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Sustainable Tourism and Tourist Destination Loyalty Model with the Integration of Safety Indicators in the COVID-19 Period

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Abstract
The COVID-19 pandemic and current security issues bring new aspects to the area of destination loyalty, which need to be incorporated into this model and comprehensively evaluated. The purpose of this study is to assess the significance of the model of tourist destination loyalty in combination with the safety indicators during the pandemic period among consumers in Slovakia. The research sample consists of 383 consumers from Slovakia, and data were collected during the COVID-19 period. The confirmatory factor analysis confirmed the sufficient validity and reliability of the model consisting of the indicators Safety, Cultural image, Environmental image, Socioeconomic image, Tourist satisfaction, and Destination loyalty. The research also assessed the significance of differences among the above indicators in terms of the categories Frequency of Travel, Length of Stay, Income, and Form of Tourism using ANOVA analysis. Large-scale differences have not been found, which indicates the model's stability. PLS Path Modelling assessed the relationships between the individual categories of the indicators. The strongest relationship was found between Tourist satisfaction and Destination loyalty. The element Value for Money was added to the model, and it had a significant positive relation to Tourist satisfaction. The indicator Safety is also of significant importance to the model as was shown in several cases. Based on the results, it could be stated that the indicator Safety is an important element in the Socioeconomic image indicator.

Key Words: sustainable development, sustainable tourism, destination loyalty, safety, COVID-19, Slovakia

JEL Classification: M31, Z32

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1. Introduction

Tourism and sustainability are strongly interconnected since sustainable tourism endeavors to support economic progress while limiting adverse effects on the environment and communities. This is achieved by embracing eco-friendly practices, preserving cultural heritage, and prioritizing social

responsibility within the tourism sector. The outcome is that tourism development benefits present and future generations, while preserving the natural and cultural resources of the destination. Additionally, sustainable tourism can generate new economic opportunities for local communities and promote the preservation of biodiversity and ecosystems. Sustainable destinations also possess a greater capacity to attract and retain tourists who value and actively support initiatives aimed at positively impacting the local community and environment. This relationship between sustainability and destination loyalty fosters a mutually beneficial dynamic, yielding long-term advantages for both visitors and the host destination (Kusumah, 2024).

Tourism is one of the industries most affected by the COVID-19 pandemic (Hoang et al., 2023). The decrease in demand for air travel due to the pandemic has had negative impacts on airlines, hotels, and target markets. As such, it is the responsibility (Havel & Ronovská, 2025) of policymakers, researchers, and tourism professionals to find solutions and work towards the recovery of the sector (Ruppenthal & Rückert-John, 2024; Sivák et al. 2024). The tourism industry is highly sensitive to shocks, such as those caused by the COVID-19 pandemic. The United Nations World Tourism Organization reported a dramatic decline in international tourist arrivals in 2020, experiencing a 73% decrease compared to the preceding year (United Nations World Tourism Organization, 2022). While a modest 4% recovery was observed in 2021, international tourist arrivals in 2022 remained at 63% of 2019 levels (United Nations World Tourism Organization, 2023). However, the pandemic has also opened doors to the implementation of sustainable solutions in the tourism industry (Sharma et al., 2024).

Tourism is a pivotal aspect of the national economy and has garnered considerable attention from both academic and professional spheres, as evidenced by its incorporation in the Sustainable Development Goals. Nevertheless, despite its criticality, the tourism sector is often neglected in Slovakia and other countries. Slovakia was severely impacted by the COVID-19 pandemic, which resulted in a significant downturn in the tourism industry. Nonetheless, Slovakia remains an appealing destination for visitors, while the legal environment there lags behind modern EU Trends (Csach & Havel, 2024). The success of tourism primarily hinges on the number of visitors drawn to a destination, which is predicated on the perceived appeal of the destination (But, 2024). This attractiveness is epitomized by the destination image and loyalty.

In view of the foregoing, it appears that a scientific endeavour concentrating on the evaluation of destination image and loyalty holds significant strategic importance. Given the prevalence of notions surrounding safety concerns and health security within the tourism industry during the COVID-19 pandemic, it is imperative to explore its influence on the destination loyalty model. Hence, the aim of this investigation was to evaluate the extent of the role played by safety concerns and health security in the said model.

2. Literature review

Tourism is recognized as a significant contributor to regional development in the EU, particularly in underdeveloped and declining areas. Sustainable tourism, which includes economic, social, and environmental sustainability, is vital for the industry's long-term success. Sustainable tourism research has come a long way since the publication of the Brundtland Report. Over the last five years, the tourism sector has matured and it now places more emphasis on climate change, tourist values and behavior, modelling and theoretical progress (Androniceanu et al., 2020; Kubickova et al., 2023; Saura et al., 2023). As research on sustainable tourism is progressing and addressing new research topics, it is important that it continues to push the boundaries of what is known and address a rapidly changing world. One of such topics is the research of the tourist destination loyalty model and its enrichment in relation to current trends.

Tourist destination loyalty can be defined as the tourist's intention to visit the destination again and their willingness to support it. Several works characterize destination loyalty in terms of the intention to revisit and recommend (Pike, 2010; Chi, 2011; Prayag and Ryan, 2011). When someone repeatedly visits a destination or recommends it to others, that person is loyal to the destination. Yoon and Uysal (2005) have shown that loyalty towards a destination can be displayed through a person's behavior, attitude, or a combination of both. Among other things, destination loyalty is closely linked to the destination image, which plays a key role in shaping tourists' judgment. It is generally recognized as an important concept that influences tourists' decision-making, destination selection, evaluation, and future behavior, e.g. destination loyalty (Zhang et al., 2014; Wu, 2016; Stylos et al., 2016; Zhang et al. 2016). Several studies have shown a relationship between destination image and destination preference or intent to visit a destination (Alcañiz et al., 2009; Chi and Qu, 2008). Destination image can affect tourist behavior as well as the destination's success (or failure). Within the context of a sustainability-oriented tourism industry, destination loyalty transcends mere brand loyalty. It encompasses a broader spectrum of value attributes that are cultivated through effective information dissemination and targeted marketing strategies aimed at promoting sustainable practices. Prior research, including studies by Zheng et al. (2022), Najar and Rather (2023), and Zhou et al. (2023), has consistently demonstrated that destination image exerts a significant influence on loyalty, as manifested by a strong desire for repeat visitation, an inclination to recommend the destination to others, and the propensity for positive word-of-mouth communication.

Tourists' behavioural intentions to return to and recommend a location to others are influenced by tourism satisfaction (Adamovich et al., 2021; Çevrimkaya & Zenin, 2023; Mura & Stehlíková, 2025; Uslu et al., 2024; Zeng et al., 2021). This is also confirmed by many researches researching the issue. It was found that there is a positive relationship between Tourist satisfaction and Destination loyalty, i.e. the intention to recommend and revisit the destination (Prayag and Ryan, 2011; Chen and Phou, 2013; Wu, 2016; Chetthamrongchai & Saengchai, 2019). The results of the original study, which examined the model of destination loyalty, showed that tourist satisfaction fully mediated the impact of cultural image and partially mediated the effects of socioeconomic and environmental images on destination loyalty (Lee and Xue, 2020).

The environmental image of a destination generally includes the destination environment, atmosphere, and natural attractions (Chen and Phou, 2013; Wu, 2016; Šimelytė and Tvaronavičienė, 2022). Environmental pollution and land destruction are major environmental problems in the destination. These are capable of reducing satisfaction not only of tourists but also residents (Li et al., 2021). The preserved natural environment could serve as a competitive advantage of the destination due to its authenticity and potential to provide tourists with a unique leisure experience (Fong et al., 2017). According to Zulvianti et al. (2023), perceived environmental value also exerts a significant influence on destination loyalty and destination image exerts a significant influence on both tourist satisfaction and destination loyalty. Perceived environmental value has long been recognized as one of the primary determinants of consumer satisfaction, perceived service quality, and loyalty behaviors (Mirzaalian and Halpenny, 2021). As tourist visitation rates escalate, the environmental and socio-cultural integrity of host communities faces increasing pressure, thereby underscoring the critical importance of sustainable tourism practices. In support of this notion, Tyllianakis et al. (2021) demonstrated a significant and positive relationship between perceived environmental values, tourist satisfaction, and destination loyalty.

