

ECOLOGICAL CONSCIOUS CONSUMER BEHAVIOUR FROM THE VIEWPOINT OF DIFFERENT GENERATIONS AND GENDERS

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Abstract

The main purpose of this study is to assess the opinion and attitude of Slovakian consumers about their green consumer behaviour. The theoretical part of the paper deals with environmental awareness, environmental protection, and ecological conscious customer behaviour. Primary research was done and a questionnaire survey was used to collect a total of 150 responses. The data was analysed with the help of Microsoft Excel and SPSS software. According to our results consumers consider themselves to be environmentally conscious, and this is reflected in their actions too. Based on gender, there is no difference between men and women in terms of how environmentally conscious they consider themselves. Members of the younger generation (Generation Z) separate their waste at a higher rate than members of the older generations (Generation Y, X and Baby boomers). The last part of the study summarizes the conclusions of the research and deals with limitations and future directions.

Key words: generations, consumer behaviour, green marketing, green consumers, conscious consumers

JEL Code: D12, M31

Introduction

According to Steg and Vlek (2009) environmentally conscious behaviour includes all activities and behaviours that are as minimally harmful to the environment as possible, or even useful for it. Nagy (2018) states that an individual's environmentally conscious behaviour depends on the number of environmentally conscious actions he takes and their difficulty.

Consumers concerned about the environment began to show environmental awareness through their purchasing behaviour (Seres Huszárík et al. 2022). According to Seres Huszárík and Korcsmáros (2021) consumers' environmental problems intensified and they began to look for environmentally friendly alternatives to the usual products, instead of reducing their consumption. That's when the green consumer “was born”. Finally, consumers began to worry

more and more about environmental problems, which is why green marketing became more and more important. This happened in two ways: on the one hand, with the expansion of public knowledge about environmental protection aspects, and on the other hand, with the increase of environmental responsibility.

In recent years, many studies have been conducted to explain environmentally conscious consumer behaviour (Akehurst et al., 2012). These studies used personal, demographic and psychographic characteristics for consumer segmentation. According to Akehurst et al. (2012), psychographic variables are more relevant than socio-demographic variables. Similarly, Emekci (2019) argue that personality variables are better predictors than socioeconomic variables.

However, environmentally conscious behaviour is based on many factors, including prices, product quality, social norms, etc. (do Paço, Raposo, 2009). In addition, environmentally conscious consumer behaviour also has determining factors. “Environmental psychology” generally examines five levels:

- environmental knowledge,
- environmental attitudes,
- environmental values,
- willingness to act,
- and the action itself (Tóth, Molnár, 2014)

At the same time, the visibility of environmentally conscious actions is also an important issue. This means whether the action is visible to others; whether environmentally conscious or non-environmentally conscious behaviour is noticed or perceived by others; and if it has a general positive effect on environmentally conscious behaviour. Just like individual benefit, which clearly has a positive effect on the occurrence of environmentally conscious actions. (Nagy, 2018)

In addition, we can also talk about environmentally conscious types of action, which can be classified into the following five groups:

- reducing or completely giving up the consumption of traditional products
- demand modification: buying environmentally friendly products instead of traditional ones,
- consuming environmentally friendly products
- participation in recycling and separate waste collection
- environmentally protest (Nagy, 2018).

Tóth and Molnár (2014) on the other hand, distinguishes three types of attitudes in terms of consumer behaviour: the committed green consumers, the persuasive and the indifferent consumers. Committed green consumers try to (trans)form their consumption partially or entirely by taking environmental factors into account. One of the most important factors in their purchasing decisions is the environment, and they also try to behave in a way that is favourable to the environment in their everyday life (e.g. saving the energy). Persuadable consumers choice is not determined by environmental factors, although “with some help” (e.g. advertisement, facts or “shockvertising”) they tend to make environmentally conscious decisions, e.g. among many almost identical products, they could choose the environmentally friendly version if they are persuaded. On the other side, indifferent consumers don't care about environmental issues. It may happen that they make purchases favourable to the environment, but they usually do so because, their behaviour is influenced by other factors (e.g. price, taste, habit etc.).

Regarding the origin of environmentally conscious behaviour, Nagy (2018) came to the following conclusions in his study: the emotional element of the attitude is the one that has the greatest influence on the intention to act in an environmentally conscious way, while the effect of the intellectual component appears only in a much smaller proportion. In other words, our willingness to act in an eco-conscious manner is not primarily due to our knowledge of the environment, but rather to our emotional motivations. Nevertheless, the environmental knowledge already plays a major role in the realization of environmentally conscious behaviour.

