The influence of demographic factors on attitudes toward brands and brand buying behavior of Slovak consumers

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Abstract
The paper describes brand buying behavior of Slovak consumers and their attitudes toward brands across gender, age and education. Demographic characteristics play an important role in consumer’s purchase decision process and can cause deviation from general patterns of consumer decision making. Therefore marketers need detailed information about consumers so that they understand their behavior and needs. To be able to determine if demographic factors have an impact on Slovak consumers’ brand perception, a research on 1067 respondents was conducted. Based on the research results, gender does not affect consumers’ opinions and men and women do not differ in their decision concerning domestic and foreign brands. Regarding age groups and education levels, significant differences in brand buying behavior were found. Consumers older than 50 years of age care where the products were made and they mostly buy domestic products, younger consumers prefer foreign brands. Respondents who finished college without graduation have positive feelings for Slovakia and they buy domestic products because they want to support the economy. Consumers differ in their behavior and preferences and it is important for marketers to examine these differences based on demography.
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Since the last decades of the 20th century, Europe has witnessed strong declines in fertility levels which were caused by changes in the number of children within families, as well as changes in the timing of births due to social and economic changes, such as increasing labor force participation of women and rising levels of education (Memecan, 2012). For central and eastern European countries, including Slovakia, also the socio-political changes and the accompanying economic hardship and insecurity of the late 1990s played a role in this emerging trend (van Nimvergen and van der Erl, 2012). The lowest fertility levels in the European Union are found in Moldova, Poland and the Slovak Republic with a fertility level of about 1.3 children per woman (Memecan, 2012).

It can be assumed that in the coming years, period of significant decrease of Slovak population will start – according to Infostat (Institute of Informatics and Statistics) it can be from the 5.5 million today, down to 4 million people until 2100. Therefore, main features in the development of Slovak population in the first half of 21st century will be decrease of population and ageing caused by decrease in birth rates and increase of life expectancy. Another demographic trend in development of Slovakia will be intensive migration and increased number of foreigners (Vaňo, Jurčová & Mészaros, 2002). Since 1993, the Slovak Republic has positive net foreign migration. In 2010, the number of immigrants to Slovakia was 5 300 persons and the number of emigrants 1 900 persons, meaning the foreign net migration was 3 400. The majority of immigrants, 90.2%, to the Slovak Republic came from European countries (Podmaníkca, 2010). But in general, immigration rate to Slovakia is one of the lowest in the European Union. This is because the immigration policy of Slovakia is one of the strictest in Europe.

Describing Slovak market in terms of demography, the population is 5.5 million, median age is 38 years, urban population is 55 percent of total population and literacy is 99.6 percent (www.infostat.sk).

1. Literature review

The demographic development significantly influences the functioning of society and it is projected in many business areas. Correct decisions and predictions in the fields of economics, social affairs, employment, education, management cannot be made without proper, exact and appropriately structured demographic information (Vaňo, Jurčová & Mészaros, 2002). E.g. socioeconomic status is determined by measuring income, education, occupation, and wealth of an individual or a family. Life stage is based on an individual’s age, family status, and relationships. Education, location, activities, interests, opinions, socioeconomic status, and life stage determine lifestyle. All of these characteristics are helpful to businesses as they are valuable predictors of consumer spending trends (demodirt.com). Marketers need detailed information about consumers in order to understand their behavior and needs. The more information they have the better decision
they can make. Understanding the effect of key demographics such as age, income, and gender of consumers is important. “When marketers think like demographers, they gain an understanding of how things work that can help them increase market size, deepen market penetration, and carve out market share” (Exter, p. 20, 1988).

Consumer behavior can be described as “activities people undertake when obtaining, consuming and disposing of products and services” (Blackwell, Miniard and Engel, p. 6, 2001). Marketers use the knowledge from psychology and sociology to be able to understand how people’s mind works because consumers vary in their behaviors, preferences and attitudes. All these differences are induced by the characteristics of consumers. According to marketing theory, there are four basic factors affecting the consumer behavior: cultural, social, personal, and psychological (Tintin, 2013).

- Cultural factors include a consumer’s culture, subculture and social class. These factors are often inherent in consumers’ values and decision processes.
- Social factors include groups (reference groups, aspiration groups and member groups), family, roles and status. This explains the outside influences of others on consumers’ purchase decision either directly or indirectly.
- Psychological factors affecting the purchase decision include motivation (Maslow's hierarchy of needs), perception, learning, beliefs and attitudes.
- Personal factors include such variables as age and lifecycle stage, occupation, economic circumstances, lifestyle and personality. These factors include the demographic characteristics of consumers.

Demographic characteristics, such as gender, age, income level, educational level, etc. play an important role in consumer’s purchase decision process and can cause deviation from general patterns of consumer decision making (Lee, 2005).

Researchers discovered the importance of demography in consumer studies in the 1950. Fisher (1952), Lyndall (1955) and Zwick (1957) investigated how and if demographic data affect consumer behavior and they all agreed that demographic variables need to be incorporated in a model of consumer behavior. Over the next years, factors such as income, gender, age, ethnicity have emerged as good predictors of consumer behavior and other market related issues (Pol, 1991).