Socioeconomic image of the city, e.g. public infrastructure, accessibility, tourism-related services and facilities, and prices of goods and services have an impact on tourist satisfaction and behavior (Androniceanu, 2019; Chen and Phou, 2013; Wu, 2016). Nilplub et al. (2016) suggest a strong link between perceived value for money and satisfaction, suggesting that tourists' satisfaction with their visits to destinations depends to a large extent on their assessment of what value they receive for the money they spent. While the tourism industry contributes to the socio-economic growth of the destination (Fong et al., 2017), tourism also has negative effects, such as an increase in the overall price

level of goods and services (Tkalec and Vizek, 2016). The COVID-19 pandemic has also affected socio-economic life around the world and has severely affected the global tourism sector, which in many cases also affects the socioeconomic image (Kinseng et al., 2022).

Frias et al. (2012) highlight culture as a moderating variable in pre-visit tourist destination image formation, through the information sources utilized by the tourist in the selection of a holiday destination. Wu (2016) states that the cultural image of a destination can greatly affect tourist satisfaction. Kladou and Kehagias (2014) state that cultural and historical festivals, attractions, art, and traditions are essential determinants of the destination's cultural image.

The tourism sector, particularly tourist behavior, exhibits heightened vulnerability to a spectrum of disaster events, encompassing both natural occurrences, such as earthquakes, and anthropogenic disasters, such as terrorist attacks (Ma et al., 2020). While pandemics, including COVID-19, can be categorized as natural disasters, their profound and unprecedented impact on tourism activity necessitates their classification as a distinct typology (Moya Calderón et al., 2021; Villacé-Molinero et al., 2021; Zenker et al., 2021). This unique classification is warranted by the imposition of numerous and significant constraints across various countries, including restrictions on travel mobility, the implementation of social distancing measures, and limitations in access to essential services and critical infrastructure. The COVID-19 pandemic has greatly affected the whole economy (Hýžová et al. 2024), but especially the tourism sector. The closure of borders and concerns about the spread of the virus by tourists have disrupted tourism services, leading to a negative impact on the industry (Matsuura and Saito, 2022). The pandemic has brought about uncertainty, anxiety, fear and concerns for one's health and safety when traveling – thus hesitation to travel (Zheng et al., 2021; Dedeoğlu et al., 2022). Within the specific context of a pandemic such as COVID-19, it is logical to postulate that tourists' intentions to visit and recommend a destination are significantly influenced by their perceived level of risk associated with the destination within the prevailing health crisis (Lebrun et al., 2022; Pan et al., 2022; Tiwari et al., 2023; Villacé-Molinero et al., 2021).

Even after health and safety protocols at all levels of travel have been adopted, tourists were not so eager to travel. However, "travel fear" can evoke different coping strategies, thereby increasing tourists' psychological resilience and cautious travel behavior (Abdullah et al., 2021; Zheng et al., 2021). The general perception of safety in a destination is a crucial factor that influences its image, and therefore, is important to consider. If tourists perceive a destination to be unsafe, they are less likely to return or recommend it to others (Chew and Jahari, 2014). Tourists who feel safe in the destination tend to perceive the attributes of the destination more positively, show greater satisfaction and a greater willingness to revisit and recommend the destination (Ding and Wu, 2022). Lack of safety constitutes a significant barrier to revisiting the destination. Ribeiro et al. (2018) state that integrating perceived safety into models could significantly enhance the understanding of destination loyalty dynamics.

The study of De Los Reyes and Dael (2023) revealed that both perceived destination image and tourist satisfaction exerted a significant influence on destination loyalty. Notably, perceived safety emerged as the most salient factor, demonstrating the strongest positive impact. These findings strongly suggest that investing in robust safety measures and strategically enhancing customer perceptions of safety within the destination can significantly cultivate and maintain visitor loyalty. Similarly, empirical evidence derived by Herrero-Crespo et al. (2024) reveals that pandemic-related risks exert influences on the key dimensions of destination loyalty, namely, the intention to revisit and the propensity to recommend, for both domestic and international travel experiences. Supriadi et al. (2024) discovered that enhancing the security infrastructure of tourist destinations following the COVID-19 pandemic can significantly incentivize repeat visitation. A heightened sense of safety and security within tourist attractions fosters greater comfort and enhances the overall visitor experience. Notably, the study revealed that the level of health value perceived by tourists during their visit exerts a more substantial influence on loyalty compared to cleanliness. Jiménez-Medina et al. (2022) underscore the significance of tourist perceptions regarding a comprehensive suite of anti-COVID-19 safety measures, encompassing disinfection protocols, social distancing measures, capacity restrictions, contactless

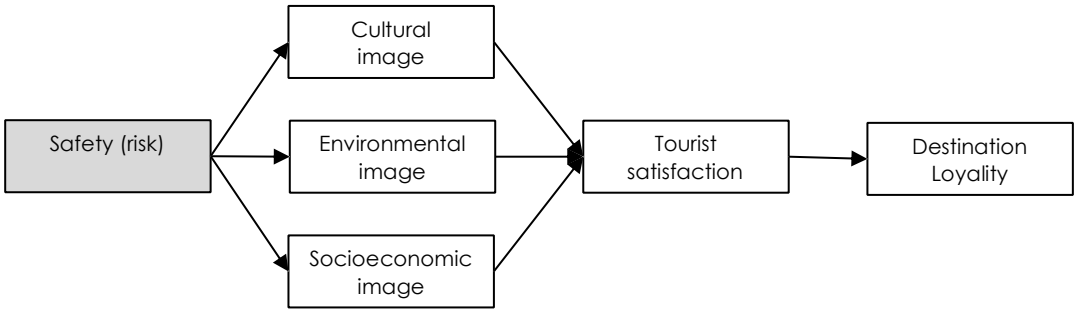
technologies, air renewal systems and the utilization of furniture designed to minimize contagion risk. Subsequent analysis confirmed a positive association between overall tourist satisfaction with the implementation of these measures and their intention to revisit the destination. Notably, the study revealed that all assessed safety measures contributed significantly to enhancing satisfaction and fostering tourist loyalty. Cheng et al. (2022) revealed a significant positive influence of tourist perceptions of recreation safety climate on key constructs including situational involvement, recreation satisfaction, place dependence, place identity, and ultimately, destination loyalty. Liu and Pratt (2017) asserted that perceived safety constitutes a primary determinant in shaping tourist intentions to both visit specific destinations and engage in travel-related activities. Environmental factors also exert a profound influence on tourists' assessments of destination safety. These encompass a wide range of natural and sociocultural elements, including the likelihood of encountering extreme weather events (e.g., typhoons, hurricanes, flooding, heatwaves, earthquakes), the quality of air and water resources, and the presence of cultural taboos (Hübner and Gössling, 2012; Xie et al., 2021).

Researchers realized that due to the complexity of the concept, they cannot design and empirically test a model that encompasses all aspects of this image. This study is based on an extended version of a comprehensive model of sustainable tourism called the destination loyalty model (Lee and Xue, 2020), which includes constructs falling under Destination image - Cultural image, Environmental image, Socioeconomic image, Safety, Tourist satisfaction and Destination loyalty. When formulating the research, we set several research questions: RQ 1: Is there a significant relationship between safety and cultural image? RQ 2: Is there a significant relationship between safety and environmental image? RQ 3: Is there a significant relationship between safety and socioeconomic image? RQ 4: Is there a significant relationship between cultural image and tourist satisfaction? RQ 5: Is there a significant relationship between environmental image and tourist satisfaction? RQ 6: Is there a significant relationship between socioeconomic image and tourist satisfaction? RQ 7: Is there a significant relationship between tourist satisfaction and destination loyalty?