An important discovery was made by Nagy (2018) regarding the relationship between values and environmentally conscious behaviour. The study discovered that environmental behaviour mainly characterizes people who avoid uncertainty, those who consider security, belonging somewhere, and warm human relations to be the most important in their life. While representatives of hedonistic values are much less characterized by eco-conscious behaviour. The research supports the assumption that green attitude does not necessarily result in environmentally conscious behaviour, which Nagy (2018) justifies with the presence of other influencing factors. It is also worth mentioning the inhibiting factors in the case of environmentally conscious behaviour. One of these factors is the issue of convenience, while the other is financial, which is listed as the second strongest limiting factor in the results of the mentioned research.

Tóth and Molnár (2014) defined environmentally conscious consumption as a function of two factors, which are the environmentally conscious attitude and the customer's eco-knowledge, i.e., that he or she is aware of the environmental effects of his or her consumption.

In the enforcement of eco-awareness, it can certainly also be determined that environmentally conscious consumption can result not only from the product's sustainable nature. Price, quality, packaging and ease of access play a role in the customer's decision.

The environmentally conscious consumer can be classified into two large groups:

- The first group is related to the basic beliefs, world view and values of individuals;
- the second group focuses on their specific forms of manifestation, on various behaviours that can be considered environmentally friendly (Berke et al., 2011).

At the same time, people cannot be divided into two groups according to which 'greens' belong to one and 'non-greens' belong to the other, but there are different shades of “green” (Berke et al., 2006).

Researchers approach the question of environmentally conscious consumer behaviour in different ways. Many authors, generally mentions the choice of environmentally friendly products and brands as a typical manifestation of environmentally conscious shopping. Others, on the other hand, also mention specific products, for example the purchase of energy-saving household appliances and light bulbs (Bakó et al., 2021), the rejection of products developed with the help of animal experiments and the rejection of disposable products (Akhtar, 2005). Some specifically examine the purchase of eco-labelled products (Jad'ud'ová et al., 2020), others specifically mention the purchase of recycled/recyclable products (Scott, Vigar-Ellis, 2014). Several researchers pay more attention to packaging, for example by examining consumers looking for environmentally friendly packaging, looking for biodegradable packaging or rejecting individually packaged products (Scott, Vigar-Ellis, 2014). Several authors highlight the refusal of plastic bags at the point of purchase as an environmentally friendly activity (Muposhi, et al. 2022). Many (Disdier et al., 2013), on the other hand, examine the willingness to pay as an indicator of environmental awareness. For example, a higher willingness to pay for products with an environmentally friendly label (Jad'ud'ová et al., 2020) environmentally friendly products (Scott, Vigar-Ellis, 2014) or safe food (Akhtar, 2005).

1 Methodology

The aim of the study was to assess the opinion and attitude of Slovakian consumers about their green consumer behaviour. On the other side, the research reflects on gender and generational differences too. The questionnaire survey was chosen from the quantitative research techniques. This method is helped to get sufficient data to work with. An online form of a questionnaire

(with the help of Google Docs platform) was used to reach as many people as possible. A snowball sampling was used while collecting the data between of 2022 March and April. After excluding incompletely completed questionnaires, 150 evaluable response was included in the final sample.

We formulated 2 assumptions and 1 hypothesis for our research:

- Assumption 1: Individuals consider themselves to be environmentally conscious, but do not act accordingly.
- Assumption 2: Males consider themselves to be more environmentally conscious than females
- Hypothesis 1: Members of the younger generation (Z) separate waste at a higher rate than members of the older generation (Y, X, Baby boomers)
 - H₀: There is no connection between generations and selection
 - H₁: There is a connection between generations and selection

Microsoft Excel and IBM SPSS software were used during the data evaluation and hypothesis testing.

2 Results

The following table (X.) shows the demographic characteristics of the respondents, which were evaluated based on the last questions of the questionnaire.

