Determinants of Green Purchasing Process: Study of Czech Market

DOI: 10.12776/qip.v29i1.2127

Petra Koudelková, František Milichovský

Received: 22-12-2014 Accepted: 25-3-2025 Published: 31-3-2025

ABSTRACT

Purpose: In the last few years, there has been an increasing emphasis on eco-friendly behaviour and shopping. The change in societal perception is supported by the EU's contribution. The paper is focused on analysing green purchase behaviour in the Czech Republic and its determinants as the parameters of consumers' sustainable approach.

Methodology/Approach: The paper aims to specify relationships between gained factors and chosen demographic parameters (such as generation, gender, education, economic activity, and household income). To this end, we employed factor analysis, independence test χ^2, and correspondence analysis.

Findings: According to the results, we defined three factors and four dependencies – factor 2 and gender, and factor 3 and gender, education, and generation.

Research Limitation/Implication: Our limitation is connected to focus on the consumer situation in the Czech Republic concerning the green purchase process.

Originality/Value of paper: Green purchase behaviour helps to improve the purchasing process in connection to eco-friendly products in central Europe. GPB represents an important dimension of green sustainable consumption behaviour, regarding customer characteristics.

Category: Research paper

Keywords: green purchasing behaviour; green consumption; sustainable consumption; generations; determinant of green purchasing behaviour

Research Areas: Quality by Sustainability; Quality of Life

1 INTRODUCTION

Many marketing activities are contributing to economic growth and, at the same time, rising consumerism. Economic growth improves people's living standards, and at the same time, intensifies human activities (Yang et al, 2023) and is associated with an increase in purchases, the so-called increasing consumerism. Consumerism is closely linked to the erosion of nature in the form of pollution, the loss of biodiversity, the gradual depletion of natural resources, and the overall increase in pressure on the environment (Dai, Sheng, 2022). This advancing trend can be prevented by making purchasing decisions based on less consumption and green purchasing behaviour – GPB (Lin, Niu, 2018; Hazaea et al, 2022; Essiz et al., 2023). It has a direct link to climate change, which has emerged as a major issue for academics, practitioners, and governments (Shove et al., 2015). Climate changes caused by environmental destruction have an impact on people's lives (Khan et al., 2023). Consumers are increasingly inclined towards green consumerism, which is defined as consumer purchasing and non-purchasing decisions that are at least partially based on environmental or social criteria (Peattie, 2010). Typical manifestations of this are customer demands for sustainable products. Firms respond to this type of demand by implementing environmentally friendly/green practices to respond to current environmental degradation (Xu et al, 2022). The response of firms is greater and faster, while in others, such as in the case of Central European countries, the onset of response is slower. In the case of green product supply and demand, we should talk about green purchasing, which on the one hand, contributes to environmental protection (Yang et al, 2023) and represents one of the main factors for firms to achieve sustainable development. Also, we must point out that marketing communication plays a major role in influencing consumers. In the case of GPB, companies try to show that they have sustainable products and/or that they behave sustainably.

This article aims to investigate which factors are decisive for consumers in the examined market. The research involved people of Generation X, Y, and Z living in the Czech Republic for a long time. Among the respondents were Czech, Slovak, Polish and Ukrainian. These representatives of Central Europe have similar patterns of purchasing behaviour and are connected by a similar historical development based on the rule of communism, which marked these nations with a certain hostility and distrust in the state/government, and, subsequently also the European legislative apparatus (Hejlová, 2022) bringing many decisions on sustainable development and its communication (greenwashing).

2 THEORETICAL BACKGROUND

2.1 Sustainable consumption of GPB

Sustainable consumption (SC), which Wang understands as an umbrella term for many individual aspects such as improving quality of life, improving resource

efficiency, increasing the use of renewable energy, varying resources, minimizing waste, taking a life cycle perspective, and considering equity (Wang, 2014), but also consciously shopping. We can say that SC is about more than just shopping; it is about lifestyle and mind-set, avoiding overconsumption. It also focuses on caring for the environment and meeting the needs of future generations (Quoquab & Mohammad, 2020). Much of the existing literature provides suggestions on how to approach corporate sustainability management and how to motivate people to behave sustainably. However, the lifestyles of many consumers remain unsustainable in many ways as they continue to engage in overproduction and overconsumption (Backhaus et al., 2012). Thus, as can be seen, some authors directly link SC to consumption behaviour and frame the theory of Sustainable Consumption Behaviour (SCB), which is referred to as pro-environmental consumption behaviour, green consumption behaviour, or ethical consumption behaviour, among others. Sustainable consumption behaviour is related to the awareness of the long-term impact of an individual's consumption behaviour on the social and natural environment and is often referred to as environmentally friendly or socially responsible consumption behaviour (Carrington et al., 2010). The issue of SC behaviour is partially important for young people, who are committed to environmental protection and are often aware of issues related to environmental protection and society as a whole. Members of Generation Z have a high awareness of environmental issues (Brand et al., 2022) and are willing to pay a premium for sustainable product features (Tait et al., 2020) as opposed to Generation X who are more focused on quality and customer service (Brand et al., 2022).