3. Methods

The aim of the paper was to assess the significance of the model of tourist destination loyalty in combination with the safety indicators during the pandemic period among consumers in Slovakia. Figure 1 completes the idea of the main areas of the assessed model.

Figure 1. **Sustainable model of destination loyalty in combination with safety**



Source: own processing based on Lee and Xue (2020)

The model was based on the ideas of Lee and Xue (2020), who presented a model of destination loyalty with destination image and sustainable tourism in their study. The paper hereunder added to the above model 2 latent variables, namely perception of safety-related risks in general and health. The latent variable Value for Money was also added. The variable Safety (risk) consisted of 2

indicators (Safety, Health), the Cultural image variable consisted of only one indicator (Cultural), the Environmental image included two indicators (Upkeeping, Ambience), the Socioeconomic image variable consisted of 4 indicators (Infrastructure, Commerce, Offering, Value for Money), the Tourist Satisfaction consisted of one indicator (Satisfaction) and the Destination Loyalty consisted of 2 indicators (Revisit, Recommend). The structure of the latent and manifest variables model is available in Annex 1. This annex also shows selected studies that addressed these indicators and which were the inspiration for the questionnaire items.

Manifest variables were surveyed on a five-point Likert scale (strongly disagree; disagree; neither disagree nor agree; agree; strongly agree). In addition to the above, the items focused on the specifics of tourism were also included in the survey section, in particular (i) Travel frequency [Approximately how many trips (at least one overnight stay) do you make over the course of one year?] (1-2: n = 225, 58.75%; 3-6: n = 130, 33.94%; 7-12: n = 19, 4.96%; 13-24: n = 4, 1.04%; 25 and more: n = 5, 1.31%), (ii) Length of stay [Length of stay (number of nights):] (mean = 3.95, median = 3, standard deviation = 3.75), this item has been subdivided into categories (<= 2: n = 130, 35.25%; 3: n = 101, 26.37%; 4-5: n = 86, 22.45%; 6 and more : (= 220, 15.93%), (iii) Income [Average net monthly income:] (up to EUR 220: n = 47, 12.27%; EUR 221 - 330: n = 31, 8.09%; EUR 331 - 430: n = 26, 6.79%; 431 - 540 EUR: n = 25, 6.53%; 541 - 720 EUR: n = 56, 14.1%; 721 - 1090 EUR: n = 103, 26.83%; 1091 - 1810 EUR: n = 64 , 16.71%; 1811 - 2540 EUR: n = 17, 4.43%; 2541 and more EUR: n = 16, 4.18%) and (iv) Form of tourism [Aim of tourism] (Mountain and alpine: n = 184; 48.04%; Urban and suburban: n = 26, 32.90%; Rural: n = 73, 19.06 %).

Data was collected from 2 November 2021 to 31 December 2021. The final sample consisted of 383 statistical units (consumers' answers). This size is sufficient for Slovakia. Sample preparation consisted of three steps. In the first step, 12 statistical units (2%) were excluded as these respondents did not agree to be included in the research (did not consent to the processing of personal data). Subsequently, 140 (23%) statistical units were excluded, as these were the respondents who stated "No" to the question "Over the course of the last 2 years, did you stay at a place outside your place of residence / place of work for at least one night's stay?" In the last step, 76 (17%) statistical units were excluded, as these respondents were on their holiday stay before 2020. The selection of respondents was planned as a quota selection, where an approximately proportional representation of women and men was assumed and also certain socio-economic conditions were foreseen: students about 30% of the population, employed persons about 50% of the population.

The data was collected on the basis of paid promotion on social networks, direct contacting of respondents on social networks, sharing a questionnaire in various groups on social networks, sending requests for questionnaire completion to people whose contact details were found in the publicly available contact database as well as private database of the researchers. Data was collected exclusively via electronic means of communication. Each respondent received identical information about the research.

Table 1 presents the characteristics of the sample. The largest discrepancies were identified in the area of gender, but these discrepancies are not expected to significantly skew the results. The average age of respondents is 32.57 ± 11.997. The survey also aimed at finding out the purpose of tourism – the most frequent reply to that was relax (n = 223, 58.23%), exploring new places (n = 51, 13.32%), visiting friends and acquaintances (n = 46, 10.97%), business (n = 19, 4.96%), sports (n = 18, 4.7%), entertainment (n = 17, 4.44%), education (n = 12, 3.12%) and religion (n = 1, 0.26%). In terms of accommodation, the most popular choices included hotels (n = 144, 37.6%), accommodation with a private provider (n = 77, 20.1%), boarding houses (n = 59, 15.41%), cottages (n = 25, 6.53%), hostels (n = 18, 4.7%), campsites (n = 15, 3.92%), motels (n = 4, 1.04%) and boats (n = 1, 0.26%). On the basis of the above, it was possible to conclude that the sample is sufficiently diverse while still corresponding to the basic set (albeit with certain deviations). Thus, the sample is sufficient enough for a credible assessment of the results.

As a first step, the paper made use of the descriptive analysis. Confirmatory factor analysis (CFA) was used to assess the validity and reliability of the research tool (the relevant characteristics were evaluated). The acceptance limit for the factor loading was set at the level of 0.7 (similar to the reliability characteristics).

Table 1. **Sample characteristics**

Characteristics	Frequency	Percent
Gender:		
Male	159	41.5 %
Female	224	58.5 %
Socio-economic status:		
Full-time student	118	30.8 %
Pensioner (old-age, disabled, etc.)	10	2.6 %
Maternity leave / guardianship	10	2.6 %
Unemployed	12	3.1 %
Entrepreneur / self-employed etc.	47	12.3 %
Employed	186	48.6 %
Highest education attained:		
Secondary education	203	53.0 %
Tertiary education	180	47.0 %

Source: own processing

For a Comparative Fit Index and Tucker-Lewis Index, the acceptance limit was set at 0.9. Root Mean Square Error of Approximation was considered acceptable at a level below 0.06. The difference analysis made use of the parametric analysis of variance ANOVA. The effect size was interpreted using the characteristic η. According to Cohen (1988), the results can be interpreted as follows: small effect size ($\eta 2 = 0.01$), medium effect size ($\eta 2 = 0.06$), and large effect size ($\eta 2 = 0.14$). The Partial Least Square - Path modelling method (PLS-PM) was applied to assess the relationships between the individual areas (indicators) of the destination loyalty model. Simultaneously with the assessment of relationships, differences were also assessed using the permutation method (200 replications). The research made use of the programming language R v. 4.1.2 (Bird Hippie) and Python v. 3.10 in PyCharm v. 2021.3.2.

4. Results

The study results are divided into three parts. The first part focuses on the assessment of the model through confirmatory factor analysis and includes descriptive analysis. The second part analyzes differences between model components based on tourism-related characteristics such as travel frequency, length of stay, income, and form of tourism. The final section presents the most significant results and overall assessment of the relationships between model components.

The basic outputs of the descriptive analysis, as well as the outputs regarding the validity of the model resulting from the confirmatory factor analysis are available in Annex 2. With regard to the outputs of the factor loading, it can be stated that none of them acquires a value lower than 0.7, i.e. in no case is the value lower than the generally accepted limit. The reliability presented by the outputs of Cronbach's alpha (Crm. α) reached values higher than 0.7 in all cases except Safety ($\alpha = 0.65$). Certain deviations from the expected values were also identified in the characteristic average variance extracted (AVE), but these are not deviations that would evaluate the assessed structure of the model as

insufficient, as evidenced by several general outputs (Comparative Fit Index (CFI) - 0.918, Tucker-Lewis). Index (TLI) - 0.908, Root Mean Square Error of Approximation (RMSEA) - 0.059 (CI 0.059 - 0.062). Based on the above, the model of destination loyalty is eligible for further analytical processes. Table 2 presents the results of the differences in the indicators of the model of destination loyalty in relation to the categories of selected characteristics specifying tourism and visitors in more detail.

