ARTICLE

WILLINGNESS OF GEN Z MEMBERS TO GIVE UP COMFORT IN THE FIELD OF SUSTAINABILITY, WASTE SORTING, ELECTROMOBILITY: A REPRESENTATIVE STUDY IN CZECHIA

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Abstract

A frequently discussed topic nowadays, especially in business, marketing or human resources, is the generation gap. Young people have a relatively strong environmental sense, which is also reflected in their choice of employment. When formulating the hypotheses, we proceeded from theories of social capital. Gen Z, which has grown up and matured in a fully digital world, attracts a lot of attention. This is evidenced by the many expert studies on the subject. One important reason for studying the behaviour and attitudes of Gen Z is their significant purchasing power. These people are on the rise or approaching the peak of their professional careers. In this paper, we focus on the topic of sustainability, attitudes towards waste management and electric vehicles. The paper aims to contribute especially to the analysis of the relationship between the declared benefits of the researched topics and the willingness to give up one's comfort to fulfil them. The analysis is based on primary data collected in 2023. The analysis conclusively confirms that the topic of sustainability is important for the young generation. Representatives of Gen Z exhibit a high level of critical thinking in the area of waste sorting and, in particular, the environmental benefits of electric vehicles. They are interested in real environmental benefits. The willingness to give up one's comfort is lower than the declared benefits of the phenomenon.

Implications for Central European audience: This paper addresses the topic of sustainability through the eyes of the young generation, specifically members of Gen Z. This is a topic of great importance for the European economy. The economic sector is forced to respect both EU regulations and the market environment, which, as our research shows, is not always in line with these regulatory interventions. Our research reflects the opinions of the young population in Czechia. Scholars can use the results for follow-up research studies, and so can practitioners in the field of marketing, strategic business orientation or human resources, especially when setting up communication with the young generation.

Keywords: Gen Z; sustainability; waste sorting; electric vehicles; comfort reducing
JEL Classification: J40, M30

Introduction

In today's turbulent world, a frequent topic of both professional and commercial studies is the intergenerational difference in attitudes to issues relating to work requirements, attitudes to consumption behaviour and opinions on the future direction of society. Older generations often have an uncomprehending or distant attitude towards Gen Z (a frequently used abbreviation for Generation Z) and have certain reservations about its behaviour. However, a certain level of distrust or negative attitude is often evident at the beginning of any new phenomenon that brings something new and unknown. Growing up with access to the internet is something that no other generation has experienced, so it is no surprise that members of Gen Z come with different approaches to communication, education, job requirements and overall perception of the world. It is a world that changes and evolves every day at a pace never seen before, and Gen Z members are prepared for it with a great deal of flexibility and the ability to learn and collaborate.

The fact that Gen Z differs significantly in attitudes and lifestyles compared to previous generations was highlighted, for example, by Chen et al. (2023). Gen Z is largely of working age and will have a significant impact on the world in the coming decades. Understanding and respecting its unique characteristics and perspectives is important for the future of us all. The different perceptions of the economic environment by Generations X, Y and Z were also described by Gosztonyi (2023). Our internal research shows that social responsibility and a desire to solve environmental or societal problems are some of the important factors that members of Gen Z are concerned with. Examples could be electromobility, waste sorting or company culture. The growing need to study the behaviour of Gen Z, especially because of its increasing influence on the consumer and labour market, was highlighted, for example, by Ganguli et al. (2022).

Motivations for exploring the behaviour of Gen Z are evident from two perspectives: from the above conclusions and recommendations of other authors and from the fact that most of the scholarly studies on Gen Z were developed one to two years ago and it is not very rare to find an earlier year of publication. This is therefore a new field for further scholarly research. This has been confirmed, for example, by the systematic literature review articles by Loring and Wang (2022), Saxena and Mishra (2021) or Barhate and Dirani (2022), which show that the first scholarly publications exclusively focused on Gen Z started to appear around 2017 and later. Until then, of course, the term Gen Z existed for the concept of the younger generation, but it rarely appeared as a separate topic of scholarly papers. This paper aims to contribute to the rapidly expanding body of literature on Gen Z consumer and environmental behaviour. We have chosen relatively narrow topics on purpose, namely waste sorting and electromobility. The reason is to enrich the existing range of articles focusing on Czechia with this narrowly focused topic. We use a combination of conventional quantitative research techniques with a large number of open-ended questions as a contribution, which allows, in addition, the simulation of quantitative insight; to accompany the "how much" type outputs with many "why" explanations.

