

Article

Does Travel Really Enhance Destination-Country Image? Understanding Tourists' Changes in Perception toward a Destination Country

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Received: 22 April 2020; Accepted: 21 May 2020; Published: 24 May 2020



Abstract: Tourism has played a fundamental role in shaping the image of destination countries. This study aimed to examine changes in international tourists' enhanced and complex destination-country images (DCIs) by comparing pre- and post-trip perceptions. A total of 268 and 275 valid questionnaires from pre- and post-trip Chinese outbound tourists to South Korea, respectively, were collected. The results indicated that tourists' DCIs were dynamic and could be effectively promoted through their actual tourism experiences. Overall, when considering enhanced DCI perception, compared with pre-trip tourists, post-trip tourists possessed a positive complex DCI perception. Tourism could provide an important channel for promoting a destination country's image to the world.

Keywords: destination-country image; enhanced image; complex image; perception changes; tourism experiences

1. Introduction

With the globalization of the world economy, countries are facing heightened competition for investments, immigrants, tourists, etc. A favorable country image has become the most important form of soft power, and the impetus that promotes a country's international competitiveness against the background of fast development under globalization [1]. In particular, the tourism industry has become an increasingly essential ingredient in the global economy. Given the intensive competition in the tourism market, the overall image of a country plays an important role in attracting international tourists [2,3]. However, most studies on tourism destination image have focused on the image of a tourist destination, while ignoring the destination in a country image context [4–6]. Country image includes consumers' perceptions of country stereotypes, reflected in a country's politics, economy, cultural heritage, technological resources at the macro level, and specific product categories at the micro-level [7,8]. Both the macro and micro characteristics may come into play in the choice of tourism destination country [9,10]. Therefore, tourism managers and researchers should pay considerable attention to the role that destination-country image plays in attracting international tourists.

According to Zhang et al. [10], destination-country image (DCI) is defined as international tourists' mental representations of their overall cognition and affection regarding a given country for a tourist destination, and it is composed of the macro DCI and micro DCI. The macro DCI refers to tourists' perceptions and impressions of politics, the economy, technology, the environment, people, and other factors of a destination country. The micro DCI refers to the core tourism product image related to tourist attractions and tourism facilities. Compared with the macro DCI, the micro DCI emphasizes the core tourism product aspects more.

However, the question of whether tourists' perception of a destination image is able to be changed remains controversial. Some scholars believe that tourism destination image is dynamic [11], while others believe this dynamism only refers to changes in dimensions of the destination image, and the overall image is quite stable [12]. At present, researchers are mainly focused on comparative studies of pre- and post-trip tourist destination image changes. Results show that post-trip tourists' destination image is more positive than that of pre-trip tourists. However, Hughes and Allen [13] disclosed that there is no difference in country image between visitors and non-visitors when comparing these two groups' overall country image. Therefore, whether international tourists' actual tourism experience enhances destination-country image remains an important question for tourism destination marketers and researchers to answer. If well-understood, it could provide a theoretical basis and practical guidance for a destination-country to shape its country image and develop an international tourism market.

In the international tourism context, tourists' travel experiences are composed of the different products of a destination country that can co-meet their needs. Tourists' actual travel experiences in a destination country will promote adjustment and reshaping of their DCI [14,15]. Hence, Smith et al. [15] suggested that tourists' actual travel experience-related feelings will contribute to the tourist's DCI. To extend the findings of prior studies, this study focuses on the analysis of DCI perception changes between pre-trip and post-trip international tourists. Tourists' DCI perceptions vary throughout the different stages of their travel. Pre-trip tourists' DCIs may be shaped by various types of indirect information. In contrast, those who are traveling acquire direct information on the destination country, which helps shape a richer and more factual DCI [16]. The present study answers the following questions: (1) Does the DCI change, and how has the DCI changed?, (2) does tourism experience enhance or weaken the DCI? To answer the above questions, this article selects South Korea (hereafter Korea) as a destination country to investigate, in pre-trip and post-trip Chinese outbound tourists, DCI perception changes in the context of international tourism and seeks to provide a thorough understanding of the tourism experience effect on the DCI.

2. Literature Review

2.1. Country Image and DCI

Country image is a mainstream research area in the international trading, marketing, and tourism fields. Diverse disciplines have defined the concept of country image differently, to accommodate varied research contexts. From the perspective of consumers, a widely held view is that the concept of a country image includes a country-of-origin effect (specific product country image), product-country image (aggregate product country image), and country stereotype (overall country image) [17,18]. "Specific product country image" refers to consumers' overall perceptions of a particular country's products [19,20], "aggregate product country image" focuses on the image of countries and their products [21], and "overall country image" represents consumers' overall perception of a country. When consumers purchase products from a specific country, the country image (positive or negative) will be linked with the country's products (positive or negative evaluation), resulting in a country-of-origin effect [18,22]. Therefore, international trading and marketing scholars have connected the specific country with the evaluation of specific products to study country image and have deconstructed the country image into macro and micro components (see Table 1) [8,23].

Table 1. Macro and micro country image (CI) dimensions [18,24,25].

	Definition	Dimension
Macro CI	A more comprehensive and overall image of country of origin.	Country's character, country's competence, people's character, people's competence, and national relationship.
Micro CI	The general impression of products of a specific country.	Product evaluation, product belief, product attitude, product innovation, product design, and product reputation.

From the perspective of tourism consumers, a tourism destination is a kind of experience product, and the tourism destination image corresponds to the product image in the international trading and marketing field [26,27]. However, the destination image at the country level is not exactly the same as the product image. It includes not only dimensions that relate to tourism activities, such as tourism attractions, transportation, accommodation, food, and entertainment, but also the dimensions of politics, the economy, the environment, and people, which overlap with the content of the country image concept in the international trading and marketing field [9,10]. To further illuminate the country image concept and measurement in the tourism context, this study adopted the concept of the DCI [10]. Zhang et al. integrated the abovementioned overlapping contents into the macro DCI and defined it as international tourists' perception of macro DCI factors, including the political, economic, technical, cultural, character of the people, and competence dimensions. The micro DCI is the core tourism product image that meets international tourists' needs, and includes aspects such as tourism attractions, service infrastructure, and tourism activities in the destination country.

However, environmental management and affective DCI dimensions were not included in the DCI in the study by Zhang et al. [10]. Environmental management is an important indicator to measure a country's development. It is closely related to tourists' actual tourism experiences in a destination country [24]. Further, international tourists prefer to choose countries with relatively good environmental quality as tourism destinations. Thus, the environmental management dimension was included in the DCI in the present study. Based on Attitude Theory [28], the country image can be divided into cognitive and affective country images. The cognitive country image is the consumers' beliefs about a particular country. The affective country image is the emotional response of the consumer to the country [9,25,29]. According to Roth and Diamantopoulos, most of the scales measuring country image studies lacking an affective dimension. Likewise, the DCI can be divided into the cognitive and affective DCIs in the tourism context [30–33]. In the present study, the macro DCI was further disaggregated into the macro cognitive DCI and macro affective DCI aspects, and the micro DCI into the micro cognitive DCI and micro affective DCI. The macro cognitive DCI, as defined here, refers to tourists' overall beliefs about a particular country. The micro cognitive DCI refers to tourists' beliefs about the core tourism product of a destination country. The macro affective DCI refers to tourists' affective evaluations of a particular country. The micro affective DCI refers to tourists' affective evaluations of a destination country [10,25].

2.2. Factors That Affect the DCI

The DCI is mainly influenced by stimuli and personal response factors (e.g., mega events, tourism experiences). Stimuli factors are the characteristics of the object being perceived, and personal response factors are internal [34].

Mega-events are important external factors that influence the DCI. However, most studies have emphasized the influence of major events on changes in the macro DCI, and there has been little exploration of micro DCI perception changes. It is widely accepted that events help to enhance the DCI [35]. A great number of scholars have conducted empirical studies of pre- and post-event destination image changes. For instance, Zeng et al. [36] examined the Beijing Olympic Games as an example and concluded that it served to promote a better understanding of China in the world's media and for the global public. However, after the Olympic Games, China's international image did not significantly improve. Ritchie and Smith [37] suggested that the success of the Winter Olympic Games in 1988 in Calgary caused the city to be mentioned much more frequently when compared with other cities in Canada. The city image was also tangibly improved, which enabled Calgary to have a stronger competitive advantage in the long term from the perspective of tourism.

Individual behaviors like information searching, tourism activity participation, and tourism experience are important internal factors that influence the DCI. The evolution process of a tourist's trip is a dynamic changing process of the DCI [38]. During the pre-trip, a tourist's DCI perception changes with information acquisition, information source, and subjective judgment of the available

information. During the post-trip, a tourist's DCI perception changes again due to their perception of tourism destination products [39]. For instance, Kim and Morrison [11] used a before-after design and investigated international tourists' country image changes of Korea after event participation. They found that personal experience affects country image perception, in that the country image perception of post-event tourists tended to be higher compared with pre-event tourists. Chaudhary [14] investigated tourists from Germany, the U.K., and the Netherlands to examine their pre- and post-trip perception of Indian tourism, and came to a conclusion that, except for a slight promotion of the image perception of art, cultural heritage, safety, and guide service, the post-trip Indian image among tourists tends to be more negative than the pre-trip image.

2.3. Enhanced DCI and Complex DCI

The dynamic nature of the destination image has been given various names [16,40]. Tourism destination images could be divided into organic, induced, and complex images [12]. The organic image refers to an image that is mainly formed based on non-commercial marketing information. The induced image is mainly formed by commercial marketing information, and the complex image is a more realistic image formed by a combination of actual tourism experience and former knowledge. With the boom of information, diversified information sources such as social media and online social networks have begun to greatly influence destination images. The marketing strategies and modes of tourism information dissemination for tourism destinations are becoming increasingly flexible. The coexistence of commercial and non-commercial information sources enables tourists to acquire tourism information that is both commercial and non-commercial, blurring the distinction between organic and induced images. In this regard, Li et al. proposed that a destination image shaped with information that is passively available to potential tourists is called the baseline image, whereas the image shaped after tourists' intentional and active search for destination information is called the enhanced image. They adopted mixed-methods experiments to analyze the destination image differences between pre- and post-information collection and found that the affective and overall image were both significantly and positively changed after online information search. However, the cognitive image basically remained the same [41]. The analysis of the evolution of baseline and enhanced images in Li et al. mainly focused on the perspective of tourism information searches and discussed image perception changes caused by potential tourists' active information searching behavior. However, tourists' actual tourism experiences in a destination promote adjustment and reshaping of the destination image, thereby forming a more complex image.

From the perspective of the dynamic development of DCIs, the present study divided the DCI into the baseline DCI, referring to the DCI before international tourists' decision making, the enhanced DCI, referring to the DCI shaped by international tourists' positive information search after tourism decision making but before the actual trip, and the complex DCI, referring to the DCI shaped after tourists' personal travel experiences in the destination country. As Figure 1 shows, the actual travel experiences of international tourists caused the pre-trip enhanced DCI to evolve into the post-trip complex DCI. The objective of this research was to investigate the perception changes in the enhanced DCI and complex DCI measurement items and related factors between pre-trip and post-trip international tourists.

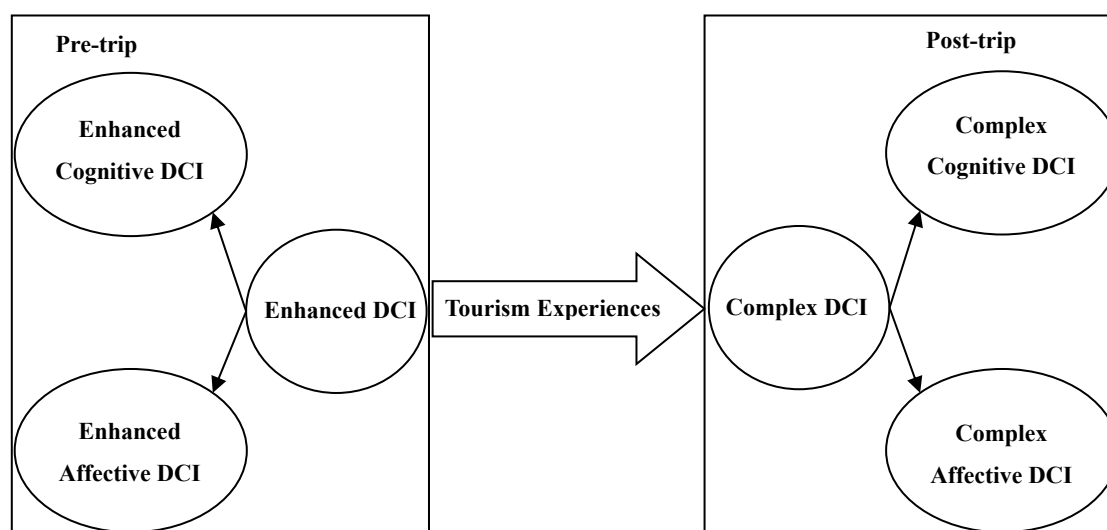


Figure 1. Perception changes of the DCI between pre-trip and post-trip tourists.

3. Research Method and Data Collection

3.1. Survey Questionnaire Development

In the international tourism context, the DCI contains both the macro and micro DCI. Based on previous studies, the measurement dimensions of the macro cognitive DCI were divided into country's character, country's competence, people's character, people's competence [9,18,23], environmental management, and national relationship [24,25]. In the present work, the measurement items of the macro affective DCI included "I like Korea" and "I enjoy being with Koreans" [9,21]. Based on the scale of the tourism destination images of Beerli and Martín [32] and Lee et al. [42], the micro DCI in this study referred to the image related to tourism core products. The micro cognitive DCI was divided into tourism attractions, destination's environment, and service infrastructure. The micro affective DCI contained "Travel in Korea makes me very happy," "Travel in Korea makes me relaxed," and "Travel in Korea makes me excited." A five-point Likert-type scale was adopted to evaluate the measurement items (5 = strongly agree, 1 = strongly disagree).

3.2. Data Collection

Korea is one of the top foreign tourism destination countries for Chinese tourists. This research used Korea as a tourism destination country and Chinese outbound tourists as research subjects. The outbound Korea trip of Chinese tourists was divided into the pre-trip and post-trip stages. Considering the comparatively smaller geographical area, Chinese tourists prefer team tours, and often have fixed tour routes, including several major tourism cities like Seoul, Incheon, Gimpo, Busan, and Jeju. Usually, Jeju is the last leg of the trip. In this regard, the research samples were mainly Chinese tourists who had traveled to several cities in Korea. Data collection in the pre-trip stage involved a pre-trip tourists' questionnaire survey, which was carried out in the international departure hall of Hefei Xinqiao International Airport, Nanjing Lukou International Airport, and Shanghai Pudong International Airport in January and March 2015. Based on flights to Korea, this study selected Chinese tourists as questionnaire respondents using convenience sampling. Before distributing the pre-trip questionnaire, the investigator briefly demonstrated the aim of the investigation and asked the respondent, "Is this the first time you have traveled to Korea?" The questionnaire was only released to those who answered "Yes", which helped to correctly measure tourists' enhanced DCI. The questionnaires were distributed and retrieved on the spot, as soon as the respondents were finished. A total of 350 questionnaires were distributed, of which 268 were valid, for a valid questionnaire response rate of 77%. Data collection in the post-trip stage involved a post-trip tourists' questionnaire

survey, which was carried out in the departure hall of Jeju International Airport in March 2015. Jeju was selected because it is the main tourism destination and departure port in Korea for Chinese tourists. Chinese tourists were again selected as questionnaire respondents using convenience sampling. Of the 350 questionnaires distributed, 275 were deemed valid (valid questionnaire response rate of 79%). The total number of samples (pre-trip and post-trip tourists) was 543.

3.3. Comparison of Demographic Characteristics between Pre-trip and Post-trip Tourists

In order to ensure any comparative analysis of the perception difference in DCI between pre- and post-trip tourist samples would be valid, this paper applied the chi-square test to analyze the difference in the variable structure of demographic characteristics between the pre- and post-trip tourist samples. The demographic characteristics of the two research samples (pre-trip and post-trip tourists) are presented in Table 2. The chi-squares test for pre-trip and post-trip tourists' demographic variables, given in Table 3, revealed no significant differences in the sex ($\chi^2 = 4.385$, $p = 0.112$), age ($\chi^2 = 6.845$, $p = 0.114$), occupation ($\chi^2 = 17.769$, $p = 0.123$), monthly income ($\chi^2 = 8.301$, $p = 0.217$), marital status ($\chi^2 = 4.916$, $p = 0.296$), or completed education ($\chi^2 = 0.304$, $p = 0.959$) between the two samples. The majority of both samples were people aged between 25 and 44 years with a bachelor's degree, whose monthly income ranged between CNY 4000 and 6000. Most of them were female and company employees. The distribution of marital status was relatively even. The chi-squared test results showed that the demographic characteristics of the pre-trip Chinese tourists bore strong similarities to those of the post-trip Chinese tourists. Therefore, it is reasonable to make comparisons between the two samples.

Table 2. Profile of the respondents.

Characteristic	Dimension	Post-Trip	Pre-Trip	Characteristic	Dimension	Post-Trip	Pre-Trip
		Frequency (%)	Frequency (%)			Frequency (%)	Frequency (%)
Gender	Male	92 (33.5)	62 (23.5)	Marital status	Single	132 (48.0)	142 (53.8)
	Female	183 (66.5)	202 (76.5)		Married	143 (52.0)	122 (46.2)
Age	18–24	48 (18.1)	73 (28.0)	Worker	12 (4.6)	6 (2.4)	
	25–44	185 (69.8)	161 (61.7)	Farmer	1 (0.4)	1 (0.4)	
	45–64	30 (11.3)	25 (9.6)	Businessman	20 (7.7)	12 (4.7)	
	65 plus	2 (0.8)	2 (0.7)	Company employee	88 (33.9)	106 (41.9)	
Education	High school or below	29 (11.6)	30 (12.2)	Occupation	Professional and technical	25 (9.6)	26 (10.3)
	College degree	62 (25.0)	59 (23.9)	Waiter and salesman	5 (1.9)	3 (1.2)	
	Bachelor's degree	131 (52.6)	130 (52.6)	Manager	14 (5.4)	11 (4.3)	
	Graduate degree	27 (10.8)	28 (11.3)	Retiree	8 (3.1)	4 (1.6)	
	Less than 2000	24 (9.8)	31 (13.6)	Housewife	6 (2.3)	3 (1.2)	
Monthly income (CNY)	2000–4000	68 (27.8)	52 (22.8)	Civil servant	6 (2.3)	2 (0.8)	
	4000–6000	69 (28.3)	60 (26.3)	Teacher	4 (1.5)	8 (3.2)	
	6000–8000	29 (11.9)	33 (14.5)	Student	28 (10.8)	46 (18.2)	
	8000–10000	17 (7.0)	27 (11.8)	Other	43 (16.5)	25 (9.9)	
	Over 10000	37 (15.2)	25 (11.0)				

Table 3. Chi-square test for pre-trip and post-trip tourists' demographic variables.

Characteristic	Dimension	Chi-Square	p-Value
Gender	Male/Female	4.385	0.112
Age	18–24/25–44/45–64/65 plus	6.845	0.144
Occupation	Worker/Farmer/Businessman/Company employee/Professional & technical/Waiter & salesman/Manager/Retiree/Housewife/Civil servant/Teacher/Student/Other	17.769	0.123
Monthly income	Less than 2000/2000–4000/4000–6000/6000–8000/8000–10000/Over 10000	8.301	0.217
Marital status	Single/Married	4.916	0.296
Education	High school or below/College degree/Bachelor's degree/Graduate degree	0.304	0.959

4. Results

This study mainly used SPSS software to analyze the collected data, with analysis methods, including the independent sample t-test and exploratory factor analysis. This paper adopted the independent sample t-test to analyze the differences in the mean values of DCI items between the pre- and post-trip tourist samples. Next, exploratory factor analysis was applied to figure out the DCI factors. Finally, this paper adopted the independent sample t-test to analyze the differences in the mean value of DCI factors between the pre- and post-trip tourist samples.

4.1. Change in the Mean Values of Macro DCI Items

The changes in the macro DCI items (see Table 4) showed that the mean value of each item was above 3.40. Considerable differences between the pre- and post-trip tourists were observed. Compared with the pre-trip tourists, post-trip tourists' perceptions of all measurement items were significantly improved, which demonstrated that Chinese tourists' actual tourism experiences in Korea were better than their pre-trip expectations. The post-trip tourists offered a comparatively positive evaluation of Korea's macro DCI. On the measurement item "Korea is a country that respects the environment," especially, both the pre- and post-trip tourists gave the highest score. Meanwhile, both tourist samples gave the lowest score on the item "I enjoy being with Koreans."

Table 4. Change in the mean value of macro destination-country image items.

Measurement Items	Means		Mean of DCI Items Difference	t Value	p Value
	Pre-Trip	Post-Trip			
Korea is a politically stable country	3.36	3.77	0.41	6.492	0.000
Korea is a democratic country	3.41	3.86	0.45	7.230	0.000
Korea is an economically developed country	3.56	3.84	0.28	4.301	0.000
Korea is a modern country	3.63	3.92	0.29	4.494	0.000
Korea is a technologically developed country	3.60	3.79	0.19	2.974	0.003
Korea is a country that respects the environment	3.90	4.44	0.54	9.231	0.000
Korea has strict controls on environmental pollution	3.79	4.31	0.52	8.302	0.000
Korea has made positive efforts to protect the environment	3.57	4.15	0.58	8.929	0.000
The Koreans are friendly	3.66	4.12	0.46	7.200	0.000
The Koreans are polite	3.84	4.27	0.43	6.862	0.000
The Koreans are trustworthy	3.35	3.77	0.42	6.262	0.000
The Koreans are honest	3.34	3.83	0.49	7.006	0.000
The Koreans are working-hard.	3.49	3.88	0.39	6.014	0.000
Bilateral relations between China and Korea are friendly	3.69	3.84	0.15	2.338	0.020
Korea has close ties with China in terms of economic development	3.63	3.86	0.23	3.591	0.000
I like Korea	3.53	3.76	0.23	3.370	0.001
I enjoy being with Koreans	3.18	3.49	0.31	4.235	0.000

According to the perception changes in the macro DCI items, the change degree in the mean value of the item "Korea has made positive efforts to protect the environment" was the highest, increasing by 0.58 from the pre-trip's 3.57 to the post-trip's 4.15. In addition, compared with pre-trip tourists, the mean value of post-trip tourists' perceptions of the items "Korea is a country that respects the environment" and "Korea has strict controls on environmental pollution" increased by more than 0.50. It can be concluded that the post-trip Chinese tourists' perceptions of Korea's environmental problems and management were significantly better compared with those of pre-trip tourists, and they positively perceived the achievements that Korea has made in this respect. However, the change degree in the mean value of the item "Bilateral relations between China and Korea are friendly" was the lowest, increasing by only by 0.15 from the pre-trip's 3.69 to the post-trip's 3.84.

4.2. Change in the Mean Values of Micro DCI Items

The perception differences in the micro DCI between pre- and post-trip tourists were determined with the independent samples t-test (see Table 5). Significant differences were observed in the perception

of most items, namely: “Personal security is not a problem in Korea,” “The climate is good in Korea,” “Hygiene and cleanliness standards in Korea are good,” “Korea has suitable accommodation,” “The natural scenery in Korea is beautiful,” “The environment in Korea is not polluted and destroyed,” “Travel in Korea is good value for money,” “Travel in Korea makes me relaxed,” and “Travel in Korea makes me excited.” No significant differences in perception were observed for the following six items: “It is easy access tourism information about Korea,” “Korea is a good place for shopping,” “Korea has good recreational facilities,” “Korea has interesting historical and cultural attractions,” “Korea is an exotic destination,” and “Travel in Korea makes me very happy.” According to the changes in micro DCI items, there were improvements but also reductions in measurement items between the pre- and post-trip tourists. Post-trip tourists’ evaluations of most items improved compared with pre-trip tourists’. However, post-trip tourists’ evaluation of “Korea has good recreational facilities,” “Korea has interesting historical and cultural attractions,” and “Travel in Korea makes me excited” were lower compared with pre-trip tourists. It can be concluded from the mean values of the micro DCI items that “Korea is a good place for shopping” scored the highest (mean = 3.90) and “Korea has interesting historical and cultural attractions” scored the lowest (mean = 3.49) among pre-trip tourists, whereas “Hygiene and cleanliness standards in Korea are good” scored the highest (mean = 4.23) and “Travel in Korea makes me excited” scored the lowest (mean = 3.28) among post-trip tourists. As for the change degree in the micro DCI items, the mean value of “Personal security is not a problem in Korea” was the highest, increasing by 0.54 from the pre-trip’s 3.63 to the post-trip’s 4.17. The change degree in the mean value of “Travel in Korea makes me very happy” was the lowest, increasing by only 0.01 from the pre-trip’s 3.79 to the post-trip’s 3.80.

Table 5. Change in the means of micro destination-country image items.

Measurement Items	Means		Mean of DCI Items Difference	t-Value	p-Value
	Pre-Trip	Post-Trip			
Personal security is not a problem in Korea	3.63	4.17	0.54	9.653	0.000
The climate is good in Korea	3.60	4.05	0.45	6.944	0.000
Hygiene and cleanliness standards in Korea are good	3.81	4.23	0.42	7.050	0.000
The environment is not polluted and destroyed in Korea	3.50	3.99	0.49	7.404	0.000
It is easy to access tourism information about Korea	3.87	3.92	0.05	0.794	0.427
Korea has suitable accommodation	3.67	3.81	0.14	2.130	0.034
Korea is a good place for shopping	3.90	4.00	0.10	1.393	0.164
Korea has good recreational facilities	3.54	3.42	−0.12	−1.769	0.077
Korea has interesting historical and cultural attractions	3.49	3.38	−0.11	−1.420	0.156
Natural scenery is beautiful in Korea	3.63	4.03	0.40	5.956	0.000
South Korea is an exotic destination	3.64	3.66	0.02	0.201	0.840
Travel is good value for money in Korea	3.56	3.71	0.15	2.288	0.023
Travel makes me happy in Korea	3.79	3.80	0.01	0.168	0.866
Travel makes me relaxed in Korea	3.80	3.93	0.13	2.119	0.035
Travel makes me excited in Korea	3.55	3.28	−0.27	−3.781	0.000

4.3. Change in the Mean Values of DCI Factors

This study combined the DCI measurement items in both the pre-trip and post-trip tourists’ sample data (total number of samples = 543), and then applied exploratory factor analysis (EFA) to determine the DCI factors. The change characteristics of the DCI at the factor level were determined by comparing the mean values of the factors.

SPSS Statistics 23.0 was used to conduct EFA of the macro cognitive DCI, macro affective DCI, micro cognitive DCI, and micro affective DCI. The factors and items in the EFA of the macro cognitive DCI measurement scale showed that KMO was 0.897, Bartlett’s test of sphericity was significant ($p = 0.000$), and the hypothesis of the independent variable was invalid. These outcomes met the basic requirement of factor analysis, and as such, the adoption of factor analysis was applicable.

The study applied varimax rotation to run EFA and regarded Eigenvalues > 1, factor loading > 0.50, and communalities > 0.50 as prerequisites. The items that did not meet the requirements were deleted. EFA was again run with the remaining factors and finally identified four factors: “Country’s competence” (Alpha = 0.80), “National relationship” (Alpha = 0.71), “People’s character” (Alpha = 0.89), and “Environmental management” (Alpha = 0.84), the total variance was 71.29%.

The EFA of the micro cognitive DCI measurement scale showed a KMO of 0.855 and significant results for Bartlett’s test of sphericity ($p = 0.000$), indicating that the micro cognitive DCI measurement items had multi-related dimensions and that the adoption of EFA was applicable. After the EFA, three factors were obtained: “Destination’s environment” (Alpha = 0.65), “Service infrastructure” (Alpha = 0.71), and “Tourism attraction” (Alpha = 0.77), the total variance was 59.79%.