Table 2. **ANOVA and effect size (η2)**

	Frequency of travel		Length of stay		Income		Form	
	F (sig)	η^2	F (sig)	η^2	F (sig)	η^2	F (sig)	η^2
Safety	**2.51 (0.0417)**	0.026	0.6 (0.6139)	0.005	**3.2 (0.0016)**	0.064	2.67 (0.0709)	0.014
Health	1.03 (0.3928)	0.011	0.42 (0.7376)	0.003	1.83 (0.0693)	0.038	1.13 (0.3246)	0.006
Cultural	1.35 (0.2514)	0.014	0.39 (0.7593)	0.003	1.5 (0.1538)	0.031	**6.08 (0.0025)**	0.031
Upkeeping	2.09 (0.0815)	0.022	1.54 (0.2041)	0.012	1.21 (0.2915)	0.025	1.26 (0.2841)	0.007
Ambience	1.33 (0.2591)	0.014	**2.79 (0.0404)**	0.022	1.41 (0.1915)	0.029	**10.59 (<0.001)**	0.053
Infrastructure	1.51 (0.1987)	0.016	0.63 (0.5945)	0.005	1.15 (0.3295)	0.024	**4.59 (0.0107)**	0.024
Commerce	1.74 (0.1398)	0.018	0.63 (0.5964)	0.005	1.74 (0.0871)	0.036	**19.16 (<0.001)**	0.092
Offering	1.89 (0.1119)	0.020	**2.96 (0.0323)**	0.023	1.25 (0.2667)	0.026	2.82 (0.0607)	0.015
Value money	0.43 (0.7842)	0.005	1.47 (0.2227)	0.011	0.81 (0.5919)	0.017	0.11 (0.8986)	0.001
Satisfaction	**3.5 (0.008)**	0.036	0.98 (0.4014)	0.008	1 (0.4348)	0.021	2.17 (0.116)	0.011
Revisit	**2.4 (0.0498)**	0.025	1.38 (0.247)	0.011	1.43 (0.1804)	0.030	1.55 (0.2128)	0.008
Recommend	**3.19 (0.0135)**	0.033	1.42 (0.2378)	0.011	0.86 (0.5504)	0.018	2.85 (0.0592)	0.015

Source: own processing

The analysis focused on 4 areas. The post-hoc Tukey HSD test was used to assess the significance of the differences between the categories. With regard to the travel frequency, a significant difference manifested itself in four cases (Safety, Satisfaction, Revisit, Recommend). With regard to the Safety indicator, significant differences at the $\alpha < 0.05$ level were identified in the category of the lowest travel frequency and the frequency of 7-12 stays per year. The higher level of risk was identified at lower travel frequency (mean: 1-2 stays per year = 2.29 ± 1,161, 7-12 stays per year = 1.45 ± 0.85). With regard to travel frequency, significant differences at $\alpha < 0.05$ were identified between the lowest and highest intensity categories, with a higher Satisfaction rate identified at lower travel frequency (mean: 1-2 stays per year = 4.49 ± 0.71, 25 and more stays per year = 3.45 ± 1.46). No difference significant at the $\alpha < 0.05$ level was identified by the post-hoc test for the Revisit and Recommend indicators. The difference between the categories of the number of days of stay was reflected in the Ambience and Offering indicators. At a significance level of $\alpha < 0.05$, significant differences by post-hoc test were identified only in the Offering for the following: a stay of 4-5 days and a stay of 6 or more days. A higher rate of Offering was identified for a 4 to 5 day stay (mean: stay 4-5 days = 3.91 ± 0.87, stay 6 and more days = 3.44 ± 0.99). The difference between the income categories was identified only in terms of the perceived security risk. For lower-income groups (up to EUR 220, EUR 221-330, EUR 331 - 430) a higher level of Safety risk was identified in comparison with the group with higher

average income (EUR 721 - 1090). The most differences between the indicators related to the model of destination loyalty were identified in the categories of forms of tourism (Cultural, Ambience, Infrastructure, Commerce). Differences in the Cultural indicator showed significant differences at the level of α <0.05 between urban and rural tourism (mean: urban and suburban = 3.76 ± 0.9, rural = 3.28 ± 1.01), in the Ambience indicator there were significant differences between mountain and urban tourism (mean: mountain and alpine = 3.99 ± 0.92, urban and suburban = 3.49 ± 0.9).

Table 3. **PLS PM output**

Relations (GOF: 0.325)	**β**	**SE**	**t-value**	**sig**
Safety -> Cultural	0.072	0.0707	1.02	0.309
Health -> Cultural	-0.002	0.0707	-0.03	0.979
Safety -> Upkeeping	0.135	0.0705	1.91	0.057*
Health -> Upkeeping	**-0.140**	**0.0705**	**-1.99**	**0.047****
Safety -> Ambience	-0.052	0.0707	-0.73	0.463
Health -> Ambience	-0.030	0.0707	-0.43	0.669
Safety -> Infrastructure	**0.183**	**0.0702**	**2.60**	**0.010****
Health -> Infrastructure	-0.106	0.0702	-1.51	0.131
Safety -> Commerce	**0.160**	**0.0703**	**2.28**	**0.023****
Health -> Commerce	-0.063	0.0703	-0.90	0.369
Safety -> Offering	**0.147**	**0.0705**	**2.09**	**0.037****
Health -> Offering	-0.124	0.0705	-1.75	0.080*
Safety -> Value money	0.136	0.0705	1.94	0.054*
Health -> Value money	-0.137	0.0705	-1.94	0.053*
Cultural -> Satisfaction	0.081	0.0586	1.38	0.168
Upkeeping -> Satisfaction	**0.351**	**0.0677**	**5.19**	**<0.001 †**
Ambience -> Satisfaction	-0.005	0.0657	-0.08	0.937
Infrastructure -> Satisfaction	-0.095	0.0715	-1.32	0.186
Commerce -> Satisfaction	0.025	0.0704	0.35	0.728
Offering -> Satisfaction	0.029	0.0703	0.41	0.682
Value money -> Satisfaction	**0.176**	**0.0610**	**2.89**	**0.004****
Satisfaction -> Revisit	**0.708**	**0.0362**	**19.60**	**<0.001 †**
Satisfaction -> Recommend	**0.762**	**0.0332**	**22.90**	**<0.001 †**

Note: Significant results (p-value < 0.05) are highlighted in bold.

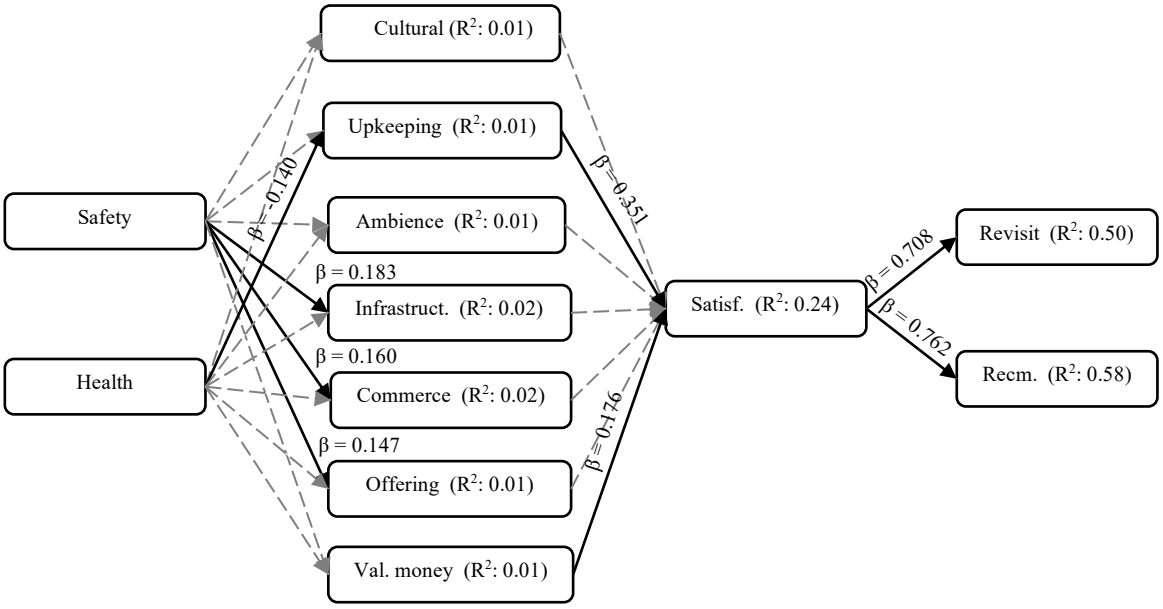
*p-value < 0.1. **p-value < 0.05. ***p-Value < 0.01. †p-value < 0.001.

