

Attitudes of Generation Z Towards Sustainable Behaviour in Tourism

Ľubomíra Kubíková¹, Stanislav Rudý²

¹ *University of Economics in Bratislava, Commerce Faculty, Dolnozemska cesta 1, Bratislava 852 35, Slovak Republic*

² *University of Economics in Bratislava, Faculty of Business Economics with seat in Košice, Tajovského 13, Košice 041 30, Slovak Republic*

Abstract – Young adults from generation z are ecologically active individuals with a high level of involvement in climate change, waste, and responsible consumption. Based on this statement, we decided to confirm or reject it for a selected sample of Slovak tourists. Our research objective is to find and assess the attitudes and preferences of tourists from generation z. We collected data based on a questionnaire with a sample of 118 respondents aged 18-24. The questionnaire aimed to identify responsible behaviour and focused on attitudes towards sustainable consumption decisions. It was evaluated based on a 5-point Likert scale. We used the Mann-Whitney U test, Pearson's, and Spearman's correlation coefficient and logistic regression to find and identify the results. Our results point to the behaviour and attitudes of 118 Slovak respondents of generation z, who are interested in sustainability and separation responsibility for the environment in tourism. Findings may significantly impact tourism. Identifying problems allows for understanding the motives of tourists' behaviour, which creates the basis for effective measures to reduce environmental impact. Identifying these attitudes makes it possible to create targeted awareness campaigns and contribute to a better understanding of tourists' preferences.

These findings are also significant in raising awareness about travel's environmental impacts and supporting tourists' ecologically responsible behaviour, which can lead to more sustainable tourism development.

Keywords – Generation z, tourism, tourist preference, Slovak tourists, sustainability.

1. Introduction

Sustainable behaviour in tourism is an extension of pro-environmental behaviour supporting sustainable tourism, which contributes to the economic growth of the local economy, a social perspective of sustainability and pro-cultural behaviour [1]. Circulating solutions gain prestige in the eyes of the public, which leads to the preference for such products. The number of customers paying more for sustainable products is increasing, and sustainability as a decision-making factor is becoming essential. Extended product life, recycling, restoration of natural systems, and productivity support economic development and reduce resource use in tourism, which is a significant contributor to environmental degradation [2]. Due to over-tourism, tourism sustainability is becoming a significant topic. Mohan [3] drew attention to several factors, such as economic growth, improved quality of life, protection of the environment, and diverse cultural heritage. Environmental sustainability in tourism is based on preserving natural resources, ecosystems, and cultural heritage for the future, thriving biodiversity and well-being. The tourist population affects the quality of the environment, and exceeding the capacity of tourist destinations causes negative impacts, which are reflected in environmental pollution. Sustainable tourism development involves planning, promoting, and implementing strategies to develop, support and encourage green initiatives and ecotourism with minimal impacts on local communities. Responsible travel protects the environment, and ecotourism minimizes the effects of tourism on the resources of regions and destinations [4].

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Corresponding author: Stanislav Rudý,
University of Economics in Bratislava, Faculty of Business Economics with seat in Košice, Tajovského 13, Košice 041 30, Slovak Republic.


Email: stanislav.rudy@euba.sk

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Consumers are also an essential part of the economic process in tourism, which manifests through consumer behaviour that can have a positive or negative impact on nature. It is important to support customers' green shopping behaviour based on the theory of green shopping behaviour [5]. He considers such behaviour a fundamental component of the success of ecological companies [5]. Authors of the study [6] emphasize the need for love for nature. However, consider how much this love affects different dimensions of sustainable consumer behaviour. It should include passion, intimacy, and devotion to nature to benefit consumer behaviour. The authors' findings [6] showed that passion and intimacy with nature indirectly positively affect ecological consumer behaviour. Connection with nature even inspires the consumer to behave ecologically. In contrast, attitudes significantly influence green consumer behaviour [7]. For this reason, they consider consumer attitudes to be the most important predictor of purchasing behaviour. However, it is necessary to point out that user behaviour is influenced by income, age, and the perceived efficiency of the consumer while recycling behaviour is determined by user behaviour itself. Based on age, we can divide consumers into generations such as baby boomers, generation x, generation y and generation z [8]. Our contribution focused on identifying generation z's attitudes towards sustainable tourism behaviour. We consider young Slovaks from generation z to be ecologically active individuals with high involvement in climate change, waste, and responsible consumption. In the following sections of our contribution, we present whether the assertion we believe has been confirmed or refuted. The habits and tourism preferences of generation z are essential for future generations. This digital generation pays attention to how they spend money and is flaw-oriented. Their financial constraints at the beginning of their careers are also reflected in sustainable decisions, and they are tomorrow's travellers. For sustainable tourism, the needs of this generation z, which is interested in environmental protection and healthier choices, should be addressed [9]. Social norms, personality traits, natural disasters and intrinsic motivation of generation z move them towards pro-environmental behaviour in the context of tourism. Generation z's decision to use tourism services is influenced by socialisation, experiencing an unforgettable experience, emotional factors, and their ecological awareness of sustainability issues, which helps them consider the environment. They are developing a growing awareness of environmental sensitivity, looking for brands associated with green products, and promoting green travel during their decision-making processes [10]. Theories of decision-making