This paper aims to provide information on the extent to which the willingness to give up one's comfort corresponds to the declared attitude towards sustainable development.

Another significant reason why Gen Z is often the subject of research and study is its significant purchasing power. This is a young generation of consumers. Younger members

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of Gen Z are approaching working age, while older members are building careers and are in a period when their incomes and savings are growing. This was mentioned, for example, by Kovács et al. (2024), who said, "The practical implication of our research lies in the fact that the members of Generation Z might have significant purchasing power in the coming decades, so it is crucial that businesses better understand their attitude" (p. 36). Given that our research focuses on the attitudes of the younger generation towards consumption behaviour and sustainability, it is also worth mentioning in support of this research area, for example, the paper of Abrar et al. (2021), which stated that Generation Z consumers are more likely to be aware of environmental problems and motivated to act on those issues.

For marketers and HR managers, understanding this discrepancy is crucial for several reasons. Gen Z is not only a key consumer segment, but also an emerging workforce. These young people often present themselves as strongly value-driven, with environmental protection among their top priorities. For marketers, this means the need to understand whether and how deeply these values influence purchasing behaviour. Indeed, it is not enough to communicate environmental sustainability, it is also necessary to find out how much Gen Z is willing to rethink their habits because of these values, for example by choosing products that may be more expensive, less convenient or less accessible.

HR managers tasked with attracting and retaining young talent need this information to develop strategies that resonate with their values and expectations. For example, if it becomes apparent that a stated environmental mindset does not always match practical behaviour, it may be important to adjust the approach to communicating company culture to make it more authentic and in line with reality. HR managers can also use these insights to create work environments and benefits that not only align with Gen Z's stated values but also realistically reflect their actual behaviour and motivations.

Understanding the links between stated values and actual behaviour is therefore essential for effective marketing campaigns and a successful HR strategy that not only attracts Gen Z but also builds their loyalty and satisfaction in both the marketplace and the work environment.

When it comes to environmental behaviour, research shows that while Gen Z strongly declares an interest in ecology and sustainability, in practice they often face a conflict between their ideals and their daily decisions. Uncovering such contradictions in terms of their attitudes and declarations towards pro-environmental market behavioural patterns was the focus of, for example, Andruszkiewicz et al. (2023). Revealing the gap between attitudes and Gen Z behaviour was also addressed, among others, by Nikolić et al. (2022).

Young Gen Z employees expect employers to reflect their values. Crucial aspects of talent attraction and retention were examined, for example, by Vieira et al. (2024). They highlighted the need for further research to explore which issues are important to Gen Z.

The above information, including the literature review, led us to target this paper and determine the research gap. The questions analysed in this paper address three areas of ecological behaviour of Gen Z. However, the leading motive – a central research line of this paper – is to analyse the gap between Gen Z values and actual behaviour in the context of environmental sustainability, which has key implications for marketing strategies and HR

approaches. The paper highlights the need to understand this gap so that marketers can better target the preferences of this generation and HR managers can more effectively tailor their strategies to attract and retain young talent in line with their stated values and actual needs.

This paper analyses the attitudes of young people applying for jobs, often for the first time in their careers. For this reason, we focus on the age range of 19–27 years. The age range of the entire Gen Z is broader and includes people born from the mid-1990s to 2010.

The strong connection between topics such as sustainability, consumption, ecology, strategic business and marketing is evident from the previous paragraphs. Thorough knowledge of the behaviour of the target group, in this case, members of Gen Z, is indispensable for the right strategy, segmentation, communication mix and product offering.

1 Literature Review

In the literature, authorse.g., such as Thoumrungroje and Suprawan (2024) classify Gen Z as “digital natives, [distinguishing] itself as the most educated, mobile and connected consumer group”“ (p. 432). The importance of examining not only consumer behaviour was mentioned by Bulin et al. (2024): "significant change in consumer behaviour can be observed worldwide, which has a considerable impact on various industries" (p. 1). The fact that Gen Z is an exceptionally large consumer group was also mentioned by Li and Siti (2023). Andruszkiewicz et al. (2023) pointed out that representatives of that group emphasized green aspects when making consumer choices. The authors continue to say "this goes hand in hand with the perception that Gen Z is less ‘me’-oriented than their parents and grandparents" (p. 4). The importance of exploring access to sustainability for different generational cohorts was also highlighted by Pandita et al. (2023). "Gen Z presents favourable characteristics to be a prominent potential audience for sharing economy" (Palomo-Domínguez et al., 2023).