Source: Source: own processing

Infrastructure Image indicates a significant difference between urban and rural tourism (mean: urban and suburban = 3.68 ± 0.93, rural = 3.26 ± 1). Significant differences in the Commerce indicator were identified between mountain and urban tourism (mean: mountain and alpine = 3.25 ± 0.96, urban and suburban = M 3.77 ± 0.9) and also between urban and rural tourism (mean: urban and suburban = 3.77 ± 0.9, rural = 2.96 ± 1.02). A comprehensive descriptive analysis is available in Annex 3.

Table 3 presents the outputs of the assessed relationships, and as can be seen, several relationships gained significant ground. Relationships with a significance rate of α <0.005 are highlighted. The only significant negative relationship was identified between the Health and Upkeeping indicators. This output suggests that lower level of environmental upkeeping is often associated with an increased level of perceived health and safety concerns. Increased concerns about safety in general go hand in hand (a significant positive relationship) with the indicators Infrastructure, Commerce, Offering. These indicators are characteristic of larger developed cities. A significant link with satisfaction was identified in two indicators (Upkeeping, Value money). In particular, the Upkeeping indicator was given a slightly higher importance based on the value of the β coefficient (β: 0.351, p-value: <0.001) than the indicators mentioned so far. The most important part of the model is the relationship of satisfaction with the indicators of willingness return to the destination and the willingness to recommend destination. Additional information about the models (outer model outputs) is available in Annex 4.

Figure 2. **PLS PM model**



Source: own processing

Figure 2 visualizes the relationships graphically for better understanding. Relationships significant at α <0.05 are connected with a black solid line. The stable model should include significant relationships. The stability of the destination loyalty model was also assessed by analyzing the difference in effects (β coefficients) selected tourism characteristics have. These included characteristics such as: Travel Frequency, Length of stay (number of days of stay), Income and Form of tourism. The analysis was performed using the PLS PM permutation method at 200 replications. As this method allows only two sub-categories to be compared, the categories Travel Frequency, Length of stay (number of days of stay) and Income have been converted into a dichotomous form. Travel Frequency consisted of the

following sub-categories (i) 1-2 stays per year, (ii) 3 or more stays per year. The sub-category the Length of stay (number of days of stay) consisted of two categories: (i) 1-3, (ii) 4 and more. Income also consisted of 2 sub-categories: (i) up to EUR 720, (ii) EUR 721 and more. The Form of Tourism consisted of three sub-categories ((i) Mountain and Alpine, (ii) Urban and Suburban, (iii) Rural (these were identified in pairs due to the restriction referred to above). No significant differences in relationships were confirmed between the Travel Frequency and Income categories. At the level of significance α <0.05, 2 differences were identified for the Length of Stay, namely in the relationship Safety -> Ambience (β (p-value) = 1-3 days: 0.173 (0.0595); 4 and more days: -0.390 (0.0029) and in the relationship Health -> Ambience (β (p-value) = 1-3 days: 0.129 (0.0761); 4 and more days: 0.234 (0.0715)). When comparing the relationships between Forms of Tourism, several significant differences were identified: (i) Health -> Ambience (β (p-value) = Mountain and alpine: -0.178 (0.0753); Urban and suburban: 0.21 (0.0637)), (ii) Infrastructure -> Satisfaction (β (p-value) = Mountain and Alpine: 0.057 (0.0753); Rural: -0.401 (0.0295)), (iii) Safety -> Ambience (β (p-value) = Urban and suburban: (0.014); Rural: 0.227 (0.1984)), (iv) Upkeeping -> Satisfaction (β (p-value) = Urban and suburban: 0.561 (<0.001); Rural: 0.149 (0.436)), (v) Ambience -> Satisfaction (β (p-value) = Urban and suburban: 0.128 (0.23); Rural: 0.300 (0.1151)), (vi) Satisfaction -> Revisit (β (p-value) = Urban and suburban: 0.646 (<0.001); Rural: 0.79 (<0.001)), (vii) Satisfaction -> Recommend (β (p-value) = Urban and suburban: 0.686 (<0.001); Rural: 0.869 (<0.001)). When assessing the significance of these relationships, the attention should be drawn also to the comparison with the outputs of the whole sample model (Table 3). In several categories, significant relationships were observed in places where these relationships failed to emerge for the whole sample.

5. Discussion

A tourist destination is a living organism that develops over time and goes through certain life stages. In the current uncertain times, it is essential for every tourist destination to build its positive image, especially with regard to competitiveness, safety and sustainable development. A potential visitor relies, among other things, on the image of the destination when making his choice. Due to the wide choice and greater diversity of the offer of destinations, visitors prefer those that enable the realization of their personal needs as well as a safe environment and attractive value for money. COVID-19 (declared as a pandemic by WHO, 12 March 2020) significantly affected global economic, political, social and cultural systems. Health measures have halted travel, tourism and leisure activities on a global scale (Sigala, 2020). We based our assessment of the importance of the model of destination loyalty on the above facts and enriched it with the safety area during the COVID-19 pandemic in Slovakia.

The results of the assessment of destination loyalty model indicators differences in terms of the categories of selected characteristics specifying tourism in the case of travel frequency pointed out that visitors showed significant differences in four cases (Safety, Satisfaction, Revisit, Recommend). Results of the Revisit category are in accordance with Lee and Xue (2020) and indicate that the more tourists visited the destination, the better they looked at the city's development status and were more loyal to the destination. This may be because tourists who have visited the destination more have developed a higher level of attachment, a factor that is related to destination image and leads to tourist loyalty (Prayag and Ryan, 2011; Chen and Phou, 2013). The differences in the category Length of stay (number of days of stay) were found for the Ambience and Offering indicators. It is reasonable to believe that tourists may reduce their length of stay due to environmental pollution and poor product quality (Krelling et al., 2017). The differences in the category Income were found only for the Safety indicator, while similar differences were also found in other studies (Floyd and Pennington-Gray, 2004; Liu et al., 2013). Four cases of differences between the indicators related to the destination loyalty model were identified also in the category Forms of tourism (Cultural, Ambience, Infrastructure, Commerce).

Forms of tourism affect many fields, as every form has very different characteristics and domains (Nistoreanu et al. 2010).