and planned behaviour confirm that different generations have different beliefs and environmental values. For generation z, the planet's future is as important as their social connection, and they are environmentally responsible in their long-term goals. They show interest in environmental issues and respect for the environment, which affects their choice of sustainable travel options [1]. It is important to note that generation z grew up in an atmosphere of digital technology. It is a hyper-connected population, surrounded by smartphones, computers, and the Internet. Revolutionary advances and digital commodities influence their lifestyles and aspirations, making them more environmentally conscious, thus playing a significant role in environmental, social, and consumer issues. Motivated by humanistic ideals, morals and ethics, generation z is more aware of the human impact on the environment than any previous generation. Tourism can serve as a digital disconnection and detox from digital activity. On the other hand, it can be shifted to virtual tourism thanks to digital technologies [11]. The experience of generation z in virtual tourism has a positive effect on affective performance. The higher the technological level of the equipment used, the greater the immersive experience (individual immersion, enjoyment, and psychological engagement). Immersion in an experience positively affects behaviour and increases the intention to repeat the experience. Virtual tourism in the context of generation z museums can be future research for reducing the environmental burden [12]. From the point of view of tourism, generation z represents an age group that prefers experiences to possessions, influences the family when choosing a vacation destination and is careful about the budget. This generation was born into the digital age, and this change represents an important phenomenon that may pose opportunities and challenges for developing tourism and destinations. The importance of this generation and the broader youth market lies in its representation of the future market. Travel for generation z is also a time of conviviality, socialisation, and empowerment [13]. Generation z members grew up during the global digital revolution, represented by the fast evolution of the Internet. Undoubtedly, all these innovations significantly impact their lifestyles and needs. As a result, younger generation z is much more inclined towards green values, preservation of resources, and reduction of consumption. Generation z entered a world where economic globalisation, digitalisation, and post-truth trends dominated. Undergoing a difficult path of choice and self-identification, the global tourist society of generation z is trying to determine its prospects' priorities and reference points.

Modern trends in tourism can only be adequately understood in the context of the structural evolution of society. Generation z is a target group of people constantly connected with the World Wide Web, primarily communicating through the Internet, and wanting new and exciting stimuli and experiences. Consumer behaviour typical for members of generation z differs from that of the previous generations because generation z is always looking for the most recent information to make purchasing decisions [14].

2. Methodology

The young generation z is a generation with the potential to be more ecologically responsible than their responsibilities in political interest. This consideration inspired us to study the professional literature and scientific contributions. The gained knowledge helped us to formulate research questions:

1. *Is there a statistical difference between the answers from the point of view of selected factors and attitudes?*
2. *Is there an association between selected factors and the attitudes of sustainable behaviour of selected generation z tourists, and is there a significant correlation between factors and the chosen attitudes?*
3. *May selected tourist types influence the sustainable attitude of selected generation z tourists, and is there a significant correlation between types and the chosen attitudes?*

In the research section, we examined and more closely identified factors that influence the sustainable behaviour of selected tourists of generation z. Our research sample consisted of 118 tourists from generation z aged between 18 and 24 from the Slovak Republic. We collected data through primary research with the help of a questionnaire. We examined 118 respondents. The questionnaire started in April 2023 and ended in May of the same year. The questionnaire was distributed via MS Teams, email, social networks, and tourist centres located in Slovakia. The questionnaire contained several questions focused on responsible, sustainable, and environmental behaviour. The respondent could express his agreement/disagreement with the given attitude using a 5-point Likert scale, while we followed the following scale (1 - strongly disagree, 2 - disagree, 3 - neutral, 4 - agree, 5 strongly agree).

