal mine area; they are very similar in the meaning city-village citizen ratio. They are also areas in Poland where people live mainly by the agriculture. In the Moravian-Silesian Region people has lived more recently at a high living standards mainly due to coal mining. However, the mining is no longer crucial, it still thrive engineering industry. The unemployment rate has increased from the past, but generally speaking the standard of living has not been changed drastically during last few decades. People in Pomeranian Region are living relatively well due to the attractiveness of tourist sites. The amount of tourist has increased in the region because of beautiful surroundings.

Specification of Respondents

This article focuses on opinions of the young people. The main group of respondents participating in the survey was 18-to-25-year-old students, some of them were 26-to-35-year-old. For the purpose of this paper, there were chosen two groups – one from Czech Republic, second from Poland. The Czech group contained students from the Silesian University of Opava, the Polish group had students from the University of Gdańsk. To be exact regarding the students selection, it is important to note that the participants were mainly from economic field, which indirectly implies a bigger representation of women among the respondents.

Figure 1: Group selection regarding of sex from Poland (left) and Czech Republic (right)



Source: Own elaboration

Figure 1 shows that both groups contained roughly three quarters of women.

The University of Gdansk, Faculty of Management in Sopot is located on the territory in Pomeranian Region. Figure 2 shows the respondent town size residence in absolute terms. It shows that the most of the Polish respondents were living in a city between 100 001 and 500 000 inhabitants. The second most common group was from the towns over 500 000 inhabitants, a third of the towns with 20 001 to 50 000 inhabitants. Fourth of the largest group was from the village, the fifth of the town between 50 001 and 100 000 inhabitants and the smallest group of respondents was from the town below 20 000 inhabitants.

Figure 2: Respondent town size residence histogram in Poland (in absolute terms).

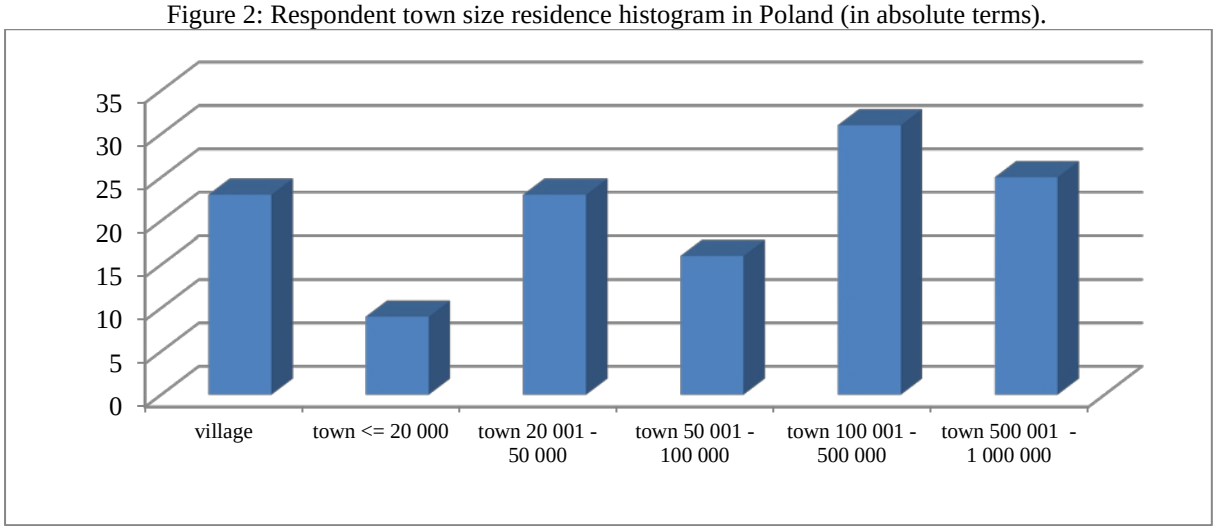


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Figure 3: Respondent town size residence histogram in Czech Republic (in absolute terms).