2.2 Green purchasing behaviour

Green purchasing behaviour (GPB) began to form through green consumption (otherwise also sustainable consumption mentioned above) which is demonstrated by reducing consumption and buying environmentally friendly products (Lin & Niu, 2018). It is the positive selection and acquisition of products and services that most effectively minimize negative environmental impacts during their life cycle of production, transport, use, recycling, and disposal (Vazifehdoust et al., 2013). If we want to characterize GPB, we come across several different definitions. We can say that GPB is about purchasing eco-friends/environmentally friendly purchasing with minimum harm to the environment. GPB represents only one dimension of green (sustainable) consumption behaviour, yet it is important to see it in context. For example, Sharma & Foropon (2019) examined three types of green purchasing patterns depending on the level of environmental concern, namely: unconditional, conditional, and accidental. The first is unconditional GPB - this is driven by people with deep care for the environment (Trivedi et al., 2018). It is purchasing without conditions or terms, Conditional GPB is observed when consumers are convinced of the benefits of the purchase (price, quality, functionality, or convenience) compared to the environmental impact. The last level is the so-called accidental GPB when consumers do not aspire to care about

the environment and these purchases are accidental, caused by a discounted price offer or an incomparable quality advantage (Sharma and Foropon, 2019). GPB is associated with theories explaining human decision-making processes and behaviour. Among the best-known and frequently used is the theory of planned behaviour (TPB). TPB tends to be a frequently used theory to explain various physical and mental behaviours (Ajzen, 2020). Another theory we can mention here is the Theory of Reasoned Action (TRA). This theory suggests that consumer attitudes and personal standards towards environmental issues influence consumer behaviour and actions toward a clean environment. According to the study by Hazaea et al (2022), the most commonly discussed determinants of GPB include socio-demographic factors (age, gender, education, income, religion, race, residential area, and lifestyle), perception (e.g. perception values, perceived quality, perceived environmental and social responsibility), then family factors, consumption values, product related factors, attitudes, personal norms, green facets, regulatory, contextual factors, cognitive factors, motivation and emotions (Hazaea et al, 2022). These determinants are divided into:

- cognitive, psychological, and sociodemographic;
- product and advertising attributes;
- social and environmental factors;
- other factors such as green products and technology innovations, and marketing of green innovations.

3 METHODOLOGY

By relevant description of determinants of GPB, it is possible to define key areas that provide significant marketing activities bringing business advantages for the company to become more competitive. The right choice of appropriate marketing activities must be linked to a corporate business strategy that reflects sales requirements and can increase the number of purchases. In conjunction with marketing communications, it can then have a direct impact on GPB. The chosen marketing activities must be complex and theoretically significant, and they are often influenced by adequate managerial approaches. The purpose of the contribution is to specify marketing activities, which are related to the green purchasing behaviour of potential consumers in connection to their generation, gender, and education in the form of composite factors. This aim is focused on the specification of potential relationships concerning gained factors and generation, gender, and education. In connection with the main aim, we stated the hypothesis that "there is dependence between the chosen demographic characteristics and observed factors of customers' purchase preferences". Gained data were analysed and processed by the usage of the statistical program IBM SPSS Statistics 29 by application of the following statistical tests: 1) factor analysis; 2) Pearson's chi-squared test for independence; 3) correspondence analysis.

3.1 Variable specification

Marketing performance indicators help to specify both internal and external marketing activities in each company. However, there are various types of performance indicators, which depend on the area of activity of the company and are deemed as key items. The way to ensure the complex requirements of customers is the employment of a collection of relevant indicators, reflecting various points of view and needs (Lindgreen et al., 2012). For the paper, the chosen variables, used for verification, are as follows: x_1 – price; x_2 – quality; x_3 – brand; x_4 – corporate social responsibility; x_5 – community support by companies; x_6 – corporate pro-environmental behaviour; x_7 – fair trade; x_8 – ECO packaging; x_9 – appearance and design; x_{10} – place of origin for the product; x_{11} – composition-cosmetics; x_{12} – composition-food.

3.2 Sample description

These marketing variables were evaluated as part of a questionnaire survey focused on the purchase behaviour of consumers in individual generations (X, Y, Z). The research involved people staying in the Czech Republic for a longer time, not only Czech but also Slovak, Polish and Ukrainian. The individual members of these generations could have different priorities and habits when it comes to GPB. In addition, we can encounter views that say that young people (here Generation Z) are catalysts for change (Bentley et al, 2004) and, through their environmental awareness and attitude, can be a driving force for conservation (Caruana and Rosella, 2003). Each generation is defined by the single year of birth (Hertz, 2016): 1) Generation X: born from 1965 to 1979; 2) Generation Y: born from 1980 to 1999; 3) Generation Z: born since 2000.