We identified four factors that might influence sustainable behaviour:

- Gender - with this factor, we considered whether it is a woman or a man.
- Income - we considered the size of the respondents' income, which was divided into two groups: up to 700 € and from 701 €.
- Education - we considered whether education affects behaviour; we assessed education from two points of view: secondary or higher education (if the respondent was still studying at secondary school or university, he was included in the relevant education groups).
- Residence (home) - we assessed whether the residence influences sustainable behaviour; we considered whether the respondent lives in a city or the countryside.

The following tourist types indicate behaviour that may or may not influence attitudes. We identified several attitudes that we consider to be attitudes expressing sustainable and environmental behaviour:

1. As a generation z tourist, I prefer to buy and consume products in recyclable packaging during my vacation/trip.
2. As a generation z tourist, I am willing to accept a higher price when purchasing products in recyclable packaging during a vacation/trip.
3. As a generation z tourist, I prefer to buy and consume local/local products during my vacation/trip.
4. As a generation z tourist, I am willing to combine the program during the vacation/trip with cleaning the environment.
5. As a generation z tourist, I actively share experiences regarding managing waste in the visited destinations and report on them on social networks.
6. As a generation z tourist, I actively support programs to clean sites and tourist attractions from waste.
7. As a generation z tourist, I am interested in produced waste during my vacation/trip.

Table 1. Factors

Factor	What does a factor include
Gender	Gender of individuals (female/male)
Income	Salary conditions (up to 700 €, more than 701 €)
Education	The highest education achieved (secondary school/university)
Residence	A place where an individual lives permanently (city/village)

We identified six types of generation z tourists, which we hypothesized could influence selected attitudes. We examined the influence and direction of selected attitudes:

- [1]. A tourist prefers to buy recycled products.
- [2]. A tourist accepts a higher price for recycled products.
- [3]. A tourist prefers to buy local products.

[4]. A tourist is willing to combine the program during the vacation/trip with cleaning the environment.

[5]. A tourist actively shares his experiences on the issue of waste management.

[6]. A tourist actively supports programs to clean up nature.

We formulated the following hypotheses, which we divided into two parts:

Table 2. Hypothesis - Part I

Hypothesis		Attitudes						
H1 ₀	Distribution of attitude is the same across gender categories	1	2	3	4	5	6	x
H1	Distribution of attitude is not the same across gender categories	1	2	3	4	5	6	x
H2 ₀	Distribution of attitude is the same across education categories	1	2	3	4	5	6	x
H2	Distribution of attitude is not the same across education categories	1	2	3	4	5	6	x
H3 ₀	Distribution of attitude is the same across income categories	1	2	3	4	5	6	x
H3	Distribution of attitude is not the same across income categories	1	2	3	4	5	6	x
H4 ₀	Distribution of attitude is the same across resident categories	1	2	3	4	5	6	x
H4	Distribution of attitude is the same across resident categories	1	2	3	4	5	6	x
H5 ₀	There is no relationship between factor gender and attitude	x	x	x	x	x	x	7
H5	There is no relationship between factor gender and attitude	x	x	x	x	x	x	7
H6 ₀	There is no relationship between factor education and attitude	x	x	x	x	x	x	7
H6	There is a relationship between factor education and attitude	x	x	x	x	x	x	7
H7 ₀	There is no relationship between factor income and attitude	x	x	x	x	x	x	7
H7	There is a relationship between factor income and attitude	x	x	x	x	x	x	7
H8 ₀	There is no relationship between factor residence and attitude	x	x	x	x	x	x	7
H8	There is a relationship between factor residence and attitude	x	x	x	x	x	x	7

Table 3. Hypothesis - Part II

10		Attitudes						
H9 ₀	There is no influence between tourist type [1-6] and attitude	x	x	x	4	x	x	x
H9	There is an influence between tourist type [1-6] and attitude	x	x	x	4	x	x	x
H10 ₀	There is no influence between tourist type [1-6] and attitude	x	x	x	x	5	x	x
H10	There is no influence between tourist type [1-6] and attitude	x	x	x	x	5	x	x
H11 ₀	There is no influence between tourist type [1-6] and attitude	x	x	x	x	x	6	x
H11	There is no influence between tourist type [1-6] and attitude	x	x	x	x	x	6	x

The result section was divided into three parts. The results were obtained using the Mann-Whitney U test in the first part. It is a non-parametric test that helped us to identify whether there is a difference in the respondents' answers, considering the selected factors (gender, education, income, and residency) on attitude (1 to 6).