Maria and Bredice (2023) said, "Sustainable food consumption opinions and the behaviour of today’s younger generations can reveal future demand prospects that could support an improvement in the environmental impact" (p. 2). The fact that ethics and sustainability are strong themes among members of Gen Z was also highlighted by Djafarova and Foots (2022), who said, "Generation Z has strong awareness and desire towards ethical and environmental issues, driven in the main by the cohort’s unlimited exposure to social media platforms and online resources where information is shared" (p. 413). Nguyen et al. (2023) said, "Sustainable practices are essential for preserving ecosystems and biodiversity" (p. 2).

The research gap for this paper is supported by another finding of Ding and Jiang (2023), who said, "discussions of Gen Z members’ ethical consumption have been popular because this generational group has increasingly more purchasing power in the market; how and why Gen Z customers behave ethically in the process of food sustainability has not been well documented" (p. 354). The topic of waste separation and its impact on the environment and consumption was also addressed by Warintarawej and Nillaor (2023), who identified the behavioural patterns in household solid waste management along with a participatory action research approach to generate guidelines for community solid waste management. "The contemporary environmental challenges (such as various hazardous emissions from open dumping sites, landfills and incinerators) confronting the traditional solid waste disposal

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methods have changed the focus towards a better awareness of the environmental implications" (Adefeso et al., 2023, p. 1179).

Kovács et al. (2024) noticed significant differences in the characteristics and purchasing intentions of young people (Gen Z) regarding sustainable food consumption. "Literature has shown that Gen Z and millennial consumers have demonstrated a strong concern about the environment. They are more active in addressing climate change concerns than older generations" (Pham & Lam, 2024, p. 50).

The reason for pursuing sustainability research even in the area of individual personal transportation was nicely summarized by Jali et al. (2023), who said, "the ability to meet present demands without compromising the ability of future generations to meet their own needs is referred to as sustainability" (p. 3). Mazhar et al. (2023) said that to improve the reliability and sustainability of the transportation system, changes are being made to the way electric vehicles are used. "Through a sustainability prism, this underscores the alignment of the ecosystem with shared objectives, mutual benefit realisation and its intricate interplay with myriad stakeholders (Sebastian & Sulich, 2023, p. 20). "Modern industry is a meaningful concept whose main role is to ensure the sustainable development of the economy and the dynamic growth of the quality of people's lives" (Kaczmarczyk et al., 2024, p. 982). According to internal research with representatives of the younger generation, their doubts about the environmental benefits of electric vehicles is evident if we look at their operation in the big picture, i.e., the entire life cycle of the car. Many of the current obstacles and technical challenges for the future were highlighted by Martin et al. (2024).

"Over a substantial period of scholarly research spanning several decades demonstrate that distinct generational groups have profoundly shaped the entrepreneurial landscape, each imprinting it with their unique socio-economic status, perspectives and future visions" (Gosztonyi, 2023, p. 193). The research gap is also supported by Mohd et al. (2023), who said, "there is a dearth of focus on certain age groups, such as Gen Z, which is currently the trendsetter of new technologies" (p. 5752). Kovács et al. (2024) said that "Gen Zers are open-minded and interested in incorporating sustainability into most of their activities" (p. 23).

The exploration of Gen Z's environmental behaviour is motivated by the fact that despite their stated interest in sustainability, there is a dearth of empirical studies examining actual behaviour and willingness to make personal sacrifices. The research gap lies mainly in the absence of such studies on the Gen Z population in Czechia. It is also underpinned by other studies in Czechia, e.g., Lašáková et al. (2023), who stated that "the benefits and leisure-related aspects of a happy personal life". The more we understand the key drivers of Gen Z behaviour, the more effective the subsequent development of policies and initiatives that align with the values of this emerging generation and support sustainable behaviour in the future.

2 Methodology

Our analysis is based on research grounded in primary data collected by researchers from the Prague University of Economics and Business. The data were collected in two waves between 16 February and 19 November 2023. For this analysis, the data from both waves were aggregated. Two waves of research were selected to boost the research sample and reduce the confidence interval. At the same time, the data of both waves were collected only

3 months apart, which allowed us to avoid information shifts in the data. Quota sampling was applied. Data collection was done using the specialised interviewing software Click4Survey. The sample size was n = 528. The structure of the research sample is shown in Table 1. Both waves of the research were based on the same data collection methodology and the same questionnaire. Data analysis was performed in SPSS statistical software.