3.3 Data collection

The contribution was based on the questionnaire survey in the Czech Republic in the period from June 2023 to November 2023. In total, we asked 2157 persons, of whom only 467 persons (266 females, 201 males) replied. The return rate is 21.65 %. According to individual generations, the frequencies are as below (19 persons did not mention their year of birth): generation X: 22 persons (18 F, 4 M); Generation Y: 237 persons (128 F, 109 M); Generation Z: 199 persons (117 F, 82 M). In the questionnaire, respondents answered questions regarding their purchasing habits in connection with the knowledge of both ecological and business-related topics; a dichotomous scale (variable with Yes/No answer) was applied.

3.4 Chosen statistics methods

To define composite indicators within key roles, we employed factor analysis. Before accepting the results of proven factor analysis, it is important to verify it with two relevant tests (Conti et al., 2014):

- Kaiser–Meier–Olkin (KMO) test is a coefficient whose value is in intervals (0 and 1); it is expressed as the rate of correlation coefficient and the sum of squares of correlations within the partial coefficient; acceptable values are over 0.5.
- Bartlett's test of sphericity estimates the null hypothesis within the identity matrix; acceptable values are 0.05.

The number of factors is determined by the loadings calculation of the eigenvalue indicator, which explains the complex variance of the input variables – the required value of the eigenvalue indicator is specified as 1 or higher. All gained factors must be evaluated by Cronbach's alpha. The value of Cronbach's alpha rate indicates inter-correlation between input variables as the reliability rate of gained factor in the connection to analysed dimensions in factor analysis – the interval between 0 and 1; a value close to 0 describes a situation without correlation between individual variables; at the same time, if the value is under 0.5, then is considered internal consistency at a bad level. Otherwise, a value close to 1 refers to a robust correlation. Values over 0.7 are considered excellent. If that factor reaches a value of 0.5 or higher, it may be acceptable for the next calculation (Cronbach, 1951). As the final step of application factor analysis, it is recommended to recalculate the loading values of the component matrix to ensure a sum of 1.

We supposed that gained factors are closely connected to descriptive variables. We used Pearson's test of independence (χ^2), which assesses the statistical dependence between two variables, and employed the Pearson distribution. In case the significance level α is stated, the value is tested by the critical range Wα. If the gained value belongs to a crucial field, then the null hypothesis is rejected (there is no dependence) and the alternative hypothesis is accepted – there is dependence. After establishing a significant relationship between two variables at a relevant level, the power of dependence should be defined by the contingency coefficient. The contingency coefficient reaches values in the interval 0 and 1.

The correspondence analysis (CA) is based on the description of the relation between just two nominal variables. For calculation, there is a pivot table, which includes category combinations at significant levels. The CA helps to define the association rate, typically represented by Pearson's chi-square, which verifies the significance of the CA. By Pearson's chi-square, it is possible to remove zeros and specify relations between rows and columns (Beh and Lombardo, 2012). For the application of CA, it is necessary to have a two-dimensional pivot table, which has categorical variable A with r values (a_1, a_2, a_3, …, a_r) and categorical variable B with ***s*** values (b_1, b_2, b_3, …, b_s). After observation of the cases, it is possible to define a table with two-dimensional separations of both variables. In that table, there is an applied frequency with n_{ij} cases, which describes the intersection of input variables by several observations, in which a_i and b_j are (Beh and Lombardo, 2014).

4 RESULTS AND DISCUSSION

The key statistical method for the application of factor analysis is correlation analysis of input variables as a process to define key parameters, supporting effectiveness in the chosen area. On defined variables, we employed factor analysis to specify key factors. The factor analysis has to meet two basic indicators, which allow the use of factor analysis on chosen data. The value of KMO reached 0.728, which should be considered very strong. The value of Bartlett's test is 0.000 and it should be acceptable. By the application of factor analysis, we got three factors, in which input variables were divided. By factor analysis, we got the component matrix and its rotated version, in which we divided individual inputs into one of the factors:

- Factor 1: corporate social responsibility, community support by companies, corporate pro-environmental behaviour, fair trade, ECO packaging;
- Factor 2: place of origin for products, composition – cosmetics, composition – food;
- Factor 3: price, quality, brand, appearance and design.

Both values of the rotated and component matrices are displayed in Table 1. All gained factors were evaluated using Cronbach's alpha, which indicated an acceptable level. The factor 1 reaches a value of 0.685, which represents the average value. The values for factor 2 (0.551) and factor 3 (0.576) are low but still acceptable.