We examined the correlation between the selected factors and attitude 7 in the second part. We used the Pearson correlation coefficient, which reveals the strength of the linear association between two variables. We wanted to verify the results with Spearman's correlation coefficient, which detects the dependence between two quantities. In the third part, we examined whether there is a dependence/influence between tourist types and attitudes 4, 5, and 6. At the same time, we examined the probability that the type of tourist has or does not influence the selected attitude. In contrast, the characteristic tourist type indicates the possible behaviour of a generation z tourist. We used logistic regression analysis for the calculation. Logistic regression uses probability theory in which only two values can be predicted (0 or 1), which means the higher/lower probability that an event coded as "1" will occur compared to an event coded as "0".

3. Results and Discussion

Based on using selected mathematical and statistical methods such as the Mann-Whitney U test, Pearson correlation coefficient, Spearman correlation coefficient, and logistic regression analysis, we present our findings.

Table 4. Gender

Attitudes	Sig.	Decision
Attitude 1	0.587	Do not reject H1 ₀
Attitude 2	0.574	Do not reject H1 ₀
Attitude 3	0.892	Do not reject H1 ₀
Attitude 4	0.272	Do not reject H1 ₀
Attitude 5	0.018	Reject H1₀
Attitude 6	0.753	Do not reject H1 ₀

Based on the results of the Mann-Whitney U test, we noted that the distribution of responses of generation z is the same in all attitudes, except attitude 5, where there is a difference in responses based on whether the respondents identified themselves as male or female. We reject the hypothesis H1₀. Respondents who identified themselves as women expressed their disagreement with attitude 5. The results show they disagree with sharing their experience in waste and cleaning nature on social networks.

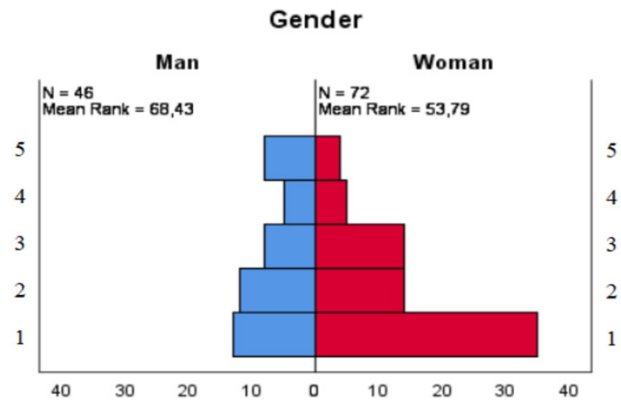


Figure 1. Attitude 5

Table 5. Education

Attitudes	Sig.	Decision
Attitude 1	0.030	Reject H2₀
Attitude 2	0.707	Do not reject H2 ₀
Attitude 3	0.109	Do not reject H2 ₀
Attitude 4	0.029	Reject H2₀
Attitude 5	0.590	Do not reject H2 ₀
Attitude 6	0.656	Do not reject H2 ₀

In education, we noticed that the distribution of the answers of generation z is different for attitudes 1 and 4. Respondents who study at secondary schools or have already attained secondary education agree with attitude 1. Respondents have a positive attitude towards purchasing and consuming products in recycled packaging during holidays/trips. Similar results were also found in attitude 4, where respondents who study at secondary schools or have already achieved secondary education agree with attitude 4. Respondents of generation z agree that they are willing to combine the program during the vacation/trip with cleaning the environment.

Table 6. Income

Attitudes	Sig.	Decision
Attitude 1	0.200	Do not reject H3 ₀
Attitude 2	0.225	Do not reject H3 ₀
Attitude 3	0.500	Do not reject H3 ₀
Attitude 4	0.759	Do not reject H3 ₀
Attitude 5	0.905	Do not reject H3 ₀
Attitude 6	0.367	Do not reject H3 ₀

We did not find a difference in the distribution of responses in the factor income. The results are statistically insignificant. The distribution of responses is the same across income. We do not reject H3₀.