Table 1 | Sample structure

Category	Variable	Numerical value	Value in %
Gender	Male	260	49.2%
	Female	268	50.8%
Age category	19–21	166	31.4%
	22–24	173	32.8%
	25–27	189	35.8%
Region of residence	Prague	71	13.4%
	Bohemia	272	51.6%
	Moravia & Silesia	185	35.0%
TOTAL		**528**	**100%**

Source: Authors

The motivation for selecting questions on waste sorting, electro-mobility and sustainability is that for the young generation, these are topics that are part of their lives and are often addressed, as shown in the literature review. We focused on two research questions.

RQ1: How does the willingness to give up one's own comfort correspond to the declaration of the benefits of waste sorting and electromobility for society?

RQ2: How does a positive/negative view of waste separation and electromobility correspond to a positive/negative view of sustainable development?

The formulation of the hypotheses is mainly based on theories of cultural and social capital. We investigate whether members of Gen Z, who have better knowledge of environmental issues and sustainable practices and a predominantly positive attitude towards them based on research and the literature review, may be more willing to sacrifice personal comfort to achieve social benefits. The issue has been addressed, for example, by Wan and Du (2022) or Lašáková et al. (2023).

The above research questions were then transformed into four hypotheses in more detail.

H1: The importance attached to waste sorting corresponds to the willingness to give up one's own comfort in favour of sorting.

H2: The willingness to give up one's own comfort corresponds to the declared environmental benefits of electric cars.

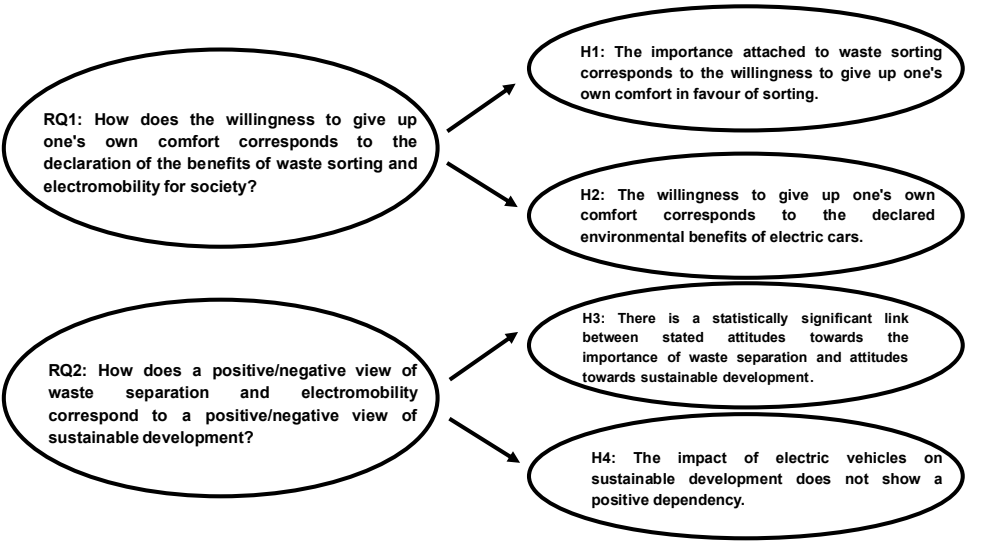
H3: There is a statistically significant link between stated attitudes towards the importance of waste separation and attitudes towards sustainable development.

H4: The impact of electric vehicles on sustainable development shows a positive dependency.

The fact that the willingness to meet sustainability attributes in the area of waste separation differs among different population groups and therefore it is beneficial to address this issue was highlighted, for example, by Zhao and Chen (2021). The issue of people's willingness to switch to electric vehicles was addressed, for example, by Ogunkunbi and Meszaros (2023). Also in this study, we conclude that the motivation to switch to electric vehicles is a complex issue influenced by many factors. We used these scholarly findings in formulating our hypotheses.

The relationship between the research questions and hypotheses is graphically expressed in Figure 1.

Figure 1 | Relationship between research questions and hypotheses



Source: Authors

2 Results

This chapter is divided into four subchapters, in which we deal step by step with the testing of hypotheses, i.e., the relationships between young people's attitudes towards waste sorting, electric vehicles and sustainable development.