Table 1 – Dividing variables into gained factors. Source: own research

	Factor 1		**Factor 2**		**Factor 3**	
	rot. matrix	***comp. matrix***	***rot. matrix***	***comp. matrix***	***rot. matrix***	***comp. matrix***
price	0.112	0.560	0.330	0.387	**0.622**	**0.210**
quality	0.199	0.694	0.501	0.356	**0.567**	**0.064**
brand	0.005	0.334	0.026	0.380	**0.672**	**0.443**
social responsibility	**0.709**	**0.507**	0.031	-0.484	0.053	0.123
community support	**0.504**	**0.330**	-0.054	-0.356	0.069	0.163
ecological behaviour	**0.806**	**0.578**	0.075	-0.561	0.014	0.079
fair trade	**0.627**	**0.469**	0.084	-0.423	0.019	0.049
ECO packaging	**0.629**	**0.502**	0.166	-0.412	-0.017	-0.034
appearance and design	-0.031	0.301	-0.058	0.422	**0.757**	**0.556**
place of origin	0.041	0.407	**0.525**	**0.250**	0.147	-0.266
composition – cosmetics	0.096	0.472	**0.746**	**0.172**	-0.070	-0.564
composition – food	0.018	0.543	**0.809**	**0.353**	0.110	-0.496

According to the values of the component matrix, we have to recalculate them for chosen variables in each factor. The recalculated values serve as coefficients, describing the importance of individual variables in a factor. Formulas for individual factors are as follows:

$$\text{Factor } 1 = 0.2125 \times x_4 + 0.1383 \times x_5 + 0.2422 \times x_6 + 0.1966 \times x_7 + 0.2104 \times x_8 \quad (1)$$

$$\text{Factor } 2 = 0.3226 \times x_{10} + 0.2219 \times x_{11} + 0.4555 \times x_{12} \quad (2)$$

$$\text{Factor } 3 = 0.1650 \times x_1 + 0.0503 \times x_2 + 0.3480 \times x_3 + 0.4368 \times x_9 \quad (3)$$

These formulas should be applied for each potential customer who wants to react to marketing factors in connection with ecological elements. All three factors meet the basic conditions in the definition of the effectiveness of purchase behaviour parameters. In the simple application of gained factors, it is difficult to generalize because there could be various personal elements influencing the purchase decision-making process. Therefore, we focused on the potential connection between factors and basic personal parameters such as gender, economic activity, education, household income, and generation. We used Pearson's chi-square test as a tool for defining potential dependencies between two chosen variables. By the results obtained from the Pearson's chi-square test, we defined fifteen potential relationships between chosen personal parameters and gained factors.

The reliability of individual pairs is given by their significance, with a value under 0.05. From that amount of potential pairs, we confirmed only four dependencies (see Table 2), which confirms the alternative hypothesis.

Table 2 – Pearson's chi-square test between gained factors (by quartiles) and chosen basic parameters of respondents. Source: own research

		Gender	**Economic activity**	**Education level**	**Household income**	**Generation**
Factor 1	*sign.*	0.086	0.568	0.241	0.416	0.749
	cont.coef.	0.086	0.168	0.195	0.196	0.087
Factor 2	*sign.*	**0.015**	0.230	0.232	0.131	0.343
	cont.coef.	**0.160**	0.222	0.222	0.253	0.139
Factor 3	*sign.*	**0.039**	0.160	**0.002**	0.490	**0.004**
	cont.coef.	**0.117**	0.172	**0.239**	0.155	**0.181**

4.1 Generation of consumers

According to the results of the CA application on defined factors and generation of the respondents, we defined three connections between factors and generation. Individual descriptions of the figures, which show the connection between factors

and generations, are below (It should be mentioned here that this is a representation of a relationship without reference to "signification"):

- Figure 1 shows two potential connections. The first is that Generation Z is close to values in quartile 1 (quadrant 4), which means they are connected to their own "social bubble", and also they are not interested in social activities and social responsibility, fair trade, or corporate pro-environmental behaviour. Next, generation Y reaches values close to quartile 3 (q3), which should be considered in opposition to the behaviour of Generation Z.

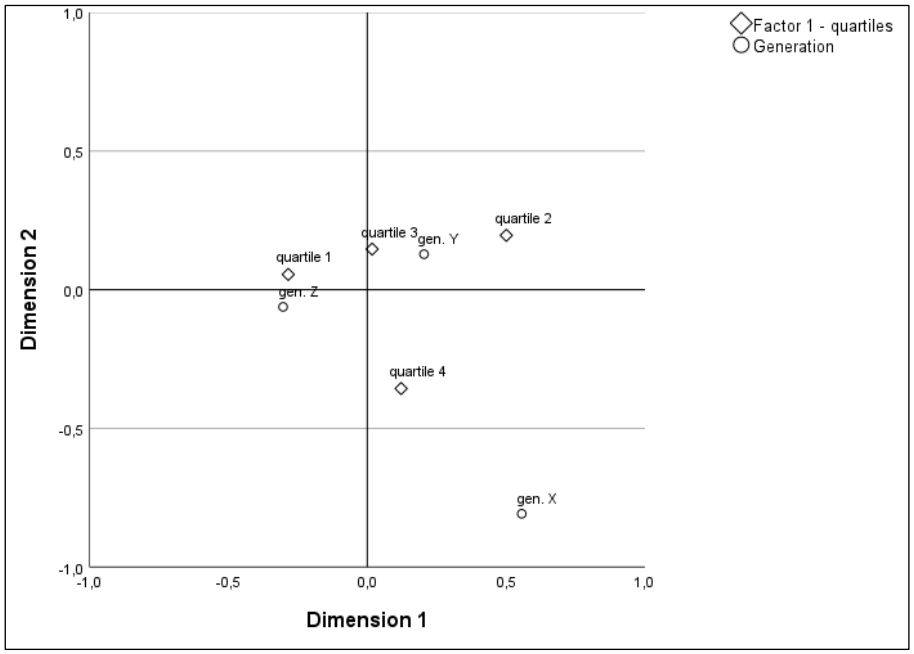

Figure 1 – Correspondence map for factor 1 and generation

Last, generation X is located far from the rest and usually, they do not care about social activities, responsibilities, or ecological elements; this generation typically cares about their own social environment and relationships.