Man and women behave differently, they want different products and they are likely to have different ways of liking and obtaining these. Gender has an important role in consumer behaviors. Because, the differences between men and women about expectation, want, need, life-style etc. reflect to their consumption behaviors (Swarna, 2012). For instance, studies have revealed that gender, education, income and age differentiate the consumers' information search process. Men are less likely than women to complain when they are dissatisfied with a good or service in comparison to women they do not spread word of mouth and they are significantly less likely than women going to use specialist magazines as a source of information (Lee, 2005).
2. Methods

In this paper, partial results from a research on brand buying behavior of Slovak consumers are being presented. The data was collected from January to April 2013 with a questionnaire. Respondents were presented with a list of 24 statements concerning their attitudes towards domestic and foreign brands and their brand buying behavior. Likert scales, as a very common and easy tool for measuring attitudes, were used in the survey. The scales ranged from -2 (absolutely disagree) to +2 (absolutely agree).

The population in the research were Slovak consumers 14 years of age and older. In Figure 1 distribution of selected demographic features can be seen. These selected variables are going to be used to determine the influence of demographic factors on attitudes toward brands and brand buying behavior of Slovak consumers. The number of respondents was set to 1067 in order to get permissible error of 3 percent and confidence level of 95 percent for the research results. The distributions of age groups, education levels and gender were as follows. There were 48% men and 52% women included in the research. 6% of all respondents had primary/secondary education and 6% completed college without graduation. 49% have finished college and 39% have a university degree. In the youngest age group 14-17 were 1% of respondents, 18-29 years old were 26%, 30-39 were 22%, followed by 18% of 40-49 years old, 25% respondents were in the 50-59 age group and 8% were older than 60.

The data were evaluated in R, software for statistical computing and graphics. The techniques used in R were factor analysis to reduce the initial number of statements followed by Kruskal-Wallis tests to determine possible significant differences between demographic variables and factors of brand buying behavior.

3. Research results

The initial number of statements in the questionnaire was 24. To reduce interrelated information and similar statements, factor analysis was performed. The number of factors was determined by parallel analysis and Kaiser criterion. According to both techniques, the optimal number of factors was six. These factors are:

Factor 1 Slovak brands - quality
Statements in Factor one favor Slovak brands. It is important for people to buy Slovak products, they usually prefer Slovak brands, and they trust Slovak brands and think these brands have better quality than foreign. They are also willing to pay more for Slovak products and they buy Slovak brands because they like Slovakia.

Factor 2 Foreign brands - quality
Typical for this factor are positive feelings towards foreign brands. Foreign brands are seen to have better quality, are more trustworthy, people have better experience with them and they usually go to shops with foreign brands.

Factor 3 No brands
This factor represents no preference in brands. Brands are not important in buying decision process; people usually prefer cheap products and do not care about the brand.
Factor 4 Country of origin

Statements in Factor four are related to products’ country of origin. It is important where products are made, people take time to find out some information about country of origin and they mostly prefer Slovak products, but also buy brands based on their previous experience.

Factor 5 Foreign brands - availability

There are four main statements in Factor five showing us that foreign brands are perceived to be more available and cheaper than Slovak brands, people usually go to shops with foreign brands and they feel confused with great variety of brands sometimes.

Factor 6 I love Slovakia

The most significant features for this factor are buying Slovak brands to support the economy and buying Slovak brands because of positive feelings for Slovakia.

Followed the factor analysis, Kruskal-Wallis tests were performed to examine the relationship of given factors and demographic data. This test is used “to test the null hypothesis that all populations have identical distribution functions against the alternative hypothesis that at least two of the samples differ only with respect to location (median), if at all” (the statistics glossary). Computed p values are presented in Table 1.

Several relationships were found when using the Kruskal-Wallis test to examine the demographic variables and brand buying behavior factors at the α = 0.05 (95%) confidence level. The only demographic variable, which showed no differences in brand buying behavior and brand attitudes, was gender. Men and women have the same opinion in all six factors. They agree Slovak brands are high quality brands, they also have positive feelings toward foreign brands, they are brand oriented and they disagree with not caring about brands, country of origin is important for them and they agree that foreign brands are more available than Slovak. When they buy Slovak products they do it to support the economy.

When examining the age groups, significant differences were found in all six factors. The only age group with different behavior was always the 14 to 17 years old. The youngest respondents do not agree Slovak products are high quality products, they think foreign brands have better quality. The young age group is very brand oriented, they do not think foreign brands are more available than domestic and they do no prefer Slovak products.