Regarding the outputs of the evaluated relationships between constructs of the model, several relationships proved to be significant. The only significant negative relationship was identified between the Health and Upkeeping indicators. It could be said that a lower level of Upkeeping is often associated with an increased level of risk in Health indicator. With the increased concerns about Safety in general there has been identified a significant positive relationship with the increased values in Infrastructure, Commerce and Offering. Increased values in Infrastructure, Commerce and Offering can therefore be associated with a higher degree of Safety concerns. These indicators are characteristic of larger developed cities. The observed results may be due to the fact that tourism risk indicators, including financial, economic, social and cultural, psychological, environmental, health, political and technological risks, affect the opinion of foreign tourists on various aspects of a destination (Nouri et al., 2018). These findings support the view that perceived safety and health risk are multidimensional constructs that affect many domains (Perić et al., 2021). Li et al. (2019) found that the perception of safety has a significant positive impact on overall tourist loyalty (willingness to revisit, willingness to recommend and positive word of mouth), a result supported by many other studies conducted on a global scale in the post-COVID-19 period (Jiménez-Medina et al., 2022; De Los Reyes and Dael, 2023; Herrero-Crespo et al., 2024; Supriadi et al., 2024). The inclusion of safety in the models and the examination of connections are thus important to investigate in the future as well. A significant link with satisfaction was identified for two indicators (Value for Money, Upkeeping). Similarly, Nilplub et al. (2016) suggest a strong correlation between perceived Value for Money and Satisfaction. In particular, the results of Upkeeping indicator could be given slightly higher importance than the indicators mentioned so far, based on the detected values, while the given result is in line with the findings of the original study (Lee and Xue, 2020). Preserving buildings, especially historic ones, is important for maintaining the image of the place and its brand (Hankinson, 2004). The way tourists perceive the destination's natural areas, such as parks, lakes and rivers, may positively affect their satisfaction, therefore, these areas should be well maintained (Karácsony et al., 2024). The government should keep investing in urban development for the benefit of both tourists and residents (Chi and Qu, 2008; Chen and Phou, 2013). In relation to the results of the original study by Lee and Xue (2020), the findings regarding the impact of Infrastructure, Offering and Cultural indicators on the Satisfaction were not confirmed. In terms of environmental image, "Ambience" has shown to have a negative beta but had no relationship with Satisfaction, which also agrees with the original study. The important part of the model is the relationships between the indicators Willingness to return / Willingness to recommend and Satisfaction, so it has been found that tourist satisfaction has had a positive effect on destination loyalty. These results agree with the results of many studies (Yoon and Uysal, 2005; Chi and Qu, 2008; Wang and Hsu, 2010; Prayag and Ryan, 2011; Chen and Phou, 2013; Wu, 2016; Ramesh and Jaunky, 2021). Satisfied tourists are more likely to revisit the destination and spread positive word-of-mouth about the place, thus inspiring other people to visit the place. As tourist satisfaction was significantly influenced by Upkeeping and Value for Money and had an impact on destination loyalty, attention must be paid to keeping these two indicators in good shape. However, tourists were more inclined to recommend the destination than to visit it again. Tourists, even if satisfied, are less likely to return to the same destination, especially if they can meet most of their travel goals at the destination within a few days.

6. Conclusion

The success of tourism in a particular place is influenced by its overall structure and the positive environment surrounding it. Tourist offerings should prioritize basic human needs for safety and security to ensure potential visitors feel secure during their stay. Safety concerns vary depending on the

destination, and in Slovakia, the perceived risk associated with safety is relatively low. The results of the research conducted in Slovakia can be generalized to other countries in Europe and beyond. Considering safety in the sustainable tourism model and destination loyalty is critical for the industry's development. The pandemic period increased awareness of the importance of safety and security, which should be incorporated into strategic plans by tourism industry providers and organizations. This study's results contribute to the current tourism theory by extending the basic model of destination loyalty to include safety. The research conducted in Slovakia is innovative and connects issues of sustainable tourism development, destination image, and safety. The study's most significant aspect is the relationship between satisfaction, potential return to the destination, and recommendations to visit, which aligns with the results of many foreign studies.

The concept of sustainability is gaining more attention not only among professionals, but also in the public, as people recognize its importance for various sectors of the national economy. The findings of this research can aid in the creation of international strategic plans for tourism development, as well as national management policies for sustainable tourism. To promote sustainable travel and consumption in the tourism industry, targeted communication should be used to highlight the benefits of choosing a specific destination. However, in Slovakia, information about sustainable tourism is often insufficient or presented in a way that fails to capture the attention of its intended audience.

From a practical perspective, the findings of this study are relevant to important stakeholders in the tourism industry, including destination management organizations and national marketing agencies (e.g., Slovakia Travel in Slovakia), who can use these results to inform their strategies and create effective tourist products for marketing purposes. One possible solution to address overtourism in highly visited destinations is to use artificial intelligence (AI) through various applications that provide information on sustainable travel, transportation, and accommodations, as well as tips for protecting natural and cultural resources. However, future research should focus on expanding the sample size to include both domestic and foreign visitors, as well as investigating the impact of local residents' living standards on tourist satisfaction and loyalty to the destination. It is crucial to ensure that local residents support tourism because it plays a vital role in sustainable development, and without their support, the tourism industry cannot develop in the desired direction.

In addition to several strengths, this research inevitably has its limitations. One of the key limitations concerns the representativeness of the sample, as the study was conducted solely in Slovakia. Given that Slovakia exhibited certain specificities during the pandemic compared to other countries, the findings may not fully reflect the broader international context. In regions where perceived safety risks are higher, the results could differ, particularly in terms of linking various indicators to the perception of safety risks. Additionally, there was a slight deviation in gender representation, with female responses predominating. However, we do not consider these limitations to be critical, nor do we assume that they significantly distort the overall research findings.

Future research ambitions include expanding the study into an international context, enabling comparative analysis across selected EU countries. This approach will provide deeper insights into variations in perceptions and behavioral patterns across different socio-cultural and risk environments. Moreover, the research will extend into the post-pandemic period to examine how key relationships evolve over time. This will help validate the sustainable tourism and destination loyalty model beyond the direct influence of the pandemic. Since safety perception has been confirmed as a crucial factor within the model, future studies will further explore the differentiation of safety perceptions across destinations with varying levels and types of perceived safety risks.

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Annex 1. Specification of the research tool

LV	MV (questionnaire items)	ID MV	Authors
Safety Concerns	I didn't go out alone after 11:00 pm I feared for my safety (violence and mugging) I was afraid that the atmosphere among people was not good	Safety 1 Safety 2 *	Zou and Meng (2019)
Safety Health (risk)	I was concerned about my health in general. I was concerned about my health because of the possibility of contracting viral diseases in the destination. I was concerned about my health and safety because of the environment itself. I was concerned about my safety because of the infrastructure.	Health 1 Health 2 Health 3 Health 4	Byon and Zhang (2010); Mathew and Sreejesh (2017); Perić et al. (2021)
Cultural Image	Interesting cultural events Attractive historical sights Interesting local arts and crafts Quality cultural experiences Unique cultural identity and traditions Well-preserved cultural heritage Abundance of cultural educational opportunities	Cultural 1 Cultural 2 Cultural 3 Cultural 4 Cultural 5 Cultural 6 Cultural 7	Fakeye and Crompton (1991); Echtner and Ritchie (1993); McKercher et al. (2006); Simpson (2008); Lee and Xue (2020)
Environmental Image Upkeeping	Clean and tidy environment Good protection of natural areas Well-maintained buildings	Upkeeping 1 Upkeeping 2 Upkeeping 3	Echtner and Ritchie (1993), Choi and Sirakaya (2006); Simpson (2008); Lee and Xue (2020)
Environmental Image Ambience	Low level of water pollution Low level of air pollution Low noise level Peaceful and relaxing atmosphere Low incidence of traffic restrictions Not too many people in one place	Ambience 1 Ambience 2 Ambience 3 Ambience 4 Ambience 5 *	Fakeye and Crompton (1991); Echtner and Ritchie (1993); Miller (2001); Choi and Sirakaya (2006); Lee and Xue (2020)
Socioeconomic Image Infrastructure	Easy access to destinations / areas Good public transport system Good public infrastructure	Infrastructure 1 Infrastructure 2 Infrastructure 3	Fakeye and Crompton (1991); Echtner and Ritchie (1993); Lee and Xue (2020)
Socioeconomic Image Commerce	Well-developed local economy Diverse local businesses Good nightlife and entertainment centers Good shopping opportunities	Commerce 1 Commerce 2 Commerce 3 Commerce 4	Fakeye and Crompton (1991); Echtner and Ritchie (1993); Choi and Sirakaya (2006); Simpson (2008); Lee and Xue (2020)
Socioeconomic Image Tourism Offering	Available facilities and tourism information Lots of tourist attractions and activities Quality tourism offer	Offering 1 Offering 2 Offering 3	Fakeye and Crompton (1991); Echtner and Ritchie (1993); Lee and Xue

			(2020)
Socioeconomic Image Value for Money	Reasonable price of accommodation.	Value money 1	Byon and Zhang (2010)
	Reasonable price level overall.	Value money 2	
	Good value for money.	Value money 3	
	Acceptable value for money.	Value money 4	
	Possibility to choose from several price levels.	Value money 5	
Tourist Satisfaction	Overall, I was satisfied with the place of stay	Satisfaction 1	Fornell et al. (1996); Yoon and Uysal (2005); Lee and Xue (2020)
	I enjoyed my stay	Satisfaction 2	
	The place met my expectations	Satisfaction 3	
	My time and money were well-spent at the place of stay	Satisfaction 4	
Destination loyalty Intention To Revisit	Compared to other destinations, this destination is better	Revisit 1	Fornell et al. (1996); Zeithaml et al. (1996); Lee and Xue (2020)
	If possible, I will visit the destination again in the near future	Revisit 2	
	I prefer this destination	Revisit 3	
Destination loyalty Intention To Recommend	I am willing to recommend this destination to others	Recommend 1	Zeithaml et al. (1996); Yoon and Uysal (2005); Wu (2016); Lee and Xue (2020)
	I am willing to encourage friends and family to visit this destination	Recommend 2	
	I am willing to say positive things about the destination	Recommend 3	

Note: * The item was removed from the model based on the factor loading < 0.7 metric, LV – latent variable, MV – manifest variable.