Using an independent samples t-test for the DCI factors (see Table 6), the study found significant differences in country’s competence, national relationship, people’s character, environmental management, macro affective DCI, and destination’s environment between the pre-trip and post-trip tourists. However, no significant differences were seen in the service infrastructure, tourism attractions, and micro affective DCI between the samples.

Table 6. Change in the means of destination-country image factors.

Factors	Means		Mean of DCI Factors Difference	t-Value	p-Value
	Pre-Trip	Post-Trip			
Country’s competence	3.54	3.83	0.29	5.839	0.000
National relationship	3.66	3.85	0.19	3.372	0.001
People’s character	3.54	3.98	0.44	8.163	0.000
Environmental management	3.76	4.30	0.54	10.334	0.000
Destination’s environment	3.65	4.13	0.48	10.858	0.000
Service infrastructure	3.81	3.91	0.10	1.811	0.071
Tourist attraction	3.57	3.64	0.07	1.337	0.182
Macro affective destination country image	3.36	3.62	0.26	4.240	0.000
Micro affective destination country image	3.71	3.67	−0.04	−0.822	0.411

According to the changes in the mean value of the DCI factors, the post-tourists’ evaluations of Korea’s DCI were comparatively positive (the mean value of all factors was above 0.35). Except for the decline in the micro affective DCI perception, post-trip tourists’ perceptions of the other DCI factors all improved compared with those of the pre-trip tourists. The comparison of the mean values of the DCI factors showed that the macro affective DCI scored the lowest, both among pre-trip and post-trip tourists. Service infrastructure ranked highest (mean = 3.81) in the pre-trip tourists’ evaluations, whereas environmental management ranked the highest (mean = 4.30) in the post-trip tourists’ evaluations. As for the change degree in the mean values of the DCI factors, the mean value of “Environmental management” was the highest, increasing by 0.54 from the pre-trip’s 3.76 to the post-trip’s 4.30. The change degree in the mean values of the “Micro affective DCI” was the lowest, decreasing by 0.04 from the pre-trip’s 3.71 to the post-trip’s 3.67.

5. Conclusions and Implications

5.1. Conclusions

This study examined the perception changes in enhanced DCI and complex DCI items and factors in the international tourism context, taking Korea as the tourism destination and pre-trip and post-trip Chinese mainland tourists as the research subjects. Regarding Korea’s DCI measurement items between pre-trip and post-trip Chinese tourists, the post-trip tourists’ perceptions of macro DCI measurement items were significantly higher compared with those of pre-trip tourists. This was also the case for most of the micro DCI measurement items. Moreover, perceptions of country’s competence, national relationship, people’s character, environmental management, destination’s environment, and macro affective DCI were significantly changed. Post-trip tourists’ perceptions of country’s

competence, people's character, national relationship, environmental management, destination's environment, service infrastructure, tourism attraction, and macro affective DCI were higher compared with pre-trip tourists, indicating that post-trip Chinese tourists' actual experiences met or exceeded their pre-trip expectations. However, post-trip tourists' perceptions of micro affective DCI factors were comparatively lower compared with those of pre-trip tourists, which could be attributed to tourists' pre-trip excitement and happiness turning into post-trip relaxation as they returned to China.

The results of this research indicate that, compared with pre-trip tourists in terms of enhanced DCI perception, post-trip tourists possessed a positive complex DCI perception. However, Chaudhary [14] concluded that tourists' post-trip Indian images were more negative than at pre-trip. Therefore, this is quite a different finding from the results of the present study. The possible reasons for the different results are that Chaudhary collected both pre- and post-trip image perceptions on India at the post-trip stage. As re-evaluation is often distorted by events following the trip, this approach may have yielded inaccurate answers regarding the tourists' pre-trip images.

5.2. Theoretical Implications

The findings suggest that international tourists' actual travel experiences promote their perceptions of enhanced DCI, evolving into perceptions of complex DCI, as well as improving their impression of the destination country. The results highlight the importance of travel as a way to improve DCIs. International tourists' travel experiences in the tourism consumption process and non-resident consumption space function as possible ways to adjust the DCI. Pre-trip international tourists will actively search for tourism information related to the destination country, enhancing their cognitive and affective DCIs, and then shaping their enhanced DCI. If post-tourists' actual perceptions meet or exceed their expectations, they will have a comparatively happy tourism experience, which further helps shape a positive complex DCI. Otherwise, a negative complex DCI will be shaped. However, international tourists are more likely to form a positive complex DCI after traveling to their destination country. This study also supplemented understanding of the cognitive and affective components of the DCI, particularly by including environmental management and the affective DCI in the measurement structure of the DCI. The present study showed that post-trip tourists' perceptions of environmental management and macro affective DCI factors improved compared with those of pre-trip tourists.

5.3. Practical Implications

This study offers a reference for DCI construction and marketing: Destination countries ought to value the development of inbound tourism, strive to meet the tourism demand for tourism activities of inbound tourists, improve the travel experience quality of inbound tourists to guide inbound tourists to shape a positive DCI, and maximize the role that travel plays in improving DCIs. In this study, post-trip Chinese tourists' perceptions of service infrastructure, tourism attraction, and the micro affective DCI were generally consistent with those of pre-trip Chinese tourists. However, significant perception changes were noted in people's character, environmental management, and destination's environment between the pre-trip and post-trip tourists. The post-trip tourists' evaluations of environmental management, the destination's environment, and people's character were significantly higher compared with those of pre-trip tourists.

5.4. Limitations and Recommendations for Further Study

The results of this research provide a new perspective on the influence of international tourists' experiences on DCI change. Nonetheless, this study is not free of limitations. First, this research did not differentiate individual tourists and group tourists. There are certain differences in the characteristics of tourism consumption between the two, which might further influence the DCI perception of pre-trip and post-trip tourists. Future research could compare the characteristics of DCI perception changes between individual and group tourists. Second, a follow-up study may be needed to understand the differences between destination-country perceptions of long-haul and short-haul destination countries [5]. China is

geographically close to Korea, where a similar culture can be experienced. Whether the actual tourism experience of international tourists enhances the image of a long-haul destination country remains to be answered in tourism research. Thus, investigating post-trip international tourists' perceptions of a long-haul destination country would provide insightful clues to related research questions. Third, this study takes China as the tourist source country, and Korea as the tourism destination country. Pre- and post-trip tourists' destination-country image perception might be influenced by geographical and cultural distance. Therefore, much more validation will be required to support these research results. Finally, this study does not take Chinese tourists' duration of stay in Korea and form of tourism organization into consideration, which might influence tourists' complex DCI perceptions.

Author Contributions: Conceptualization and methodology, H.Z. and P.Y.; investigation, software, and writing, P.Y.; funding acquisition, H.Z. All authors have read and agreed to the published version of the manuscript. All authors contribute equally to the work.

Funding: This research is supported by the National Natural Science Foundation of China (Grant No. 41371161).

Conflicts of Interest: The authors declare no conflict of interest.

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Review

Educational Tourism and Local Development: The Role of Universities

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Received: 18 June 2020; Accepted: 17 August 2020; Published: 20 August 2020



Abstract: On the basis of a scoping review of the literature about educational tourism—a type of tourism in which the traveller’s primary or secondary objective is learning—this study summarizes views on how Higher Education Institutions (HEIs) can foster local development through educational tourism. The results show that international students can be considered as educational tourists, and their stay can benefit them and the destination. In this context, the university can actively facilitate relationships between tourists and local stakeholders to foster learning at the destination and improve the sustainability of the local economy; some reports about specific cases are described. We argue that the tourism component should be considered by any institution organising or managing educational programmes, in order to exploit the opportunities offered by the destination for the achievement of learning goals. More specifically, the paper focuses on educational tourism related to HEI students in international mobility programs, who are educational tourists inasmuch as their overall experience at the destination includes leisure and tourism activities. Further research is needed to formulate models of intervention.

Keywords: educational tourism; local development; higher education

1. Introduction

In the last few decades, the number of students studying abroad has increased throughout the world, with important outcomes for the host universities and countries, as well as the students themselves. According to UNESCO, an internationally mobile student is an individual “who has physically crossed an international border between two countries to participate in educational activities in a destination country, where the destination country is different from his or her country of origin” (UNESCO Glossary: <http://uis.unesco.org/en/glossary-term/international-or-internationally-mobile-students>). The advantages of study-abroad programs accrue to the host country as well as to the student. On the one hand, host countries benefit from international student expenditures on accommodation, food and beverages, entertainment and leisure activities, and, in some programs, tuition fees, not to mention the inevitable taxes, with a positive impact on the economy [1]. On the other hand, students benefit not only from their studies, but also from interactions with local and foreign people, and experiences that foster personal and professional growth. Additionally, international students are tourists, taking advantage of the opportunities to visit local attractions or travel to other regions of the host countries, alone or with friends and relatives. Experiential learning is part of studying abroad, and tourism is part of the whole experience [2]. It is a transformative [3,4] combination of learning and personal growth [5], thus creating a complete social experience [6,7]. The most frequently cited reasons for choosing a particular university abroad are the quality of education offered and the attractiveness of the destination [8–14]. In a parallel development to the growth in the number of students who study abroad, universities in recent decades have become progressively more committed to their third mission—to boost the local economy

through the promotion of technology transfer to businesses [15]. Moreover, through their engagement in place-based, multi-stakeholder partnerships, they have sought to bring innovation to bear in addressing local and world challenges [16]. In this environment, universities also pursue their civic mission [17,18] in a holistic way [18], by involving students in educational activities with the local community, thus providing opportunities to practice active citizenship, gain knowledge, and improve their employability. In this context, universities and their local areas also benefit when talented international students chose to stay and work in the host country, putting to use the skills they have learned there; this can support the process of innovation and the development of production systems, providing skilled workers for the future of the local area [1]. In addition, international student mobility may promote future international scientific co-operation networks and cross-faculty fertilisation [19], thus creating benefits for the host university, the destination and the students themselves.

1.1. Purpose and Organization of the Study

This study investigates the role of universities in fostering local development through educational tourism. First, we provide a brief description of the methods used for the literature survey and the definitions of educational tourism put forth in the literature. Second, we define the role of travel as part of the educational experience. Third, we explore the role of universities as place-based education providers in a region. We then examine the role of universities in improving the potential for the provision of educational tourism in their areas and thus fostering local development. Fourth, the impact of educational tourism is presented, drawing upon examples in the literature.

1.2. Background Context

To better understand the dynamics of study abroad in recent years, some statistics and data are helpful. According to the UNESCO Institute for Statistics, there were over 4.8 million international students in 2016, up from 3.9 million in 2011, as reported in the Global Migration Indicators [20]. More than 50% of these students were enrolled in educational programmes in six host countries; namely, the United States of America, the United Kingdom, Australia, France, Germany and the Russian Federation. Prominent sending countries of international students included China, India, Germany, South Korea, Nigeria, France, Saudi Arabia and several Central Asian countries. In 2013–2014, American students abroad numbered 304,465, with Europe as their favourite destination, in particular the U.K., Italy, Spain, France, and Germany. China, Ireland, Australia, Japan and South Africa also hosted significant numbers of American students. Looking at data for the OECD area, in 2016, there were 3.5 million international or foreign students [21], over half of them from Asia, especially China (1.9 million, 55% of all international students in 2016), and they chose the U.S., U.K. and Australia as destinations. Europe is the second major region of origin, with 845,000 European cross-border students. 80% of these European students travel to other European nations for study, perhaps because of the Erasmus mobility program between universities, which, in its 30 years of activity, has enabled study abroad for 4.4 million European students and university staff [22]. In 2014, the Erasmus+ program was launched to expand beyond Europe's borders and to offer an opportunity to study, train or volunteer abroad not only to university students but also to vocational students, apprentices, teachers, youth workers and volunteers; as of 2017, up to 2 million Europeans had participated in its mobility programmes.

Moving from the discussion of student origins to that of their destinations, the U.S. was the top OECD destination country for mobile tertiary students (971,000 students) in 2016. The European Union (1.6 million students) was another key destination [21,23]. The U.K. was the destination of choice for 26% of the total number of students from abroad. In fact, in 2014–2015 there were approximately 437,000 international students enrolled, 19% of all students registered at U.K. universities. Of these, 125,000 came from other EU member states and 312,000 from the rest of the world [24]. France and Germany (both at 245,000) were also major host countries, followed by Italy (93,000), the Netherlands (90,000) and Austria (70,000). Of international students, 26% are Europeans, 29.5% come from Asia,

and 12.7% are from Africa; in 2016, they came to the European Union for bachelor's degrees (46%), master's degrees (41%), doctoral degrees (10%), and short-cycle tertiary courses (3%), according to EU learning mobility statistics [23].

The economic impact for host countries has been considerable, as detailed in studies for the U.S., Italy and the U.K [24–26]. In the U.S., during the academic year 2017–2018, the 1,094,792 international students contributed \$39 billion to the economy and supported more than 455,000 jobs [25]. A 2013 study by the Association of American College and University Programs in Italy stated that the value added created by these international educational programs was particularly significant in the education sector (46.9% of the total impact in terms of value added generated by the presence of international students), because of tuition expenditures. Economic impact in other sectors was not negligible either: real estate (1.2%), sales (6.9%), food and beverage (5.8), transport (40%), and other services, among them arts and entertainment (more than 1%), were affected. The tertiary sector was most impacted, which creates opportunities for the development of more services and benefits, above all in those destinations where the programs are well developed [26]. Detailed information on the economic impact of international students in the U.K. during the academic year 2014–2015 [24] is provided in Table 1.

Table 1. Economic impact of international students in the U.K. (a. y. 2014–2015) [24].

Economic Impact of International Students in the U.K. (a. y. 2014–2015)					Overall Contribution to U.K. Economy
Type of Economic Contribution					
Payment of Tuition Fees to U.K. Universities	Payment of Tuition Fees + Accommodation	Off-Campus Expenditure + Visitors' Expenditure	Transport and Retail Sectors (% of the Total Increase in Economic Output)	Tax Revenues for the U.K. Exchequer	
£4.8 billion	- Additional £13.5 billion in gross output; - £13.8 billion: contribution to gross value added to GDP	- £25.8 billion in gross output in the UK; - £13.8 billion: contribution to gross value to GDP	13% and 12%	£1 billion	£6.1 billion

Among the factors related to educational tourism that economically contribute to the host destination, it is worth mentioning the expenditures of friends and relatives who visit the international students. In the U.K. in 2014–2015, visitors spent about £520 million for transport, hotels, hospitality, and cultural, recreational and sports attractions, generating an estimated £1 billion in gross output. Their presence supported a further 11,000 jobs and £100 million in tax revenues [24].

Moving on to the discussion of the benefits that accrue to the students themselves, two studies contribute useful insights. A 2002 publication on a longitudinal study of alumni of study abroad programs run by the Institute of International Education of Students [27] reported that 98% of respondents believed study abroad helped them to understand their own cultural values and biases better, and 82% felt that the experience gave them a more sophisticated way of looking at the world. For 94% of the alumni, the study-abroad experience continued to influence their interactions with people from different cultures. The choice of subsequent educational experiences was influenced by the study abroad experience for 87% of respondents; nearly half of all respondents went on to international work or internships (usually in offices) and/or international volunteerism. The second study, the Erasmus Impact Study [28], reported that most respondents felt that their future career paths were influenced by the skills acquired during their study abroad period. The study also reported that companies are willing to hire students who studied at foreign universities, because they feel that this kind of experience would have helped them acquire transversal skills important for the world of work.

2. Materials and Methods

Our research question for this literature review was “What is the role of HEIs in fostering local development through educational tourism?” The first phase of desk research focused on collecting academic contributions about educational tourism using the Google Scholar search engine, Scopus, EBSCO and the Web of Science databases, and the Academia.edu and Research Gate academic social networks, for the following keywords: “educational tourism”; “educational tourism”; “educational travel”; “study abroad”; “learning experience”; “learning destination”; “experiential learning”; “learning backpackers”; “international students” combined with “tourism”; “rural tourism” combined with “education”; “civic university”. The authors perused the abstracts and chose those most suited to the purpose of this study for in-depth reading. Both conceptual papers and case studies, the latter applying both qualitative and quantitative methods, were considered. From a first selection of over two hundred papers, about one hundred were chosen and categorized into clusters according to these main topics:

1. Educational tourism (in general): definitions and frameworks related to educational tourism.
2. Travel and experiential learning: connections between educational tourism, travel and experiential learning.
3. Educational tourism destinations. How can the stakeholders in a destination manage local educational tourism to contribute to local development, and how can universities, significant stakeholders in their own right, contribute to the touristic offer? This topic also includes the concept of civic university.
4. The educational tourism of international students. What are the characteristics of international students as educational tourists? What motivates a student to choose international mobility, and what criteria determine the choice of a destination?
5. The social benefits of educational tourism for international students and the destination. What personal benefits do international students gain from educational tourism? How does the presence of international students impact a destination?
6. The impact of educational tourism. What is the impact of educational tourism on a destination?

Next, the content in each cluster deemed most pertinent to the current or potential role of universities for local development through educational tourism was identified, analysed and synthesized for the third section, ‘Results and Discussion’, organized as:

- Section 3.1. Defining educational tourism: cluster 1;
- Section 3.2. Educational tourism and travel: cluster 2;
- Section 3.3. The role of higher education institutions in fostering educational tourism: clusters 3, 4 and 5;
- Section 3.4. Impact of educational tourism on the destination: cluster 6;

3. Results and Discussion

3.1. Defining Educational Tourism

The aspect of educational tourism has been studied as part of tourism research since the 1990s [29–32]. Several definitions of educational tourism can be found in the literature, as summarized in Table 2.

Educational tourism as a concept, therefore, refers to common topics, such as formal education, travel, tourism and skills, but precise attributes have yet to be agreed upon. The ongoing debate concerns the motivation of the learner/traveler, the links between formal and informal learning, and the relation between tourism and education.

Table 2. Definitions of educational tourism in the literature.

Definition of Educational Tourism	Authors
“Educational tourists (students, adults, and seniors) are those respondents who indicated that they took part in study tours or who attended workshops to learn new skills or improve existing ones while on vacation”	Gibson [33]
“Tourist activity undertaken by those who are undertaking an overnight vacation and those who are undertaking an excursion for whom education and learning is a primary (education first segment) or secondary (tourism first segment) part of their trip” (p. 18).	Ritchie [32]
“A form of tourist experience that explicitly aims to provide structured learning in situ through active and engaged intellectual praxis. Learning is explicit and core to the delivery of the product” (p. 6).	Pitman et al. [34]
“Organised trip led by skilled guides where leisure-travel activities and learning processes occur simultaneously through interaction between related stakeholders (participants, tour operators/leaders, and local community) as part of the total experience. The educational tourism experience occurs within a certain period of time (minimum of 24 h away from home) and generally ensues in an informal setting.” (p. 107)	Sie et al. [7]

Falk et al. [35] did not offer a precise definition of educational tourism, but explored the nexus between travel and learning, arguing that there is always a learning component in travel, even if it is often a passive one. They noted that the development of practical skills and the acquisition of knowledge occur in spontaneous and incidental ways. Practical wisdom, understood as learning and awareness about sustainable and ethical behaviour and cultural views can be achieved, as exposure to diverse contexts contributes to a cumulative process of experiencing. Conversely, they acknowledge that some travel—for example sailing or golfing trips—is undertaken with the specific, intentional goal of learning, an “active quest for controlling physical and cognitive skills and acquiring understanding and knowledge” (p. 917). This point seems to echo the education/tourism first dichotomy of Ritchie [32], as in Table 1. McGladdery and Lubbe [4] also referred to Ritchie in their description of educational tourism as a transformative process that joins elements of experiential learning and international education, and provides several measurable outcomes, categorized as cognitive (knowledge acquired), affective (attitudes, or ways of thinking), and behavioural (skill development). McGladdery and Lubbe also discussed motivation, arguing that it is not always easy to determine whether the desire to learn while travelling is a primary or secondary motivation. Moreover, they explored a factor not considered by Ritchie, asking whether educational tourism includes ecotourism or cultural tourism. Even if it is acknowledged that learning occurs anyway during travels, authors do not all agree on the need of having an education institution driving the learning process. Sie et al. [7] defined educational tourism as an organised leisure-travel trip which lasts at least 24 h and usually takes place in an informal setting. Educational tourism is related to non-formal learning and is a form of self-directed learning while travelling; education and tourism are the core services. It encompasses study tours for adults (active discovery or special interest) and study tours during school holidays. They do not consider university study projects in this category, viewing them instead as “formal learning”, in which education and learning are the core services. Instead, Pitman et al. [34], whose definition, as in Table 2, noted three characteristics of educational tourism for adults [36]: (a) an intentional pedagogical structure; (b) an educational leader/teacher; and (c) in situ experience that triggers an emotional, sensory reaction in the learner, which in turn facilitates transformative learning. According to them and other authors, personal and pleasurable pursuit in which the learning moment is structured and facilitated by an expert and supported by materials has the potential to transform the learner, and therefore has the potential to be transformative learning [3,32,36].

In 2016, Nugroho and Soeprihanto [37] explored the relationship between the fields of education and tourism in more depth. They described educational tourism as a three-dimensional product:

(a) the educational experience at the tourism destination and the consequent learning benefit (main product); (b) the tourist package, which meets the tourist's needs (real product); (c) all the tangible and intangible aspects of the tourism experience, which are added to the primary service (additional product). Furthermore, they identified different formats of educational tourism: school trips (and perhaps a follow-up visit with the children's parents); study abroad experiences (intensive study sessions with full cultural and linguistic immersion); seminar vacations/senior seminars/hands-on enhanced experience vacations (which mostly appeal to adults and seniors); skills enhancement vacations (trips with several practical learning activities, such as 'how-to-do' learning or ecology-based activities); and educational cruises (which combine fun and specific-topic lectures).

In this paper, we consider educational tourism as a learning experience organised and managed by educational institutions. Of course, learning takes place during any kind of travel, for leisure or to visit a destination, for example, but in our definition, education is the learner's primary purpose and tourism the secondary one. However, we argue that the tourism component should be considered by any institution organising or managing educational programmes, in order to exploit the opportunities offered by a destination for achieving learning goals. More specifically, the paper focuses on educational tourism related to HEI students in international mobility programs, who are educational tourists inasmuch as their overall experience at the destination includes leisure and tourism activities [2].

3.2. Educational Tourism and Travel

Travel is a fundamental aspect in any definition of educational tourism, as it plays a significant part in the entire experience: travel satisfies the desire to learn about the culture and the customs of a place [24,38]. While travelling, tourists are actively involved in their "cognitive, emotional and bodily dimensions [39]", and learning becomes possible through the direct experience, which is "meaningful discovery" [40]. Liang et al. [41] focused on the motivation for travel and on the value of leaving one's comfort zone, and of reflection during and after the journey, and proposed the development of an individual travel biography to facilitate learning. Richards [3] argued that educational tourism, including ecotourism, cultural tourism and agri-tourism, can be transformative and related to experience, referring to the experience value of Pine and Gilmore [5], where education also entails learning and personal growth.

Experiential learning [40,42,43] is an essential part of the experience of tourism, and consequently is particularly significant when it comes to educational tourism, where the learning component is core. Experiential learning in the tourism context has been studied by several scholars [32,34,44]. Travel necessarily involves experiential learning. Pine and Gilmore [5] define four experience realms—education, aesthetics, entertainment and escape—that can be considered part of the four dimensions of active vs. passive, and absorption vs. immersion. Education provides active and absorbing experiences. In a survey of tourists and providers regarding adult educational tourism, Pitman et al. [36] found that customers linked the travel experience to learning about a country through its history, art, food and culture. Intentional learning to open one's mind and reinforce knowledge, context-related experiential involvement, and the combination of travel and a structured educational programme are three key elements in educational tourism [36]. The learning experience in educational tourism involves providers, practitioners and learners, and it goes beyond the actual touristic experience. It includes pre-travel considerations (product development, personnel recruitment and learner preparation) and after-travel moments related to the learning communities and the maintenance of learner social links. Furthermore, spending some time during the experience to absorb and share it with the other actors enhances reflection and thus learning [36].

3.3. The Role of Higher Education Institutions in Fostering Educational Tourism

In recent decades, universities have paid increasing attention to their engagement with civic society, collaborating in place-based projects with local stakeholders to enhance sustainable local economic development [45]. In this process, specific needs are identified, and then innovative solutions

to real problems are proposed [16,46,47] in efforts that draw upon and share the specialized knowledge of academics and the particular knowledge of locals, especially their culture, with its traditions and values [17], to foster sustainable development and bring other benefits to the local area [48].

3.3.1. Universities and Educational Tourism

Pitman et al. [34] studied the role of higher education institutions in educational tourism, recognizing that “educational tours are an interesting site of study, first, because they are explicitly about learning, and second, because they provide an opportunity for universities to reach beyond their walls and directly teach members of the broader community” (p. 6). They argued that universities could play a pivotal role in teaching ethics beyond the context of academic education by providing moral education that supplements professional skills, and by using the entire world as a stage for pedagogy, and asserted that, by applying mixed strategies, such as practical and experiential learning at a local level, and by exposing students to real life, it is possible to increase the links between the university and the community. Liang et al. [41] also highlighted the role of higher education teachers in the learning process: “Educators, who have the opportunity to get to know individual students more closely and to work with them repeatedly in thinking about travel and learning in advance of a trip, in digesting the trip as it is happening, and in reflecting on it after they return, are in an even stronger position to facilitate students’ growth through travel and to direct their awareness towards ways their learning may be turned in the service of social transformation” (p. 236).

By engaging in educational tourism, universities also pursue their civic mission for the benefit of the local area. A civic university integrates teaching, research and engagement with the outside world, according to Goddard et al. [18]. From the results of dialogue with local stakeholders, HEIs can form students into “well-rounded citizens” (p. 13) capable of providing answers to the real challenges of the territory in terms of innovation [17]. A civic university has a sense of purpose and place, viewing the territory as a “living laboratory” where it has cultural and social impact. For this reason, it actively engages and collaborates with public and private local stakeholders, and with other educational and research institutions and departments at a local and international level. It takes a holistic approach and shows a willingness to invest to achieve societal goals, and operates with transparency and accountability, and by applying innovative methodologies to be more effective. HEIs play a pivotal role in innovation for society and sustainable development, as they are a means of cross-fertilisation and co-creation in different thematic areas and for different actors, by contributing to the generation of knowledge that is trans-disciplinary and practice-based [49].

In the context of hosting educational tourism, universities can also achieve their civic purposes [17]. For example, they could run place-based research and extend teaching to address the challenges faced by local society, also with the aim to valorise the place. The holistic approach and sense of place could lead them to create new connections with other universities and local stakeholders, involving students in local activities. This could be done through specific projects and by using new methodologies and approaches. An intriguing example is a proposal to organise educational tourism at GadjahMada University in Indonesia, given the interesting architecture on campus, the Biology museum, and the natural beauty of the surrounding areas [37]. The authors argue that to pursue these objectives, university and tourism stakeholders need to create tourism programs and learning materials, and the government should be involved in policy planning, the identification of resources and the management of infrastructures. The community should also play an active role in planning and should inform the other actors about the local culture, engage local residents in social commitment, and develop the human resources of its members, so that educational tourism can continue in the area. Thus, universities could satisfy both the government’s and the tertiary sector’s needs, and address policy and market challenges [34]. Furthermore, local activities foster the engagement of the young and adult learners of the local community, alongside university students, thus creating a multi-stakeholder learning community that could also address societal and ethical issues. To be sustainable, the development of

educational tourism practices in a destination, where the university always plays a coordinating role, should be the result of the combination of the 3E principles [50]:

- Environmental factors: provide tourists with knowledge-based information and educate them to respect the local environment. Sustainable actions promote the preservation of biodiversity and enhance attention to the cultural heritage;
- Engagement: active participation of tourists is central to making them feel fully immersed in the context and to cultivating their special interests;
- Exploration: help tourists authentically experience the place by contributing to in-situ learning-by-doing practice.