Table 7. Residence

Attitudes	Sig.	Decision
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Attitude 1	0.469	Do not reject H4 ₀
Attitude 2	0.125	Do not reject H4 ₀
Attitude 3	0.224	Do not reject H4 ₀
Attitude 4	0.045	Reject H4₀
Attitude 5	0.051	Do not reject H4 ₀
Attitude 6	0.043	Reject H4₀

The distribution of respondents' answers is different in the case of attitudes 4 and 6. Respondents from the city have a more negative attitude towards the willingness to combine the program during the vacation/trip with cleaning the environment. Similar results were also found in the case of attitude 6. Respondents show a negative attitude towards actively supporting programs to clean sites and tourist attractions from waste.

Table 8. Association between selected factors and attitude7

Factor	Coefficient	P-value
Gender	0.19	0.04
Education	0.61	0.51
Income	-0.19	0.04
Residence	0.11	0.22

To identify the dependence between the selected factors and attitude 7, we used Pearson's correlation coefficient. The results are statistically significant at the 5% significance level, except for the factor of "education" and "residence"; the result is statistically insignificant. Dependence was found between the factor "gender" and "attitude" 7, and at the same time between the factor "income" and attitude 7; in the first case, the coefficient acquired the value $r = 0.19$, which means a small but positive correlation. In the case of the factor "income", we noted a small but negative correlation. The coefficient acquired the value $r = -0.19$. We did not find statistically significant results for the "education" and "residence" factors. It may also be because the respondents are not influenced by education or place of residence. However, we perceive these results as paradoxical. Education is an influential factor that educates individuals and helps teach them habits of how to behave.

Spearman's correlation coefficient confirmed these results. In contrast, the correlation was identified between the factor "gender" and attitude 7, i.e., small but positive correlation $r_s = 0.19$, and at the same time, the factor "income" and attitude 7, i.e., small but negative correlation $r_s = -0.19$. The results are statistically significant at the 5% significance level, except for "education" and "residence"; the result is statistically insignificant.

Table 9. Influence of tourist type on attitude 4

Tourist type	Coefficient	P-value	Odds Ratio
A tourist prefers to buy recycled products. (1)	-0.36	0.49	0.70
A tourist accepts a higher price for recycled products. (2)	1.04	0.03	2.83 **
A tourist prefers to buy local products. (3)	-0.54	0.23	0.59
A tourist actively shares his experiences on the issue of waste management. (5)	0.97	0.04	2.64 **
A tourist actively supports programs to clean up nature... (6)	1.52	0.00	4.55 **
Constant	-1.59	0.01	0.20 **

Based on logistic regression, we identified the following findings. The overall model results are statistically significant at the 5% significance level. There is a correlation between the selected tourist types and attitude 4 in three cases, i.e., a tourist accepts a higher price for recycled products (2); a tourist actively shares his experiences on the issue of waste management (4); a tourist actively supports programs to clean up nature (5). The number of the tourist type is given in parentheses; these numbers are given later in the text. In the case of tourist type 2, the coefficient reached $b = 1.04$. If we consider the probability, we have identified the following statement. If the variable changes by one unit, there is a 2.83 times higher chance that the dependent will acquire the value 1. The possibility that the tourist will be interested in combining the program during the vacation/trip with nature cleaning increases by 2.83 times. In the case of tourist type 4, the coefficient acquired the value $b = 0.97$. If we consider the probability, we have identified the following statement. If the variable changes by one unit, there is a 2.64 times higher chance that the dependent will acquire the value 1. The possibility that the tourist will be interested in combining the program during the vacation/excursion with nature cleaning increases by 2.64 times.

In the case of tourist type 5, the coefficient acquired a value of 1.52. If we consider the probability, the odds ratio indicates that if the variable changes by one unit, there is a 4.55 times higher chance that the dependent will acquire the value 1.

There is a 4.55 times higher chance that the tourist will be interested in combining the program during the vacation/ trip with nature cleaning. Other tourist types proved statistically insignificant; we did not detect a correlation between attitude 4.