2.1 Attitude of Gen Z towards waste sorting

First, the analysis focuses on the issue of the young generation and its attitude towards waste separation, which, as the literature review has shown, is an issue that is widely discussed in today's economic environment, but at the same time, there is ample room for research and analytical work. Here we are testing hypothesis H1.

From the research survey conducted, responses to the following questions were compared: “Q10. What is your opinion on waste sorting?” and “Q10b. How much are you willing to give up your own comfort in favour of sorting?” The hypothesis assumes agreement between the answers to these two questions; i.e., that people who have a positive view of waste sorting will equally declare a willingness to give up their own comfort to implement this activity.

For the sake of clarity and potential follow-up research, the questions were coded with numerical and letter codes that correspond to the numbers of these questions in the survey on which the analysis is based.

In all questions analysed, respondents answered on a five-point numerical scale. The extremes of each scale were described verbally to identify which pole of the scale expressed total agreement with the statement and which total disagreement.

For Q10, the extremes of the numerical five-point scale were named as 1= “Waste sorting is more of a social pose” and 5 = “Waste sorting significantly helps the environment”.

For Q10b, the extremes of the numerical five-point scale were named 1 = “I sort only if it does not cause me too much extra work or financial expense” and 5 = “I sort even at the cost of extra effort or money”.

The data were sequentially analysed using paired sample statistics, followed by a paired sample t-test, which is used for verification of hypotheses, and then a correlation analysis was also performed.

Table 2 shows the results of the paired sample statistic test.

Table 2 | Paired sample statistics on waste sorting and willingness to give up one's own comfort

Question ID	Mean	N	Std. deviation	Std. error mean
Q10	4.22	528	0.953	0.041
Q10b	3.51	528	1.095	0.048

Source: Authors

At first glance, it is clear that the willingness to give up one's own comfort is lower than the importance attached by the respondents to the topic of waste sorting.

Furthermore, in order to determine the statistical significance of the similarity or dissimilarity of the responses, a paired sample t-test was performed on both questions, the results of which are shown in Table 3.

Table 3 | Paired sample t-test of waste sorting and willingness to give up one's own comfort

Question ID	Paired differences mean	Paired differences std. deviation	Paired differences std. error mean	Test criterion	p
Pair Q10–Q10b	0.714	0.901	0.039	18.210	< 0.001

Source: Authors

The results of the analysis showed that:

$$p = 0.01 < \alpha = 0.05 \quad (1)$$

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From this computation, hypothesis H0 about the coincidence of the two selections is not supported, so the alternative hypothesis is valid.

Although respondents declare a positive impact of waste sorting on a scale of 1-5 with a value of 4.22, the willingness to sacrifice their convenience for its fulfilment is expressed as a statistically significantly lower value with a mean value of 3.51.

To illustrate the relationship between the answers to the two questions, a correlation analysis was also carried out, the results of which are shown in Table 4. Since the data have a normal distribution, the Pearson correlation coefficient was used.

Table 4 | Correlation analysis of waste sorting importance and willingness to give up one's own comfort

Question ID	Method	Q10	Q10b
Q10	Pearson correlation	1	0.621**
	Sig. (2-tailed)		< 0.001
	N	528	528
Q10b	Pearson correlation	0.621**	1
	Sig. (2-tailed)	< 0.001	
	N	528	528

Note: **. The correlation is significant at the 0.01 level (2-tailed).

Source: Authors

The computation shows a moderate correlation.

$$0.3 < |R| < 0.8 \tag{2}$$

The correlation result illustrates the results of the paired sample t-test. Although the willingness to sacrifice convenience is above the mean on a five-point scale, it is significantly lower than the claimed benefit of this area of consumption behaviour in terms of all the statistical comparisons and tests performed.

2.2 Attitude of Gen Z towards electric vehicles

Next, to verify hypothesis H2, we analyse the values of the answers to the questions "Q11. What is your opinion on the environmental benefits of electric vehicles? (Consider car and battery production, electricity production, car operation, disposal)" and "Q11b. How much are you willing to pay extra or give up your comfort for the benefits of electric cars (e.g., plan your journey according to the range of the electric car, time spent charging)?"

For Q11, the extremes of the numerical five-point scale were named 1 = “It is total nonsense” and 5 = “They have great ecological benefits”.

For Q11b, the extremes of the numerical five-point scale were named 1 = “I would not like to give up convenience or pay more” and 5 = “I do not mind paying extra or giving up my comfort for using an electric vehicle”.