The university's role in educational tourism is therefore closely linked with its regional role, and it is not limited to the education of foreign students: the experience of the place is, in fact, embedded into the educational journey. The university needs to work with the place to co-create meaningful learning experiences. At the same time, although being a secondary outcome of education, it actually contributes to create different touristic offers and packages, both directly (through co-creation with local players) and indirectly (by bringing travelling students in the region).

3.3.2. International Students as Educational Tourists

While living and studying abroad, international students also enjoy tourism and boost the local economy with their expenditure on transport, visits to cultural attractions, meals at restaurants and local food [37]. Even so, as Huang [2] noted, most academic tourism theories do not consider international students as tourists, unless their study period at the destination lasts less than one year, because they spend time in non-tourist settings. He argues, instead, that if we consider the full experience of international students, not only the academic one, we should not define them only as students. Travel is essential in their choice. Thus, international students can be seen as special interest or niche tourists: "The whole international student experience—touching, smelling, hearing, tasting and also seeing—in foreign countries, perfectly matches the 'tourism as an embodied practice' argument" (p. 1008).

Most of the studies on educational tourism have focused on of the reasons international students choose to attend study-abroad programs. The destination is significant, and its image and reputation [2,9,13] are primary factors in the student's choice. Other factors include the safety and political stability of the destination, its cultural and touristic attractions, the events and leisure activities offered, the weather, the natural environment and the local lifestyle [2,8,51,52].

The image and reputation of the destination university is another important motivational factor: students consider the quality of its teaching programs and academic staff, its infrastructure and services, the availability of scholarships and the costs [2,8,14]. Other relevant factors in choosing the destination and the university are the geographical and cultural proximity, the presence of social ties, recommendations from trusted people, or even word of mouth [8,11,13]. Fortunately for researchers, students often record the reasons for their choices. Stone and Petrick [44] wrote a literature review identifying several aspects of educational tourism and analysing motivational factors. Table 3 summarises their list of motivational factors and provides a reference to the scholars who discussed them.

Table 3. Motivational factors for educational tourism (adapted and further elaborated from Stone and Petrick [44]).

Motivation	Authors
A search for new experiences	Juvan and Lesjak [52] Sanchez, Fornerino, and Zhang [53] Taylor and Rivera [54]
A good opportunity to travel	Sanchez, Fornerino, and Zhang [53] van Hoof [55]

Table 3. *Cont.*

Motivation	Authors
To live in or learn about another culture	van Hoof [55]
The desire to be somewhere different	Juvan and Lesjak [52]
Exposure to a different culture/language	Doyle et al. [56]
Desire for personal growth and increased independence	Glover [51]; Castillo Arredondo et al. [57]
Wish to immerse themselves in another culture and language	Chew and Croy [58]; Lee [13]; Abubakar et al. [11]; Liang et al. [41]
Gaining academic knowledge	Lam et al. [10]
Understanding of the host country	Sie et al. [59]
Living a complete social experience	Huang [2]; Sie et al. [59]
Future opportunities given by study abroad, also about professional and career development	Glover [51]; Nyaupane et al. [9]; Lam et al. [10]; Abubakar et al. [11]; Tashlai and Ivanov [12]

3.3.3. Benefits of Educational Tourism

Study abroad can have immediate benefits, such as learning or improving skills in a language, gaining knowledge in academic disciplines, and growing socially and emotionally, as students become more independent, mature and self-confident, and improve their interpersonal skills. Students who study abroad can also acquire intercultural competence [60]; that is, they gain specific knowledge about the host culture, come to an understanding of cultural differences, overcome prior stereotypes, and develop a broader awareness of the world around them. The study abroad experience allows them to practice critical thinking and reflect on the learning experience. It can influence their affections and attitudes. Living in a foreign context, they may be prompted to re-evaluate their own cultural identity and personal values, and may change their worldview, belief systems, and vocation. Study abroad can also contribute to modifying the students' attitudes and feelings about other cultures and can help them become more tolerant of ambiguity or learn to adapt to it. They may grow in their observation skills, develop new styles or strategies for learning information, improve their academic achievement, and learn to function more effectively in multicultural groups [60]. To sum up, the most common benefits are intrapersonal and interpersonal development, also in terms of interculturality and cultural self-awareness, academic and career benefits, growth in knowledge and skills, and social engagement and active citizenship [12,41,44,59–62].

The benefits of study abroad programs are not limited to the students, as these visitors can have a positive impact on the host country as well. For example, if they engage in activities related to the sustainable development of the host countries, there can be an exchange of benefits. A few scholars have explored the social interactions between tourists and hosts in educational tourism [63–65]. Moscardo [66] described knowledge-sharing and capacity-building to help communities interact positively with tourists. If several stakeholders jointly organise educational tourism activities, this may lead to “the realisation of a step-change in the strategic implementation of a curriculum aimed at enhancing students' professional and practice-based learning by offering an innovative programme which facilitated access to resources, knowledge exchange, capacity-building, cross-cultural and philanthropic collaborations and,

as part of the university corporate commitment to sustainability, a contribution towards sustainable development practices in the wider community” [67]. Stable international programs benefit the university and the destination by increasing the internationalisation of the university, creating fertile terrain for the formation of new partnerships, fostering conditions for multiculturalism and integration, and attracting new students, tourists and investors in the long term. Moreover, the students’ presence at the local level would lead to cultural exchange between residents and international students, and would influence the attitude of local communities towards students in socio-cultural terms [68]. All these factors may contribute to the sustainable development of a local system.

3.4. Impact of Educational Tourism on the Destination

The benefits of educational tourism to host countries have economic and social relevance. As mentioned above, the presence of study-abroad programs provides more opportunities for local entrepreneurs, economic benefits for small businesses and employment opportunities for local people. The level of interaction with international students may influence the perception of residents. A study about Malaysia [68] showed that the presence of international students at an educational tourism hub could improve the quality of life for residents through the provision of increased opportunities for local entrepreneurs, economic benefits to small businesses and employment opportunities for local people.

The economic impact of international study programs on destination countries has been explored in a number of studies. As mentioned in the Introduction, one study explored the impact of American study abroad programs in Italy [26] (see Introduction), and another assessed the economic impact of international students in the U.K. Along similar lines, O'Brien and Jamnia [69] argued that international students can contribute to the local economy through:

- on-campus spending directly related to their studies;
- off-campus spending on housing, food, books, transportation, clothing and entertainment;
- contribution to the local tourism industry through domestic travel and other tourist activities;
- non-educational tourism spending by students, visiting friends and relatives (VFR) and the return visits of alumni.

As a consequence, international educational tourism can lead to an increase in the sales of goods and services, and related tax revenue, as well as job creation [69].

Rezapouraghdam et al. [70] described the benefits brought by international students in Northern Cyprus, but noted some drawbacks as well. As benefits, students spend on food, school supplies, and transportation, and give more business to travel agencies and, if they bring their cars, to local insurance agencies. Construction businesses profit as ‘dead’ areas are exploited for the construction of new accommodations. Banks benefit from loans taken out by firms that can expand because of the influx of business from international students, as well as from financial services to students, such as money transfers, checking and savings accounts, and currency exchanges. Finally, student expenditures also bring in tax revenue. Negative aspects, according to the authors, include an increase in costs to residents, such as:

- higher prices for accommodations and shop rentals in the university area compared to the suburbs;
- fewer part-time and full-time jobs for local people, as international students take them at lower pay;
- the decline of the local economy in the summer, when students are away;
- excessive competition in the market for services dedicated to students.

International students can also have a direct economic impact on tourism in the host country. In Australia, Weaver [71] found that all the international students of the sample group visited the local tourist attractions or other regions, mostly on their own initiative. Moreover, as mentioned above, visiting friends and relatives can also have a substantial impact on the local economy [71], as they usually add tours of the destination and nearby regions. According to Asiedu [72], these visits are one of the foremost motivators in tourism.

Particularly in non-urban areas, tourism may contribute to demographic stability and socioeconomic sustainability [73]. This type of tourism has the potential to generate local prosperity through decent jobs and better incomes [74]. In this matter, as highlighted in the Introduction, the presence of international students at a destination creates new entrepreneurial and employment opportunities related to the students' expenses at the local level. In some cases, new services are built to respond to students' needs for housing, cultural activities, and leisure and entertainment opportunities. The social impact of international students is, therefore, significant. From an environmental and social perspective, also, tourism in rural areas promotes environmental awareness and contributes to a positive attitude both in locals and tourists in terms of the respect, protection and conservation of the local cultural and natural heritage [73,74]. Cultural exchange between international students and locals brings its own social benefits. International students may actively engage in projects drawing together university and local stakeholders and bring positive contributions to the local context. Furthermore, this exchange between students and locals can help local communities become more aware of their own cultural identity, which, in rural areas, is a fundamental component in the promotion of territorial development and governance [75].

4. Conclusions

This work explored the role of HEIs in fostering local development through educational tourism. Statistical data show that the number of students studying abroad throughout the world is increasing. Research has provided evidence about the significant impact of international education tourism, including students' potential involvement in place-based activities, increased tourism business, and economic and social benefits to the host country [20,21,23,24], which relate to the sustainability of this form of tourism for the destination. In turn, these educational tourists also benefit from their experiences personally and professionally [27].

This paper presents academic contributions that define educational tourism. Moreover, it explores the role of universities in enhancing educational tourism and in promoting local development; to do so, the authors, in this study, considered international students as educational tourists, and provided a description of the outcomes of educational tourism for students and destinations. In this context, it is possible to conclude that HEIs—as regional educational hubs—can enhance the potential of educational tourism destinations [26,76]. To this end, policymakers should work with HEIs to optimise and expand their educational exchange programs and make them more attractive to students. International educational tourism programs could work in collaboration with university information centres in other countries to promote their offerings. In addition, HEIs and actors at the destinations could collaborate on marketing strategies to communicate a positive image of both the institution and the destination, through outlets such as airline on-board magazines and the materials of other transportation companies, and with destination management organisations [69]. Finally, the alumni of study abroad programs can serve as 'brand ambassadors' for the university and destination, making them known and recommending them when they return home [26,69,76].

Further research is needed, however, to give evidence and formulate models of intervention for the more strategic and operational deployment of educational tourism as a means for supporting the regional dimension of universities. We know from previous literature that the presence of international students impacts local communities, partly through an increase in local development. However, it is not clear whether this impact is the natural consequence that tourism of any kind would cause, or whether it derives from a deliberate university strategy as part of the design and management of its educational offer.

Author Contributions: Conceptualization, S.T., G.P. and A.C.; methodology, A.C.; investigation, S.T. and G.P.; writing—original draft preparation, A.C. (Section 2), G.P. (Sections 1 and 3.3.1), S.T. (all other paragraphs and sections); writing—review and editing, S.T. and G.P. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Acknowledgments: We would like to thank Sheila Beatty for editing the English usage in the manuscript.

Conflicts of Interest: The authors declare no conflict of interest.

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Article

Service Quality in Hospitality and the Sustainability Effect: Systematic Literature Review and Future Research Agenda

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Received: 8 September 2020; Accepted: 30 September 2020; Published: 2 October 2020



Abstract: This article presents a systematic review of the literature on quality of service and sustainable practices in the hospitality sector with the objective of analyzing the state of the art, identifying gaps for future lines of research, and defining a future research agenda. The number of articles on these topics, although not particularly high, does demonstrate a growing trend. Despite this growth, however, several untreated lines of research were detected in three specific areas. In the first area, emphasis is placed on the critical factors that affect the quality of service. In the second area are the specific practices and tools of sustainability and quality of service that affect development and business success. Finally, the third section analyses the impact of strategies and the management of sustainable practices and quality of service with respect to business development. Research questions have been defined for each area.

Keywords: service quality; sustainability; hospitality; tourism; sustainable practices

1. Introduction

In global terms, with respect to rapid growth and social, economic, and environmental impact, the tourism industry is one of the most important industries in the world [1–3]. In recent years, the hospitality sector has faced the challenges that come with being part of the trends of globalization, localization, personalization, and concern for the environment [4,5]. Many studies have focused on improving the performance of tourism and hotels [6,7]. In addition, there is a positive relationship between quality of service and customer satisfaction in the hotel industry [8–10], as well as between quality of service and the consumer's perception of quality [11]. Consequently, to survive and achieve successful results, quality improvement is key in a sector as competitive as the hospitality industry [12–14]. Therefore, hospitality companies' good management of these quality of service practices will allow their development and success [15].

Additionally, sustainability is considered an important element in terms of reputation. In the hospitality sector, certifications of sustainable practices form a competitive advantage [16], and they give businesses a better reputation among customers [17,18]. Previous studies show a positive association between environmental practices and business success in the hospitality sector [19,20]. Sustainable development has been a growing topic in the years since the origination of this concept in 1987 from the World Commission on Environment and Development (WCED) [21].

The importance of this sector is reflected in the global economy, as it accounts for 10.4% of all global economic activity; moreover, it represents one in ten jobs worldwide [3]. The importance of sustainable tourism is reflected by its inclusion in the Sustainable Development Goals (SDGs) set by

the United Nations (UN) for the year 2030 [22,23]. Specifically, SDG 8 deals with sustainable economic growth, and full occupation is one of its indicators, including policies that help promote sustainable tourism and create local employment [24].

The inclusion of sustainability in quality management should have a positive impact on the results of the company, but in no case should it lead to a reduction in the quality of other services.

Given the aspects described above, the present systematic review of the literature aims to identify the main factors and sustainable practices of quality of service to determine how they impact the development and success of companies in the hospitality sector (hotels and restaurants). In addition, the findings in this study will allow us to detect future lines of research to explore and provide a research agenda for future researchers.

This paper is divided into five sections. The introduction describes the theoretical framework of the topic. The second section explains the methodology used: a qualitative research was done through a systematic literature review. The content analysis of the selected literature review is described in the third section which is divided in three areas. Then, a discussion is provided through the topic and several research questions are identified for creating a future research agenda. Lastly, conclusions are presented with implication for academics and practitioners.

2. Methodology

In this study, we propose a systematic review that addresses the management of service quality and the effect of sustainable practices in the hospitality sector. This review offers a general description of the different scientific contributions made to date that adopt reproducible methods [25]. Defining this systematic methodology in ten steps, beginning with the identification of keywords and even validating the documents with the citation method [26]. Petticrew and Roberts suggest a conceptualization of the systematic review focused on striving to identify, evaluate, and synthesize all relevant studies on the defined topic; they propose a structured review in twelve steps [27]. Easterby-Smith et al. define two main processes for the systematic review [28]. The first attempts to define the review protocol and the relevance of the research studies in its specific field of research. The second process identifies the main findings to define gaps in research in this field of knowledge. Aiming to see the complete panorama, excluding these methodologies, the diagram of systemic revisions and metanalysis PRISMA were taken in consideration in order to select the articles [29]. The PRISMA method allows us to identify and select the paper with a higher quality and interest, through 4 phases: identification, screening, eligibility and inclusion [30].

After the previous contributions and in accordance with Centobelli et al. [31] and Cerchione and Esposito [32], and with the contributions of the previous authors, the literature review was organized in two stages. In the first stage, by PRISMA, a flow chart was built in order to identify and select the articles included in the analysis. In the second stage, the analysis of the included papers was carried out.

The first stage, searching for and selecting articles, had two key steps:

Searching for scientific articles: This section defines the keywords and selects the databases in which the search will be performed.

Selection of scientific articles: Criteria are defined to include or exclude articles found in the databases, and the selection of these articles is performed according to the criteria. This step is shown in Figure 1 through the PRISMA Flow diagram.

In the second stage, content description and analysis, there were also two key steps:

- a) Description: Articles are classified according to different perspectives to obtain a summary image.
- b) Analysis of content: The articles are selected and classified based on the defined criteria are reviewed and exhaustively studied. The analysis should highlight the strengths and weaknesses of the literature and identify and define future lines of research.

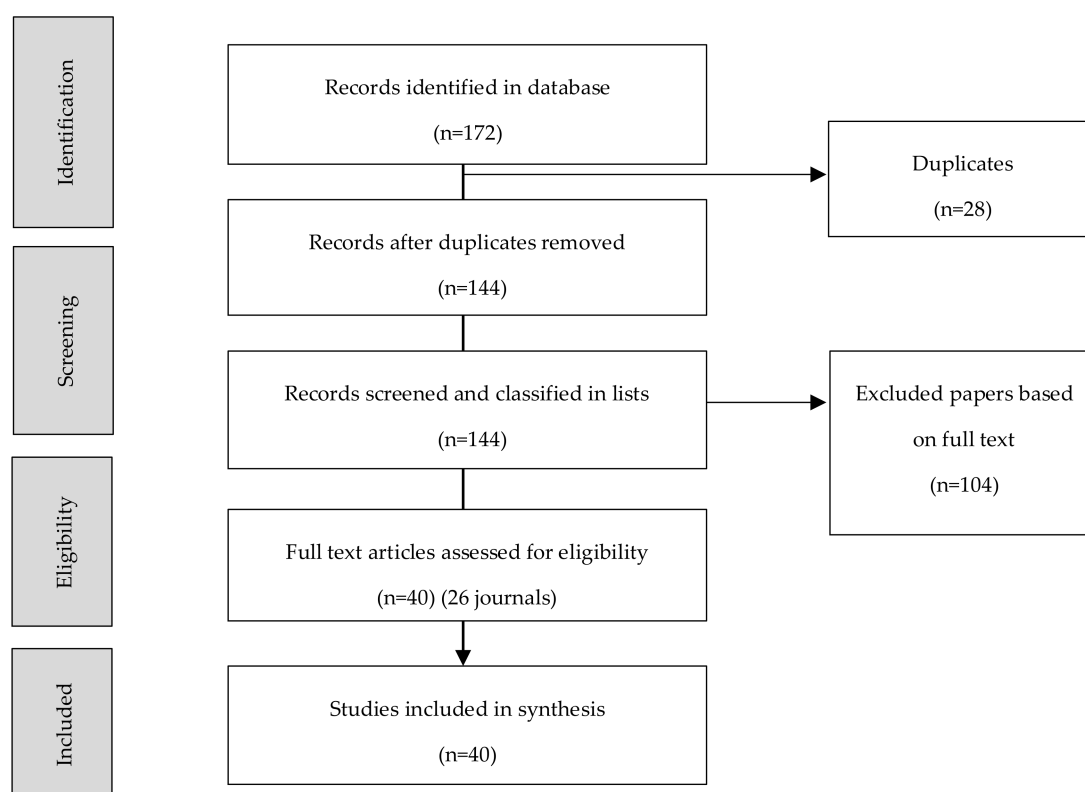


Figure 1. PRISMA flow diagram [30].

2.1. Search Stage

The articles were selected from the Scopus and Web of Science databases between 1990 and February 2019, although the oldest article found was from 2004. The keywords set to perform the search were "service quality", "quality service", "service quality management", "service quality practices" or "service quality polices", combined with "hospitality", "restaurants" or "hotels", and combined with "sustainability", "sustainable" or "sustain*". In the latter, the use of the asterisk allows us to also find those variations of "sustain" with other endings that may be related to the topic of study. We added one final criterion to refine the search: we selected only scientific articles that were available in English or Spanish.

A total of 144 articles were found with our criteria in the two databases (Table 1).

Table 1. Search.

Keywords Used	
Date range	Published from 1990 to present
Scopus database	81
Web of Science database	91
Total hits in two databases	172
Duplicates	28
Hits excluding duplicates	144

2.2. Selection Stage

Two selection criteria were defined to identify the articles that allowed us to focus and approach the subject under investigation in a clear way. These criteria are found in Table 2.

Table 2. Selection criteria.

Criterion	Definition
First criterion: Title and Abstract	Selection of papers that their titles and abstracts focus on the keywords of the research.
Second criterion: Focus of the papers	Selection of the papers that the content focus on topics related to the keywords of the research.

With the first criterion in Table 2, we delimit the selection of articles to only those whose titles and abstracts focus on the management of service quality with reference to sustainable practices in the hospitality sector. The 144 articles were classified into the following four lists in Table 3:

- List A includes articles that discuss the two main concepts, service quality management and sustainable practices, in the hospitality sector.
- List B includes articles that focus only on service quality without considering sustainable practices and the sector.
- List C includes articles that focus only on sustainable practices without considering the quality of service and the sector.
- List D includes articles that focus on the hospitality sector without determining key aspects regarding service quality and/or sustainable practices.

Table 3. Selection.

List	Description	Number of Papers
A	Papers with a focus on both topics and sector of the research	40
B	Papers with prevalent focus on service quality	40
C	Papers with prevalent focus on sustainability practices	23
D	Papers with prevalent focus on hospitality sector	41
Total		144

The articles included in list B (40 articles), list C (23 articles), and list D (41 articles) are excluded because they are not focused on the scope of the research. The articles included comply completely with criterion 2, which allows us to view and analyze the content of each article to determine whether they fall within this article's scope of research. Through this process, a total of 40 articles was selected for the next stage of analysis.

2.3. Descriptive Analysis of the Results

The main objective of the descriptive analysis stage was to offer an overview of the articles analyzed that focus on service quality in the field of hospitality and that address sustainability. To carry out this analysis, four perspectives were defined as follows:

2.3.1. Articles by Time

In Figure 2, we see that the year with the largest number of articles published is the year 2017. Furthermore, only six articles were published before 2010. Most of the articles were produced between 2010 and 2020, and thus, we observe a growing trend of contributions on this topic in recent years.

2.3.2. Articles by Journals

Through the SCImago Journal Rank (SJR) platform, eight thematic areas can be identified, which are identified by journal in Table 4. These areas are as follows: Business, Management, and Accounting; Decision Sciences; Economics, Econometrics, and Finance; Environmental Science; Social Sciences; Computer Science; Psychology; Agricultural and Biological Sciences.

Table 4. Distribution by journals.

Journal	No. Articles	Business, Management and Accounting	Decision Sciences	Economics, Econometrics and Finance	Environmental Science	Social Sciences	Computer Science	Psychology	Agricultural and Biological Sciences
African Journal of Hospitality, Tourism and Leisure	3(8%)	X				X			
Amfiteatru Economic Journal	1(3%)			X					
Benchmarking: An International Journal	1(3%)	X							
British Food Journal	1(3%)	X							X
Computers in Human Behavior	1(3%)						X	X	
Current Issues in Tourism	1(3%)	X				X			
International Journal of Contemporary Hospitality Management	3(8%)	X							
International Journal of Environmental Research	1(3%)				X				
International Journal of Hospitality Management	5(13%)	X							
International Journal of Hospitality & Tourism Administration	2(5%)	X							
International Journal of Services Economics and Management	1(3%)	X		X					
International Journal of Tourism Research	1(3%)	X			X	X			
Journal of Brand Management	1(3%)	X							
Journal of Hospitality Marketing & Management	5(13%)	X							
Journal of Travel & Tourism Marketing	1(3%)	X							
Journal of Service Theory and Practice	1(3%)	X							
Operations Management Research	1(3%)	X	X						
Sage Open	1(3%)					X			
Social Responsibility Journal	1(3%)	X				X			
Sustainability	2(5%)				X	X			

Table 4. Cont.

Journal	No. Articles	Business, Management and Accounting	Decision Sciences	Economics, Econometrics and Finance	Environmental Science	Social Sciences	Computer Science	Psychology	Agricultural and Biological Sciences
The Journal of Hospitality Financial Management	1(3%)	X							
The Service Industries Journal	1(3%)					X			
Total Quality Management & Business Excellence	1(3%)	X							
Tourism and Hospitality Planning & Development	1(3%)	X				X			
Tourism Management	1(3%)	X				X			
Worldwide Hospitality and Tourism Themes	1(3%)	X			X	X			

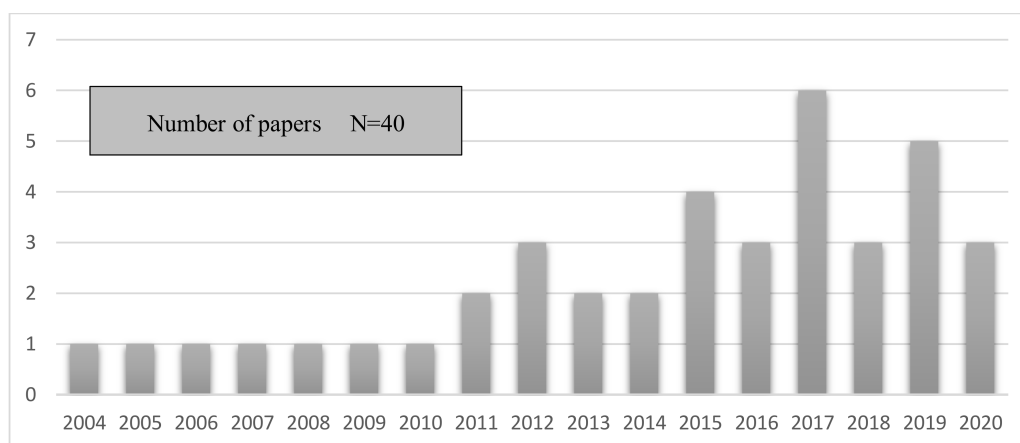


Figure 2. Papers distribution over time.

Table 4 shows that the vast majority of articles share the category of Business, Management, and Accounting, but we also see that this research topic has an important cross-sectional aspect and involves journals focused on different topics, such as Psychology, Computer Science, and Environmental Science, among other categories.

2.3.3. Articles by Methodology

Table 5 shows the distribution of the articles by methodology used. As shown, the quantitative methodology is the most commonly used in most articles, well ahead of qualitative and mixed methodologies.

Table 5. Data collection method.

Data Collection Method	No. of Articles
Quantitative	29
<i>Surveys</i>	10
<i>Model</i>	17
<i>Mathematical model</i>	2
Qualitative	2
Mixed (Survey + Interview)	9

Of the 40 articles, 29 were based on a quantitative methodology. The 29 quantitative articles were into ten surveys, seventeen models and two mathematical models. The two qualitative articles contain a theoretical section and a case study. The nine articles based on mixed methodology combine quantitative and qualitative methodologies.

2.3.4. Articles by Areas

To obtain a complete overview of the body of the literature studied, the documents were divided into three thematic areas. These three areas are analyzed in the content analysis section.

1. "Factors influencing service quality in hospitality", where the main critical success factors linked to sustainability in the management of service quality in the hospitality sector are identified. Nine articles were selected.
2. "Service quality and sustainability practices for hospitality", where sustainable practices for service quality in hospitality are analyzed. Ten articles were selected.
3. "Impact of service quality and sustainability on hospitality performance", which shows the relationship and impact of quality of service on different types of successes and improvements. Twenty-one articles were selected.

3. Content Analysis Stage

The content analysis stage provides us with a detailed overview of the content of the 40 articles. This overview illustrates the various problems covered by the literature on service quality and sustainability in the hospitality sector. The articles are classified into three content areas: Area 1—factors influencing service quality in hospitality; Area 2—service quality and sustainability practices for hospitality; Area 3—impact of service quality and sustainability on hospitality performance. The three sections are shown in detail in the following paragraphs.