Source: own processing

Annex 2. **Descriptive and validation analysis of the tool**

ID	Manifest variables			Latent variables					
	mean (std)	**med (iqr)**	**Loading**	**mean (std)**	**med (iqr)**	**Crm. α**	**Dg. ϱ**	**CR**	**AVE**
Safety 1	2.58 (1.57)	2 (3)	0.907	2.2 (1.16)	2 (2)	0.65	0.85	0.85	0.74
Safety 2	1.83 (1.13)	1 (1)	0.802						
Health 1	1.82 (1.13)	1 (1)	0.924	1.83 (1.05)	1.5 (1.25)	0.95	0.96	0.96	0.87
Health 2	2.02 (1.2)	2 (2)	0.871						
Health 3	1.77 (1.1)	1 (1)	0.961						
Health 4	1.72 (1.07)	1 (1)	0.960						
Cultural 1	3.63 (1.21)	4 (2)	0.756	3.56 (0.95)	3.71 (1.14)	0.90	0.92	0.92	0.63
Cultural 2	3.71 (1.22)	4 (2)	0.771						
Cultural 3	3.48 (1.19)	4 (1)	0.807						
Cultural 4	3.51 (1.19)	4 (1)	0.802						
Cultural 5	3.62 (1.22)	4 (2)	0.813						
Cultural 6	3.69 (1.16)	4 (2)	0.780						
Cultural 7	3.29 (1.19)	3 (1)	0.814						
Upkeeping 1	4.07 (1.07)	4 (1)	0.887	3.94	4 (1.33)	0.83	0.90	0.9	0.74

Upkeeping 2	3.93 (1.11)	4 (2)	0.858	(0.94)			0	
Upkeeping 3	3.81 (1.09)	4 (2)	0.837					
Ambience 1	3.78 (1.16)	4 (2)	0.834					
Ambience 2	3.79 (1.16)	4 (2)	0.880					
Ambience 3	3.66 (1.23)	4 (2)	0.885	3.78 (0.96)	4 (1.4)	0.89	0.92	0.9 2	0.65
Ambience 4	4.09 (1.09)	4 (1)	0.811					
Ambience 5	3.58 (1.17)	4 (1)	0.732					
Infrastructure 1	3.82 (1.12)	4 (2)	0.806					
Infrastructure 2	3.29 (1.15)	3 (1)	0.890	3.53 (0.97)	3.67 (1)	0.84	0.91	0.9 0	0.76
Infrastructure 3	3.48 (1.06)	4 (1)	0.915					
Commerce 1	3.45 (1.08)	4 (1)	0.827					
Commerce 2	3.53 (1.19)	4 (1.5)	0.858	3.36 (1)	3.5 (1.25)	0.87	0.91	0.9 1	0.71
Commerce 3	3.1 (1.24)	3 (2)	0.841					
Commerce 4	3.38 (1.2)	3 (2)	0.849					
Offering 1	3.56 (1.11)	4 (1)	0.842					
Offering 2	3.77 (1.14)	4 (2)	0.903	3.68 (0.99)	4 (1.33)	0.88	0.92	0.9 2	0.80
Offering 3	3.7 (1.08)	4 (2)	0.936					
Value money 1	3.71 (1.1)	4 (2)	0.887					
Value money 2	3.55 (1.1)	4 (1)	0.905					
Value money 3	3.68 (1.06)	4 (1)	0.912	3.64 (0.96)	3.8 (1.4)	0.93	0.95	0.9 5	0.78
Value money 4	3.7 (1.06)	4 (1)	0.934					
Value money 5	3.56 (1.12)	4 (1)	0.771					
Satisfaction 1	4.4 (0.86)	5 (1)	0.917					
Satisfaction 2	4.52 (0.85)	5 (1)	0.912	4.41 (0.78)	4.75 (1)	0.93	0.95	0.9 5	0.83
Satisfaction 3	4.39 (0.83)	5 (1)	0.910					
Satisfaction 4	4.34 (0.9)	5 (1)	0.897					
Revisit 1	3.69 (1.03)	4 (2)	0.854					
Revisit 2	4.03 (1.09)	4 (2)	0.895	3.84 (0.96)	4 (1.67)	0.86	0.92	0.9 2	0.78
Revisit 3	3.79 (1.13)	4 (2)	0.904					
Recommend 1	4.21 (1)	5 (1)	0.960					
Recommend 2	4.16 (1.09)	4 (1)	0.957	4.2 (0.97)	4.33 (1)	0.95	0.97	0.9 7	0.91
Recommend 3	4.21 (0.97)	4 (1)	0.945					

Source: own processing

Annex 3. **Arithmetic mean and standard deviation of indicators of the destination loyalty model in the classification of selected characteristics of tourism**

Mean ±standard deviation	Safety	Health	Cultural	Upkeeping	Ambience	Infrastructure
Frequency of travel						
1-2	2.29 ±1.16	1.83 ±1.03	3.64 ±0.96	4.01 ±0.92	3.82 ±0.95	3.61 ±0.94
3-6	2.18 ±1.18	1.9 ±1.12	3.45 ±0.94	3.87 ±0.95	3.78 ±0.97	3.38 ±0.95
7-12	1.45 ±0.85	1.38 ±0.55	3.64 ±0.93	3.84 ±0.88	3.55 ±1.02	3.74 ±1.14
13- 24	2 ±1.41	1.81 ±1.18	3.39 ±0.38	3.5 ±1.11	3.6 ±0.99	3.17 ±1
25 and more	1.9 ±1.02	1.8 ±1.04	3 ±0.68	3 ±1.13	2.96 ±1.01	3.4 ±1.52
Length of stay						
<= 2	2.14 ±1.15	1.81 ±0.96	3.52 ±0.87	3.92 ±0.85	3.69 ±0.96	3.46 ±0.89
3	2.15 ±1.14	1.77 ±1.03	3.57 ±1.09	3.99 ±1.05	3.86 ±0.98	3.57 ±1.18
4 - 5	2.33 ±1.3	1.94 ±1.22	3.65 ±0.9	4.05 ±0.79	3.97 ±0.83	3.63 ±0.89