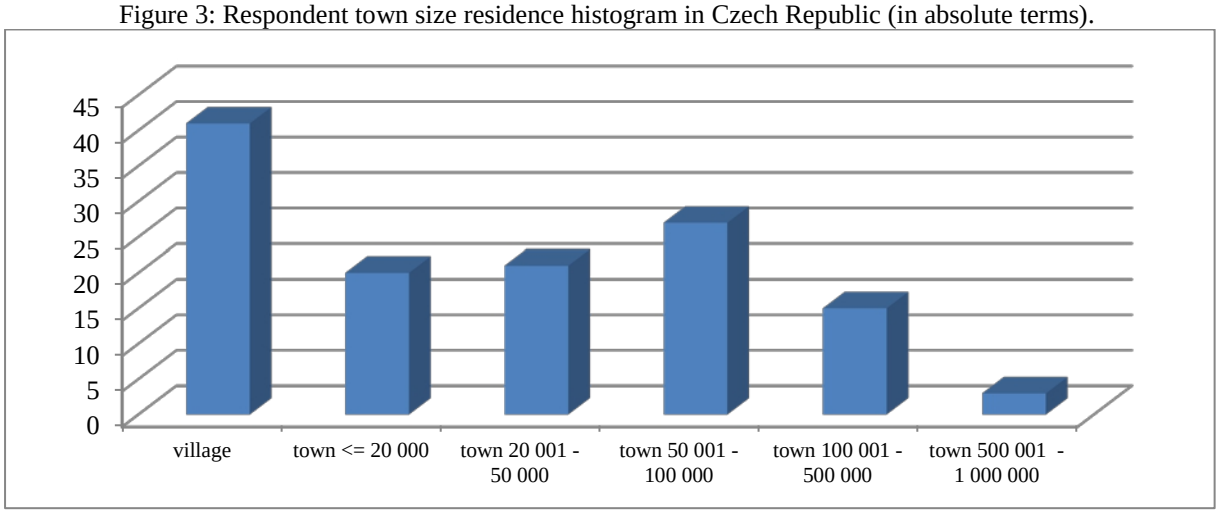

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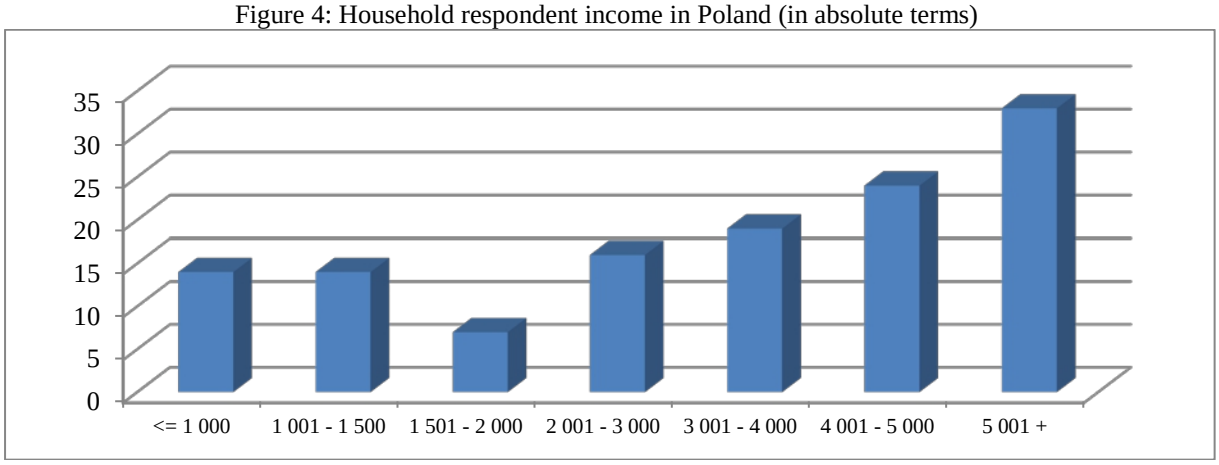
Figure 3 shows that respondents from the Moravian-Silesian Region – northeast part of the Czech Republic - where the Silesian University, Faculty of Business Administration in Karvina is located, most often mentioned as the place of residence is village. The second most common place of residence is city with 50 001 to 100 000 inhabitants. The fourth, fifth and sixth most common residence of the respondents were in the city to 20 000 inhabitants, a city of 100 001 to 500 000, and in the more than 500 000 inhabitants respectively.

The previoustwo figures show, apart from the cultural aspect, the possibility of opinion difference based on the origin of the respondents. The Polish group consisted rather of students from larger cities, while in the Czech Republic showed that a random selection of respondents pointed rather to persons from the villages.