Table 10. Influence of tourist type on attitude 5

Tourist type	Coefficient	P-value	Odds Ratio
A tourist prefers to buy recycled products. (1)	-0.17	0.76	0.84
A tourist accepts a higher price for recycled products. (2)	0.01	0.98	1.01
A tourist prefers to buy local products. (3)	-0.66	0.17	0.52
A tourist is willing to combine the program during the vacation/ trip with cleaning the environment. (4)	0.98	0.04	2.66 **
A tourist actively supports programs to clean up nature... (6)	2.11	0.00	8.22 **
Constant	-1.73	0.01	0.18

In the case of attitude 5, we identified different findings. The overall model results are statistically significant at the 5% significance level. In this case, we identified a correlation in only two tourist types, i.e., a tourist is willing to combine the program during the vacation/trip with cleaning the environment (4) a tourist actively supports programs to clean up nature (6), where tourist types proved to be statistically significant. In the first case, the coefficient acquired the value $b = 0.98$. If we consider the probability, in case the variable changes by one unit, there is a 2.66 times higher chance that the dependent will acquire the value 1. There is a 2.66 times higher chance that the tourist will be interested in actively sharing experiences regarding managing waste in the visited destinations and reporting on them on social networks. In the second case, the coefficient acquired the value $b = 2.11$. If the variable changes by one unit, there is an 8.22 times higher chance that the tourist will be interested

in actively sharing experiences regarding managing waste in the visited destinations and reporting on them on social networks. Other types of tourists proved to be statistically insignificant and have no effect on attitude.

In the case of attitude 6, we identified the following findings. Even in this case, the result of the overall model is statistically significant at the 5% significance level. We identified a correlation in four tourist types, i.e., a tourist prefers to buy recycled products (1); a tourist prefers to buy local products (3); a tourist is willing to combine the program during the vacation/trip with cleaning the environment (4); a tourist actively shares his experiences on the issue of waste management (5).

Table 11. Influence of tourist type on attitude 6

Tourist type	Coefficient	P-value	Odds Ratio
A tourist prefers to buy recycled products. (1)	1.48	0.01	4.36 **
A tourist accepts a higher price for recycled products. (2)	-0.69	0.16	0.50
A tourist prefers to buy local products. (3)	1.07	0.03	2.93 **
A tourist is willing to combine the program during the vacation/ trip with cleaning the environment. (4)	1.43	0.00	4.19 **
A tourist actively shares his experiences on the issue of waste management. (5)	2.08	0.00	8.01 **
Constant	-2.58	0.00	0.08

In the case of tourist type 1, the coefficient acquired the value of 1.48. If we consider the probability, the odds ratio indicates that if the variable changes by one unit, there is a 4.36 times higher chance that the dependent variable will acquire the value 1. There is a 4.36 times higher chance that tourists will actively support programs to clean cities and tourist attractions from waste. In the case of tourist type 3, the coefficient acquired the value of 1.07. If we consider the probability, the odds ratio indicates that if the variable changes by one unit, there is a 2.93 times higher chance that the dependent variable will acquire the value 1. There is 2.93 times higher chance that the tourist will actively support program to clean cities and tourist attraction from waste. In the case of tourist type 4, the

coefficient acquired the value of 1.43. If we consider the probability, the odds ratio indicates that if the variable changes by one unit, there is a 4.19 times higher chance that the dependent variable will acquire the value 1.

There is a 4.19 times higher chance that tourists will actively support programs to clean cities and tourist attractions from waste. In the case of tourist type 5, the coefficient acquired the value of 2.08. If we consider the probability, the odds ratio indicates that if the variable changes by one unit, there is an 8.01 times higher chance that the dependent variable will acquire the value 1. There is 8.01 times higher chance that the tourist will actively support program to clean cities and tourist attraction from waste.

The other tourist types proved statistically insignificant and did not influence attitude.

Is there a statistical difference between the answers from the point of view of selected factors and attitudes? Yes, there is a significant difference in the following cases. Based on this result, we rejected $H1_0$:

- From the point of view of the gender factor, there is a statistically significant difference in the responses related to attitude 5.
- From the point of view of the education factor, there is a statistically significant difference in the answers related to attitudes 1 and 4.
- From the point of view of the residence factor, there is a statistically significant difference in the answers regarding attitudes 4 and 6.

From the point of view of the income factor, we did not find any statistical difference in the answers related to attitudes.

May selected factors impact the attitude of sustainable behaviour of selected generation z tourists, and is there a significant correlation between factors and the chosen attitudes?

- In connection with attitude 7:
 - Yes, statistically significant values were found for the factors "gender" and "income".
 - No, statistically insignificant values were found in the factors "education" and "residence".

There is an association between the factor "gender" and attitude. There is an association between the factor "income" and attitude.