The respondents' answers were analysed using the same statistical procedure as in the previous case. First, paired sample statistics were carried out. The results are presented in Table 5.

Table 5 | Paired sample statistics on benefits of electric vehicles and willingness to give up one's own comfort

Question ID	Mean	N	Std. deviation	Std. error mean
Q11	2.80	528	1.042	0.045
Q11b	2.61	528	1.188	0.052

Source: Authors

Here, too, a similar correlation with the previous questions emerges. That is, the willingness to give up one's own comfort (which is 2.61) is lower than the declared benefits of electric vehicles (which is 2.80).

However, it should be noted that the overall average is below 3 on the scale in both cases. That is, the benefits of electric vehicles are seen by the younger generation at the lower end of the scale, i.e., they are perceived rather negatively in terms of ecology.

A paired sample t-test was also performed to determine the statistical significance of the similarity or diversity of responses. The results are presented in Table 6.

Table 6 | Paired sample T-test of questions on benefits of electric vehicles and willingness to give up one's own comfort

Question ID	Paired differences mean	Paired differences std. deviation	Paired differences std. error mean	Test criterion	p
Pair Q11–Q11b	0.195	0.963	0.042	4.654	< 0.001

Source: Authors

The results of the analysis showed that:

$$p = 0.01 < \alpha = 0.05 \tag{3}$$

From this calculation, it is clear that hypothesis H0 about the coincidence of the two selections is not supported, so the alternative hypothesis is valid.

This is followed by a correlation analysis, the results of which are shown in Table 7. The Pearson correlation coefficient was again applied.

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Table 7 | Correlation analysis of issues of benefits of electric cars and willingness to give up one's own comfort

Question ID	Method	Q11	Q11b
Q11	Pearson correlation	1	0.634**
	Sig. (2-tailed)		< 0.001
	N	528	528
Q11b	Pearson correlation	0.634**	1
	Sig. (2-tailed)	< 0.001	
	N	528	528

Note: **. The correlation is significant at the 0.01 level (2-tailed).

Source: Authors

The computation shows a moderate correlation.

$$0.3 < |R| < 0.8 \quad (4)$$

The results of all the tests confirm the same direction of young people's attitudes towards electromobility. They see overall more negative environmental benefits of electric vehicles and declare even less willingness to give up their comfort and convenience for them.

2.3 Relationship between Gen Z attitudes towards waste management and sustainability

Subsequently, we move on to an analysis of the relationship between the two topics mentioned above, i.e., the opinion on waste sorting and the benefits of electric cars versus the question analysing young people's opinion on sustainable development – a question that overlaps to some extent between the two areas analysed above in the business world. The wording of the question was "Q12. What is your personal opinion on sustainable development?" In our research, this is testing hypothesis H3.

For this Q12, the extremes of the numerical five-point scale were named as 1 = “It is more of a social pose” and 5 = “Efforts towards sustainability are clearly a positive activity”.

The same statistical tests were used to ensure consistency in comparison.

Table 8 again first presents the results of the paired sample statistics.

Table 8 | Paired sample statistics on waste sorting and attitude towards sustainable development

Question ID	Mean	N	Std. deviation	Std. error mean
Q10	4.22	528	0.953	0.041
Q12	4.03	528	1.090	0.047

Source: Authors

The respondents' positive subjective attitude towards both questions is evident. On a five-point scale, they are in the upper half, even if both values are higher than 4.

Following the same procedure as in the previous cases, the paired sample t-test was performed. The results are shown in Table 9.

Table 9 | Paired sample t-test of questions on waste sorting and attitude towards sustainable development

Question ID	Paired differences mean	Paired differences std. deviation	Paired differences std. error mean	Test criterion	p
Pair Q10–Q12	0.195	1.032	0.045	4.435	< 0.001

Source: Authors

The results of the analysis show that the test criterion is 4.435, yet the alternative hypothesis holds. The hypothesis that the two selections are consistent (i.e., H0) is not supported.

$$p = 0.01 < \alpha = 0.05 \tag{5}$$

Table 10 again presents the results of the correlation analysis using the Pearson correlation coefficient.

Table 10 | Correlation analysis of waste sorting issues and attitude towards sustainable development

Question ID	Method	Q10	Q12
Q10	Pearson correlation	1	0.497**
	Sig. (2-tailed)		< 0.001
	N	528	528
Q12	Pearson correlation	0.497**	1
	Sig. (2-tailed)	< 0.001	
	N	528	528

Note: **. The correlation is significant at the 0.01 level (2-tailed).