- Figure 2 also includes two potential connections between generations and factor's quartiles. The closest connection is between generation Z and quartile 2 (q3). That means that this generation is interested mainly in product composition which has been growing in society in recent years. Generation Y reached similar connections to quartiles 3 and 4 (q1), which meant mainly their interest in good-quality products. The issues of product composition in this generation are not as relevant as in generation Z. Finally, the connection of generation X (q4) is far from the nearest quartile 4. This generation does not care about the product composition or place of origin - generally, they focus on price (Noble et al., 2009).

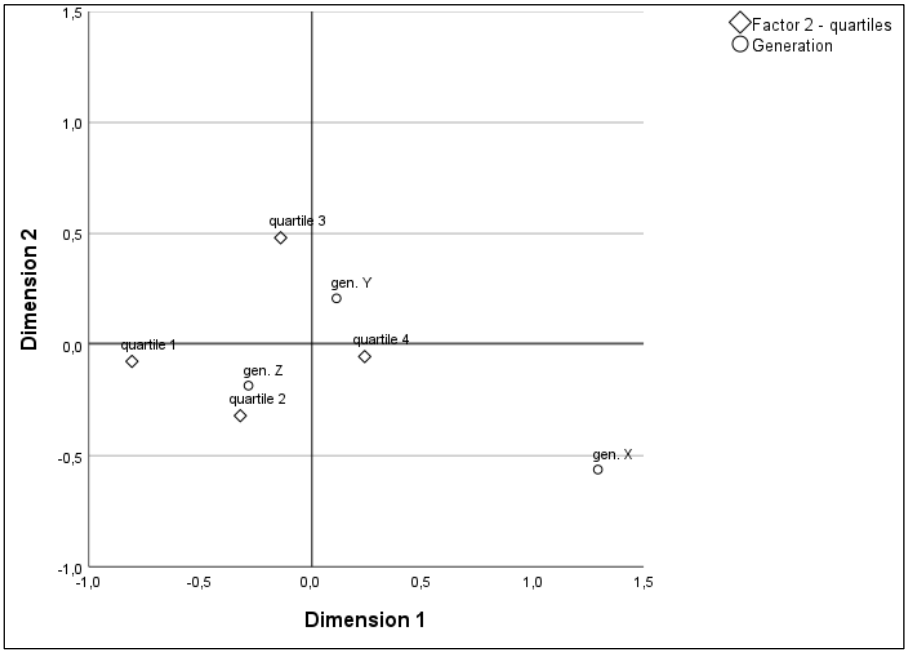

Figure 2 – Correspondence map for factor 2 and generation

- In Figure 3, there are close connections of all generations. The most positive connection is for generation Z (quadrant 1) with quartile 3, what we could describe as the focus on brands of products representing high-quality production. The focus and good orientation among brands is because they are used to navigating the internet, which is a natural space for brands. This results in Generation Z having extensive brand knowledge, developed brand preferences, and stronger brand involvement in self-concept (Sprott et al., 2009).