3.1. Factors Influencing Service Quality in Hospitality

The first area contains nine articles that discuss factors influencing the quality of service in hospitality, defining an area of study by quantitative and qualitative methods. In this first section, a main trend of the literature is analyzing the critical factors of sustainable success that affect the quality of service in the hospitality sector. The factors found can be classified as follows:

The first group of factors identified are (1) Environmental factors, which explain their impact through the ecological components of the surroundings [33,34], the equipment used for the service [35] as well as the product itself that is served must be environmentally friendly [33,36], such as other sustainable practices that the company carry out [37]. The second group of factors can be classified as (2) Business factors, that explain the relationship with the success of the service quality based on the management of the Human Resources, the settlement and formation adapted in order to improve their environmental behavior, and that have a positive effect on the customer perception of the service quality [38,39]. Another group of factors is composed by the (3) Human Factors, these demarcate, according to their gender and intellectual capital, better practices accompanied with an improvement in their environmental behavior and have an impact on the enhancement of their competitiveness and the satisfaction of the customer, as a result of a higher quality perception [40,41].

Aside from these factors gathered in these three categories, in the literature is also mentioned the impacts that are determined according to the type of customer. It is possible to identify in the client different factors, such as the economic and motivational ones that cannot be classified as sustainable but have influence on the success of the company. The economical factor can divide into segments the customers, according to their economic capacity, social class, occupation [35]. The motivational factors explain the purpose of the trip [41], the aim and the motivation for a service with a sustainable approach and a higher quality.

Due to all the previous factors explained, relational factors appear. These relational factors study the effects of the satisfaction and the loyalty of the customer with a typology of practices and the quality of the service [34,37]. These relational factors have a positive impact on the development of the company [40].

However, the literature does focus on several specific key factors but does not go into great detail with others, such as environmental factors and sustainable practices. Other, more sociopolitical factors that do not appear in the literature could also be analyzed. In this area, many more concrete factors could be differentiated and analyzed. In addition, it is not determined whether or not these factors are pure; that is, if their presence has a positive impact but their absence is not negative for the quality of the service, or if their presence has a positive impact, but their absence exerts negative impact.

This section indicates that it is necessary to delve into key factors and determine their impact to implement a clearer classification.

3.2. Service Quality and Sustainability Practices for Hospitality

In the second area, 10 articles were analyzed—the articles focus on the practices that are carried out to create the quality of sustainable service in the hospitality sector.

For some years, there have been studies, all of which conclude that the behavior of the consumer and the green practices of the hospitality sector have a positive relationship, because they influence

the purchase decision of the customer and their satisfaction [42,43]. Prud'homme and Raymond (2013) are the first to detail the influential green practices on the satisfaction and decision of the customer. The practices of the 3Rs, recycle–reuse–reduce, have a positive influence on the quality and the satisfaction [44]. These practices also have an impact on the cost and the internal processes of the company. It is for this reason that it is determined that internal process practices, the learning of the organization, the quality increase and the cost reduction, and sustainable and effective practices, have a positive influence on the reputation and the results of the company [45].

Another studied practice is more linked to the product that is offered in the service itself, in which the product has a very positive influence on consumer decision, considering the sustainable proximity products that have respected the environment for its production are appreciated [46]. Nevertheless, for obtaining these products it should be considered the supply chain, and in this stage also appear the sustainable practices, such as the reuse of products, social practices, the information, communication and technology, as well as the environmental monitoring [47].

Many of the practices mentioned above have influence for obtaining environmental protection certificates. Therefore, the fact is that these types of practices and obtaining the certificates have a positive influence on the business performance [48].

Lastly, there are the practices linked to human resources matters, in which the employers training focused on these sustainable practices, is linked to an increase in quality service and consequently on the company's sustainability [49,50]. The employers' motivation and consciousness-raising are important to promote sustainable practices on the product or service offered. Good sustainable consumption practices, for example on food, have a positive impact on the sustainability [51], and therefore on the perceived quality by the customer and on the business success.

One weakness found in the literature is the lack of differentiation in the size of hospitality businesses and whether such differences exert different influences in the implementation of the practices and their impact. Likewise, it does not examine the star classification of hotels in depth or in a quantification of its real impact on company results.

3.3. Impact of Service Quality and Sustainability on Hospitality Performance

In the third area, the literature shows us which aspects of environmental practice strategies and the management of service quality have an impact. After analyzing the 21 articles that make up this section, it was determined separately that environmental and the service quality practices have a direct effect on different elements.

Regarding environmental practices, the elements which are impacted can be classified as follows: economic and financial performance, environmental and relational performance. Concerning the impact on economic and financial performance, it is proven that a higher environmental strategy implementation has a positive impact on occupation and incomes [52]. This association is due to one of the most influential factors on purchasing decision is the customer perception of the green quality, green value and information of cost savings [53]. Furthermore, sustainable factors make customers willing to pay a higher price [54]. As we can determinate the relationship with the customer is an important aspect that should be considered—it is for this reason that the impact on relational performance is the key to the success of the company. Considering that environmental practices have a positive effect on the consumer's satisfaction and on customer's loyalty [55], the customer is willing to pay more if the service offered is done with these kinds of practices [56]. Therefore, if the company wants to increase the result indicators and the customer's loyalty, it should make more practices related to sustainability [57,58]. All these practices, besides the implications on business factors, as we have seen, have a very positive effect on environmental performance [52].

On the other hand, we find service quality practices that impact the following performances: economic and financial performance, relational performance and innovation performance. In regard to the impact on economic and financial performance it is noted that the service quality is the most important reason why a hotel is chosen [59,60]. The previous statement is understandable considering

that a better service quality increases the perceived quality by the customer [61,62]. Therefore, an improvement in service quality will have a positive impact on the company performance [63,64]. Furthermore, within the five dimensions, safety, empathy, trust, sensitivity and tangibility of quality service [65], those with a higher impact are trust, tangibility and empathy. This fact concurs with the importance of the impact on the relational performance, inasmuch service quality practice affects directly and positively the corporate image and, through these, impact indirectly on customer loyalty [66–68]. These practices not only have an effect on consumer loyalty, but also impact satisfaction [69,70] and reputation [71]. Both the quality of the tangible elements and the service of the staff increase the perceived satisfaction of the clients. The quality of the tangible elements has more impact on local companies while the quality of the service of the staff affects global companies more [72]. In the studies of Kandampully et al. (2011) and Cham and Easvaralingam (2012) it is determined that constant improvement and innovation on the factors that influence on the quality of service must occur. This shows us that it should also be considered the innovation and improvement performance, since it is essential that the different service quality practices are improved and innovated in order to improve quality [68]. This growth will positively affect company competitiveness [73]. Aside from the constant improvement and innovation, the relationship between market orientation and organizational success should be considered, since the quality of the service has a direct and positive connection with this relationship.

Although there are several positive impacts of each of the practices, we find only that the combination of environmental practices and service quality have a positive impact on (1) purchase decision making and (2) customer satisfaction. Due to the importance of both practices in the development of the company and its improvement in the result, this limitation is very significant. This limitation reflects the need to investigate the combined effect of the two practices on different elements of the business. This fact is key to decision making of the companies' managers.

4. Discussion

Once the content of the literature had been analyzed, we could identify the strengths and weaknesses that each area presents, and they will be discussed in the following section.

Regarding the first area, in which critical success factors that positively impact the quality of service in the hospitality sector stand out, the literature highlights five factors: (1) environmental factors, (2) business factors, (3) human factors, (4) motivational and customer factors, and (5) relational factors. The latter factor is influenced by the above factors because they have a positive effect on the relationship between the company and the customer and are relevant to the managers and the decision makers, considering that the relational factors have repercussions in the development and results of the company. However, the correlation among these five factors jointly it is not identified in the literature and it can be an important gap to solve that will allow practitioners to make decisions about the company.

RQ1: Which correlation has critical success factors jointly in the quality of service?

Moreover, the literature does not clearly determine if these factors are pure factors; such factors exert positive impacts when present, but their absence does not negatively impact the quality of service. In contrast, other factors exert positive impact, but their absence exerts negative impact. Furthermore, the literature does not delve into determining the possible relationships and consequent influence among the factors themselves and their combinations. Investigating this fact is of utmost importance, since knowing if several factors are correlated could help determine which business decision to make in order to implement a typology of practices or both of them. Therefore, to find out if the implementation of environmental practices combined with the implementation of service quality practices cause an improvement on both, the correlation between them should also be studied.

Such omissions indicate that it is necessary to delve into key factors and determine their impact to create a clearer classification. This study allows us to formulate these questions for future research.

RQ2: Could it be determined if factors are pure and exert a positive impact on the quality of service in hospitality?

Nevertheless, in the literature, we do not find that socio-political factors (partners' power, socialization, behavior, orientation) are analyzed in depth. The literature, in consequence, focuses on the above factors. However, environmental factors and sustainable practices are not covered in detail by the literature, which treats them more broadly. The next step will be to shed light in the relation within the socio-political factors because of their importance in the hospitality that is not shown in the literature. Therefore, a more detailed study of these factors would bring light both academic and professional level in order to study its effects and put into practice.

RQ3: How do sociopolitical factors influence sustainability and quality of service in the hospitality sector?

Concerning the second area, which contains articles focused on the practices and tools used in the hospitality sector, the literature analyses the specific practices of sustainability and quality of service that influence business success within the hospitality sector. The practices that are found and analyzed are as follows: (1) the 3Rs (reduce, recycle, and reuse); (2) ecological concern; (3) sustainability in internal operations; (4) increased quality and reduction in costs; (5) sustainable organizational learning; (6) sustainability and effective cost management; (7) sustainable food; (8) environmental certifications; environmental monitoring; (9) social practices; (10) sustainability in human resources. All these practices discussed in the literature exert positive influence, albeit to differing degrees, on customer's perception of quality and on business success.

The main weakness in the literature is that practices are only examined individually, and it does not take into account their impact jointly, as we could also see in the first area. These practices must be studied in depth to differentiate and detect the different degree of influence among them and to conclude which practices are more effective for business.

RQ4: What is the impact of the application of sustainability and quality service practice on business and financial performance of the company?

However, despite all these practices found in the literature, there is no comprehensive system of practices regarding the environment and quality of service to achieve a positive perception of quality from the customer and good business results, nor is there a comprehensive system that is differentiated by the various characteristics of companies. Therefore, based on our content analysis, we view as a weakness this lack of differentiation by characteristics such as company size, the hotel's number of stars, and other segmentation characteristics in the performance of sustainable practices and quality of service that help companies achieve success. There is also a lack of studies examining how these practices impact financial performance. In addition, there is no model to quantify the real impact of such practices on companies' results, this would be important for the companies because it would allow an optimal decision making. These gaps in the literature allow us to identify the following lines for future research.

RQ5: According to the segmentation by characteristics such as size of the company, stars, location, are there differences in the impact of practices of quality service and sustainability?

Regarding the third area, the knowledge on the relationship between strategies of environmental practices and the management of service quality practices regarding the development of the company shows different factors and effects in each topic.

On the one side, the literature highlights that environmental practices have a positive influence on six development factors such as: (1) purchase decision making, (2) customer loyalty, (3) customer satisfaction, (4) willingness to pay a higher price, (5) occupation and (6) results indicators.

On the other side, the quality of the service has a positive impact on nine factors of business development: (1) competitiveness, (2) corporate image, (3) customer loyalty, (4) purchase decision making, (4) market orientation, (5) organizational success, (6) customer satisfaction, (7) performance of the company, (8) reputation, and (9) perceived quality.

The content analysis of this area reveals the necessity to investigate and discover other factors which together have a positive overall impact. We find that only (1) decision-making in the purchase and (2) customer satisfaction positively influenced development factors. What is more, decision-making and customer satisfaction have only been studied individually and also it is important to know which the effects are to apply them jointly and to know if this positive impact is bigger together than individually. This fact will allow companies to apply (or not) strategies together. However, other factors should have a positive impact in the development of the company. Knowing the importance for practitioners in this topic, academics must extend the actual literature for solving that important and practical gaps.

This analysis also opens the field to more empirical research of what type and what degree of impact such practices have on company development. From these gaps, the following questions can be formulated for future research.

RQ6: What impact do environmental and quality of service practices have when they are applied together in the development of the company?

Finally, after analyzing the three areas detected in the literature, it is shown how there are several gaps where more thorough investigation should be done. First of all, it must be analyzed what kind of correlation exists between the two types of practices, in order to determine if the implementation of both will have effects on the same direction. Once done, the effects that they have jointly must be deeply analyzed, as well as the different concrete practices both of service quality and sustainability.

5. Conclusions

This article conducted a systematic review of the literature on service quality management and sustainability in the field of hospitality. This review has allowed us to present a unified contextual framework in which certain gaps in the literature can be identified and with which we can define new lines of research to expand the literature.

Regarding the research question, this review's main objective is to identify the sustainable factors that positively influence the quality of hospitality service, sustainable practices, and service quality and the impact of service quality and sustainability in service on the success of hospitality.

A descriptive analysis was carried out that provides an overview of the articles selected in the literature review. This analysis offers a summary of the documents that address the subject of the study. In reference to the methodology used, most articles are based on quantitative methodologies, and a few have a more qualitative or mixed point of view. This content analysis of the articles included has provided a description of the main problems covered by the research on quality of service and sustainability in the hospitality sector. The research agenda proposed based on our analysis allows us to provide guidance for future lines of research and to draw conclusions for academics and professionals.

A content analysis has also been performed, that allows us to detect and delimit literature in three areas. The first one refers to critical factors of sustainable success that affect the quality of service in the hospitality sector; five have been identified: (1) environmental factors, (2) business factors, (3) human factors, (4) motivational and customer factors, and (5) relational factors. The second area refers to ten main practices that companies do to improve their quality of sustainable services in the hospitality sectors. Finally, in the third area critical factors of environmental practices and quality of service are analyzed. We can determine that the only factors that can be found in both categories are (1) decision-making in the purchase and (2) customer satisfaction.

For academics, the highlighted and identified research gaps and the consequent questions proposed represent possible lines of research to improve and contribute knowledge to the content of these research areas. Studies in these research areas should not only investigate the impact of sustainable practices and quality of service in a company in a generic way but should also consider differentiation according to the companies' differing characteristics.

Therefore, the proposed research agenda with 6 research questions should offer future researchers the opportunity to develop a comprehensive framework of sustainable practices and quality of

service, in addition to the ability to study the impact and influence such practices have on companies' development.

Regarding professionals, the review of the literature has shown that there are joint environmental practices and quality of service that positively influence (1) purchase decision making and (2) customer satisfaction. However, there remains much to demonstrate from other practices and key factors of the company that can positively influence development factors. This study has shown how such practices influence company development factors, but not in conjunction with sustainable practices and service quality. This avenue can mark the future lines of action that companies in the hospitality sector must pursue to obtain greater success from these practices, which are increasingly important in the sector. However, the professional will also be interested in the results of studies of practices and impacts segmented by size of the company, quality, and other characteristics, to implement those that best suit the company and sector.

All these conclusions invite us to pursue these new lines of research to obtain results and thus expand knowledge in the area and sector of the hotel trade, specifically in restaurants and hotels.

Author Contributions: Conceptualization, J.L., J.P. and M.O.-V.; methodology, J.L., J.P. and M.O.-V.; formal analysis, J.L., J.P. and M.O.-V.; investigation, M.O.-V.; writing—original draft preparation, M.O.-V.; writing—review and editing, M.O.-V.; supervision, J.L. and J.P. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

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Article

Are Young People Ready to Have a Pro-Environmental Sustainable Behaviour as Tourists? An Investigation of Towel Reuse Intention

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Received: 8 October 2020; Accepted: 10 November 2020; Published: 13 November 2020



Abstract: Tourism, one of the economic sectors that has experienced great development in recent decades and must face unexpected challenges related to the evolution of the global context, needs a sustainable approach to harmonise its effects and impact on the natural and social environment. The aim of this research was to investigate the pro-environmental behaviour of young tourists in hotels versus at home and the main influencing factors of behavioural intention to reuse towels in hotels. The primary data were collected using a survey that was applied to Romanian young people. Eight hypotheses were formulated and tested through paired samples *t*-tests, a correlation analysis and a hierarchical multiple regression analysis. Our results showed the higher pro-environmental conduct of young guests at home than in hotels, both through their general behaviour regarding the reduction of resource consumption and through their specific behaviour of reusing towels. Our empirical findings also highlighted that tourists’ behavioural intention to reuse towels was positively influenced by an eco-friendly attitude, pro-environmental past experiences and habits to reuse towels at home. In order to achieve sustainable tourism, hotel management should convince guests to bring their ecological habits with them, and educational institutions should use specific methods of raising awareness among young people about an environmentally friendly attitude.

Keywords: pro-environmental behaviour; young tourists; hotel guests; towel reuse; eco-friendly attitude; past experience; habits; hierarchical multiple regression analysis

1. Introduction

Studies conducted in the EU on tourism reveal that it is one of the largest and fastest-growing economic sectors [1]. At the same time, it is not only a very dynamic but also a very complex sector, which contributes to both economic growth and socioeconomic development, generating more and better jobs and improving people’s living standards [2–5]. According to the latest statistics [6], in just ten years (2009–2018), international tourist arrivals have increased significantly globally (by 57.55%, from 0.89 billion to 1.407 billion), and this number is estimated to be much higher (1.8 billion) by 2030. As a result of this significant growth, there are increasingly more effects in different areas, with consequences in terms of the influence of tourism consumption on the environment and the disruption of various social and economic variables in the most frequented destinations [5]. Therefore, this increase must impose a greater responsibility for ensuring an efficient management of the destination place in order to minimise the adverse effects of tourism [2]. It is known that each tourist accommodation involves a high consumption of different natural resources [4] and that, in general,

tourism can lead to water and air pollution, the depletion of natural resources, increased waste and, implicitly, global warming [7].

Since the beginning of the COVID-19 pandemic, the tourism sector has been severely affected. Although travel has greatly diminished during 2020, people's desire to travel has increased in intensity, precisely due to the restrictions imposed on travelling. In this challenging and ever-changing context, ensuring sustainable tourism as the type of tourism that makes optimal use of resources, respects host communities and ensures viable, long-term economic operations, generating benefits equitably distributed among all stakeholders [8] is the most critical point ever requested [2]. The ecological sustainability of tourism depends to a large extent on tourist behaviour, and, therefore, convincing tourists to behave more ecologically would lead to substantial environmental benefits [7].

Pro-environmental behaviour (PEB) is seen as that behaviour that seeks to minimise the negative impact of actions on the natural and man-made worlds (e.g., minimising resource and energy consumption, nontoxic use of substances and reducing waste production) in a more conscious and responsible way [9]. Pro-environmental behaviour can also be defined as actions of individuals to support the environment or as a type of behaviour that harms as little as possible or even benefits the environment [10].

Understanding and influencing the pro-environmental behaviour of tourists, as hotel guests, are vital for assuring the environmental sustainability in the hotel industry [11]. Given that pro-environmental behaviour involves several dimensions and determinants [7,9,10,12], we must be aware that changing human conduct is a continuous challenge, studied in the fields of psychology, economics and consumer behaviour [13], requiring a very complex effort [14].

Pro-environmental behaviour is determined by a complexity of factors. In identifying the determinants, the researchers [7,9,10,12,14] analysed a number of factors in the context of behavioural theories and models, e.g., the theory of planned behaviour, the theory of social identity, the theory of attribution, the theory of norm activation, the theory of cognitive dissonance, the theory of value-belief-norm, etc. Thus, three categories of factors were identified, such as internal ones (attitude, perceived barriers, perceived support, etc.); external factors (economic, sociocultural, institutional and political factors) and demographic characteristics.

In this paper, from the multitude of factors, we focused on a few main ones that can influence the pro-environmental behaviour of young people as hotel guests (the eco-friendly attitude, social norms, personal moral norms, past pro-environmental experience and behavioural habits—ecological conducts in everyday life). These are factors of great importance in explaining the intention and pro-environmental behaviour of hotel guests [11,15–19].

According to meta-analyses made by Morren and Grinstein [20], the driving forces of environmental behaviour substantially differ across countries, environmental behavioural intentions being less likely to translate into actual conduct in less-developed countries (like Romania compared to the EU developed countries). The most recent EU report regarding "Attitudes of European citizens towards the environment" [21] showed that Romanian people agree, to a smaller extent relative to EU citizens (78% of Romanian against 87% of EU citizens—average EU level), that they can have an important role in protecting the environment through personal actions such as separating waste for recycling, cutting down energy consumption and water consumption, buying local products, etc. [21]. Moreover, the level of agreement has decreased in Romania (78% in 2017 compared to 82% in 2014). These statistical data placed Romanians among the EU citizens with the smallest personal actions to tackle environmental issues and highlighted the need to change the environmental behaviour of Romanian consumers so that they become more eco-friendly.

There is a lot of research that focuses on general pro-environmental behaviour rather than specific behaviours in certain locations, with a limited body of research investigating specific pro-environmental behaviours among hotel guests [10]. Additionally, there are a lot of studies in developed countries on the influence of social norms on pro-environmental behaviours but a lack of such studies in developing countries [22]. As far as we know, no study has empirically approached the intentions of specific

pro-environmental behaviours, such as reusing towels in hotels in Romania. Therefore, this paper fills this gap, focusing on this specific pro-environmental behaviour of young Romanian tourists.

The aim of the research is to investigate the main determinants of the specific pro-environmental behavioural intentions of young Romanians to reuse towels when staying in hotels. Additionally, this research analyses pro-environmental behaviours both at home and in hotels in order to find some ways to translate the pro-environmental behaviours at home into pro-environmental behaviours in hotels. Finally, we highlight the specific measures that should be taken by both hotel managers and educational institutions to improve the pro-environment behaviours of youngsters.

2. Literature Review

2.1. Pro-Environmental Behaviours in Hotels Versus at Home

Research shows that the habitual process, which refers to how often eco-friendly behaviours are performed in everyday life, is one of the main elements that can explain why travellers make better eco-decisions and behave in environmentally responsible ways [11]. There are some eco-friendly habits in everyday life such as reusing the towel, turning off the lights when leaving a room and turning off the shower/tap water while soaping or brushing teeth—behaviours that are abandoned during a trip [17].

Empirical research [7,17,19,23–27] highlighted that the environmental behaviours of people significantly differ depending on their settings (at home or on holiday). Studies have shown that the pro-environmental behaviours of tourists are lower in hotels than at home [10,17,28]. Miao and Wei [26], based on a comparative analysis, found that there was a significantly higher level of pro-environmental behaviours within the household than in a hotel settlement. Moreover, they showed that normative motives mainly influence pro-environmental behaviours in a household setting, while, in a hotel setting, the strongest predictor of such behaviour is given by hedonic motives.

Carr [24], exploring the behaviours of young people while on holiday in comparison with their behaviours in their place of origin, pointed out that, while on holiday, they are inclined to behave more liberally and hedonistically than when they are at home. Apparently, the way they behave on holiday follows the same pattern as their home behaviours, and it is not distinct from them [24]. At the same time, contradictory aspects between environmental concerns and consumer decisions in everyday and tourist contexts were identified by Higham, Reis and Cohen [29], even if there are climate concerns among travellers.

Dolnicar [28] revealed that the differences between pro-environmental behaviours at home and on vacation can be explained by infrastructure, taking into account that, at home, people create the infrastructure they need and behave in an ecological way, but, on holiday, they must adapt to the infrastructure provided, which can act as a barrier to pro-environmental behaviours. In this regard, Baker et al. [25] identified the following barriers to the adoption of ecological practices in hotels (including the practice of towel reuse): the perception of luxury, comfort and cost reduction.

Barr et al. [23], analysing the link between pro-environmental practices at home and outside the home, showed that, while individuals feel relatively comfortable participating in a range of environmental behaviours in and around the home, transferring these practices to tourism contexts can be problematic.

The substantial decrease in the level of ecological behaviour in a tourist context compared to being at home is explained by Dolnicar et al. [7], who highlighted that the change of tourist behaviour is difficult, because tourism takes place in an extremely hedonic context, characterised by relaxation and pleasure, very different from the sacrifices made for the benefit of the entire planet. On the contrary, when being at home, a series of interventions in changing behaviours with immediate consequences on the environment proved effective [7] such as reducing energy consumption, saving water and increasing recycling.

Based on these assertions, it is expected that people will have less pro-environmental behaviours while staying in hotels than when they are at home.

Thus, we developed the following hypothesis:

Hypothesis H1. *Young people have a higher level of general pro-environmental behaviours at home than in hotels.*

Among the most known and effective eco-friendly or green practices adopted in the hotel industry, the towels reuse practice, which is the object of our study, is directly linked to hotel guests' pro-environmental behaviours [11], taking into account that hotels can save water and energy and reduce detergent use when tourists reuse towels in the hotel room [11,15,17,25,30,31].

Although hotels invest less in this eco-friendly practice than they do in other green practices, its effectiveness greatly depends on the pro-environmental behaviours of guests [15,17]. As Esfandiar et al. [10] pointed out, in some particular situations, in which a behavioural choice sometimes involves high personal costs, sometimes, fewer personal costs in terms of time, money and effort, will influence the people's pro-environmental decision-making. Towel reuse behaviour is a type of pro-environmental behaviour that occurs at the individual level and has low costs in terms of effort and time.

In order to increase the effectiveness of towels reuse programs, accommodation providers should encourage guests to voluntarily reduce the frequency of towel changes, underlining the positive effects of towel reuse on the environment through reducing water consumption, saving energy and reducing detergent use [31,32]. Moreover, the challenge for hotel management is to convince hotel guests that towel reuse is much more than a simple measure to reduce costs in order to achieve profit [25,33] and, thus, enhance the PEB of hotel guests.

There are only a few studies that analyse the differences between specific, not general, pro-environmental behaviours in households and hotels. According to these studies, the consumption of specific resources (e.g., water, energy) and the use of towels are higher in hotels than at home [19,34–36] but, also, in luxury hotels compared to economy hotels [36].

Taking into account the interdependence between general pro-environmental behaviours (proxies by energy saving, water conservation and detergent consumption reduction) and specific pro-environmental behaviours (proxies by towel reuse), in the current study, we analysed these environmental behaviours in two different contexts (at home and in hotels).

Therefore, we developed the following hypotheses:

Hypothesis H2. *Young people have a higher level of propensity to towel reuse behaviour (a specific pro-environmental behaviour) at home than in hotels.*

Hypothesis H3. *Young people display a higher level of propensity to towel reuse behaviour in economy hotels than in luxury hotels.*

2.2. The Main Influencing Factors of the Behavioural Intention to Reuse Towels (BIRT) in Hotels

In identifying the determinants of individual PEB, researchers [7,9,10,12,14,26,37–39] analysed a range of factors in the context of behaviour theories and models, e.g., the theory of planned behaviour, social identity theory, attribution theory, norm activation theory, cognitive dissonance theory, value-belief-norm theory, etc. They highlighted that pro-environmental behaviours are influenced, either positively or negatively, by important factors such as external factors (economic factors, institutional and political factors, social and cultural factors, etc.); internal factors (attitudes, environmental knowledge and awareness, social and moral norms, values, etc.) and demographic characteristics (age, gender, educational background, etc.).

The theory of planned behaviour (TPB) has been largely used in empirical studies. These focused on environmentally sustainable behaviours both in general and in tourism [7,16,18,40,41]. The behavioural

intention is influenced by three important independent factors, such as attitude, subjective norm and perceived behavioural control [42].

Attitude as an important explanatory variable of behavioural intention that involves a judgment as a process of classifying objects, facts and behaviours. Attitude towards a specific behaviour concerns the degree to which a person evaluates the behaviour in question either favourably or unfavourably [42]. Moreover, a positive attitude towards a certain behaviour leads to the intention to perform it [42]. Empirical research has demonstrated that individuals who have shown a strong pro-environmental attitude are more likely to engage in PEB [43,44]. However, there is a discrepancy between the pro-environment attitude and the behaviour itself [10,25,29,45].