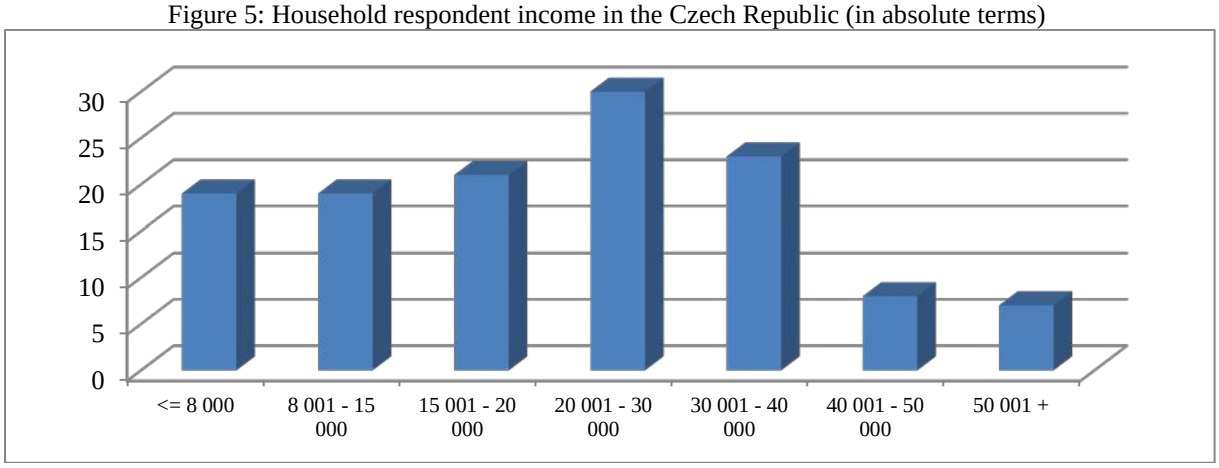
Figure 4: Household respondent income in Poland (in absolute terms)



Source: own elaboration

The figure was based on the marketing expert specialists from the Pomeranian Region to show a representative sample of Polish population. A similar approach was taken for Czech Republic where the number has been adequately normalized in a way to be comparable with the Polish results.

Figure 5: Household respondent income in the Czech Republic (in absolute terms)



Source: own elaboration

Figures 4 and 5 show a slight difference in a household income between Poland and Czech Republic. It is always difficult to compare countries data to achieve a reasonable comparability. The above figures show the absolute income for the entire household. The result interpretation could differ if we take into account the number of persons in the household, price differences or other indicators. If we divide the household income by the number of its members (that information was a part of the survey) – the average income per person in the household of our respondents would be 1 376,77 PLN in Poland and 9 600,00 CZK in the Czech Republic. Comparing those sums regarding the current exchange ratio the values are comparable as 49:51. It means the household income should have a minimum effect on the opinion differences between those two regions.

Problem formulation and methodology

For the verification purposes the following hypotheses were formulated:

H1: The perception of global ecological problems has not a big decision influence about food choices.

H2: The importance criteria when selecting food criteria have a major impact cultural difference impact of the respondents.

H3: Respondents from the Czech Republic have bigger negative experience about the freshness of goods in large-scale stores than the ones from Poland.
H4: Overall cleanliness, hygiene and shops levels will differ on the respondent origin.

To verify the hypotheses set up in this section we introduce methods that we have used in the processing of data.

First, it was important to convert the absolute values into the relative ones. When respondents have a multiple choice of some absolute values, it can distort the result among other respondents. Therefore it is needed to transform the result so that each respondent has only one answer. This can be done so that the criteria obtained from respondents convert on the scales. As a result, we get data adjusted for differential labeling and its associated errors.

To demonstrate the strength of relationship between the two data sets variables, in our case $x_1$data from Poland and x_2 data from the Czech Republic we will use the Pearson correlation coefficient which is defined by the equation (1) as follows (Ramík, 2003):

$$r = \frac{n\sum x_{1i}x_{2i} - \sum x_{1i}\sum x_{2i}}{\sqrt{[n\sum x_{1i}^2 - (\sum x_{1i})^2][n\sum x_{2i}^2 - (\sum x_{2i})^2]}} \quad (1)$$

To answer the question whether there is a linear relationship between the data from Poland and the Czech Republic, the t-test has to be done. This test is needed to verify that the correlation coefficient of the population is statistically significant. The null hypothesis H0: r=0 relates to no dependence between variables at a significance level of 0,05 and the alternative hypothesis HA: r≠0 validates the dependence existence between variables. To test the linear dependence in the data files, the test criterion t is defined as:

$$t = \frac{r}{\sqrt{1-r^2}}\sqrt{n-2} \quad (2)$$

where r is correlation coefficient and n number of variables in data set.