Source: Authors

The computation shows a moderate correlation.

$$0.3 < |R| < 0.8 \tag{6}$$

We see here a lower correlation dependence, from which we can infer a closer mean of the two tested variables, but less internal consistency between the responses of individual respondents.

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2.4 Relationship between Gen Z attitudes towards electric vehicles and sustainability

The last statistical analysis is a comparison of the questions "Q11. What is your opinion on the environmental benefits of electric vehicles?" and "Q12. What is your personal opinion on sustainable development?" In our research, we are testing hypothesis H4.

Table 11 again first presents the results of the paired sample statistics.

Table 11 | Paired sample statistics for questions on benefits of electric vehicles and attitude towards sustainable development

Question ID	Mean	N	Std. deviation	Std. error mean
Q11	2.80	528	1.042	0.045
Q12	4.03	528	1.090	0.047

Source: Authors

It is already clear from previous analyses that there will be considerable variation in the answers given by the respondents. A sceptical view of the environmental benefits of electric vehicles, which ranges on the scale in values indicating a negative attitude, versus a positive view of sustainable development, i.e., a positive attitude towards the compatibility of technical progress and environmental preservation. The assumption is confirmed by a statistical test. A paired sample t-test follows. The results are presented in Table 12.

Table 12 | Paired sample t-test for questions on benefits of electric vehicles and attitude towards sustainable development

Question ID	Paired differences mean	Paired differences std. deviation	Paired differences std. error mean	Test criterion	p
Pair Q11–Q12	-1.225	1.184	0.052	-23.791	< 0.001

Source: Authors

The results of the analysis showed that:

$$p = 0.01 < \alpha = 0.05 \tag{7}$$

From this computation, hypothesis H0 about the agreement of both selections is not supported, so the alternative hypothesis is valid. The value of the test criterion here is even -23.791.

Table 13 presents the results of the correlation analysis using the Pearson correlation coefficient.

Table 13 | Correlation analysis of questions on benefits of electric vehicles and attitude towards sustainable development

Question ID	Method	Q11	Q12
Q11	Pearson correlation	1	0.384**
	Sig. (2-tailed)		< 0.001
	N	528	528
Q12	Pearson Correlation	0.384**	1
	Sig. (2-tailed)	< 0.001	
	N	528	528

Note: **. The correlation is significant at the 0.01 level (2-tailed).

Source: Authors

The computation shows a moderate correlation.

$$0.3 < |R| < 0.8 \tag{8}$$

The correlation between the perceptions of a positive impact of electric vehicles on sustainability was not demonstrated at the aggregate or individual respondent level.

3 Discussion

The results bring interesting findings on the much-discussed topic of sustainability and the attitudes of Gen Z members towards it. This generation is known, as confirmed by the literature review, for its positive attitude. Sometimes, one could even call it an obsession or activism towards environmental care and environmentally-oriented consumption behaviour and focus on the future. There are, of course, many economic aspects that fall under the umbrella of sustainability. Our study focused on three areas.

The first area studied was the attitudes of Gen Z members towards waste sorting. We investigated how the declared opinion on waste sorting corresponds with the willingness to give up some of their comfort for this area of ecology. Analysis of the data from the questionnaire survey revealed that young people declare higher importance of waste sorting than the extent to which they are willing to give up their comfort to fulfil this attitude. The computed difference between the two values is statistically significant. In any case, both ratings, i.e., the attitude towards waste sorting and the willingness to sacrifice personal convenience to fulfil this attitude, show values in the upper half of the scale. In terms of the leading motive of this paper, we find that marketers and HR managers should expect a higher level of enthusiasm from Gen Z members in their communication strategies to Gen Z than the actual effort shown.

As the questionnaire gave respondents the option to mention anything else on the issue in the form of a verbal answer to an open question, we consider it interesting to present a few statements from respondents to illustrate the statistical evaluation. "Unfortunately, the feeling still prevails that waste collectors do not handle waste as they should and waste sorting comes to nought" (male, 25–27 years). “The contribution of the individual sorter is kind of just

a drop in the ocean" (male, 19–21 years). "It depends on the real ability of the municipality and the state to handle the sorted materials in question" (female, 25–27 years).