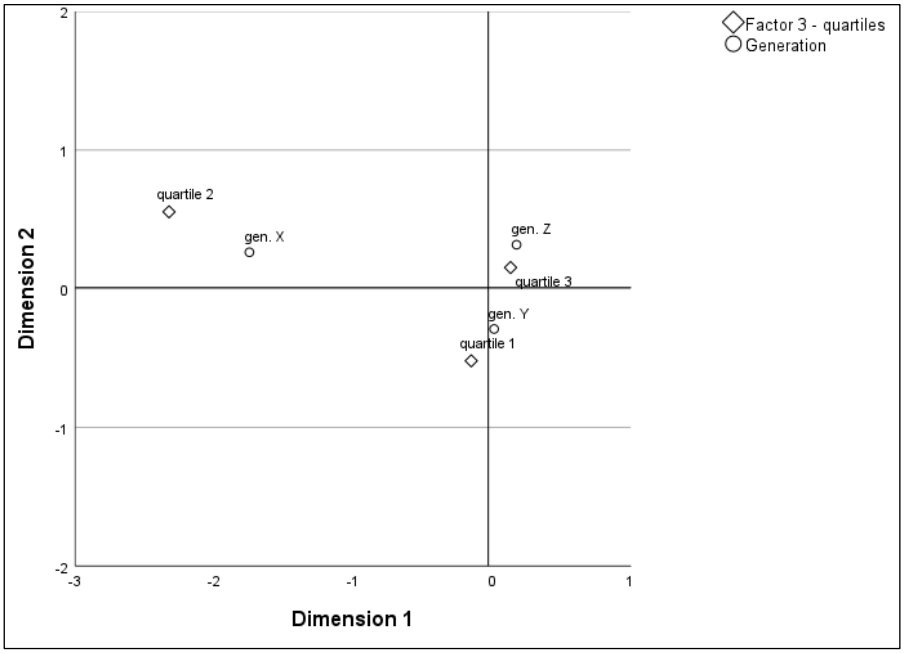

Figure 3 –Correspondence map for factor 3 and generation

The second connection is generation Y (quadrant 4) with quartile 1. This group of customers is interested mainly in the quality and price of the products - they prefer more functionality of the product to the design. The last connection is between Generation X (quadrant 2) and quartile 2. These people focus mainly on the price of the products, because their view of brands is sceptical, resulting in lower brand loyalty than other generations (Lissitsa and Kol, 2016).

4.2 The education level of consumers

The next characteristic is education, which statistically depends on Factor 3 (price, quality, brand, appearance, and design), as is shown in Table 2. In the case of connecting education to the factor, we applied CA to show a connection with Factor 3. As we can find in different studies, education is also one of the personal characteristics with a positive effect on GPB (Witek and Kuźniar, 2021), and our research has reached similar results. In addition, the higher environmental awareness, ecological awareness, higher ethical values, as well as social norms, the higher the chances that consumers will shop sustainably (Lin and Niu, 2018). A similar result was also reached in a 2016 study (Suki, 2016).

4.3 Gender of consumers

As we can see in Table 2, Factor 2 (place of origin for products, composition – cosmetics, composition – food) and Factor 3 (price, quality, brand, appearance, and design) are statistically dependent on gender. Already in 2009, Lee (2009) conducted a study about the impact of gender on enhancing purchase intentions, that women tend to buy organic/green products more than men. The study of Sreen et al. (2018) came up with a similar result. According to all cases, we can describe that females purchase more in comparison to males (Larios-Goméz, 2019). In connection with previous studies, we also analysed the relationships of input variables to gender. From the results we found out, that:

- There are almost similar / quite close high results of persons, who make purchase decisions in connection to traditional marketing parameters such as price, quality, and design.
- In the case of social parameters (CSR, community support) there are also similar results, but at a really low-value level.
- Females are more focused on products with a connection to bio/eco parameters. Also, they care more about the product composition (food, cosmetics) because they usually do more shopping. That should be the reason why females have a stronger position in making purchase decisions in comparison to males. The value for fair trade is lower, but very close.

4.4 Managerial application

The results of the research can be well applicable to marketing specialists. At the same time, the determinants of GPB are perceived in marketing as one of the important elements with which marketing works. From the research, we obtained interesting results regarding several marketing elements tested. These include, for example, price. Generation X is, according to these declarations, the most price-sensitive generation and it is therefore advisable to offer them products that match their purchasing possibilities and requirements. Generation Y and Generation X are less sensitive. Price is important because it can contribute to the growth or decline of green purchases. Other determinants of GPB that also serve as marketing elements/tools, and marketers can use them to promote the growth of green purchases, are logos. Other elements/tools that appear interesting in terms of marketing applications to promote GPB include eco packaging (more often sought by women) and product design. The determinants, such as social responsibility or community support, are not as crucial for consumers, unlike corporate pro-environmental behaviour. This may also be because CSR activities relate to the company and, therefore, may not be visible in the product.

5 CONCLUSION

In the literature, we can find studies focusing on testing the determinants of GDP. However, some of them are older, such as the study by Liobikiene and Bernatonien (2017) from 2011-2017, and may not correspond to the current societal setting. Also, many of the studies conducted focus on China (Chen and Deng, 2016) and other Asian markets or countries in Southern and Western Europe (excl. study by Witek and Kuźniar, 2021) or America (Hazaea et al., 2022). Thus, the literature lacks a view of the Central European market. This paper should fill this lack, and therefore, not only Czechs but also respondents from neighbouring countries who have been in the Czech Republic for a longer period were contacted for the research. Typically, these are Slovaks, Poles, and Ukrainians. However, we do not distinguish between these nationalities in the research. The representation of different nationalities thus gives us a more holistic view of the Central European market. However, this advantage may also be a limitation of the research, as representatives of other nationalities may have been influenced by a longer stay in the Czech Republic. In addition to understanding the Czech language, they may have already been more accepting of Czech culture and views, thus reducing any differences in access to green purchasing. Our research focused on determinants of GDP and the relation between these determinants and personal characteristics such as education, gender, and generation of potential customers in the Czech market. In general, a significant relationship can be found between generations and green purchasing of the generations tested (X, Y, Z). Generation Z is characterized by a positive relationship with the environment, but Generation X, on the other hand, shows a greater relationship with social issues. Education is equally important. Higher educational attainment has a positive effect on GPB. Some

studies have tested education in the context of awareness of environmental topics (Cai et al., 2017) although this was not done in this case. However, it is important to mention the fact that in the Czech Republic, children are taught in primary schools and many secondary schools have special courses focused on environmental topics education. This fact may have influenced the final result. Nevertheless, there is a study by Lin and Niu (2018), found that environmental knowledge does not correlate with green shopping. In terms of gender, we found out that women are generally more inclined to green purchasing, but we do not know which product categories these are. Dividing products into categories (e.g., food, clothing, cosmetics, garden) and looking at the relationship between male and female green purchasing behaviour in each category could yield interesting results and contribute to the theoretical knowledge in the field of GPB.