If $|t| > t_{0,05}(n-2)$ (3)

thenull hypotheses H0 is rejected.

This paper also uses other statistical methods to test the hypothesis such as Chi-square independence test. It is a relatively simple test based on the test criterion calculation (Čemerková, Mielcová, 2006):

$$G = \sum_{i=1}^{k} \frac{(n_i - n_i')^2}{n_i'} \quad (4)$$

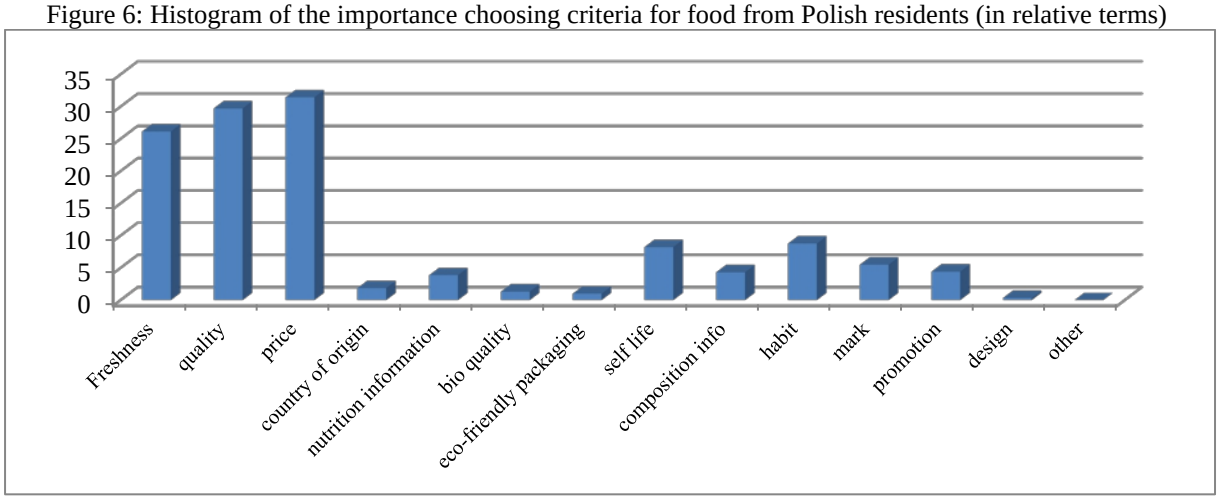
and finding critical values in Chi-square distribution tables $x_\alpha^2(df)$. The test requires the hypothesis, significance level and known degrees of freedom. The hypothesis H0 is set in a way that the given characteristics do not depend on its indicators. Significance levels are commonly set as 1%, 5% or 10%. This paper uses 5% for all tests to achieve better level of consistency. Degrees of freedom are calculated based on the number of events and indicators: $df = (m-1) * (m-1)$ (5)

If the test criterion falls within the range of critical values (t has a value greater than the critical value, inclusive), we reject the hypothesis of independence and admit statistically significant dependence on the indicators.

Results

One of the questions we asked respondents was the exact criteria importance for choosing goods in the retail store. They were asked to choose up to three of the following answers: freshness, quality, price, country of origin, nutrition information, bio quality, environmentally friendly packaging, shelf life, information about composition, habit, mark, promotion, design or also the other criteria which the needed to fill.

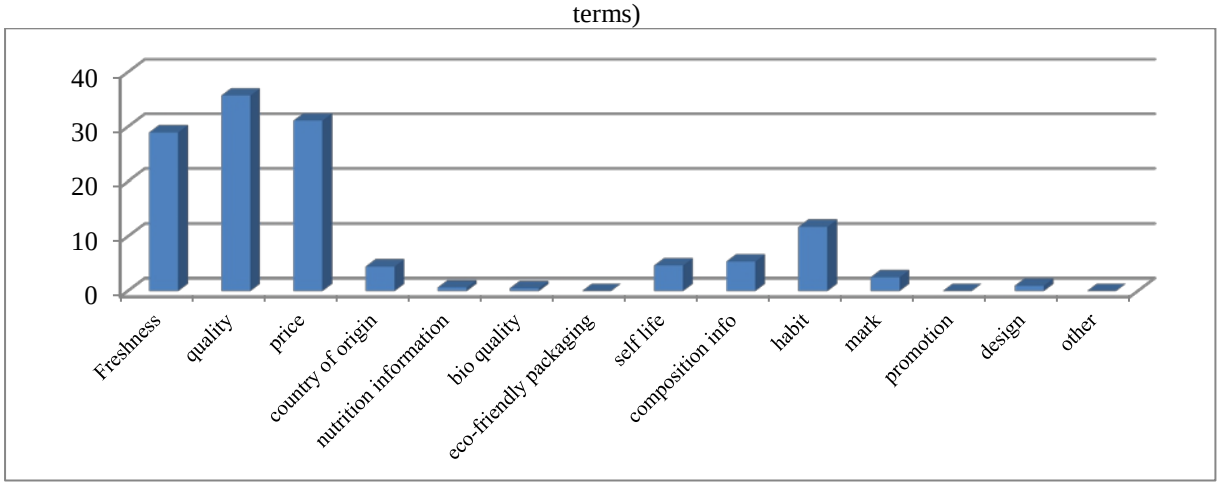
Figure 6: Histogram of the importance choosing criteria for food from Polish residents (in relative terms)