The questions for the second area examined were constructed in a similar tone. The area of research was the opinion of Gen Z members on the ecological benefits of electric vehicles (taking into account the production of the car and batteries, the production of electricity, the operation of the car and disposal) and the willingness to give up some of their convenience for the operation of electric vehicles (planning a trip according to the range of the electric car, time spent charging). Overall, young people's attitudes towards electro-mobility are much more sceptical than in the previous research question. On the scale, both opinions on the benefits of electric vehicles and on the willingness to give up one's convenience for the benefits of electric vehicles were in the lower half of the scale. Willingness to give up one's own convenience scored the lowest on the scale of any variable examined in this research.

Again, it is interesting to look at selected answers to open questions that illustrate the relatively weak beliefs of the younger generation about the benefits of electric vehicles. "The production of current electric vehicles is simply not environmentally friendly. Couple that with short battery life" (male, 22–24 years). "It is enough to know what it takes to produce and dispose of the batteries alone and it loses meaning for me, at least in terms of the environmental benefits" (female, 22–24 years). "I would only drive in the city; it's not that difficult to plan a trip" (female, 25–27 years).

The third topic was sustainability. On a five-point scale, respondents' answers averaged 4.03, thus expressing the view that striving for sustainability is a positive activity. Of interest from the literature review conducted is the statement by Makowska et al. (2024): "On the other hand, representatives of Gen Z, despite their pro-ecological views, are less likely than might be expected to engage in sustainable consumption" (p. 521). However, statistically significant agreement was not demonstrated in responses to questions about waste sorting and the benefits of electric vehicles.

Finally, 25.4% of respondents used the option to express their opinion in an open-ended question, the highest use of this option in the survey. The majority of respondents variously emphasised that sustainability for them means consuming as few plastics as possible and not wasting food. To illustrate these and other attitudes towards sustainability, we again select a few responses. "I travel more by public transport, I buy as little plastic packaging as possible, I shop in second-hand shops" (female, 19–21 years). "I don't buy fast fashion clothes; I use products made from recycled materials" (female, 25–27 years). "In my company, we use sustainable packaging and support environmental initiatives" (male, 25–27 years).

4 Limitations

The main limitation of the research is that it does not cover the attitudes of the entire Gen Z spectrum but focuses on people aged 19–27. Another limitation is due to the nature of quantitative research, i.e., that respondents have to fit their answers into pre-prepared answer options. The answers to numerous open-ended questions in the questionnaire also provide information of a qualitative character. We tried to partially eliminate this fact by including open-ended questions, where respondents had the opportunity to add their

subjective opinion on each question in their own words. The statistical analysis was also carried out on the research sample as a whole. Of course, we are considering a follow-up analysis focusing on a selected area and analysing it in more detail according to demographic or socio-economic characteristics. We are aware of the possible diversity of opinions of people from different cultural backgrounds or different generations within the same environment. This is evidenced in many studies; for example, Bratina and Faganel (2024) found that "Gen Z follows influencers, as opposed to 24% of Gen X, a 3 times difference" (p. 8).

Finally, we examined the attitudes and opinions of people aged 19 to 27, a segment of Gen Z that is often applying for stable jobs for the first time in their careers.

Conclusion

The data analysis showed that members of Gen Z consider sustainability to be an urgent economic and social issue. At the same time, however, the strong influence of their critical thinking was shown. Although they perceive the importance of the issue, they consider very carefully whether the activities that are presented by society, politicians, companies and the media are beneficial for society and have a real effect. They see the issues of waste sorting, electric vehicles and sustainability in an overall and often global context, looking at the so-called big picture.

The answer to RQ1, which can be formulated as the willingness to give up one's comfort, is lower than the declared benefits of the phenomenon, i.e., the usefulness of waste sorting and the ecological benefits of electric vehicles. The answer to RQ2 also yielded interesting results. For example, young people do not consider electric vehicles to be beneficial to ecology; they rate them at the bottom of the scale. They consider waste sorting to be beneficial for the environment and rate sustainable development as such, i.e., a way of developing society that reconciles economic and social progress with the preservation of the environment, highest on the scale.

The above findings also show that in all the cases, the H0 hypothesis is not supported, so alternative hypotheses were confirmed.

We plan to continue in a similar vein in our further research work and contribute to mutual intergenerational knowledge and understanding. In the practical field, the findings are beneficial for economists, politicians and employers. From a scholarly perspective, the research is beneficial because it provides insights into Gen Z behaviour and attitudes based on data analysis and is useful for other authors working on similar or related topics.

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