Studies have shown that an eco-friendly attitude positively influences the behaviour intentions of consumers to stay at green hotels [18,25,44,46–48], which are hotels where green practices are implemented, i.e., the towel reuse practice, in order to reduce water consumption and energy [49]. Han et al. [17] found that an attitude toward eco-friendly behaviour in hotels positively affects the sense of obligation to take eco-friendly actions there, which, in turn, positively influences the intention to reuse towels in hotels. Researchers have recognised four dimensions of the eco-friendly attitude, namely the perceived severity of environmental problems, inconvenience of being environmentally friendly, importance of being environmentally friendly and the level of corporate responsibility [17,25].

In the current study, the eco-friendly attitude of hotel guests refers to the importance of being environmentally friendly, which is the third out of the four dimensions mentioned above. Thus, in our study, an eco-friendly attitude suggests the degree to which the hotel guests recognise the significance of being pro-environment (reusing towels), being aware that, by reusing towels while they stay at hotels, they will reduce pollution and conserve natural resources.

Based on these premises, we developed the following hypothesis:

Hypothesis H4. *The eco-friendly attitude of young hotel guests positively influences the BIRT in hotels.*

Attitude reflects the past experiences of individuals accumulated, preserved and organised when they approach a new situation. According to Ajzen [42], past behaviours can influence behavioural intentions. In the context of TPB, empirical studies [50,51] have shown that individuals' past behaviours have an important role in future intention formations. Werff, Steg and Keizer [52] showed that the influence that past pro-environmental behaviours can exert on either the promotion or inhibition of future pro-environmental actions depends on the how much people's initial actions can be related to their identity as a pro-environmental person. Moreover, the results of the study indicate that people's environmental self-identities can be reinforced, and they can be encouraged to behave pro-environmentally when mentioning their previous pro-environmental actions and emphasising their identity as a pro-environmental person [52].

The results of another study [46] illustrated that intentions to visit a green hotel (the eco-friendly intentions) are influenced by previous experiences of customers with a green hotel. Thus, customers who have stayed at an ecological hotel and have had the opportunity to experience various ecological services will be aware of the ecological intentions [46]. Particularising on the behaviour regarding the use of towels, the previous experience at a green hotel will generate the behaviour of reusing towels, as highlighted by Dimara et al. [30].

Thus, we formulated the following hypothesis:

Hypothesis H5. *Young people's behavioural intentions to reuse towels (BIRT) in hotels is positively influenced by past experience in hotels (general and specific pro-environmental behaviours).*

Stern [53] states that the habits of people can explain their future behaviours, along with the others three type of causal factors. Habits are behavioural patterns that guide, regulate and control certain social actions and relationships. In our study, we refer only to people's habits that are, in principle,

goal-oriented. The pro-environmental habits (daily eco-friendly activities) can be expressed by both general and specific pro-environmental behaviours at home.

Empirical studies [18,25,44,46–48] have emphasised that daily general ecological activities, seen as habits, positively influence the intention to stay in a green hotel. Additionally, the positive influence of water conservation activities in daily life on the intention to conserve water while staying in hotels was found by Untaru et al. [19].

Focusing on more specific pro-environment behaviours, such as towel reuse, Han et al. [17] pointed out that such conduct in everyday life significantly moderates the connection between the feeling of obligation to undertake ecological actions in hotels and the guests' intentions to reuse towels. Mair and Bergin-Seers [38], analysing the environmental behaviour of Australian motel guests, showed that the habit of reusing towels at home had the strongest effect on motel guests' reuse of towels. Dimara et al. [30], in a study conducted on 1304 domestic and international tourists accommodated in Greek hotels, showed that guests with more pronounced ecological behaviours in their daily lives had higher participation rates in a towel reuse program.

Thus, we predicted that the pro-environmental habits expressed by general and specific pro-environmental behaviours at home influenced pro-environmental behavioural intentions (e.g., towel reuse in hotels). As such, we developed the following hypothesis:

Hypothesis H6. *Young people's behavioural intention to reuse towels (BIRT) in hotels is positively influenced by general and specific pro-environmental habits at home.*

Another stream of research focused on the social norms and pro-environmental behaviour interplay. Social norms are defined by Cialdini and Trost [54] as "rules and standards that are understood by members of a group, and that guide and/or constrain human behaviour without the force of laws" [54] (p. 152). Social norms are seen as the result of social interactions [55], as well as the unwritten codes and our informal perception of the expectations we have of others and the expectations others have of us. [56] Most specialists consider that social norms are inherently implicit and place other explicitly codified social frameworks outside the category of social norms.

Regarding the impact of social norms on the behaviour of individuals, there are different points of view, which we will discuss further. Some studies insist on the positive, even strong, influence of social norms on the intentions of individuals and on their behaviours. Among them, the study of Han and Hyun [11] showed that guests' towel reuse intentions were positively influenced by social norms. Based on the results of field experiments carried out in hotels in different countries (especially developed countries—Austria, Switzerland, Germany, USA, etc.), studies have found that social norms (descriptive and injunctive), suggested by the environmental messages in hotel rooms, have significant positive effects on the towel reuse behaviours of hotel guests [15,32,55,57]. For example, Goldstein et al. [15], examining the effectiveness of environmental messages in order to encourage hotel guests to reuse their towels, found that the propensity to reuse their towels was higher when the messages contained information related to towel reuse by other hotel guests. Moreover, the same authors proved that the effectiveness of environmental messages was the strongest when the information referred to guests staying in the same room.

Other authors were more reserved about the impact of social norms on environmental behaviours. Thus, according to Farrow et al. [22], it may depend on various factors, including characteristics of the individual, the rule invoked, the reference group and the social and environmental context in which the decision takes place.

A third view belongs to researchers [7,33] who claim that social norms in the case of individual behaviours in hotel rooms have not significantly influenced this behaviour. Wymer [33] stated that the social influence on towel and linen reuse programs in the hospitality industry was unlikely to be an effective influencing factor for subject compliance. He highlighted two aspects that need to be taken into account, namely the situation in which a social norm has not been established or the fact

that compliance was not assisted by others. Then, social factors are relatively inefficient in influencing behaviours [33].

Considering that, in the case of Romanian tourism, a social norm for the reuse of towels and hotel linen was not well-established, and the behaviours of hotel customers took place in a private environment, not publicly exposed, we formulated the following hypothesis:

Hypothesis H7. *Social norms will not have a significant impact on young people's behavioural intentions to reuse towels (BIRT) in hotels.*

Taking into account the value-belief-norm theory [53] and norm activation theory [58], researchers have analysed the impact of personal norms on PEB [10,16,17,59]. The difference between social norms and personal norms consists in the fact that moral personal norms contain the same rules and standards as the social ones but are mostly related to the self rather than others [10,59]. According to Schwartz [58], the central feature of personal norms is the intense feeling of moral obligation by the individual to perform a certain behaviour. In the case of PEB, e.g., recycling behaviour, when the consequences of the individual's behaviour benefits the society and the environment in which they live, personal moral norms should be activated [60]. Thus, an individual's decision-making includes a moral component that plays a very important role in their pro-social and pro-environmental behaviours [10]. Stern [53] showed that "personal moral norms are the main basis for individuals' general predispositions to pro-environmental action" [53] (p. 413).

According to Mehmetoglu [27], the moral feeling of obligation to care for the environment positively affected the pro-environmental behaviours (Norwegian population's willingness to behave environmentally friendly) both in a holiday setting and at home. Doran and Larsen [59] argued that pro-environmental behavioural intentions, expressed by intentions to choose eco-friendly travel options, were strongly associated with moral personal norms of tourists from New Zealand. Han et al. [17] found that the intention to reuse towels in hotels was positively influenced by the sense of obligation to take eco-friendly actions in hotels based on moral obligations (in the context of USA logging guests).

Therefore, we assume that the extent to which people feel a moral obligation to reuse towels in hotels is positively associated with the intention to do so.

Hypothesis H8. *Moral personal norms will have a significant impact on young people's behavioural intentions to reuse towels (BIRT) in hotels.*

3. Materials and Methods

In order to achieve the aim of this study, the primary data were collected using a survey that was applied to university economics students of "G.E. Palade" University of Medicine, Pharmacy, Sciences and Technology of Tîrgu Mures (Faculty of Economics and Law), Romania in January-February 2020. We chose to analyse the behaviour of students as young tourists, taking into account the fact that the Global Report on the Power of Youth Travel [61] showed that "youth and student travelers are an increasingly important market for destinations around the world" [61] (p.10). Moreover, the report stated that one of the fastest-growing segments in international tourism is youth travel [61], generating both socioeconomic opportunities for local communities and real environmental challenges. Our sample included undergraduate university students who were considered "an interesting and novel population, as they are still forming their values and beliefs, and therefore may be more open to engage in sustainability efforts" [62] (p. 245).

Data for this research were collected using a nonrandom sampling technique on quotas, according' to the level of studies (bachelor and master). A total of 420 self-administrated questionnaires were distributed among students who represented 53.91% of economics students enrolled (779) at the faculty. In total, 393 responses were obtained, which reflected a response rate of 93.57%. Since the main intention of this study was to analyse the pro-environmental behaviour of young tourists as hotel guests

and its determinants, the first question in the questionnaire had the role of filtering the individuals corresponding to the investigated topic: “Have you travelled in the last 3 years and stayed at hotels for more than one night?”. Thus, only those students who answered “yes” to this item, which means they were hotel guests, were asked to complete the rest of the survey. Thus, 41 students were excluded from our initial sample (N = 393), because they did not travel in the last 3 years and were not accommodated in hotels for more than one night. Additionally, after removing the 12 incomplete responses, we obtained a total of 340 valid responses that were used in our analysis. Due to the sample characteristics (a relatively small number of young people), some limitations of the research have to be acknowledged. Therefore, we mentioned some future directions of work at the end of the study.

The sociodemographic characteristics of the sample were ascertained based on the descriptive statistics (Table 1). From the total sample of 340 respondents, 67.06% were female, and 32.94% were male. Furthermore, 71.76% were bachelor students, and 28.24% were master students. In terms of the type of travel, it was found that 56.47% usually travelled with family and 37.05% with friends; 72.06% were domestic tourists (travelled more inside the country), and 27.94% travelled abroad. According to their age groups, 83.82% were between 18 and 25 years. Of the total investigated respondents, 54.71% self-reported that they participated in courses in ethics education (Ethics Education) focusing on social and moral norms.

Table 1. Sample description (N = 340).

Respondents Characteristics	Frequency	Percent	Respondents Characteristics	Frequency	Percent
	<i>Gender:</i>			<i>Type of travel 1:</i>	
Male	112	32.94	Alone	17	5.00
Female	228	67.06	With family	192	56.47
	<i>Age:</i>		With friends	126	37.05
18–25 years	285	83.82	With colleagues	5	1.47
25–30 years	19	5.59		<i>Type of travel 2:</i>	
30 years and over	36	10.59	Abroad	95	27.94
	<i>Education level:</i>		Inside the country	245	72.06
Bachelor	244	71.76	Participation in	186	54.71
Master	96	28.24	Ethics Education		

In order to achieve a comparative analysis between the PEB of young tourists as consumers in hotels and at home, we chose four different types of resources consumptions (water, electricity, heating energy and detergents). In this paper, we examined the PEB through the lens of young people’s care to reduce the consumption of these resources. Thus, general PEB is considered as the behaviour that consciously seeks to minimise the negative impact on natural and built environments and, thus, supports the environment [10]. In order to capture general PEB in hotels, four items were used to assess young people’s care for water, electricity, heating energy and detergent consumptions ($I_{1.1}$ – $I_{1.4}$, Table 2). Each response was given on a Likert scale from 1 (to a great extent) to 5 (to a small extent). A total of four items were used to measure the general PEB at home ($I_{2.1}$ – $I_{2.4}$, Table 2). Each response was given on a Likert scale from 1 (very little) to 5 (very much). The mean of the four items was used as the measure of the general PEB (total consumption score) both in hotels and at home.

The behaviour to reuse towels at home and in hotels, which is a specific PEB, was assessed based on responses to two questions (I_3 and I_4 , Table 2). Assessment of the behavioural intention to reuse towels (BIRT) in hotels—a dependent variable—was based on one item (I_5 , Table 2).

In order to determine the main factors that influenced young people’s BIRT in hotels, eight independent variables were measured (Table 3). Based on the existing studies [51,52], we considered that general and specific PEB in hotels reflect pro-environmental (PE) past experiences (three independent variables). Furthermore, taking into account that the PEB in everyday life (at home) can be seen as a pro-environmental habit of people [17,38], general and specific PEB at home were used as the measure of pro-environmental habits at home (two independent variables).

Table 2. Main survey items. PEB: pro-environmental behaviours.

Items (I)	Variables
I₁: To what extent do you agree that you, as a hotel guest, will behave exclusively according to the price of accommodation, regarding the consumption of: I _{1,1} —water, I _{1,2} —electricity, I _{1,3} —heating energy and I _{1,4} —detergents? (from 1: to a great extent to 5: to a small extent)	General PEB in hotels/General pro-environmental (PE) past experiences in hotels
I₂: At home, how much care do you give to the consumption of: I _{2,1} —water, I _{2,2} —electricity, I _{2,3} —heating energy and I _{2,4} —detergents? (from 1: very little to 5: very much)	General PEB at home/General PE habits at home
I₃: How do you behave as tourist, regarding the use of bath towels: I _{3,1} —in economy hotels and I _{3,2} —in luxury hotels? (I do not reuse the towels = 0 or I reuse the towels = 1)	Specific PEB in hotels/Specific PE past experiences in hotels
I₄: At home, do you usually replace towels after one use? (yes = 0; or no = 1)	Specific PEB at home/Specific PE habits at home
I₅: In the future, I intend to reuse the towels in hotels, a gesture that belongs to me, regardless of the cost of accommodation, paying attention to the environmental aspects. (from 1: strongly disagree to 5: strongly agree)	Behavioural intention to reuse towels (BIRT) in hotels
I₆: The attitude to reuse towels has a meaning beyond their simple use, and it is also environmentally friendly behaviour. (from 1: strongly disagree to 5: strongly agree)	Eco-friendly attitude
I₇: Do you agree that your reusing of towels in hotels is primarily influenced by:	
I_{7,1}. respecting social norms that require care for the environment? (yes = 1 or no = 0),	Social norms
I_{7,2}. respecting one's own moral norms that take care of the environment? (yes = 1 or no = 0) or	Moral personal norms
I_{7,2}. messages of the owners to take care of the consumptions that affect the environment? (yes = 1 or no = 0).	Messages

Table 3. Descriptive statistics (N = 340) and the main variable correlations.

Variables	Mean	Std. Deviation	Pearson Correlation (r) BIRT in Hotels ¹
<i>BIRT in hotels</i> ¹	3.741	0.955	1.000
Studies (0: bachelor; 1: master)	0.282	0.451	0.259 **
Gender (0: male; 1: female)	0.671	0.471	0.059
Travel (1: abroad; 2: inside the country)	1.721	0.449	−0.128 *
<i>Eco-friendly attitude</i> ¹	3.671	0.920	0.467 **
<i>Pro-environmental (PE) past experiences in hotels:</i>			
General PE past experiences in hotels ¹	2.669	0.725	0.010
Specific PEB in economy hotels ²	0.459	0.499	0.467 **
Specific PEB in luxury hotels ²	0.424	0.495	0.451 **
<i>Pro-environmental habits at home:-</i>			
General PEB at home ¹	3.563	0.725	0.110 *
Specific PEB at home ²	0.574	0.495	0.352 **
<i>Social norms</i> ²	0.359	0.480	−0.067
<i>Moral personal norms</i> ²	0.491	0.501	0.119 *

Note: ¹Five-point Likert scale: 1 to 5; ²yes = 1 and no = 0. * Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

The eco-friendly attitude (independent variable) was evaluated through one item (I₆, Table 2). This variable mainly reflects the degree to which the guests recognised that, through reusing towels in hotels, they were aware of the importance of being environmentally friendly [17,25].

To find out the main reasons for adopting specific PEB in hotels, the young people were asked to assess if their reusing of towels was primarily influenced by social norms, personal moral norms or messages of the owners (I_{7,1}–I_{7,3}, Table 2). We used moral personal norms and social norms as

explanatory variables of BIRT in hotels, based on existing literature related to the role of these norms in PEB. Additionally, we took into account that 49.1% of total respondents self-reported that the main reasons for towels reuse in hotels were moral personal norms, followed by social norms (35.9%) and the messages of the owners (15%).

We used a total of three control variables (Table 3) that potentially influenced the results of this research: level of study (bachelor = 0 and master = 1), gender (male = 0 and female = 1) and type of travel (1: abroad and 2: inside the country/domestic tourist).

In accordance with the defined research hypotheses (H1-H3), the paired samples *t*-test was used in order to identify the differences between the general and specific PEB at home and in hotels. Additionally, the paired samples *t*-test was performed to explore the differences between behaviours in economy hotels and luxury hotels in terms of the specific PEB (towel reuse behaviour). To analyse the multiple factors that can influence BIRT in hotels (H4-H8), the hierarchical multiple regression analysis was conducted in two steps. Firstly, the three control variables were regressed on BIRT in hotels (Model 1). Secondly, the direct effects of eight explanatory variables were added to the regression (Models 2–6). To determine which explanatory variables had the greatest impacts on BIRT in hotels, the standardised β -regression coefficients and *t*-values were used. Assessment of the validity of the regression models was based on the Fisher Snedecor (*F*) statistic. The quality of prediction was assessed based on the R^2 (the coefficient of determination) value [63]. Additionally, to examine whether there were significant differences between the students who participated in ethics education (EE) and students who did not participate in relation to the BIRT in hotels and the eco-friendly attitudes of young people, the statistical analyses focused on means-testing using independent sample *t*-tests. SPSS Statistical package was used for all statistical analyses.

4. Results and Discussions

4.1. Pro-Environmental Behaviour of Young People in Hotels Versus at Home

Data from Table 4 show that there are differences between the behaviours at home and in hotels for all four types of consumption. As regards the respondents' behaviours at home, water consumption ($M = 3.69$) received the highest level of care, followed by electricity consumption ($M = 3.60$), heating energy consumption ($M = 3.51$) and detergents consumption ($M = 3.45$). While, in hotels, the respondents most often paid attention to detergents consumption ($M = 2.90$), followed by heating energy consumption ($M = 2.69$), electricity consumption ($M = 2.60$) and, lastly, water consumption ($M = 2.49$).

Table 4. Paired samples test: general PEB and its components in hotels versus at home.

PEB components	Mean		Mean	Std. Deviation	Paired Differences			<i>t</i> -test (df = 339)
	Hotel	Home			Std. Error Mean	95% Confidence Interval of the Difference		
					Lower	Upper		
Water consumption	2.49	3.69	-1.20	1.448	0.079	-1.354	-1.046	-15.285 *
Detergents consumption	2.90	3.45	-0.56	1.380	0.075	-0.703	-0.409	-7.426 *
Electricity consumption	2.60	3.60	-1.00	1.425	0.077	-1.152	-0.848	-12.943 *
Heating energy consumption	2.69	3.51	-0.82	1.416	0.077	-0.972	-0.669	-10.683 *
General PEB	2.67	3.56	-0.89	1.156	0.063	-1.017	-0.771	-14.261 *

Note: * Sig. (2-tailed) = 0.000. df: degrees of freedom.

The mean score of the behaviours at home regarding the total consumption of resources was an average of 3.56 ($M = 3.56$, $SD = 0.725$) out of a possible 5, which indicated that the respondents paid much attention to consumption, having a high general PEB at home. In hotels, the mean score

of the behaviour regarding total consumption was an average of 2.67 ($M = 2.67$, $SD = 0.72$) out of a possible 5, which showed a moderate level of care for consumption compared to consumption at home. The results of the paired samples t -test (Table 4) suggested that there were significant differences between the behaviours at home and in hotels both for total consumption ($t_{399} = -14.261$, $p = 0.000$) and for each of the four types of consumption. Thus, respondents exhibit a significantly higher level of general PEB at home than in hotels. Therefore, H1 was confirmed and supported by other empirical results [7,26,28].

The higher mean scores for these types of consumptions at home than in hotels, implying that young people pay more attention to resources consumption at home than in hotels, can be explained based on the fact that saving electricity and heating energy, reduce water use and detergents consumption at home mean cost savings for consumers, but, in hotels, these eco-friendly activities do not reduce the room price, as it was highlighted in past studies [7]. Moreover, a higher pro-environmental behaviour at home than in hotels can be justified by the favourable infrastructure that can be created at home in order to reduce the energy bill, while, in hotels, guests “need to adjust to the infrastructure provided, which can act as a barrier to pro-environmental behaviour” [28] (p. 717).

As regards the main eco-friendly actions (EFA) taken by hotel management in order to create an adequate infrastructure that can minimise the consumption of resources, the data from Figure 1 illustrate a low level of these actions in the hotels visited by the respondents. To find out these eco-friendly actions, the young people were asked the following question: “Have you noticed any eco-friendly measures taken in hotels, such as the following: EFA 1—a key-card control system that provides no power unless the room key is inserted; EFA 2—energy-saving light bulbs, LED lamps or spotlights; EFA 3—thermo-saving devices in guest rooms; EFA 4—retrofitted water-efficient toilet rooms and EFA 5—messages to encourage guests to reuse towels”.

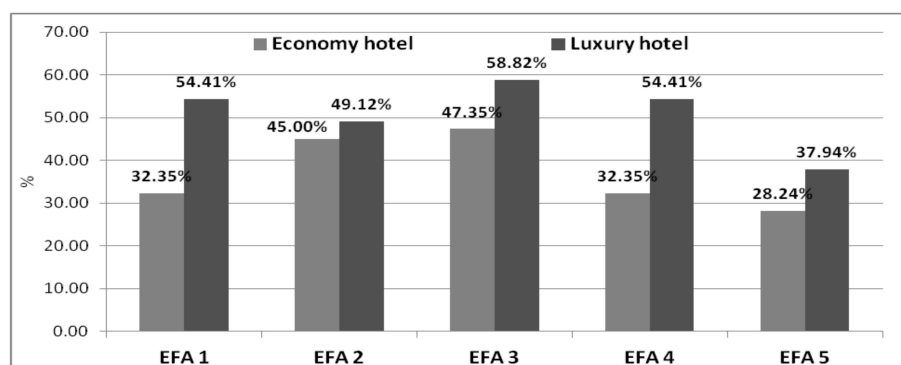


Figure 1. The main eco-friendly actions (EFA) in hotels. EFA 1—a key-card control system that provides no power unless the room key is inserted; EFA 2—energy-saving light bulbs, LED lamps or spotlights; EFA 3—thermo-saving devices in guest rooms; EFA 4—retrofitted water-efficient toilet rooms and EFA 5—messages to encourage guests to reuse towels.

It is noticed that there was a lower level of these actions in economy hotels compared to luxury hotels (Figure 1). For instance, in the case of economy hotels, 32.35% of young people declared that the supply of electricity was done through a key card control system (EFA 1) against 54.41% in the case of luxury hotels.

Almost half of the respondents (45.88%), as hotel guests, admitted that they reused towels in economy hotels. It is a higher percentage than in the case of towel reuse in luxury hotels (of 42.35%) but much lower than in the case of towel reuse behaviour at home (of 57.35%). There is a moderate positive correlation (see Table 5) both between towel reuse behaviour in economy hotels and at home ($r = 0.508$, $p = 0.000$) and between towel reuse behaviour in luxury hotels and at home ($r = 0.498$, $p = 0.000$). These results suggest that the respondents who reported that they reuse towels at home tend to engage in towel reuse practices during their stay in a hotel (economy hotels, as well as luxury

hotels). Moreover, a strong positive correlation ($r = 0.835$, $p = 0.000$) was identified between towel reuse behaviours in economy and luxury hotels. This fact emphasises that, among respondents where the propensity to reuse the towels in economy hotels is higher, the propensity in the case of luxury hotels is high as well and vice versa (Table 5).

Table 5. Paired samples test: towel reuse behaviour in hotels versus at home/in economy hotels versus in luxury hotels.

Variables	Mean	Paired Samples Correlation (r)	Mean	Std. Deviation	Paired Differences Std. Error Mean	95% Confidence Interval of the Difference		t-test (df = 339)
						Lower	Upper	
<i>Towel reuse behaviour: in economy hotels versus at home</i>								
Economy hotel	0.46	0.508 *	−0.115	0.493	0.027	−0.167	−0.062	-
Home	0.57							−4.287 ¹
<i>Towel reuse behaviour: in luxury hotels versus at home</i>								
Luxury hotel	0.42	0.498 *	−0.150	0.496	0.027	−0.203	−0.097	-
Home	0.57							−5.578 ¹
<i>Towel reuse behaviour: in economy hotels versus in luxury hotels</i>								
Economy hotel	0.46	0.835 *	0.035	0.285	0.015	0.005	0.066	-
Luxury hotel	0.42							2.282 ²

Note: *Sig. = 0.000, df = 339. ¹Sig. (2-tailed) = 0.000. ²Sig. (2-tailed) = 0.023.

The results of the paired samples *t*-test (Table 5) showed the significant differences between towels reuse behaviour in hotels and at home ($t_{399} = -4.287$, $p = 0.000$ in the case of economy hotels and $t_{399} = -5.578$, $p = 0.000$ in the case of luxury hotels). Moreover, significant differences were identified between towel reuse behaviours in economy and luxury hotels ($t_{399} = 2.282$, $p = 0.023$). Thus, on the one hand, the propensity to have a specific pro-environmental behaviour through towels reuse is significantly lower when young people stay at hotels as guests than at home. On the other hand, this propensity is significantly higher in the case of economy hotels than luxury hotels. Therefore, H2 and H3 were confirmed.

4.2. Hierarchical Multiple Regression Analysis for BIRT in Hotels

In order to test hypotheses H4–H8, we estimated the influence of eight main factors (eco-friendly attitude, general pro-environmental (PE) past experiences in hotels, specific pro-environmental past experiences in economy hotels, as well as luxury hotels, general and specific pro-environmental habits at home, social norms and moral personal norms; see Tables 3 and 6) on the behavioural intention to reuse towels in hotels using a hierarchical multiple regression analysis.

For the total sample ($N = 340$), the descriptive statistic results regarding the self-assessment of BIRT in hotels showed a high score of 3.74 (of 5), emphasising a high level of young people in agreement with specific pro-environmental behavioural intentions (Table 3).

The correlation results (Table 3) indicated that BIRT in hotels is moderately positively correlated with the eco-friendly attitude of hotel guests ($r = 0.467$) and specific PEB (towel reuse behaviour) both in hotels (economy hotels, $r = 0.467$ and luxury hotels, $r = 0.451$) and at home ($r = 0.352$). Additionally, BIRT in hotels is positively correlated, but very weak, with general PEB at home/general PE habits ($r = 0.110$) and with moral personal norms ($r = 0.119$). All significant correlations between the explanatory variables have values that do not exceed 0.9, a fact which suggests that there is a low probability that the regression analysis would be affected by multicollinearity [63].

The results of the hierarchical regression analysis are illustrated in Table 6. In the first step, the three control variables—level of study, gender and type of travel—were entered into the prediction model, and two of them emerged as significant predictors. This baseline control variable model

(Model 1) was significant at the 0.01 level ($F(3, 336) = 10.026, p < 0.01$) and explained 8.2% of the variance in BIRT ($R^2 = 0.082$, adjusted $R^2 = 0.074$).

Table 6. Results of the hierarchical multiple regression analysis for BIRT in hotels.