Is there an association between selected factors and the attitudes of sustainable behaviour of selected generation z tourists, and is there a significant correlation between factors and the chosen attitudes?

- In connection with attitude 4:
 - Yes, statistically significant values were found for tourist types 2, 5, and 6.
 - No, statistically insignificant values were found for tourist types 1, 3.
- In connection with attitude 5:

- Yes, statistically significant values were found for tourist types 4 and 6.
- No, statistically insignificant values were found for tourist types 1, 2, and 3.
- In connection with attitude 6:
 - Yes, statistically significant values were found for tourist types 1,3,4, and 5.
 - No, statistically insignificant values were found for tourist type 2.

Selected tourist types may influence:

- Tourist type 2, 5, 6 for attitude 4.
- Tourist type 4, 6 for attitude 5.
- Tourist type 1, 3, 4 and 5 for attitude 6.

Based on our findings, we can come close to the statement that generation z tourists try to be ecologically active tourists. In some cases, our findings achieved statistically insignificant results. We present our conclusion in Tables 12, 13, 14, 15, and 16. We perceive a smaller sample of respondents as a limit. In future research, we want to focus on a larger sample of respondents and investigate more factors or motivators that can influence generation z tourists.

Table 12. Conclusion for factors in connection with attitudes 1 – 6

Attitudes	Decision	Decision	Decision	Decision
Attitude 1	Do not reject $H1_0$	Reject $H2_0$	Do not reject $H3_0$	Do not reject $H4_0$
Attitude 2	Do not reject $H1_0$	Do not reject $H2_0$	Do not reject $H3_0$	Do not reject $H4_0$
Attitude 3	Do not reject $H1_0$	Do not reject $H2_0$	Do not reject $H3_0$	Do not reject $H4_0$
Attitude 4	Do not reject $H1_0$	Reject $H2_0$	Do not reject $H3_0$	Reject $H4_0$
Attitude 5	Reject $H1_0$	Do not reject $H2_0$	Do not reject $H3_0$	Do not reject $H4_0$
Attitude 6	Do not reject $H1_0$	Do not reject $H2_0$	Do not reject $H3_0$	Reject $H4_0$

Table 13. Conclusion for Attitude 7

Factor	Hypotheses	Decision
Gender	$H5_0$	Reject
Income	$H6_0$	Reject
Education	$H7_0$	Reject
Residence	$H8_0$	Reject

Table 14. Conclusion for Attitude 4

Tourist type	Hypotheses	Decision
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1	H9 ₀	Do not reject
2	H9 ₀	Reject
3	H9 ₀	Do not reject
5	H9 ₀	Reject
6	H9 ₀	Reject

Table 15. Conclusion for Attitude 5

Tourist type	Hypotheses	Decision
1	H10 ₀	Do not reject
2	H10 ₀	Do not reject
3	H10 ₀	Do not reject
4	H10 ₀	Reject
6	H10 ₀	Reject

Table 16. Conclusion for Attitude 6

Tourist type	Hypotheses	Decision
1	H11 ₀	Reject
2	H11 ₀	Do not reject
3	H11 ₀	Reject
4	H11 ₀	Reject
5	H11 ₀	Reject

Our study faced several limitations, including a constrained sample size that restricted the depth of our insights. To enhance the comprehensiveness of our research, we plan to expand our participant pool in future investigations, seeking a more diverse range of respondents to provide a more nuanced understanding of individual contexts. Furthermore, reliance on respondents' memory poses a challenge, considering the limitations in recalling events or experiences. Another limitation pertains to concerns about anonymity, which may lead to guarded responses or reluctance to participate. Lastly, external factors such as unforeseen political, economic, or social changes can impact the research environment, introducing unpredictability into the study's context.

4. Conclusion

This study explored generation z tourists' attitudes towards sustainable behaviours, employing statistical methods like the Mann-Whitney U test, Pearson and Spearman correlation coefficients, and logistic regression analysis. Results from the Mann-Whitney U test indicated gender-based disparities in responses to attitude 5, revealing that female respondents were less inclined to share waste management experiences on social networks. Educational attainment emerged as another significant factor, with those holding secondary education or higher displaying more significant support for attitudes related to environmentally conscious consumer behaviours during vacations. At the same time, income did not show statistically significant differences across

attitudes; urban residency correlated with a more pessimistic stance towards certain environmental attitudes than rural residency. Pearson correlation coefficient identified slight correlations between gender and income with attitude 7.