Source: own elaboration

After a comparison figures 6 and 7, we can conclude, that Polish representatives Generation Y tend to prefer those three criteria as the most important: price, quality and freshness. On the other hand, respondents from the Czech Republic selected criteria as food quality, price matching and freshness. Other criteria important for both countries were: habit, self-life, information about the composition and brand. In Poland, people tend to stress on promotion and more nutrition information and CR respondents prefer rather the country of origin.

Figure 7: Histogram of the importance choosing criteria for food from Czech Republic residents (in relative terms)



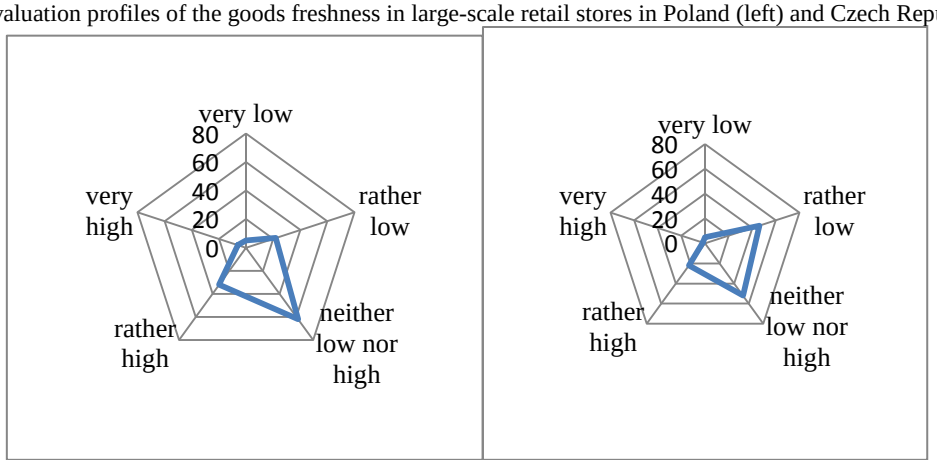
Source: own elaboration

To test the hypothesis H1 when the sensitive awareness of global issues has not a big influence on decisions about food choices, there is just glimpse needed to the previous two graphs. Young people, as we have said in the first part of this article, although they feel a big ecological responsibility, their food selection is influenced by intuitive needs, both in Poland and in Czech Republic, especially in quality, price and freshness. There are also exceptions that indicate the quality of bio and eco packaging as the main criterion for the food selection. However, this kind of selection is appreciable, unfortunately we cannot deny the hypothesis mentioned a small influence perceptions of global issues – especially the influence on environmental decisions when buying food.

Let us analyze some properties of hypotheses H2 and its verification during food selection. The hypotheses is formulates as follows: The cultural difference or respondents origin has major impact on their food selection. This hypothesis can be verified using

the Pearson correlation coefficient, as further described in subsection oriented methodology. Answers from the Czech Republic and Poland had very high correlation r=0.98 with t-test value as 15.88 which was much higher than the theoretical value found for Student's distribution 2.201. It clearly shows that this coefficient is statistically significant so we can reject the null hypothesis as absence of correlation. It means the data is strongly connected so we can clearly assume high probability of nonexistence of crucial connection between cultural differences on criterial importance selection. In other words we can assume that food choices are not based on the respondent origin but only between the Czech Republic and Poland.