Independent Variables	Model 1 (controls)	Model 2	Model 3	Model 4	Model 5	Model 6
Studies	0.253 **	0.153 **	0.118 *	0.109 *	0.108 *	0.107 *
Gender	0.025	−0.012	0.011	0.007	0.007	0.007
Travel	−0.119 *	−0.101	−0.077	−0.069	−0.070	−0.070
Eco-friendly attitude	-	0.425 **	0.304 **	0.297 **	0.296 **	0.296 **
General PE past experiences in hotels	-	-	−0.058	−0.053	−0.054	−0.054
Specific PEB in economy hotels	-	-	0.233 **	0.205 *	0.207 *	0.207 *
Specific PEB in luxury hotels	-	-	0.118	0.085	0.082	0.082
General PE habit at home	-	-	-	0.045	0.045	0.044
Specific PEB at home	-	-	-	0.118 *	0.117 *	0.117 *
Social norms	-	-	-	-	−0.016	−0.011
Moral personal norms	-	-	-	-	-	0.007
Intercept	3.991	2.417	2.681	2.383	2.403	2.398
R ²	0.082	0.250	0.344	0.356	0.356	0.356
Adjusted R ²	0.074	0.241	0.330	0.338	0.336	0.334
Std. Error of the Estimate	0.919	0.832	0.782	0.777	0.778	0.779
R Square Change	0.082	0.168	0.094	0.012	0.000	0.000
Sig. F Change	0.000	0.000	0.000	0.051	0.726	0.920
ANOVA (F value)	10.026	27.941	24.865	20.239	18.179	16.477

Note: Dependent variable: BIRT. ¹Standardised β -regression coefficients: * $p < 0.05$ and ** $p < 0.01$.

The level of study (bachelor versus master) and type of travel (abroad versus inside the country) significantly influenced BIRT in hotels. Therefore, those young people at master level ($\beta = 0.253, p < 0.001$) and those who travelled abroad ($\beta = -0.119, p < 0.05$) reported a higher BIRT.

These results are in-line with previous research findings [37], which show that, in terms of the use of towels, the domestic tourist has a lower environmental footprint. There are also research findings [64] pointing out that the young tourists on international vacations had more hedonistic and passive behaviours, having less PEB, than those on domestic vacations. As regards the level of study, our results were consistent with other studies [28,30,62,65], which highlighted that individuals who are highly educated are more concerned about environmental quality and, consequently, tend to engage more in pro-environmental behaviours. As opposed to past empirical research [30,46,64], we found that gender had no significant effect on BIRT ($\beta = 0.025, p = 0.635$). Thus, our results did not support the widespread belief that women have a stronger propensity to PEB than men.

To test Hypotheses H4-H8, we added the independent variables step-by-step: eco-friendly attitude (Model 2), three variables that reflect PE past experiences of young people in hotels (Model 3), two variables that reflect pro-environmental habits at home (Model 4), social norms (Model 5) and moral personal norms (Model 6). As compared with the base model, the R^2 improved from 8.2% to 25% (Model 2), 34.4% (Model 3) and 35.6% (Model 4). Tolerance values (from 0.282 to 0.998) and VIF (variance inflation factors) scores (values ranged between 1.002 and 3.547) suggest that these models are not affected by multicollinearity [63]. All models are significant at the 0.01 level.

Model 2 was statistically significant ($F(4,335) = 27.941, p < 0.01$) and explained a total of 25% of variance in BIRT ($R^2 = 0.25$, adjusted $R^2 = 0.241$ and R^2 change = 0.168). The change in R^2 of 0.168 ($p = 0.000$) highlighted a substantial impact of the eco-friendly attitude on BIRT in hotels relative to the control variables included in Model 1. Based on the values of the beta weights (β), it can be seen

that the eco-friendly attitude has a significant positive influence on BIRT ($\beta = 0.425, p = 0.000$). Hence, H4 was supported. This result is consistent with previous studies [17,46], which emphasise that the eco-friendly attitude significantly explains the intention to reuse towels in hotels [17] or the intention of hotel customers to visit a green hotel [46].

Through adding the three variables that reflect pro-environmental (PE) past experiences in hotels, a stronger model is obtained (change in $R^2 = 0.094$; $F(7, 332) = 24.865, p < 0.01$, Model 3). This model accounted for 34.4% of the variance of BIRT ($R^2 = 0.344$, adjusted $R^2 = 0.330$). A significant positive influence of specific PEB in economy hotels, which means the behaviour to reuse towels ($\beta = 0.233, p = 0.005$), on BIRT in hotels was identified, a fact that reflects that having specific PE past experiences with towels reuse in an economy accommodation represents an important precursor of BIRT in hotels. Due to the insignificant effect of both the behaviour to reuse towels in luxury hotels ($\beta = 0.118, p = 0.151$) and general PE past experiences in hotels ($\beta = -0.058, p = 0.198$) on BIRT, Model 3 showed only partial support for H5. Thus, the results revealed that BIRT in hotels is positively influenced by past experiences in hotels but only in the case of past experiences in towel reuse (specific PEB) in economy accommodations.

Model 4, which incorporated two variables that reflect the pro-environmental habits at home, along with variables from Model 3, explains 35.6% of the BIRT variance ($R^2 = 0.356$, adjusted $R^2 = 0.338$, change in $R^2 = 0.012$). Only the specific PEB at home (habit to reuse towels) was identified as a positive and significant predictor of BIRT ($\beta = 0.118, p = 0.024$), and consequently, H6 was partially supported. Our results confirmed previous research findings [17,38], which illustrated a positive effect of the habit to reuse towels at home on hotel guest behaviours/intentions of reusing towels.

In the next steps, we added the social norms (Model 5) and moral personal norms (Model 6) in order to show their influence on BIRT. As compared with Model 4, the change in R^2 was 0.000, and the R^2 was unchanged ($R^2 = 0.356$) in both Model 5 and Model 6, a fact that suggests an insignificant contribution of the variables added to the models (Models 5 and 6). As was shown in Table 6, there is no statistically significant influence on BIRT in both the case of social norms ($\beta = -0.016, p = 0.726$) and moral personal norms ($\beta = 0.007, p = 0.920$). Thus, H7 was supported, but H8 was not supported.

Our findings regarding the insignificant effect of social norms on BIRT (H7) were sustained by other studies [7,33], which have highlighted that the influence of social norms on reuse towel behaviours in hotels is relatively ineffective. Furthermore, Farrow et al. [22] pointed out that social norms may be a less motivating factor of PEB in countries where there are “higher levels of environmental degradation and lower levels of environmental preferences relative to developed countries” [22] (p. 3), as is the case of Romania.

The results concerning the statistically insignificant impact of moral personal norms on BIRT are unexpected, taking into account that 51.61% of the respondents who benefited from ethics education (EE) declared that, to a large and great extent, they changed their tourist behaviours even when they were on vacation and carefree, according to their personal norms. These data showed that respondents self-reported a high positive impact of the education received at school on their pro-environmental behaviours as tourists. Despite this, the results of a deeper statistical analysis based on an independent samples *t*-test (Table 7) pointed out that there were no significant differences between those who benefitted from EE (EE group) and those without this kind of education (control group) in terms of BIRT in hotels ($t(338) = 0.784; p = 0.784$), as well as eco-friendly attitude ($t(338) = 1.654; p = 0.099$). These results suggest that students who benefitted from EE did not have higher BIRT and eco-friendly attitudes in hotels than students who did not receive EE.

Despite our expectations to find a closer link between exposing young people to EE and translating a behaviour that attests to their concern for the environment into practice, the reality refutes our assumptions. We consider that there are three explanatory reasons. The first explanation lies in the fact that, according to the theory of the psychologist Kohlberg [66], there are six successive stages of the moral development of individuals, and a person can remain at level 4 or 5. Thus, not everyone reaches the highest level, and there is no such claim. Secondly, moral education, in addition to the

general aspects that lead to the understanding and acquisition of general ethical principles, must also provide specific elements related to moral duties towards the environment. Thirdly, the metaphor of shifting an engagement dominates tourist behaviours, as Stoll-Kleemann et al. [67] stated, but they believed that this impact was counterbalanced by the action of protecting the environment at home [35]. The training they received did not change such beliefs and behaviours, which remains a fundamental challenge for education.

Table 7. Results of the independent samples *t*-test: ethics education (EE) group versus control group.

Variables	Mean		Levene's Test ¹		<i>t</i> -test ²		95% Confidence Interval of the Difference	
	EE group (N = 186)	Control group (N = 154)	F	Sig.	<i>t</i>	Sig. ³	Lower	Upper
BIRT in hotels	3.778	3.697	0.053	0.818	0.784	0.784	−0.123	0.286
Eco-friendly attitude	3.746	3.581	0.001	0.976	1.654	0.099	−0.031	0.362

Note: ¹ Levene's test for equality of variances delivered a significance value higher than 0.05 for both variables for which the "equal variances assumed" option was used; *df* = 338; ² *t*-test for equality of the means; ³ 2-tailed.

In summary, the full model (Model 6), which explained 35.6% of the variance of BIRT ($R^2 = 0.356$, adjusted $R^2 = 0.334$), suggested that BIRT in hotels was positively influenced by three explanatory variables. The eco-friendly attitude of young tourists received the strongest weight in the model ($\beta = 0.296$, $p = 0.000$), followed by the specific PE past experiences (behaviour to reuse towels) in economy hotels ($\beta = 0.207$, $p = 0.014$) and the habit to reuse towels at home ($\beta = 0.117$, $p = 0.027$), implying that an eco-friendly attitude has a greater positive impact on BIRT in hotels. As regards the control variables, the level of study exhibited a positive relation to BIRT in the case of all models, while the type of travel revealed a negative effect on BIRT but only in the case of Model 1. As for gender, an insignificant influence on BIRT was found in all models.

Based on the results of the hierarchical multiple regression analysis, we can conclude that, in the case of our sample, having a higher level of education, a strong eco-friendly attitude, some past experience with reusing towels in economy hotels and the habit of reusing towels at home increase BIRT in hotels.

5. Conclusions and Main Implications

In the ever-changing ecological, social and economic environment, ensuring the pro-environmental behaviours of tourists, especially of youths, is a real challenge for sustainable tourism and for the whole of society. Towards a more sustainable future, pro-environmental behaviours are an essential part of societal change. In this context, the paper highlighted the effects of the main factors on the specific pro-environmental behaviours of Romanian young people, expressed by BIRT, aiming to improve their PEB.

The research results showed that Romanian young tourists exhibit a significantly higher level of past pro-environmental behaviours at home than in hotels, taking into account both general PEB expressed by the care for resource consumption and specific PEB expressed by towel reuse. Therefore, one of the main challenges for the ecological sustainability of the hotel industry is to convince guests to bring their ecological habits with them and to exercise persuasion on them in order to maintain their behaviours and behave in an ecological way while staying at a hotel [17]. It is also necessary for accommodation providers to be familiar with the influence of various factors on the PEB of hotel guests.

The hierarchical multiple regression analysis results highlighted that the BIRT of Romanian young people is significantly positively influenced by an eco-friendly attitude, past experience with reusing towels in economy hotels and the habit to reuse towels at home. These findings underline that the success of the ecological management of hotel operations depends on the extent to which the hotel management manages to make guests behave more environmentally friendly [17]. The ecological

attitudes of young Romanians was identified as the most important key factor of BIRT in hotels. For this reason, real and potential hotel guests should be encouraged to have a positive attitude towards environmentally responsible activities while staying at hotels. A favourable attitude towards ecological behaviours in a hotel (such as towel reuse) can be created through advertising and environmental campaigns to help tourists, as hotel guests, notice and recognise the environmental benefits of different ecological practices [17].

Moreover, our findings revealed that hotel guests reported a low level of main eco-friendly actions applied by the hotel management in both economy hotels and luxury hotels. Consequently, hotel management needs to improve the degree of implementation of green practices and pay more attention to saving energy and reducing resource consumption by using energy and water-saving systems. When guests see these positive changes in hotel rooms and are aware of the hotel's concern for energy efficiency and climate change, their satisfaction and loyalty [68], as well as their eco-friendly behaviours, will increase.

A real challenge of any ecological program adopted by hotel management is the reaction and the participation of the hotel guests. The study of the specialised literature allows us to make a proposal regarding the efficiency of the measures that would encourage a specific pro-environmental behaviour of the guests. As Goldstein et al. [15] state, it is important that messages left in hotel rooms give examples of the behaviour to reuse towels of previous guests, perhaps even the occupants of the same room. Taking this aspect into consideration, such types of messages would be an effective method to put into practice for hotel managers.

The implications for educational institutions refer to both ecological and moral educations. As measures, we emphasised that environmental education must provide specific cognitive elements related to concerns for the environment and must present more precise norms regarding pro-environmental behaviours. These norms should not remain salient. As for moral education, from the perspective of the theory of the stages of moral development described by Kohlberg [66], each stage of cognitive development is, in fact, considered a form of moral development. This education must help individuals to form personal norms in the evolution of the moral consciousness of youngsters, up to the level of moral principles.

The effectiveness of education will be proven only by specific methods of raising awareness among young people about the environmentally friendly attitudes that they can put into practice through concrete behaviours, such as reusing towels—a simple gesture but with multiple implications.

Despite scepticism about the academic pro-environmental discourse, which would not have much chance of implementation or practical evidence of behavioural changes emanating from the knowledge it has created [69], we cannot give up educational optimism. Educating young people as responsible tourists remains a challenging goal to ensure sustainable tourism.

The results from this research contribute to theory development by providing empirical proof for the behaviour theories and models in order to use eco-friendly attitudes, specific pro-environmental past experiences in hotels and the habit to reuse towels at home as essential variables in explaining the PEB of hotel guests. This study, focusing on the main determinants of the specific pro-environmental behavioural intentions of young people, fills a research gap that has been little addressed. Moreover, our research proves that taking small steps in changing specific PEB (proxies by towel reuse) of young tourists in hotels “can be an effective strategy in the process of improving the environmental sustainability of the tourism industry” [7] (p. 249).

The rejection of hypothesis H8, regarding the significant impact of moral personal norms on the behavioural intentions of young people to reuse towels in hotels, sheds further light on the theory of the norm activation process. Personal norms have a central place in this theory and function as a mediator of situational and personality activator influences on behaviours [37]. Despite the ethical education that some students acknowledged to have benefited from, the process of activating personal norms and transposing them into tangible behaviours does not appear to have taken place, based on the comparison with the control group.

The main limits of the research: The first limitation of the research is that our sample can provide only a partial picture of the factors influencing BIRT by collecting data from a relatively small number of young people. A second limitation is that the survey data were collected from subjects who did not have very rich travel experiences. However, in the context of self-awareness, an issue that interested us in relation to young tourists who may be more open to engaging in sustainability efforts, their training for certain pro-ecological values is a goal of our research. The third limitation is the fact that it focused on intentionality, on behavioural intention and not on the effective specific pro-environmental behaviours. However, the intentions may not turn into the real behaviour of reusing towels while travelling.

Given the limitations of our findings and research, we propose some future directions of work. The current study does not allow us to achieve more extensive results, so a similar type of research in which different models are used in similar circumstances must be performed with different samples in the future. We aim to investigate whether the restrictions imposed by the COVID-19 pandemic regarding measures that ensure our personal protection but, also, the protection of others affects the ecological behaviours of young tourists, in the sense of burdening them with multiple responsibilities that they have to manage when travelling. To find out to what extent the intentions of young people with past experiences and pro-environmental attitudes turn into actions, some future longitudinal studies would be interesting to carry out.

Author Contributions: Both the authors (M.-A.G.) and (E.H.) contributed equally to this paper, both being considered as first authors. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

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Article

Respondents' Involvement in Tourist Activities at the Time of the COVID-19 Pandemic

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Received: 18 October 2020; Accepted: 15 November 2020; Published: 18 November 2020



Abstract: The article is aimed at presenting the survey respondents' involvement in tourist activities, taking into account certain factors at the time of the COVID-19 pandemic. The main objective may be divided into three direct aims, each of which consists of the determination of the factors that can influence the choice of tourist journeys: (1) organizational factors, (2) social-economic ones, and (3) sustainable development. The authors' own research findings are used to verify the objective. The research was conducted in April and May 2020 with the use of a diagnostic survey method and a questionnaire. Five-hundred sixty-four respondents from Poland (Podlaskie, Masovian, and Lesser Poland Voivodeships) and 133 respondents from the US (New York State, New Jersey, and Illinois) took part in the research. It was divided into organizational, social-economic, and sustainable development related factors. The research confirmed, inter alia, a great impact of the COVID-19 pandemic on the organization of tourist travels by the respondents in 2020. The issue presented in the article is a new one; it has not yet been a subject matter of research. That is the major reason the authors aimed to conduct it. What is a new methodological element in the article is the organization of some concepts concerning tourism and a presentation of the influence of COVID-19 on tourism. In the authors' opinion, the issues presented are new and have a considerable impact on new trends in the development of tourism at the time of the COVID-19 pandemic. The issue discussed is very broad, and the article does not exhaust it. The research findings are compared to the research findings reported by other authors, and standard deviations are calculated.

Keywords: tourism; sustainable tourism; pandemic crisis; COVID-19; global change

1. Introduction

Tourism, i.e., the movement of people both individually and in organized groups is a phenomenon known even in former times although the term has been used since the 19th century. As early as in ancient times, people traveled for different purposes (first journeys were in general religious in nature) [1]. A contemporary phenomenon of tourism can be viewed from many perspectives. Most often it is perceived in the social, psychological, cultural, and economic context [2]. It can also be perceived as a dynamically developing sector of industry, which in case of many countries, regions and towns constitutes an extraordinarily important factor in economic development [3,4]. Due to the fact that tourism is a multifaceted phenomenon (it is connected with, inter alia, such sciences as geography, sociology, psychology, economics, and pedagogy), it has an impact on the development of various sectors of the economy [5,6].

The term *tourism* alone originates from a Latin word *tourus*, i.e., “rotary, circular movement” concerning the change of place of stay. In the French language the word *tourus* was changed into *tour*, i.e., a type of journey that ended in the place where it had started. The term started to be commonly

used at the end of the 17th century to describe the trips of young English people who traveled around Europe (mainly France, Italy, and Germany). Their journeys often took a few years' time and they started to be called tourists. They traveled for the purpose of educational experience as well as leisure, and the journeys were to prepare them for adult life [1].

The concept of tourism and related terms changed with the change in the number of tourist journeys and the growing interest of many fields of science [7]. The differences in defining tourism are really big and depend on the point of view from which they are considered [8].

In accordance with the definition of the World Tourism Organization, it is “the entirety of activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes with the exception of the purpose of being employed” [9–13].

At present, the world and the entire tourism industry face the COVID-19 pandemic, which has spread across 206 countries [14]. On 7 January 2020 the World Health Organization (WHO) announced that the coronavirus causes pneumonia, the reason for which had not been clearly identified in China. The infection was recognized as a coronavirus disease caused by SARS-CoV-2 with acute respiratory distress syndrome. On 11 March, when the disease spread across 114 countries, the WHO announced the COVID-19 pandemic [15].

When COVID-19 spread all over the world, many countries and regions introduced restrictions on traveling and closed their borders in order to curb the pandemic [16]. Richter [17] suggested that the occurrence or re-occurrence of infectious diseases results, inter alia, from global tourism and mobility. Urbanization and globalization caused the fast spread of the virus [18], but tourism plays a significant role in the aggravation of public health crises resulting from that. That is why identification and quantification of the risks and social costs of tourism at the time of the COVID-19 pandemic are of key importance in order to minimize the negative impact of tourism on destination towns and regions. The very serious problems of the global tourism sector caused by the COVID-19 pandemic were highlighted in 2020 by, among others, Hebli, Said [19], Sigala [20], and Haywood [21].

At the present time of the COVID-19 pandemic, the importance of tourism and its sustainable development is extremely important. According to the World Health Organization, 26.6 million people were infected and 17.7 million of them recovered. Eight-hundred seventy-five thousand people died [14]. Figure 1 shows where in the world COVID-19 accumulated.

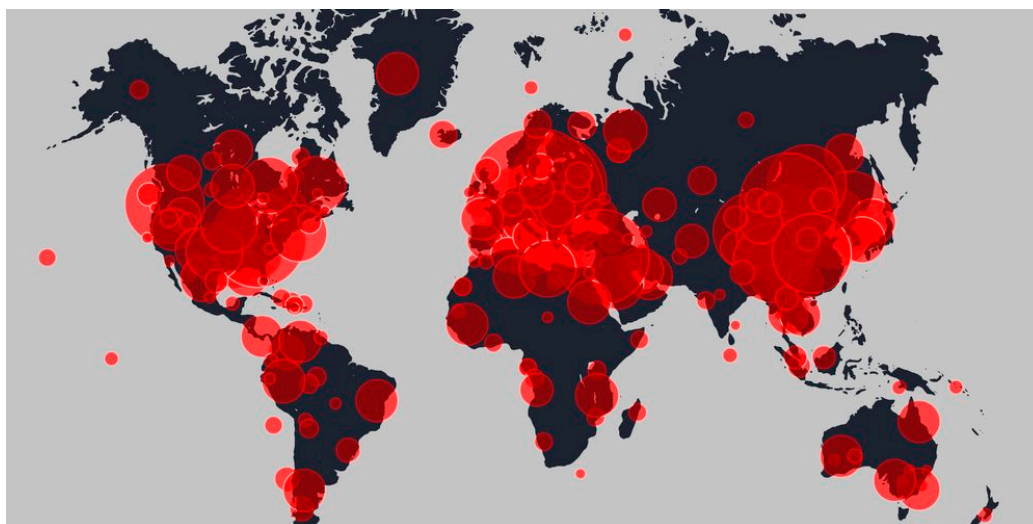


Figure 1. World regions with the highest risk of COVID-19 infection; Source: [22].

COVID-19 significantly influenced global tourism (Figure 2). According to the United Nations World Tourism Organization (UNWTO), just because of the COVID-19 pandemic, tourist journeys in 2020 can decrease by ca. 60–80% globally [23].

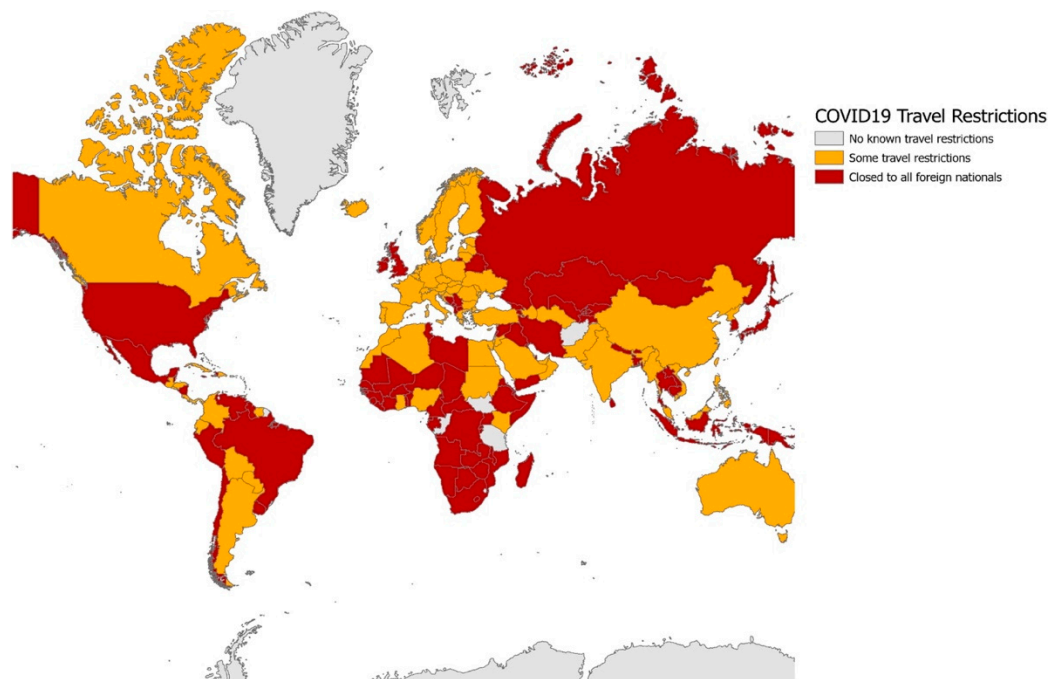


Figure 2. COVID-19 related global travel restrictions. Source: [24].

The development of tourism at the time of the COVID-19 pandemic has an impact on the management of resources so that economic, social, and aesthetic needs can be satisfied and, at the same time, life protection systems and ecological processes can be cared for. Sustainable tourism products exist in harmony with the local environment, community, and culture, which thanks to that become the beneficiary of, not victim of, of tourism development [25]. At the time of the COVID-19 pandemic, sustainable tourism is also a management method, which indicates the link between the needs and natural resources, the needs of local people and the tourism sector [26].

At the time of the COVID-19 pandemic, the factors in organization of tourist journeys are very important. They can be classified in the following groups: leisure-related, social (changes to the surroundings, emotional changes, and co-participation-related ones), educational, self-actualization related, organizational, economic, sustainable development related and health related. It is also necessary to determine factors that influence the choice of tourist destination in order to develop appropriate marketing strategies. The article focuses in particular on organizational, social, economic, and sustainable development related factors.

The article aims to present tourist activities based on the survey respondents' answers and takes into account certain conditions at the time of the COVID-19 pandemic. Particular parts of the article present theoretical conditions for the COVID-19 impact on tourism, and then the research findings are discussed. After the introductory issues, the article presents theoretical bases and a research gap. This part presents a detailed review of literature on the influence of the COVID-19 pandemic on tourism. The next part of the work discusses the material and methods. The fourth sub-chapter is devoted to the findings and the presentation of selected factors in the respondent's tourist activities. The final part of the article presents conclusions. The subject presented is topical as the SARS Co-V-2 virus has left a mark on both tourism demand and supply, will have long-term, incremental effects in the coming years, and will eventually bring us closer to the transformation of tourism.

2. Review of Literature

Tourism is perceived as a space-related phenomenon that has enormous influence on society and various sectors of national economy at the time of the COVID-19 pandemic. Table 1 presents a list of

publications on the issue of the COVID-19 pandemic concerning tourism. The list was compiled based on the review of literature.

Table 1. List of works concerning the influence of the COVID-19 pandemic on tourism published in 2020. Source: [15,24,27–37].

Authors	Title	Methodology
Gössling, Scott, and Hall [24]	Pandemics, tourism and global change: a rapid assessment of COVID-19	Period: 1972–2020 Methods: Systematic Literature Review (SLR)
Higgins-Desbiolles [27]	Socializing tourism for social and ecological justice after COVID-19	Period: 1999–2020 Methods: SLR
Qiu, Park, Li, and Song [28]	Social costs of tourism during the COVID-19 pandemic	Period: 2020 Area: 1627 respondents of Hong Kong, Guangzhou and Wuhan Methods: questionnaire, valuation method
Zheng, Goh, and Weng [29]	The effects of misleading media reports about COVID-19 on Chinese tourists' mental health: a perspective article	Period: 1995–2020 Methods: SLR
Brouder [30]	Reset redux: possible evolutionary pathways toward the transformation of tourism in a COVID-19 world	Period: 2013–2020 Methods: SLR
Farzanagen, Gholipour, Feizi, Nunkoo, and Andargoli [31]	International Tourism and Outbreak of Coronavirus (COVID-19): A Cross-Country Analysis	Period: 2020 Area: selected countries Methods: regression
Correa-Martinez, Kampmeier, Kumpers, Schwierzeck, Hennies, Hafezi, Kuhn, Pavenstadt, Ludwig and Mellmann [15]	A Pandemic in Times of Global Tourism: Super spreading and Exportation of COVID-19 Cases from a Ski Area in Austria	Period: 2020 Area: Germany, Austria Methods: case study
Yu, Li, Yu, He and Zhou [32]	Communication related health crisis on social media: a case of COVID-19 outbreak	Period: 2020 Methods: case study
Niewiadomski [33]	COVID-19: from temporary de-globalization to a re-discovery of tourism?	Period: 1987–2020 Methods: SLR
Carr [34]	COVID-19, indigenous peoples and tourism: a view from New Zealand	Period: 1979–2020 Methods: SLR
Chang, McAleer and Ramos [35]	A Charter for Sustainable Tourism after COVID-19	Period: 2020 Methods: SLR
Prideaux, Thompson and Pabel [36]	Lessons from COVID-19 can prepare global tourism for the economic transformation needed to combat climate change	Period: 2001–2020 Methods: SLR
Wen, Kozak, Yang, Liu [37]	COVID-19: potential effects on Chinese citizens' lifestyle and travel	Period: 2020 Methods: SLR

The scientific publications listed in Table 1 [15,24,27–37] indicate that works focus on the use of databases for the purpose of developing methods and tools showing the impact of the COVID-19 pandemic on tourism. The authors use a series of variables to demonstrate the issue of the pandemic

and its significance for global tourism. The largest group of authors used the Systematic Literature Review (SLR) to present the issue of the influence of the COVID-19 pandemic on tourism.