REFERENCES

Ajzen, I. 2020. The theory of planned behaviour: Frequently asked questions. *Human Behavior and Emerging Technologies*, 2(4), 314-324. https://doi.org/10.1002/hbe2.195

Backhaus, J., et al. 2012. *Sustainable lifestyles. Today's facts and tomorrow's trends: D1.1 Sustainable lifestyles baseline report*. SPREAD.

Beh, E. J., Lombardo, R. 2014. *Correspondence analysis: Theory, practice and new strategies*. John Wiley & sons.

Beh, E. J., Lombardo, R. 2012. A genealogy of correspondence analysis. *Australian & New Zealand Journal of Statistics*, 54(2), 137-168. https://doi.org/10.1111/j.1467-842X.2012.00676.x

Bentley, M., et al. 2004. *Sustainable consumption: Young Australians as agents of change*. Canberra, Australia: National Youth Affairs Research Scheme.

Brand, B. M., et al. 2022. The importance of sustainability aspects when purchasing online: comparing generation X and generation Z. *Sustainability*, 14(9), 5689. https://doi.org/10.3390/su14095689

Cai, Z., et al. 2017. Eco-label credibility and retailer effects on green product purchasing intentions. *Forest Policy and Economics*, 80, 200-208. https://doi.org/10.1016/j.forpol.2017.04.001

Carrington, M. J., N et al. 2010. Why ethical consumers don't walk their talk: Towards a framework for understanding the gap between the ethical purchase intentions and actual buying behaviour of ethically minded consumers. *Journal of Business Ethics*, 97(1), 139-158. https://doi.org/10.1007/s10551-010-0501-6

Caruana, A., Rosella, V. 2003. Children's perception of their influence over purchases: the role of parental communication pattern. *Journal of Consumer Marketing*, 20(1), 55-66. https://doi.org/10.1108/07363760310456955

Chen, K., Deng, T. 2016. Research on the green purchase intentions from the perspective of product knowledge. *Sustainability*, 8(9), 943. https://doi.org/10.3390/su8090943

Conti, G., et al. 2014. Bayesian exploratory factor analysis. *Journal of Econometrics*, 183(1), 31-57. https://doi.org/10.1016/j.jeconom.2014.06.008

Cronbach, L. J. 1951. Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297-334. https://doi.org/10.1007/BF02310555

Dai, J., Sheng, G. 2022. Advertising strategies and sustainable development: The effects of green advertising appeals and subjective busyness on green purchase intention. *Business Strategy and the Environment*, 31(7), 3421-3436. https://doi.org/10.1002/bse.3092

Essiz, O., et al. 2023. Exploring the value-action gap in green consumption: Roles of risk aversion, subjective knowledge, and gender differences. *Journal of Global Marketing*, 36(1), 67-92. https://doi.org/10.1080/08911762.2022.2116376

Hazaea, S. A., et al. 2022. Green purchasing: Past, present and future. *Sustainability*, 14(9), 5008. https://doi.org/10.3390/su14095008

Hejlová, D. 2022. Transitioning from communist propaganda to government communication in the Czech Republic. In Minelli, M. C., et al. (eds.). *Communication theory and application in post-socialist contexts*, 99-116. New York: Lexington Books.

Hertz, N. 2016. Think millennials have it tough? For 'generation K', life is even harsher. *The Guardian*. [online] Retrieved from https://www.theguardian.com/world/2016/mar/19/think-millennials-have-it-tough-for-generation-k-life-is-even-harsher

Khan, S. A. R., et al. 2023. Green capabilities, green purchasing, and triple bottom line performance: Leading toward environmental sustainability. *Business Strategy and the Environment*, 32(4), 2022-2034. https://doi.org/10.1002/bse.3234

Larios-Goméz, E. 2019. Green purchase behavior: A study regarding Mexican X generation consumers. *La Mercadotecnia Desde Una Perspectiva México-Colombia*, 7(4), 6-19.