Figure 8: Evaluation profiles of the goods freshness in large-scale retail stores in Poland (left) and Czech Republic (right)

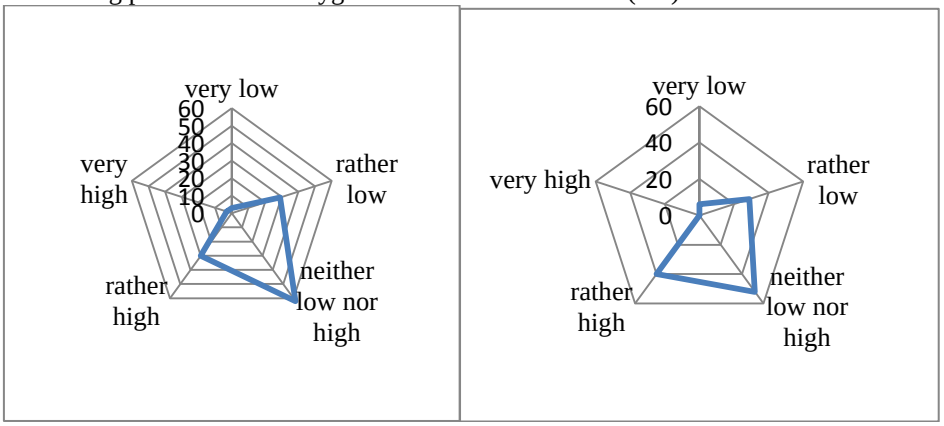


Source: own elaboration

The graph 8 shows that Polish respondent tends to value better freshness in large-scale retail stores compared to Czech Republic. Extreme case were rather rare. In order to statistically evaluate the hypotheses H3, which claims: „Respondents from Czech Republic have more negative experiences with goods freshness in large-scale retail stores.", we will use chi-square test of independence. This test is further analyzed in the methodological part of the paper.

The null hypothesis is formulated as follows: "Opinion on goods freshness in a large-scale retail stores does not depend on respondent origin". Alternative hypothesis is formulated an opposite way: "Opinion on goods freshness in a large-scale retail stores does the depend on respondent origin". Test criterion has proved value t=13.2 and the critical value c=9.5 which leads to a rejection of the null hypothesis and alternative hypothesis acceptance. At the 5% significance level (taking into account the possible error of 5%) so we can claim the statistically significant dependence onthe citizenship of the respondent. It can be objectively say that the Czechs actually perceive rather lower level of freshness goods than the Poles.

Figure 9: Assessing profiles level of hygiene in Polish retail stores (left) and in Czech retail stores (right)



Source: own elaboration

Figure 9 shows that both groups from Poland and the Czech Republic mostly answered that the level of hygiene in retail stores is neither low nor high. The Polish group answers were rather balanced and do not show any extreme values. On the other hand, the Czech answers show even unique edgy opinions like very low level. Surprisingly, most respondents didn't answer at all or claimed rather high level of sanitation in large-scale retail stores.

The following hypothesis about summary of cleanness, hygiene and level of services depends on respondent origin will be evaluated. Evaluation of this hypothesis was also done by chi-square test. The null hypothesis was formulated an independence of hygiene and service level evaluation on respondent origin. The alternative hypothesis was formulated in an opposite way: Hygiene level opinion depend on the respondent origin. Test criterion shows the value t=6.3 and the critical value c=9.5. Test criterion does not belong to the critical range C, but belongs to the range of acceptance and therefore we claim the hypothesis of independence assessment and hygiene levels in retail stores as acceptable.

Conclusion

This article presents the opinion of 300 young people from Poland and Czech Republic. Their answers have been collected for the survey of customer satisfaction about large-scale retail stores in the Czech Republic at the Silesian University in Opava, School of Business Administration in Karvina and in Poland at the University of Gdansk, Faculty of Management in Sopot.

The respondents were some university business students, aged 18 to 26 years, as very important group for the world future. This article focused on evaluation of issues related to environmental responsibility and opinions on good freshness, cleanliness and hygiene in large-scale retail stores.

The hypotheses have been formulated and statistically tested using Pearson correlation coefficient and chi-square test. Unfortunately, the hypotheses of the global perception problems have a major impact on decisions about food choices, was accepted. The hypothesis of the high influence of cultural differences (country of origin) assigning weights to the various criteria for selection of food was rejected. Furthermore, we have found a more negative perception of freshness goods in large stores for Czech respondents. The fourth hypothesis about the impact of country of origin of the respondent´s overall assessment of cleanliness and hygiene then was also rejected.

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