Logistic regression identified specific tourist types predisposed towards supporting environmental initiatives during vacations, revealing nuanced associations between tourist archetypes and attitudes. Overall, the findings suggest a general inclination among generation z tourists towards ecologically responsible behaviours. However, some results remained statistically insignificant, underscoring the need for future research with larger and more diverse cohorts to comprehensively understand the factors influencing generation z tourists' sustainability attitudes.

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References:

- [1]. Salinero, Y., Prayag, G., Rico, M. G., & Collado, A. M. (2022). Generation Z and pro-sustainable tourism behaviors: internal and external drivers. *Journal of Sustainable Tourism*, 31(9), 1–22. Doi: 10.1080/09669582.2022.2134400
- [2]. Kaszás, N., Keller, K., & Birkner, Z. (2022). Understanding circularity in tourism. *Society and Economy*, 44(1), 65–82. Doi: 10.1556/204.2021.00025
- [3]. Mohan, P. S. (2022). Sustainable Tourism and the Sustainable Development Goals in Sub-National Island Jurisdictions: The Case of Tobago. *Island Studies Journal*, 17(2), 168–191. Doi: 10.24043/isj.183
- [4]. Baloch, Q. B., Shah, S. N., Iqbal, N., Sheeraz, M., Asadullah, M., Mahar, S., & Khan, A. U. (2022). Impact of tourism development upon environmental sustainability: a suggested framework for sustainable ecotourism. *Environmental Science and Pollution Research*, 30, 5917–5930. Doi: 10.1007/s11356-022-22496-w
- [5]. Han, H. (2020). Theory of green purchase behavior (TGPB): A new theory for sustainable consumption of green hotel and green restaurant products. *Business Strategy and the Environment*, 29(6), 2815–2828. Doi: 10.1002/bse.2545
- [6]. Dong, X., Liu, S., Li, H., Yang, Z., Liang, S., & Deng, N. (2020). Love of nature as a mediator between connectedness to nature and sustainable consumption behavior. *Journal of Cleaner Production*, 242, 1–12. Doi: 10.1016/j.jclepro.2019.118451

- [7]. Zhao, H. H., Gao, Q., Wu, Y. P., Wang, Y., & Zhu, X. D. (2014). What affects green consumer behavior in China? A case study from Qingdao. *Journal of Cleaner Production*, 63(2), 143–151. Doi: 10.1016/j.jclepro.2013.05.021
- [8]. Bako, M. (2018). Different leadership style choices, different generations. *Prizren Social Science Journal*, 2, 127-143
- [9]. Puiu, S., Velea, L., Udristioiu, M. T., & Gallo, A. (2022). Behavioral Approach to the Tourism Consumer Decisions of Generation Z. *Behavioral Sciences*, 12(9), 320. Doi: 10.3390/bs12090320
- [10]. Arco, M. D., Marino, V., & Resciniti, R. (2023). Exploring the pro-environmental behavioral intention of Generation Z in the tourism context: the role of injunctive social norms and personal norms. *Journal of Sustainable Tourism*, 31(9), 1–22. Doi: 10.1080/09669582.2023.2171049
- [11]. Sujood, S. S., Naseem, B., & Sheeba, H. (2022). Travelling to Tourism Destinations through the lens of Sustainability: An extended TPB Model to predict behavioural intention of Gen Z Consumers. *Journal of Tourism, Sustainability and Well-being*, 10(3), 172-188. Doi: 10.34623/1vyp-qy32
- [12]. Lorena, R. C., Josefa D. M. S., & Francisco, M. L., (2023). Immersive experiences as a resource for promoting museum tourism in the Z and millennials generations. *Journal of Destination Marketing & Management*, 29, 1-10. Doi: 10.1016/j.jdmm.2023.100795
- [13]. Victor, M. R., & Heike, A. S., (2019). A tourism inflex: Generation Z travel experiences. *Journal of tourism futures*, 5(2), 127-141. Doi: 10.1108/JTF-01-2019-0014
- [14]. Entina T., Karabulatova I., Kormishova A., Ekaterinovskaya M., & Troyanskaya M, (2021). Tourism industry management in the global transformation: meeting the needs of generation Z. *Polish journal of management studies*, 23(2), 130 - 148. Doi: 10.17512/pjms.2021.23.2.08.