6+	2.26 ±1.04	1.81 ±0.99	3.51 ±0.95	3.73 ±1.09	3.57 ±1.07	3.49 ±0.84
Income						
up to 220 EUR	2.53 ±1.2	2.14 ±1.13	3.78 ±1.01	4.15 ±0.86	3.8 ±0.91	3.58 ±1.01
221 – 330 EUR	2.66 ±1.19	1.98 ±1.01	3.41 ±0.67	3.76 ±0.96	3.52 ±0.86	3.39 ±0.84
331 – 430 EUR	2.83 ±1.29	2.04 ±1.15	3.94 ±0.81	4.18 ±0.74	3.91 ±0.83	3.64 ±0.89
431 – 540 EUR	2.18 ±1.29	1.93 ±1.32	3.52 ±0.98	3.97 ±0.97	4.06 ±0.94	3.64 ±1.05
541 – 720 EUR	2.21 ±1.16	1.93 ±1.15	3.69 ±0.91	4.03 ±0.98	3.91 ±1	3.73 ±0.97
721 – 1090 EUR	1.9 ±1	1.55 ±0.8	3.48 ±1.01	3.88 ±1.01	3.66 ±1.06	3.58 ±1.01
1091 – 1810 EUR	2.07 ±1.11	1.85 ±1.02	3.43 ±0.97	3.86 ±0.9	3.92 ±0.91	3.4 ±0.96
1811 – 2540 EUR	2.06 ±1.01	1.68 ±0.89	3.29 ±0.9	3.92 ±0.7	3.79 ±0.66	3.31 ±0.73
2541 and more EUR	2 ±1.35	1.72 ±1.25	3.62 ±0.95	3.52 ±1.03	3.41 ±1.09	3.1 ±0.96
Form						
Mountain and alpine	2.14 ±1.14	1.76 ±1.06	3.54 ±0.93	3.99 ±0.94	3.99 ±0.92	3.53 ±0.96
Urban and suburban	2.39 ±1.19	1.94 ±1.02	3.76 ±0.9	3.94 ±0.79	3.49 ±0.9	3.68 ±0.93
Rural	2.04 ±1.15	1.83 ±1.07	3.28 ±1.01	3.79 ±1.16	3.77 ±1.04	3.26 ±1

Mean ±standard deviation	Commerce	Offering	Value money	Satisfaction	Revisit	Recommend
Frequency of travel						
1-2	3.46 ±0.98	3.78 ±0.99	3.66 ±0.95	4.49 ±0.71	3.9 ±0.9	4.3 ±0.9
3-6	3.2 ±1	3.54 ±0.98	3.64 ±0.95	4.29 ±0.85	3.72 ±1.05	4.02 ±1.1
7-12	3.51 ±0.9	3.63 ±0.89	3.6 ±1.05	4.51 ±0.69	4.09 ±0.67	4.32 ±0.83
13- 24	2.88 ±0.66	3.33 ±1.05	3.35 ±1.39	4.63 ±0.32	4 ±0.98	4.75 ±0.5
25 and more	3.3 ±1.71	3.07 ±1.01	3.16 ±0.86	3.45 ±1.46	2.87 ±1.28	3.33 ±0.62
Length of stay						
<= 2	3.42 ±0.97	3.68 ±0.94	3.68 ±0.9	4.44 ±0.79	3.71 ±0.95	4.07 ±1
3	3.32 ±1.04	3.61 ±1.11	3.55 ±1.07	4.46 ±0.76	3.95 ±0.95	4.31 ±0.95
4 - 5	3.42 ±0.98	3.91 ±0.87	3.78 ±0.89	4.43 ±0.76	3.88 ±1.01	4.27 ±0.99
6+	3.23 ±1.03	3.44 ±0.99	3.5 ±0.96	4.26 ±0.83	3.88 ±0.92	4.18 ±0.91
Income						
up to 220 EUR	3.63 ±0.99	3.77 ±1.09	3.81 ±0.97	4.52 ±0.68	4 ±0.85	4.3 ±0.83
221 – 330 EUR	3.47 ±0.78	3.48 ±0.84	3.46 ±0.81	4.44 ±0.74	3.89 ±0.9	4.17 ±0.86
331 – 430 EUR	3.7 ±0.96	3.97 ±0.84	3.86 ±0.9	4.51 ±0.54	3.94 ±0.75	4.36 ±0.63
431 – 540 EUR	3.23 ±0.92	3.55 ±1.01	3.78 ±0.99	4.64 ±0.54	4.09 ±0.86	4.43 ±0.9
541 – 720 EUR	3.5 ±0.93	3.86	3.67 ±1.01	4.36 ±0.87	3.93 ±0.99	4.16 ±1.03

		±0.96				
721 – 1090 EUR	3.29 ±1.12	3.65 ±1.04	3.54 ±0.98	4.45 ±0.79	3.86 ±0.98	4.26 ±1.02
1091 – 1810 EUR	3.15 ±0.94	3.58 ±0.91	3.66 ±0.96	4.3 ±0.83	3.57 ±1.04	4.03 ±1.05
1811 – 2540 EUR	3.26 ±0.81	3.8 ±0.94	3.48 ±0.76	4.18 ±1.16	3.61 ±1.06	3.98 ±1.28
2541 and more EUR	3.03 ±1.12	3.27 ±1.17	3.49 ±1.13	4.19 ±0.78	3.56 ±1.02	3.94 ±0.99
Form						
Mountain and alpine	3.25 ±0.96	3.77 ±1.01	3.66 ±0.97	4.46 ±0.71	3.93 ±0.94	4.32 ±0.92
Urban and suburban	3.77 ±0.9	3.68 ±0.92	3.63 ±0.91	4.45 ±0.71	3.75 ±0.93	4.08 ±0.97
Rural	2.96 ±1.02	3.44 ±1.03	3.6 ±1.01	4.24 ±1.03	3.77 ±1.03	4.09 ±1.1

Source: own processing

Annex 4. **PLS PM outer model**

Manifest Variable	Weight	Loading	Communality	Redundancy
Safety 1	0.68	0.91	0.82	0.0000
Safety 2	0.48	0.80	0.64	0.0000
Health 1	0.23	0.92	0.85	0.0000
Health 2	0.22	0.87	0.76	0.0000
Health 3	0.26	0.96	0.92	0.0000
Health 4	0.36	0.96	0.92	0.0000
Cultural 1	0.23	0.76	0.57	0.0029
Cultural 2	0.18	0.77	0.59	0.0030
Cultural 3	0.15	0.81	0.65	0.0033
Cultural 4	0.21	0.80	0.64	0.0032
Cultural 5	0.15	0.81	0.66	0.0033
Cultural 6	0.14	0.78	0.61	0.0030
Cultural 7	0.20	0.81	0.66	0.0033
Upkeeping 1	0.41	0.89	0.79	0.0093
Upkeeping 2	0.38	0.86	0.74	0.0087
Upkeeping 3	0.38	0.84	0.70	0.0082
Ambience 1	0.27	0.83	0.69	0.0040
Ambience 2	0.24	0.88	0.77	0.0045
Ambience 3	0.21	0.89	0.78	0.0045
Ambience 4	0.26	0.81	0.66	0.0038
Ambience 5	0.23	0.73	0.54	0.0031
Infrastructure 1	0.36	0.81	0.65	0.0116
Infrastructure 2	0.34	0.89	0.79	0.0141
Infrastructure 3	0.44	0.92	0.84	0.0149
Commerce 1	0.36	0.83	0.68	0.0107
Commerce 2	0.25	0.86	0.74	0.0115
Commerce 3	0.29	0.84	0.71	0.0111
Commerce 4	0.29	0.85	0.72	0.0113
Offering 1	0.33	0.84	0.71	0.0084
Offering 2	0.40	0.90	0.82	0.0097
Offering 3	0.39	0.94	0.88	0.0104
Value money 1	0.25	0.89	0.79	0.0091
Value money 2	0.20	0.90	0.82	0.0095
Value money 3	0.23	0.91	0.83	0.0096

Value money 4	0.26	0.93	0.87	0.0101
Value money 5	0.18	0.77	0.59	0.0069
Satisfaction 1	0.28	0.92	0.84	0.1993
Satisfaction 2	0.25	0.91	0.83	0.1974
Satisfaction 3	0.28	0.91	0.83	0.1962
Satisfaction 4	0.29	0.90	0.80	0.1907
Revisit 1	0.36	0.85	0.73	0.3658
Revisit 2	0.42	0.89	0.80	0.4012
Revisit 3	0.36	0.90	0.82	0.4094
Recommend 1	0.36	0.96	0.92	0.5349
Recommend 2	0.35	0.96	0.92	0.5312
Recommend 3	0.34	0.95	0.89	0.5184

Source: own processing