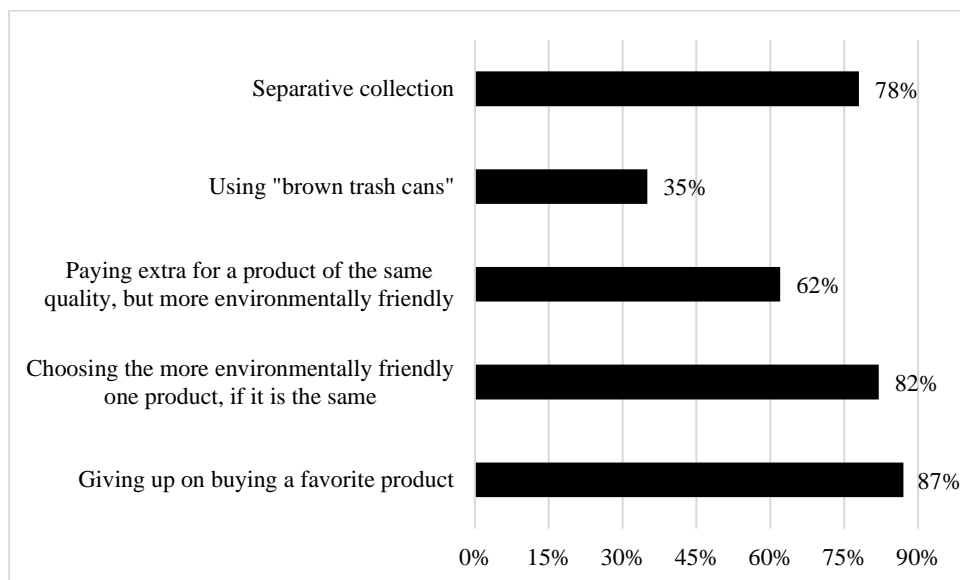
Tab. 1: The characteristics of the sample (N = 150)

Gender	Female	75%
	Male	25%
Generation	Baby boomer (1946-1964)	9%
	Generation X	31%
	Generation Y	31%
	Generation Z	29%
Education	Primary	7%
	Secondary/High school	83%
	College/University	10%
Net income	500 and below	41%
	500-1000	42%
	Above 1000	27%

Source: Own processing.

The first assumption of the study was: “Individuals consider themselves to be environmentally conscious, but do not act accordingly.” In this case, it was necessary to examine several questions. In the first question of the questionnaire, the respondents were asked whether they consider themselves to be environmentally conscious. Since the questionnaire used a five-point Likert scale for the mentioned question, only the answers of those who (N = 91) indicated an affirmative answer (“yes” 36% and “completely” 25%). The result is illustrated in Figure 1 below. It can be seen that, apart from the use of “brown trash cans”, more environmentally conscious behaviour is more typical in each case, so the first assumption can be rejected. Brown trash cans are used for sorting out biodegradable waste in Slovakia, since municipalities are obliged to enable these for residents' bio-waste from the beginning of 2021.

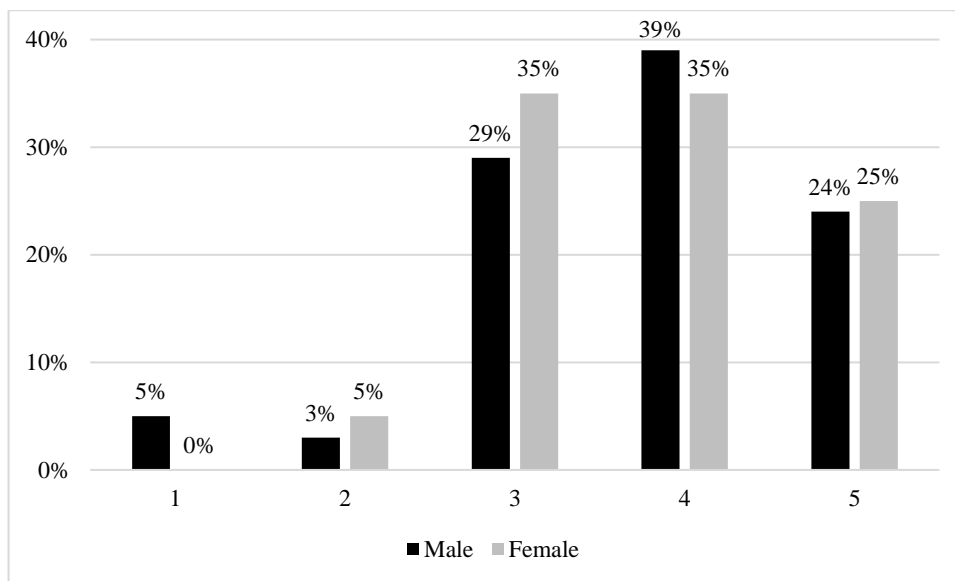
Fig. 1: Environmentally conscious actions



Source: Own processing.