Comparing brand buying behavior across education levels, respondents with primary and secondary education do not agree that Slovak brands are high quality brands. They think that foreign brands have better quality than domestic, whereas people with university education disagree. Respondents with university education care about brands and those who finished college without graduation do not have any specific brand preferences. Those who have university degree care about country of origin when they make their purchases and people with primary/secondary education and college without graduation are not paying attention to where the products they buy were made. Respondents with lower education do not think foreign brands are more available. The college without graduation group is the biggest patriots and they buy domestic goods because they have positive feelings for Slovakia. Descriptions of chosen relationships for further analysis are presented below.
Slovak brands – quality vs gender (Figure 2)
H0: The factor distribution of attitudes toward brands is identical for both genders.
H1: At least two of the gender groups differ in their attitudes.
Since the p value 0.5325 is more than 0.05, we cannot reject H0. There is insufficient evidence to indicate a difference in perceiving quality of Slovak brands within gender. Both men and women usually buy Slovak products, they trust them and think they have better quality than foreign brands. They buy Slovak product because they like Slovakia.

Foreign brands – quality vs age (Figure 3)
H0: The factor distribution of attitudes toward brands is identical for all the age groups.
H1: At least two of the age groups differ in their attitudes.
Since the p value 0.0000 is less than 0.05, we have to reject H0. There is sufficient evidence to indicate a difference in perceiving quality of foreign brands within given age groups. Whilst the youngest respondents strongly agree that foreign brands are better than domestic, they have higher quality and they trust them more, all other age groups have neutral feelings toward foreign brands.

No brands vs education (Figure 4)
H0: The factor distribution of attitudes toward brands is identical for all the education levels.
H1: At least two of the education levels differ in their attitudes.
Since the p value 0.0000 is less than 0.05, we have to reject H0. There is sufficient evidence to indicate a difference in brand preferences within education levels. Consumers with college without education make their buying decision based on price of the products, brands are not important for them, they prefer cheap goods. Consumers with university degrees have different opinions, brands are important for them.

Country of origin vs age (Figure 5)
H0: The factor distribution of attitudes toward brands is identical for all the age groups.
H1: At least two of the age groups differ in their attitudes.
Since the p value 0.0000 is less than 0.05, we have to reject H0. There is sufficient evidence to indicate a difference in perceiving country of origin across different age groups. Consumers from the two oldest age groups, older than 50 years, agree they care where the products were made and they mostly buy domestic products. The 14 to 49 years old have neutral feelings toward the country of origin.

Foreign brands – availability vs education (Figure 6)
H0: The factor distribution of attitudes toward brands is identical for all the education levels.
H1: At least two of the education levels differ in their attitudes.
Since the p value 0.4428 is more than 0.05, we cannot reject H0. There is insufficient evidence to indicate a difference in perceiving availability of foreign brands within the education levels.
College and university graduates have neutral feelings toward availability of foreign brands whilst consumers with primary/secondary education and college without graduation disagree that foreign brands are more available than Slovak.

I love Slovakia vs education (Figure 7)
H0: The factor distribution of attitudes toward brands is identical for all the education levels.
H1: At least two of the education levels differ in their attitudes

Since the p value 0.0001 is less than 0.05, we have to reject H0. There is sufficient evidence to indicate a difference in attitudes toward domestic products within the education levels. Consumers who finished college without graduation have positive feelings for Slovakia and they buy domestic products because they want to support the economy. Other consumers showed rather neutral attitudes toward Slovak brands.

4. Conclusion

Demographic trends in population depend on the development of fertility, mortality and migration, but they are also indirectly influenced by other demographic factors, as well as by social, political, economic and cultural (Vaño, Jurčová & Mészaros, 2002). They must be seen in the global context of population dynamics.

Demographic information is fundamental for analyzing buying behavior and consumer attitudes. Consumers differ in their behavior and preferences according to their age, gender or education level. Based on a research on brand buying behavior of Slovak consumers, evidence was found that demographic variables have an influence on their attitudes. According to the research results, gender does not affect consumers’ opinions and men and women do not differ in their decision concerning domestic and foreign brands. They think foreign brands are more available than Slovak and the main trigger for buying domestic products is supporting the economy. Both men and women are brand oriented and brand is an important factor for them when they make their purchase decisions.

Regarding age groups, significant differences in brand buying behavior were found. The youngest group of consumers, 14 to 17 years old, does not think Slovak products are good quality and they strongly agree that foreign brands are better than domestic. Consumers older than 50 years of age care where the products were made and they mostly buy domestic products.

Examining education levels, consumers with primary and secondary education do not think Slovak brands are high quality. Respondents who finished college without graduation have positive feelings for Slovakia and they buy domestic products because they want to support the economy. Those who have university degree care about country of origin when they make their purchases and consumers with primary/secondary education do not care where the products they buy were made.

Demographic variables play an important role in understanding consumers and it is important for marketers to examine them in order to transform demographic challenges into opportunities.

Acknowledgment

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References


Appendix – Tables and figures

Figure 1 Education, age and gender distribution

Table 1 Kruskal-Wallis tests p values

<table>
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<th>Gender</th>
<th>Age</th>
<th>Education</th>
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<td>I love Slovakia</td>
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<td>0.0001</td>
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</tbody>
</table>
**Figure 2** Slovak brands – quality vs gender

**Figure 3** Foreign brands – quality vs age

**Figure 4** No brands vs education

**Figure 5** Country of origin vs age

**Figure 6** Foreign brands – availability vs education

**Figure 7** love Slovakia vs education