Lee, K. 2009. Gender differences in Hong Kong adolescent consumers' green purchasing behavior. *Journal of Consumer Marketing*, 26(2), 87-96. https://doi.org/10.1108/07363760910940456

Lindgreen, A., et al. 2012. Value in business and industrial marketing: Past, present, and future. *Industrial Marketing Management*, 41(1), 207-214. https://doi.org/10.1016/j.indmarman.2011.11.025

Lin, S. T., Niu, H. J. 2018. Green consumption: Environmental knowledge, environmental consciousness, social norms, and purchasing behavior. *Business Strategy and the Environment*, 27(8), 1679-1688. https://doi.org/10.1002/bse.2233

Liobikiene, G., Bernatoniene, J. 2017. Why determinants of green purchase cannot be treated equally? The case of green cosmetics: Literature review. *Journal of Cleaner Production*, 162, 109-120. http://doi.org/10.1016/j.jclepro.2017.05.204

Lissitsa, S., Kol, O. 2016. Generation X vs. generation Y - A decade of online shopping. *Journal of Retailing and Consumer Services*, 31, 304-312. https://doi.org/10.1016/j.jretconser.2016.04.015

Noble, S. M., et al. 2009. What drives college-age generation Y consumers? *Journal of Business Research*, 62(6), 617-628. https://doi.org/10.1016/j.jbusres.2008.01.020

Peattie, K. 2010. Green consumption: Behavior and norm. *Annual Review of Environment and Resources*, 35, 195-228. https://doi.org/10.1146/annurev-environ-032609-094328

Quoquab, F., Mohammad, J. 2020. A review of sustainable consumption (2000 to 2020): What we know and what we need to know. *Journal of Global Marketing*, 33(5), 305-334. https://doi.org/10.1080/08911762.2020.1811441

Sharma, A., Foropon, C. 2019. Green product attributes and green purchase behavior: A theory of planned behavior perspective with implications for circular economy. *Management Decision*, 57(4), 1018-1042. https://doi.org/10.1108/MD-10-2018-1092

Shove, E., et al. 2015. Conceptualizing connections: Energy demand, infrastructures and social practices. *European Journal of Social Theory*, 18(3), 274-287. https://doi.org/10.1177/1368431015579964

Sprott, D., Czellar, S., Spangenberg, E. 2009. The importance of a general measure of brand engagement on market behavior: Development and validation of a scale. *Journal of Marketing Research*, 46(1), 92-104. https://doi.org/10.1509/jmkr.46.1.92

Sreen, N., et al. 2018. Impact of culture, behavior and gender on green purchase intention. *Journal of Retailing and Consumer Services*, 41, 177-189. https://doi.org/10.1016/j.jretconser.2017.12.002

Suki, N. M. 2016. Consumer environmental concern and green product purchase in Malaysia: Structural effects of consumption values. *Journal of Cleaner Production*, 132, 204-214. https://doi.org/10.1016/j.jclepro.2015.09.087

Tait, P., et al. 2020. Comparing generational preferences for individual components of sustainability schemes in the Californian wine market. *Applied Economics Letters*, 27(13), 1091-1095. https://doi.org/10.1080/13504851.2019.1661952

Trivedi, R. H., et al. 2018. Causality analysis of media influence on environmental attitude, intention and behaviors leading to green purchasing. *Journal of Cleaner Production*, 196, 11-22. https://doi.org/10.1016/j.jclepro.2018.06.024

Vazifehdoust, H., et al. 2013. Purchasing green to become greener: Factors influence consumers' green purchasing behavior. *Management Science Letters*, 3(9), 2489-2500. https://doi.org/10.5267/j.msl.2013.08.013

Wang, P., et al. 2014. Factors influencing sustainable consumption behaviors: A survey of the rural residents in China. *Journal of Cleaner Production*, 63, 152-165. https://doi.org/10.1016/j.jclepro.2013.05.007

Witek, L., Kuźniar, W. 2021. Green purchase behavior: The effectiveness of sociodemographic variables for explaining green purchases in emerging market. *Sustainability*, 13(1), 209. https://doi.org/10.3390/su13010209

Xu, J., et al. 2022. Estimating the efficiency and potential of China's steel products export to countries along the "Belt and Road" under interconnection: An application of extended stochastic frontier gravity model. *Resources Policy*, 75, https://doi.org/10.1016/j.resourpol.2021.102513

Yang, X., et al. 2023. Achieving sustainability: Determinants of conscious green purchasing behavior during the COVID-19 pandemic. *Business Strategy and the Environment*, 32(4), 2229-2244. https://doi.org/10.1002/bse.3245

ABOUT AUTHORS

Ing. Petra Koudelková, Ph.D. ORCID: 0000-0002-1033-2370 (P.K.) – Department of Marketing Communication and Public Relations, Institute of Communication Studies and Journalism, Faculty of Social Sciences, Charles university, petra.koudelkova@fsv.cuni.cz

Ing. František Milichovský, Ph.D., MBA, DiS. ORCID: 0000-0003-3845-4633 (F.M.) – Department of Management, Faculty of Business and Management, Brno University of Technology, frantisek.milichovsky@vut.cz

AUTHOR CONTRIBUTIONS

Conceptualisation, P.K., F.M.; Methodology, F.M.; Validation, F.M.; Formal analysis, F.M.; Investigation, P.K., F.M.; Data curation, P.K., F.M.; Original draft preparation, P.K., F.M.; Review and editing, F.M.; Visualization, F.M.; Supervision, P.K., F.M.

CONFLICTS OF INTEREST

The authors declare no conflict of interest.