According to Gössling, Scott and Hall [24], the new coronavirus (COVID-19) poses a challenge to the world. Due to the lack of a vaccine and limited medical possibilities of treating this disease, non-pharmacological interventions (NPI) constitute the main strategy of curbing the pandemic. Unprecedented global restrictions on traveling and orders to stay at home have caused the most serious disturbances in the global economy since World War II. Due to the fact that international bans on traveling affect over 90% of the global population and the wide-spread restrictions on public gatherings and the mobility of society, tourism was actually brought to a halt in March 2020. Early data concerning flights, cruises and accommodation were catastrophic. Although they are highly uncertain, the early UNWTO forecasts for 2020 suggest that the number of international arrivals can drop by 20–30% in comparison with 2019. Tourism is particularly vulnerable to the measures taken to curb the pandemic due to limited mobility and social distance. Their articles compare the influence of COVID-19 with former epidemics/pandemics and other types of global crises, and analyse how the pandemic can change society, economy and tourism.

Higging-Desbioles [27] believes that the 2019–2020 COVID-19 pandemic can change tourism industry and the contexts in which it operates. This global crisis during which traveling, tourism, hoteling and events were frozen in many parts of the world creates an opportunity to find new possibilities in this historic moment of the transformation. The critical analysis of tourism concerning those events unveils the methods with the use of which tourism supports neoliberal injustice and exploitation. The COVID-19 pandemic can constitute a rare and invaluable occasion to re-consider and redirect tourism toward a better path in the future. However, a ‘responsible’ approach to tourism alone will not ensure sufficient opportunities to make such a reset possible. Such a vision needs society-oriented tourist frameworks, which will re-define and re-direct tourism based on the rights and interests of local communities and nations. Theoretically, such an approach covers the method in which tourism might become ‘public property’ by means of its recent direction to the public good. It is necessary for tourism to be responsible for social and ecological restrictions on the globe.

Zheng, Goh, and Wen [29] believe that the coronavirus (COVID-19) was recognized by the World Health Organization as the state of threat to public health on an international scale. Since then the pandemic has been receiving major international media coverage and information about it has been spread among the citizens of the entire world. However, some reports concerning the COVID-19 pandemic exerted negative influence on Chinese travelers’ mental health because the outbreak of the pandemic was described as “the Chinese virus pandemonium”. Their in-depth article examines how the misinforming and discriminating media reports can influence the psychological wellbeing of travelers of different (Chinese) ethnic origin during the COVID-19 pandemic.

On the other hand, according to Brouder [30], the number of international arrivals exceeded 1.5 billion for the first time in 2019. Long-term evolution of tourism indicates considerable dependence upon the paths of development with a decade of increase since the global financial crisis. This recent period of unhampered development of international tourism has suddenly finished because the COVID-19 pandemic made the sector stop operating almost completely. Due to the fact that the world is struggling with the global pandemic reality, there is one chance for a generation to reconsider what tourism will look like in future decades. In their opinion, COVID-19 will leave a trace on demand for and supply of tourism, will have long-term growing effects in the years to come and eventually will bring us closer to tourism transformation.

According to Niewiadomski [33], the outbreak of COVID-19 stopped the whole travel and tourism sector. As far as this is concerned, tourism that we knew a few months ago stopped existing. Although the price that the world pays is enormous, temporal de-globalization processes offer tourism industry an unprecedented opportunity to re-launch, an unprecedented chance to redevelop in accordance with the principles of sustainable development and elimination of various ‘dark sides’ of the development of tourism such as the destruction of the environment, economic exploitation or

overpopulation. However, the path of redevelopment and transformation that the world system of tourism industry will follow after the COVID-19 crisis has not been determined yet.

Carr [34] believes that the consequences of the COVID-19 pandemic will be long-term and will have inter-generational influence on indigenous and non-native people. Autochthonous people offer unused potential for understanding in what way we develop solutions resistant to COVID-19 and similar risks in the future. According to the author, the environmental and social needs of all societies should be treated as priorities within the solution concerning COVID 19, and tourist reactions cannot be separated from social needs.

Chang, McAleer, and Ramos [35] believe that SARS-CoV-2 virus, which causes the COVID-19 disease, is extremely communicable. Long-term consequences for individuals have not been fully recognized yet while they are dramatic for international society. COVID-19 has forever changed the world in every aspect that can be imagined and exerted enormous influence on international journeys, demand for the tourism and hoteling sector, which is one of the biggest employers in the world and is very vulnerable to serious crises like the COVID-19 pandemic. It is necessary to analyse in what way the industry will recover from COVID-19 and how it can be made sustainable in the dramatically changed world. Their article presents a concept of a tourist, traveler's and hotel card after COVID-19 as their input into the sector.

On the other hand, Prideaux, Thompson, and Pabel [36] believe that the COVID-19 pandemic stopped almost all international journeys in the first half of 2020. The return to the patterns of growth observed before the pandemic will take some time and will depend on the depth and extent of the recession caused by COVID-19. The recovery phase will be accompanied by global efforts to combat the evolving climate crisis. In their opinion, in order to develop in the future world, the tourist industry must go beyond the temptation to adopt strategies based on the return to the standards before the pandemic and strive to understand how to respond to the occurrence of global economy transformation toward carbon neutrality.

Like other authors, Wen, Kozak, Yang and Liu [37] believe that the outbreak of the new coronavirus (COVID-19) in 2019 has negative consequences for global tourism and hoteling industry. Their work aims to examine in what way the outbreak of an epidemic can change the Chinese tourists' lifestyle, traveling behavior and tourist preferences in short-term and long-term perspectives. Their work is based on the synthesis of information broadcast by a few media, which is to be backed by a review of literature on marketing in tourism, tourism management and tourist behavior. The authors' experience in the research into trends in tourism and hoteling on local and international scale also contributed to the analysis. The article presents a prediction that COVID-19 will probably influence Chinese travelers' consumption patterns such as the growing popularity of the free of charge and independent journeys, luxurious journeys, as well as health and wellness tourism.

The successive two groups of authors [15,32], in order to present the influence of the COVID-19 virus on tourism in their articles, made use of case studies. Correa-Martinez, Kampmeier, Kumpers, Schwierzeck, Hennies, Hafezi, Kuhn, Pavenstadt, Ludwig, and Mellmann [15] presented data indicating the export of COVID-19 cases from the resort in Ischgl. The authors present a case of a barman who was supposedly the source of many cases then recorded in Island, Norway, and Denmark. In their opinion, the cases connected with Ischgl are still moving undetected around Europe and outside. European travelers were prohibited from traveling to the United States on 14 March, i.e., nine days after Iceland had announced an epidemiological warning.

Yu, Li, Yu, He, and Zhou [32] believe that social networking media are an important element of communication connected with catastrophes and health crises. The authors analyzed 10,132 online comments on COVID-19 with the use of automated and manual text analysis. They identified and discussed key issues, including dynamically changing tourists' perception of risk, the results of tourist services quality during the crisis, the issue of quarantine in public health, authenticity of media coverage and racial discrimination. Their research constitutes input into suggestions and observations concerning future research into the tourism crisis caused by the epidemic.

In their research, Qiu, Park, Li and Song [28], with the use of the valuation method, analyse potential consequences of tourism in relation to the COVID-19 pandemic. In their opinion, it is estimated that inhabitants are ready to pay for the decrease in the risk of the pandemic. They determined factors behind that willingness to pay. The demand and social costs curves are estimated. The restoration strategy should cover the inhabitants with different demographic features. Coronavirus causes an acute respiratory failure and is rapidly spreading all over the world at present, which resulted in the outbreak of the coronavirus pandemic in 2019. In the face of this crisis, scientists studying tourism are turning their attention to societies in tourist destinations focusing on their security and wellbeing as well as the costs that they will incur as a result of closing their tourism businesses. Their article describes the way in which the inhabitants perceive the threats connected with tourism operations and estimates their readiness to pay for the reduction of threats to public health based on hypothetical scenarios and with the use of the method of triple-bounded dichotomous conditional choice estimation.

The final group of authors (Farzanagen, Gholipour, Feizi, Nunkoo, and Andargoli [31]) analyses the connection between international tourism and cases of COVID-19, and deaths resulting from it in over 90 countries with the use of the regression method. They made use of international regression analysis and found a positive correlation between international tourism and accumulated level of confirmed COVID-19 cases and deaths until 30 April 2020. Their analyses of regression show that countries exposed to big flows of international tourism are more vulnerable to infection and deaths caused by the outbreak of COVID-19. This link is firm even when other social and economic factors in the COVID-19 pandemic and regional models are examined. Based on their estimates, an increase in the level of tourist arrivals and departures by 1% is connected with the growth in the level of confirmed COVID-19 cases and deaths by 1.2% and 1.4% respectively, taking into account other factors.

3. Materials and Methods

The research was conducted in April and May 2020 with the use of the method of a diagnostic survey and a questionnaire form. 564 respondents from Poland (Podlaskie, Masovian and Lesser Poland Voivodeships) and 133 respondents from the USA (New York State, New Jersey, and Illinois) took part in the research. The countries were deliberately selected. In the authors' opinion, their policy toward the COVID-19 pandemic differs and there are different restrictions imposed in them. In addition, their GDP per capita is different. There are also other differences in the area of traveling. The American states and Polish voivodeships were randomly chosen. The questions in the survey questionnaire were asked so that present problems connected with the COVID-19 pandemic could be recognized. The respondents' answers are analyzed with regard to different variables. Preferences as to the types of tourist travel resulting from the respondents' education and affluence level are also presented. Table 2 presents the characteristic features of the population studied.

Table 2. Characteristics of the studied population. Source: Own research.

Specification		Poland		USA	
		<i>n</i> = 564	%	<i>n</i> = 133	%
Sex	Female	345	61.2	56	42.1
	Male	219	38.8	77	57.9
Age	18–24	255	45.2	14	10.5
	25–34	171	30.3	7	5.3
	35–44	81	14.4	49	36.8
	45–54	21	3.7	35	26.3
	55–64	21	3.7	7	5.3
	Over 65	15	2.7	21	15.8
Education	Primary	12	2.1	-	-
	Vocational	12	2.1	21	15.8
	Secondary education	105	18.6	35	26.3
	Higher	435	77.1	77	57.9

Table 2. Cont.

Specification	Poland		USA		
	n = 564	%	n = 133	%	
Professional status	Pensioner	30	5.3	14	10.5
	Blue-collar worker	33	5.9	21	15.8
	White-collar worker	276	48.9	77	57.9
	Student	174	30.9	7	5.3
	Businessman	51	9.0	14	10.5
Income per 1 family member	Less than PLN/\$1000	27	4.8	-	-
	PLN/\$1001–1500	78	13.8	7	5.3
	PLN/\$1501–2500	117	20.7	28	21.1
	PLN/\$2501–3500	171	30.3	14	10.5
	Above PLN/\$3500	171	30.3	84	63.2

Over 60% of the respondents from Poland were women while over 40% were from the US. It can be noticed that the respondent's level of education in both countries was high (higher and secondary education dominated). Most of the respondents worked as white-collar or blue-collar workers.

4. Results and Discussion

4.1. Factors Limiting Tourist Journeys at the Time of the COVID-19 Pandemic

The COVID-19 pandemic exerted considerable influence on the tourism sector. According to the research findings, a significant number of people gave up traveling in 2020. Figure 3 presents the respondents' attitude depending on the level of their education.

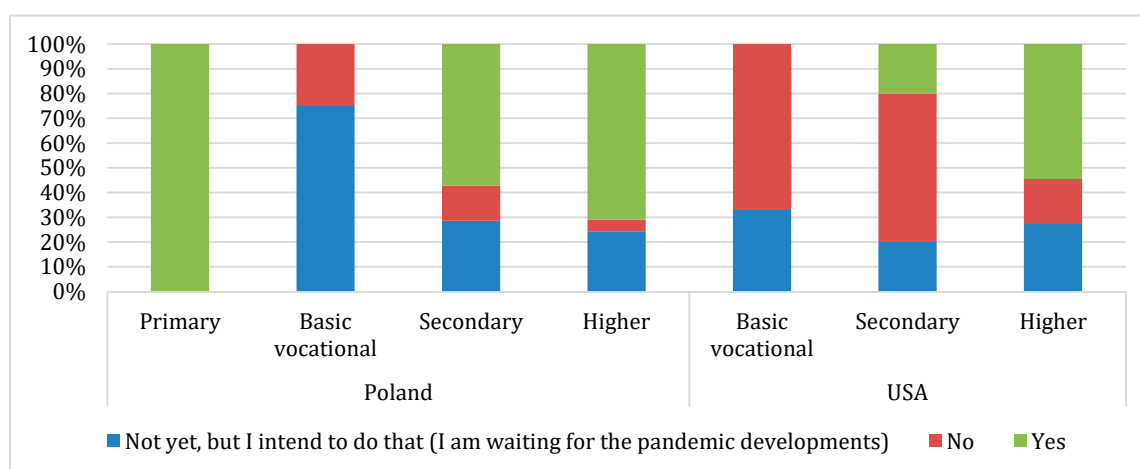


Figure 3. Respondents' opinions on planning a tourist journey in the country or abroad at the time of the COVID-19 pandemic depending on the respondents' education level; Source: Own research.

About 68% of the respondents from Poland and the USA planned a tourist journey in 2020. It can be noticed that people with higher or secondary education were more eager to plan such a trip.

Figure 4 indicates that COVID-19 had considerable influence on the organization of tourist journeys by the respondents. A big number of them decided to spend their vacation in their country. What is a very important factor in the organization of a journey is the reason for traveling. It is connected with a desire to go to a particular country or city in order to get to know its culture, wildlife or social life [38]. Table 3 presents detailed data concerning this issue.

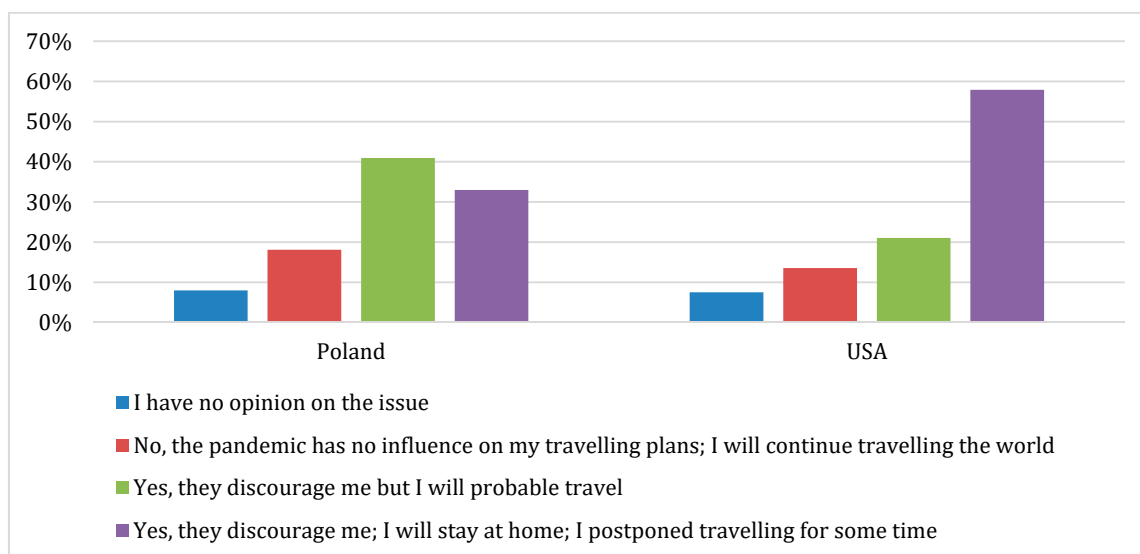


Figure 4. Influence of the COVID-19 pandemic on the organization of tourist journeys in 2020 Source: Own research.

Table 3. Respondents' reasons for tourist journeys at the time of the COVID-19 pandemic and other authors' research findings (%).Source: Own research and [39–42].

Specification	2020 (Poland) n = 564	2020 (USA) n = 133	Głabiński [39] 2018 n = 270	Alejziak [40] 2009 n = 333	Łaciak [41] 2006 n = 4021	Qu, Wong and Ping [42] 1999 n = 330	Standard Deviation
Leisure	85.7	68.4	55.7	42.0	63.6	36.4	16.5
Sightseeing (getting to know tourist attractions)	49.2	26.3	70.2	-	-	12.1	22.1
Doing sport	14.8	11.5	46.7	-	-	-	15.9
Visiting family/acquaintances	11.6	31.6	-	34.0	29.8	-	8.9
Participation in events	9.5	4.2	38.4	-	-	7.6	13.7
Religion	2.1	1.1	34.5	-	0.6	-	14.4
Business	1.6	0.7	-	10.0	5.3	5.5	3.3
Health	-	-	36.1	-	5.4	3.6	14.9
Others	1.0	0.5	-	14.0	2.8	1.5	5.1

Our as well as other authors' research findings indicate that leisure was the main reason for traveling at the time of the COVID-19 pandemic and in former years. Only according to Głabiński [39], the respondents are more willing to get to know tourist attractions than to have leisure. The research findings concerning the means of transport during a tourist journey at the time of pandemic is shown in Figure 5.

The respondents from Poland preferred their own car while the respondents from the US chose a plane as a means of transport. Figure 6 presents preferences concerning domestic and foreign journeys in 2020 depending on the level of education.

People with higher education chose foreign journeys. The choice is also confronted with the level of the respondents' income (Figure 7).

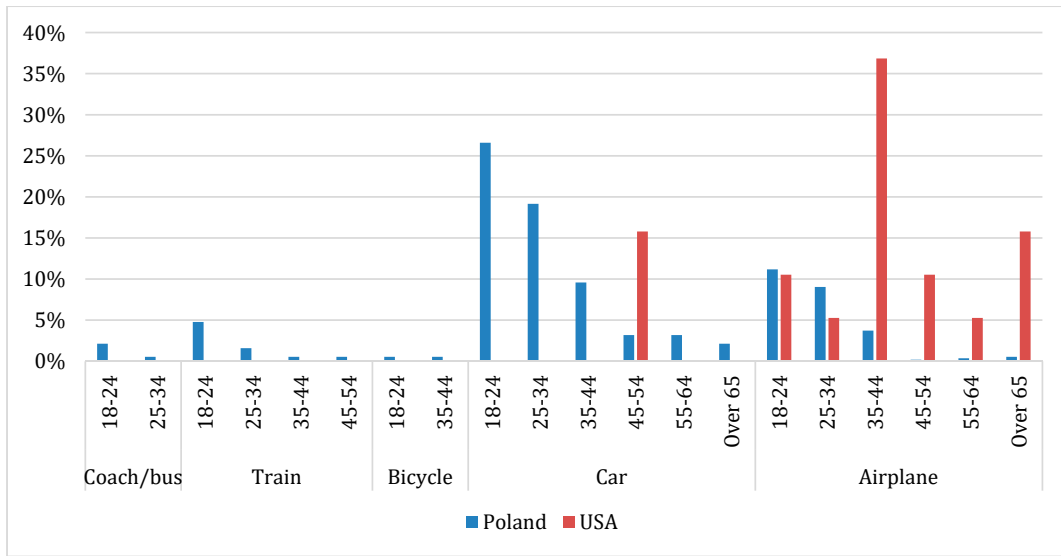


Figure 5. Preferable means of transport for the respondents at the time of the COVID-19 pandemic Source: Own research.

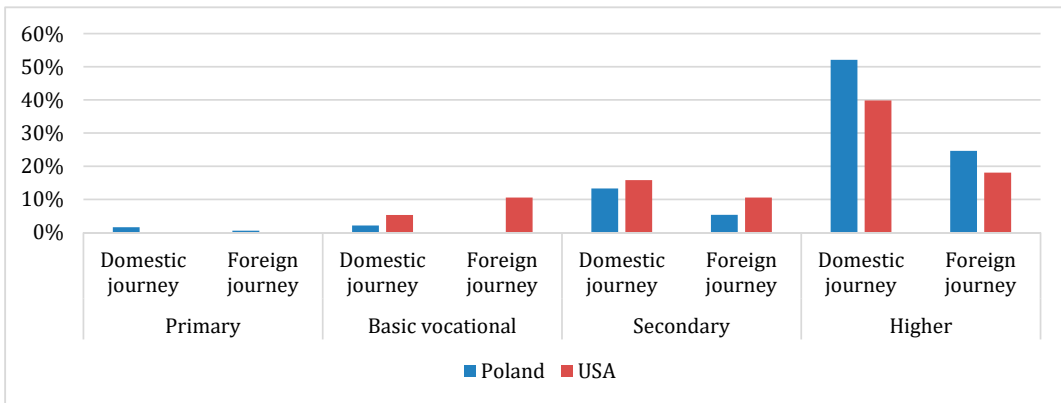


Figure 6. Preferences concerning domestic and foreign journeys at the time of the COVID-19 pandemic confronted with the level of education. Source: Own research.

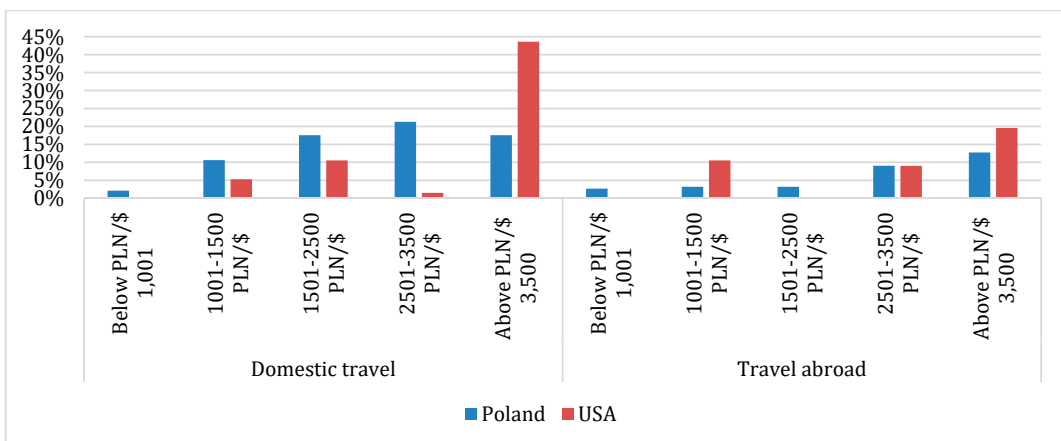


Figure 7. Preferences concerning domestic and foreign journeys at the time of the COVID-19 pandemic depending on the income level; Source: Own research.

Wealthier people preferred journeys in their own country. Table 4 presents overnight accommodation chosen by the respondents from Poland and the US in comparison with other authors' findings.

Table 4. Overnight accommodation chosen by the respondents at the time of the COVID-19 pandemic and other authors' research findings (%). Source: Own research and [41,43,44].

Specification	2020 (Poland) n = 564	2020 (USA) n = 133	Bouchon [43] 2013 n = 33	Nash, Thyne and Davies [44] 2006 n = 309	Łaciak [41] 2006 n = 4021	Standard Deviation
Hotels	40.4	56.4	42.4	49.0	7.7	16.7
Staying at family members'/acquaintances'	12.8	36.8	-	8.0	19.9	10.9
Guest houses	28.7	-	24.2	2.0	16.6	10.1
Agritourist farms	7.6	-	-	-	6.9	0.4
Camping sites/tents	3.2	5.3	-	3.0	3.9	0.9
Motels	4.3	1.5	-	-	7.7	2.5
Hostels	-	-	-	15.0	1.6	6.7
Renting apartment	-	-	3.0	4.0	5.9	1.2
Others	3.0	-	-	-	1.2	0.9

The respondents from Poland in general stayed in hotels and guesthouses and the respondents from the US chose hotels or stayed at their family members'. A big group of the respondents from Poland chose agritourism farms, which is quite reasonable at the time of the COVID-19 pandemic because it is a choice of rural areas (places with a small population) [45].

A considerable number of the respondents have not planned any journeys in 2021 (Figure 8). It can be also noticed that many of the respondents are still going to travel the world.

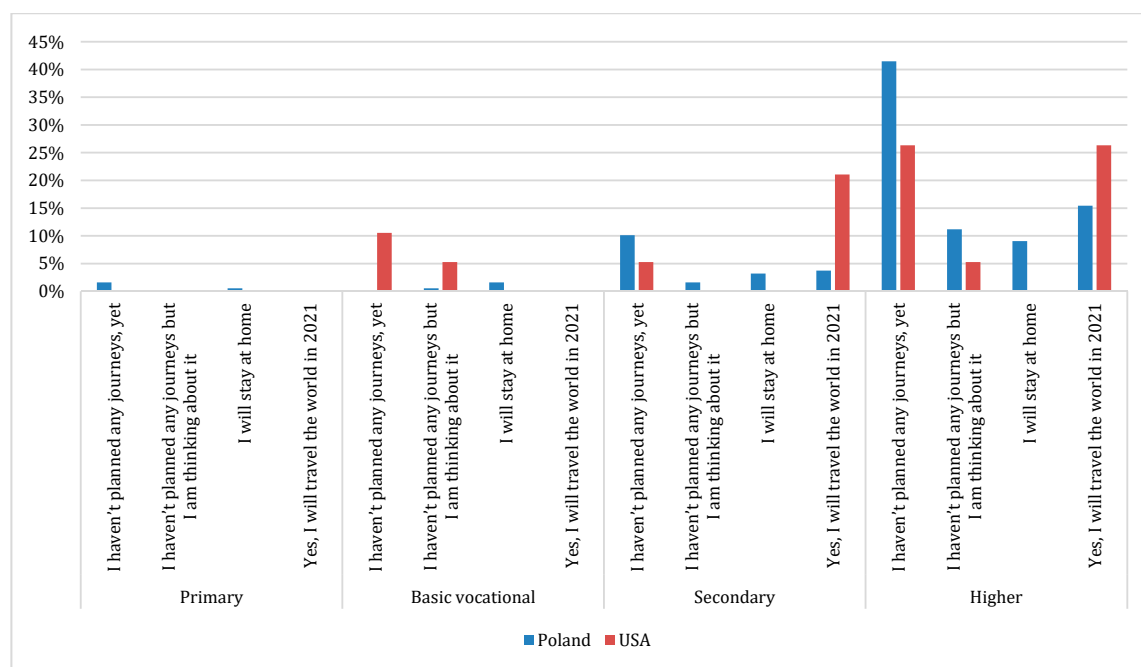


Figure 8. Respondents' travel plans for 2021 (in case there is still COVID-19 infection risk). Source: Own research.

Many factors affect the development of tourism, especially at the time of the COVID-19 pandemic. It also concerns sustainable tourism. Figure 9 presents detailed data concerning this issue.