The second assumption was the following: “Males consider themselves to be more environmentally conscious than females”. In this case, the combination of two questions were used. In the first question, respondents were inquired about how environmentally conscious consider themselves to be. In the case of the mentioned question, a five-point Likert scale was used, where 1 indicated “not at all”, while 5 indicated “completely”. The second question use, was about the gender of the respondents. The Figure 2 below clearly shows that the affirmative answers for women are 60% (35% “yes” and 25% “completely”), while for men 63% (39% “yes” and 24% “completely”). Based on this, the second assumption can be accepted.

Fig. 2: Environmental awareness by gender



Source: Own processing.

The hypothesis of the research was: “Members of the younger generation (Z) separate waste at a higher rate than members of the older generation (Y, X, Baby boomers)”

- H_0 : There is no connection between generations and selection
- H_1 : There is a connection between generations and selection

The data was coded using Excel, and then the calculations were performed using the SPSS program. For the hypothesis test, a cross-tabulation test – including Pearson's Chi-square test – was used. During the analysis, the H_0 hypothesis was examined, which assumes that there is no relationship between the two variables – belonging to a generation (independent, ordinal variable) and separate collection (dependent, nominal binary variable).

Tab. 2: Selective waste collection by generations

		Generation			Total
		Baby boomer and X	Generation Y	Generation Z	
Separate collection	No	8	9	20	37
	Yes	52	37	24	113
Total		60	46	44	150

Source: Own processing based on SPSS results

To test the hypothesis, the answers of two questions were observed. Since the number of individuals belonging to the Baby Boomer (1946-1964) generation was too low (13

individuals), they were added to the group consisting individuals belonging to the X generation (1965-1979). Thus, avoiding too low number of elements in each cell.

Tab. 3: Chi-Square value calculated using the SPSS program

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.024	2	0.001
Likelihood Ratio	14.362	2	0.001
Liner-by-Linear Associaton	13.289	1	0.000
N of Valid Cases	150		

Source: Own processing based on SPSS results

Pearson's Chi-square test is summarized in the table above. The degree of freedom ($df = 2$) and the significance level ($\alpha = 0.05$) are also necessary for the analysis. The critical value of the Chi-square distribution is 5.99 in case of degree of freedom 2 and significance of 0.05. Compared to this, the empirical value is 15,024. That means:

$$15.024 > 5.99$$

so

$$\chi^2 > \chi^2_{\text{krit.}}$$

Furthermore, the value of P (empirical significance level) is 0.001. This value is lower than the given significance level ($\alpha = 0.05$). Based on this, there is an actual relationship between the variables. There is a real connection between them, so the null hypothesis (H_0) can be rejected and alternative (H_1) can be accepted. Since there is a relationship between the variables, it is worth examining the strength of association.

Tab. 4: Value of Cramer's V

		Value	Asymp. Std. Error	Approx. T	Approx. Sig.
Nominal by Nominal	Phi	0.316			0.001
	Cramer's V	0.316			0.001
Ordinal by Ordinal	Gamma	-0.523	0.123	-3.564	0.000
N of Valid Cases		150			

Source: Own processing based on SPSS results

The value of Cramer's V is 0.316, which indicates a strong relationship ($df = 2$).

Conclusion

Overall, the conclusion can be drawn that the most typical behaviour is environmentally conscious. Also, it can be stated that belonging to a generational group is related to environmental awareness at a certain level.

The importance of environmental protection should be highlighted in various ways (e.g. at school, by parents in case of young consumers and by media for adults). The most talked about problem these days is “plastic”. It is not surprising, since its excessive accumulation is increasingly worrying, which is due to its decomposition time (e.g. in the case of plastic bags it is between 200 and 1,000 years). The plastic bags in stores should be permanently replaced by, paper-based or any other more environmentally friendly material.

In addition, the elimination of plastic bottles (they take about 450 years to decompose) could also be effective, in addition to bringing back the glass version that was proven in the past. On 1st of January, 2022 a possible mitigation solution was introduced in Slovakia with the possibility of returning plastic bottles. However, it is questionable how effective it will be and how the collected bottles will be recycled. It is not only plastic that is a problem, unfortunately, we are faced with “bleeding from several wounds” problems, which should really be eliminated or at least reduced (e.g. air pollution). Slovakia also introduced the use of “brown trash cans” which are designed for bio-waste. On the other side, it can be seen (Figure 1) that the utilization of these is at low level. This should be improved by the municipalities of towns and cities by drawing attention to the importance of bio-waste separation.

In future addition research should be done by increasing the number of respondents and also taking more demographic factors into account.

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