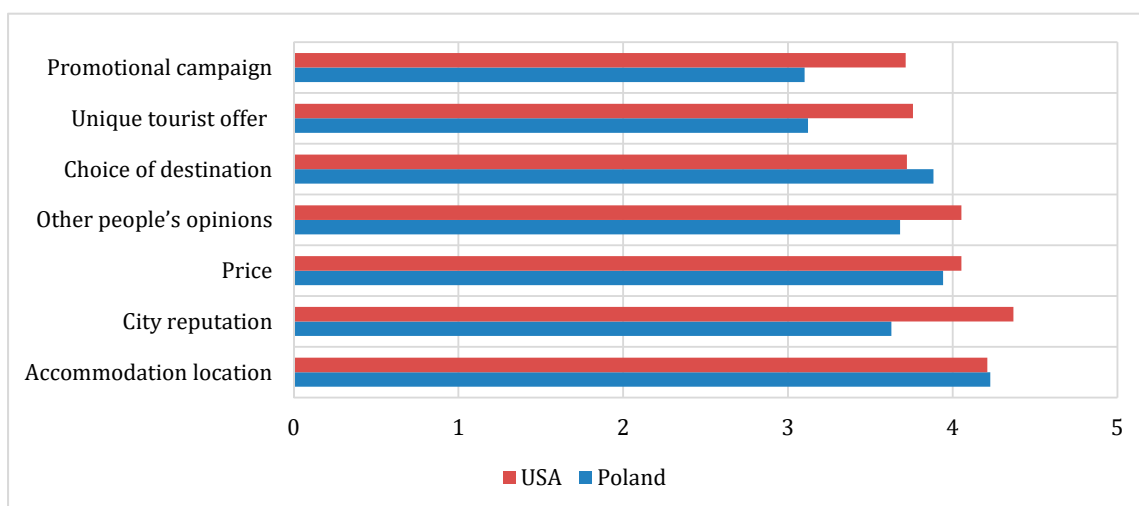


Figure 9. Factors affecting the choice of the place of stay at the time of the COVID-19 pandemic (1–it does not matter, 5–it is very important); source: Own research.

Many factors exert influence on the choice of the place of stay at the time of the COVID-19 pandemic. The respondents from Poland chose the accommodation location, price, and destination as the major factors. In the opinion of the respondents from the US, the city reputation, accommodation location, price and other people’s opinions are of major importance.

4.2. Social and Economic Factors in the Choice of Tourist Journeys at the Time If the COVID-19 Pandemic

Analyzing factors influencing tourist activities and the choice of destination by the respondents, one can state that these are social conditions, which include people who are accompanying a traveler. At the time of the COVID-19 pandemic it is a very important factor in avoiding getting infected. Table 5 presents detailed information on this issue.

Table 5. People accompanying a traveler during a tourist journey at the time of the COVID-19 pandemic and other authors’ research findings (%). Source: Own research and [41,46].

Specification	2020 (Poland) n = 564	2020 (USA) n = 133	Szpilko, Gierałtowska and Golubiewska [46] 2011 n = 315	Łaciak [41] 2006 n = 4021	Standard Deviation
Alone	8.0	15.8	9.0	22.1	5.7
With a spouse	14.4	10.5	-	39.6	12.9
With a partner	33.5	5.3	26.0	6.7	12.2
With friends (organized group)	20.2	-	35.0	17.0	7.8
With the family	23.9	68.4	24.0	27.9	18.7

The respondents from Poland decided to organize their tourist journeys mainly with their partners or family, and over half of the respondents from the US with their family. According to other authors’ research findings, people were willing to travel with their friends and spouses.

Economic conditions are also decisive factors in traveling. The research pays special attention to price and economic losses incurred by countries where the COVID-19 pandemic was most apparent. Figure 10 presents the respondents’ opinion on the issue of price reduction in the tourism sector at the time of the COVID-19 pandemic.

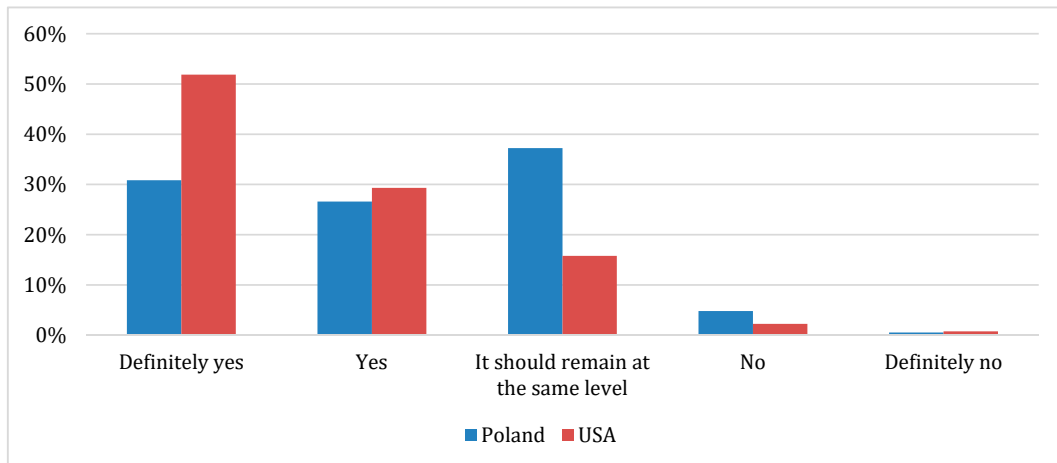


Figure 10. Respondents’ opinion on the issue of travel price reduction at the time of the COVID-19 pandemic (e.g., flight tickets, hotel accommodation, tickets to historic buildings etc.) Source: Own research.

The research findings indicate that the respondents’ opinions on the reduction of travel prices at the time of the COVID-19 pandemic were positive. Figure 11 presents countries that in the respondents’ opinion, were hit by the heaviest economic losses due to the COVID-19 pandemic.

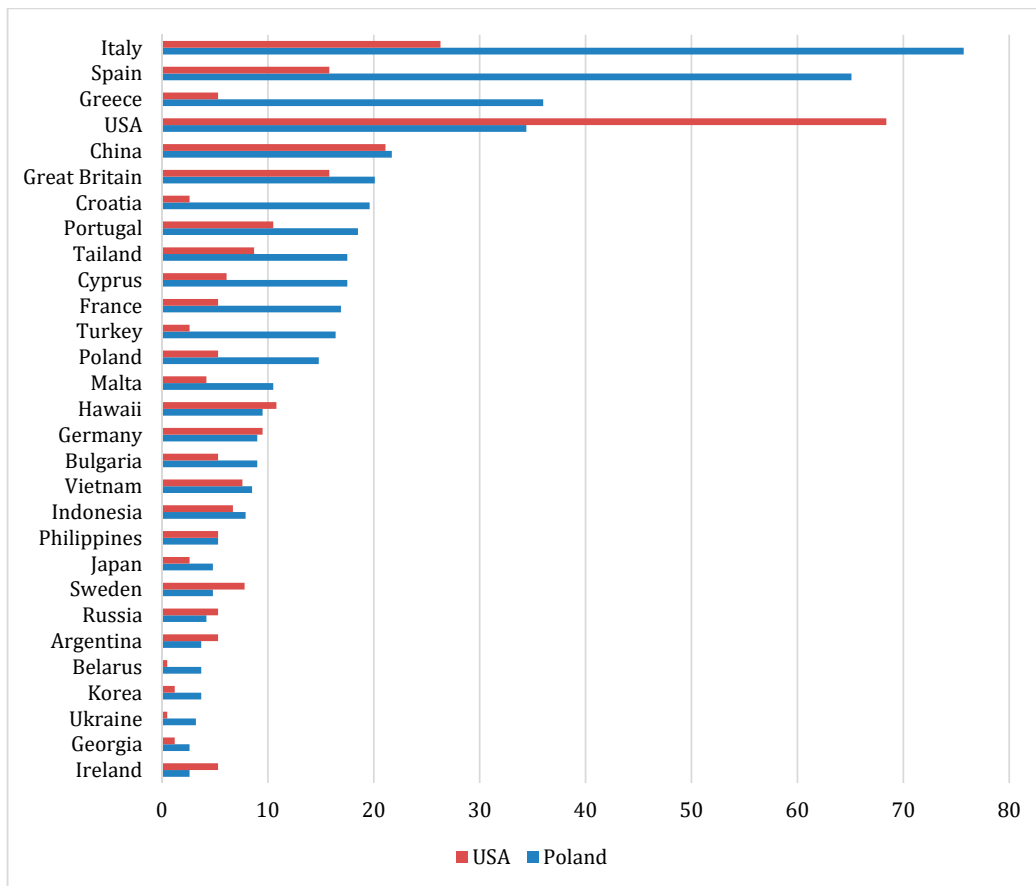


Figure 11. Countries hit by the heaviest economic losses due to the COVID-19 pandemic in the respondents’ opinion; Source: Own research.

In the opinion of the Polish respondents, Italy, Spain, and Greece incurred the heaviest losses. The respondents from the US believed that their country was hit by the heaviest loss as a result of the COVID-19 pandemic. The European Union's initiative of 'safe corridors' concerns countries that maintain the number of people infected under control and do not allow for the outbreak of another wave. A big number of tests are done and potentially infected people are traced and identified in those countries. They include Greece, Croatia, Turkey, the Czech Republic, Cyprus, Portugal, and Georgia [47].

4.3. Factors in Sustainable Development of Tourism at the Time of the COVID-19 Pandemic

The factors determining a tourist journey at the time of the COVID-19 pandemic also include the conditions for sustainable development. Sustainable tourism consists of having respect for the values of wildlife, culture, social areas, showing respect for and ensuring protection of natural resources, as well as respect for the traditions of local society while making use of opportunities for economic development of a region [13]. The concept of tourism that is subject to sustainable development at the time of the COVID-19 pandemic concerns the inhabitants of tourist regions as well as tourists visiting them and the entire tourist regions. It is based on acting according to three basic principles [26]:

- economic order: appropriate relation between the pace of using resources by tourism industry and the pace of renewing those resources;
- social and economic efficiency of tourism industry;
- ensuring profitability for cooperating systems.

In addition, the United Nations Organization distinguished criteria for the main thematic areas of sustainable tourism; they include [48]:

- efficient planning of sustainable development;
- social and economic maximization of benefits for local communities;
- support for cultural heritage;
- reduction of negative consequences of the impact on the natural environment.

The respondents were asked to interpret the concept of sustainable tourism at the time of the COVID-19 pandemic. The respondents from Poland expressed the opinion that first of all it is a balance between ecological, social, and economic factors. Figure 12 presents detailed data.

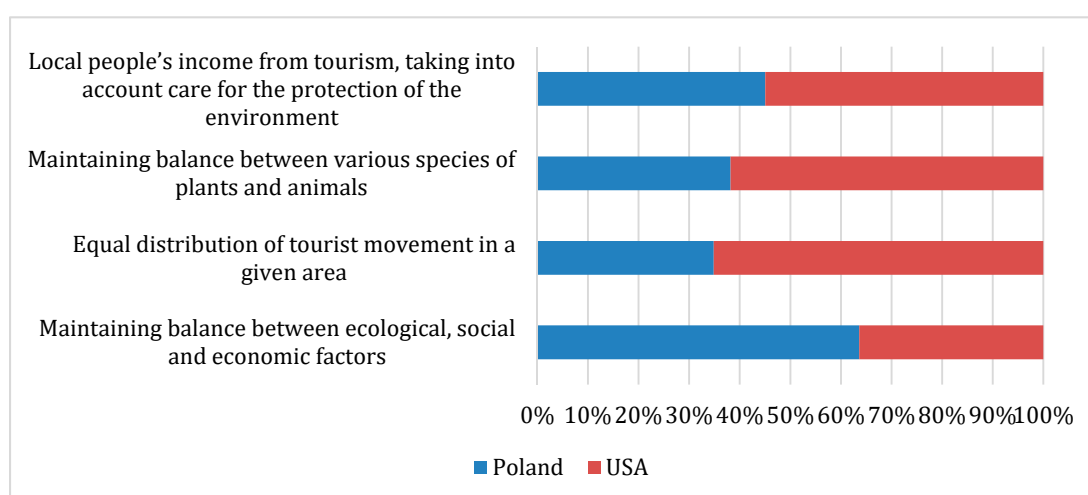


Figure 12. Interpretation of the concept of sustainable tourism at the time of the COVID-19 pandemic in the respondents' opinion; source: Own research.

The respondents from the US expressed the opinion that sustainable tourism at the time of the COVID-19 pandemic is mainly identified with equal distribution of tourist movement. Figure 13

presents main areas of the development of an industry operating in favor of sustainable tourism in the world at the time of the COVID-19 pandemic in the respondents' opinion.

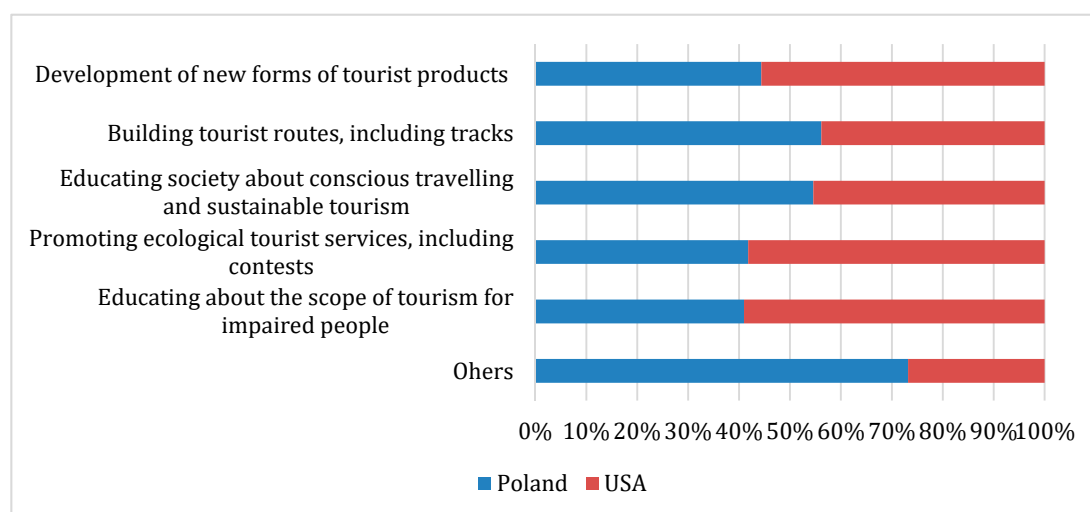


Figure 13. Main areas of the development of an industry operating in favor of sustainable development at the time of the COVID-19 pandemic in the respondents' opinion. Source: Own research.

In the above-presented research, undertaking the issue of sustainable tourism at the time of the COVID-19 pandemic is an important element because it has influence on local communities. It also affects tourists' satisfaction with traveling at the time of the COVID-19 pandemic, as well as having an impact on economic profits from tourism. Sustainable tourism is also an indicator of an ecological impact on the environment (e.g., the quality of drinking water, solid waste). As Figure 13 indicates, it is also a factor in promoting ecological tourism, in particular at the time of the COVID-19 pandemic when many tourists are looking for a tourist destination.

5. Conclusions

Tourism sector is one of the biggest and fastest growing industries in the world [49]. Thanks to the creation of workplaces, income from export, investment and infrastructure development, tourism sector directly and indirectly makes a considerable contribution to social and economic processes [50]. However, it should be pointed out that the COVID-19 pandemic affected the development of tourism in the world to a considerable extent.

The issue of tourist activities and destinations plays an important role in research aimed at getting to know the rules and mechanisms governing the tourist market, which was conducted by the representatives of various scientific disciplines [51]. It results from the fact that it is a tourist who is a basic party to tourism [7]. Tourism does not exist without people because they consciously signal the needs connected with leisure activities, which result in tourist activities in space [52]. The great tourism industry was developed for them and strives to meet their needs and expectations, especially at the time of the COVID-19 pandemic [53].

COVID-19 has changed the world forever with regard to every aspect that can be imagined and exerted great influence on international journeys, demand for tourism and the hoteling sector, which is one of the biggest employers in the world and is very vulnerable to serious shocks such as the COVID-19 pandemic [35].

The outbreak of the COVID-19 pandemic has already exerted considerable influence on almost every society and industry. Scientists and practitioners involved in tourism should thoroughly analyse this tragedy and the way in which it can affect industry and social practices. This and other crises of public health create enormous opportunities to look at the sector in a comprehensive way and at its impact on the environment, climate, and travelers [37].

The authors' own research indicates that the COVID-19 pandemic had a big impact on the organization of tourist journeys by the respondents. Many of them decided to spend their holiday in their country (especially more affluent people), and people with a higher education level were choosing to travel abroad. The research findings also indicate that relaxation was the main reason for traveling in the period of the COVID-19 pandemic. While traveling, the respondents from Poland preferred driving their own car and a means of transport chosen by the respondents from the USA was a plane. The respondents from Poland in general stayed in hotels and guesthouses, and the respondents from the USA stayed at their family members'. A big number of the respondents from Poland chose to stay on agritourism farms, which is quite reasonable at the time of the COVID-19 pandemic.

Analyzing factors that influence the respondents' involvement in tourism and their choice of destinations, one can state that these are social determinants, which also concern people accompanying a traveler. At the time of the COVID-19 pandemic, it is a very important factor that makes it possible to avoid infection. The respondents from Poland decided to organize their tourist journeys mainly with their partners of family, and over half of the respondents from the USA with their family. Economic conditions are also decisive factors in traveling. The research draws special attention to price related and economic losses incurred by the countries where the COVID-19 pandemic was most apparent.

The respondents expressed an opinion on the interpretation of the concept of sustainable tourism at the time of the COVID-19 pandemic. Those from Poland believe that it is mainly a balance between ecological, social, and economic factors. The respondents from the USA expressed an opinion that sustainable tourism at the time of the COVID-19 pandemic should be identified with equal apportionment of tourist movement. Undertaking the analysis of the issue of sustainable tourism at the time of the COVID-19 pandemic is an important element because it affects local communities. It also has an impact on tourists' satisfaction with traveling at the time of the COVID-19 pandemic and economic profits from tourism. Sustainable tourism is also an indicator of seasonality and ecological influence on the environment (e.g., the quality of drinking water, solid waste).

The role of economic policy is an important factor at the time of the COVID-19 pandemic. It should not aim at stimulating aggregated demand, at least not straight away. Economic policy with emphasis on tourism should cover the following objectives [54]:

- Ensuring the functioning of key factors in the development of tourism, e.g., resources to test COVID-19, and treatment should be strengthened. Regular healthcare. Aid for tourism businesses to help them survive in the market;
- Ensuring sufficient resources for people affected by the crisis, e.g., unemployment benefits should be extended and prolonged. To reach self-employed and unemployed persons, money transfers are necessary;
- Preventing excessive economic disturbances, e.g., governments should ensure support for private companies, including subsidies to remuneration, under appropriate conditions. Credit and guarantee programs. Supporting domestic tourism by encouraging people to spend a holiday in the country. In case the crisis worsens, governments should increase their support for tourism.

The COVID-19 pandemic brought all international journeys to a halt in the first half of 2020. A return to the increase patterns that were observed before the pandemic will take some time and will depend on the depth and extent of the recession caused by COVID-19. The restoration phase will co-exist with the global attempts to overcome the evolving climatic crisis. To enable international tourism markets to develop in the future world, the tourism sector should go beyond the temptation to adopt a strategy based on the return to the standard state that was before the COVID-19 pandemic [36].

It should be pointed out that in the past global tourism was vulnerable to many different crises. In the 2000–2015 period the main breakthrough events included terrorist attacks of 11 September 2001, the outbreak of the severe acute respiratory syndrome SARS in 2003, the 2008/2009 global financial crisis and the Middle East respiratory syndrome in 2015. None of them led to a long-term decline in global development of tourism; however, only SARS and the global financial crisis resulted in the decrease in international arrivals [55,56]. This might suggest that tourism, as a system, is resistant to internal shocks. However, there is abundant evidence that the consequences and the return to health after the COVID-19 pandemic will be unprecedented [24].

International, regional, and local restrictions on traveling immediately influenced national economies, including tourism systems, i.e., international journeys, domestic tourism, one-day trips and various segments such as air transport, cruises, public transport, over-night accommodation, cafes and restaurants, festivals, and sports meetings or events. Due to a sudden slowdown in international air travel as a result of the crisis and the imposition of bans on traveling, the closure of borders or introduction of quarantine periods by many countries, international as well as domestic tourism plummeted down. Countries struggled for their travelers' return home, which in case of key holiday markets concerned hundreds of thousands of citizens all over the world [24].

Uncertainty and the dynamic of the pandemic and political reactions are illustrated by the estimates concerning COVID-19 influence on the tourism sector presented by the United Nations World Tourism Organization (UNWTO), which were considerably amended between the beginning and the end of March. The UNWTO press release of 6 March 2020 estimated that the pandemic would cause a decrease in arrivals of tourists from abroad by 1–3% (in comparison to 2019) instead of the forecasted increase by 3–4%. Three weeks later, on 26 March 2020, the updated press release indicated a 20–30% decrease in international arrivals. These important differences demonstrate the difficulty of forecasting trends at present. Thus, all estimates of potential consequences for tourism must be interpreted with the highest caution and are at the most approximate in nature at present [24].

The European Union started an initiative of 'safe corridors' for particular spheres of tourism demand. They were intended to join countries that managed to tackle the COVID-19 pandemic. This applies to countries that maintain the number of infected people under control and do not let another wave start. Those states do many tests and identify potentially vulnerable people. More and more countries speak about 'safe corridors' for tourists in the context of reopening borders for holidaymakers [57]. The countries include, inter alia, Greece, Croatia, Turkey, the Czech Republic, Cyprus, Portugal, and Georgia [47,58].

The COVID-19 pandemic, which is still escalating, also has a considerable impact on the energy structure, requirements, and related emissions. Its use is inevitable and is given a lower priority in critical situations. However, as the pandemic continues, it is necessary to assess and possibly confine the influence on energy on the environment [59]. Differentiation of solutions is very important in order to achieve a desired objective of a key strategy of improving vulnerability and ensuring higher flexibility in minimizing environmental footprint [60].

It is also worth highlighting that the global COVID-19 pandemic resulted in considerable changes in human mobility patterns, labor environment as well as recreation [61]. The research conducted by Ventera et al. [62] indicates the COVID-19 pandemic had an impact on recreational activities e.g., on cycle paths. At the time of the pandemic, it is important that people who go jogging, hiking, and cycling do rational and well-thought activities and comply with the rules of social distance. Open spaces may be conducive to keeping distance and can indirectly limit the spread of COVID-19. Walkers' activeness increased in city parks, suburban forests and sanctuaries emphasizing the importance of access to open spaces, which are interwoven with built-up areas. This throws new light on the value of urban nature as the infrastructure resistant to crises.

The issue presented in the article is new; it has not been examined. That is why the main aim was to use the authors' research. Organization of the concepts of tourism and the presentation of the COVID-19 pandemic influence on tourism were new elements of the methodology in this article.

It was also important to present the classification of types of tourism following adequate criteria for their division. The issues presented herein, in the authors' opinion, are new and have considerable impact on the presentation of new trends in the development of tourism at the time of the COVID-19 pandemic. The issue discussed is very broad and the article does not exhaust it. Tourism at the time of the COVID-19 pandemic is observing dynamic changes [63]; therefore, following them and conducting similar research, e.g., into the influence of COVID-19 on profitability of tourist businesses (hotels, motels, guesthouses or agritourism farms) would be justified. It is also necessary to conduct further research due to the fact that former research rarely focused on the influence of COVID-19 on tourism. It is probably necessary to conduct qualitative research into small and medium-size tourist enterprises in order to answer the questions:

- What is the influence of COVID-19 on the tourism labor market?
- Will COVID-19 lead to radical transformation of the tourism sector?
- In what way can the tourism and hoteling sector respond to such changes in the future?
- How can the consequences of similar crises of public health be mitigated in the future?

Author Contributions: Conceptualization, M.R.; data curation, M.R.; formal analysis, M.R.; methodology, M.R.; resources, M.R.; visualization, M.R.; writing—original draft, M.R.; writing—review and editing, M.R., A.N., A.K.; supervision, M.R.; funding acquisition, A.N., A.K. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

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Article

Sustainable Tourism and Facilities Preferences: The Sustainable Tourist Stay Scale (STSS) Validation

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Received: 24 October 2020; Accepted: 21 November 2020; Published: 23 November 2020



Abstract: This study aims to start the development of the Sustainable Tourist Stay Scale (STSS), a self-report instrument designed to measure tourists' preferences regarding the degree to which they accept accommodation and programs in tourism facilities with sustainable characteristics. The research involved a total sample of 621 participants aged 18 to 74 (m = 41.75%; f = 58.25%). According to the literature and the available data, we considered the possibility that young people (millennials) and adults within the same sample may show peculiarities concerning the sustainability issues. We carried out three subsequent analyses: (1) an explorative factor analysis; (2) a confirmatory factor analysis via structural equation modelling; (3) the test of the structural invariance between young people and adults. The results supported a three-factor scale solution and they are discussed with reference to their potential practical applications to better understanding the preference for a sustainable stay.

Keywords: sustainable tourism; hospitality; tourist's preferences; millennials; adults; validation; factor analysis; structural equation model; COVID-19

1. Introduction

The tourism industry has experienced rapid growth in the past four decades, and this trend is expected to continue in the first half of the new millennium despite setbacks generated due to regional conflicts, global safety issues due to terrorist activities, or the dramatic health situation caused by COVID-19. For example, after the COVID-19, a 10-point charter has been presented to establish balanced and sustainable tourism, travel, and hospitality industry because tourism has not ceased to exist [1]. Although the world pays a considerable price for this, the tourism industry has an unrepeatable opportunity to re-develop in line with the tenets of sustainability and to avoid various negative effects of its growth such as environmental degradation, economic exploitation, or overcrowding [2].

Therefore, the achievement of sustainable tourism entails a continuous process and requires constant monitoring of impacts and the introduction of necessary preventive and/or corrective measures whenever necessary [3]. The path of re-development and transformation which will be followed by the global tourism production system once the COVID-19 crisis has been resolved is yet to be determined.

The hospitality industry is a major part of the world's economy and embraces various accommodation facilities, from resorts to hotel and Bed and Breakfast, including restaurants or pubs. Socially, the world of hospitality is normally an important centre of social and community life and may seem significant for defining tourists' identity. The COVID-19 crisis has implemented

the demand for environments and accommodation facilities that have led to sustainability being an important factor in a company's vision and mission [2,3]. In the current literature (pre and during COVID-19) a measuring tool that assesses tourists' preference for sustainable housing can hardly be found. The Handbook of scales in tourism hospitality research is particularly important for those studying tourism [4]. It contains over 200 scales that are used in some form and content by the researchers in hospitality and tourism. Naturally, it is impossible to gather all existing scales developed, but the book pays special effort to be as comprehensive as possible by covering the scales published in the selected and top-tiered journals. In the Handbook of scales in tourism hospitality research, we have not found a specific scale for the construct that we intend to investigate.

Based on the literature and the above gap, this study aims to address this gap in current research on sustainable accommodation by developing the Sustainable Tourist Stay Scale (STSS), a self-report instrument designed to measure tourists' perceptions regarding the extent to which they prefer accommodation in tourism based on sustainable characteristics.

In this moment of crisis, the academic community continues to disseminate timely research to explore the broad social impacts of COVID-19 on tourism and hospitality as reflected in potential changes to individuals' lifestyles and daily behaviour during this trying time. The COVID-19 period should be considered as a moment of resilience, fear can lead to new choices and encourage a reconsideration of our values and motivations. The tourists travelling in the post-COVID-19 era will be unwilling to participate in mass tourism and will instead prefer the concept of "slow tourism" that focusses on local populations, longer lengths of stay and more fulfilling tourist experiences.

The potential tourists are likely to express newfound interest in destinations' hygiene, medical facilities, and population density (including local people and foreigners) when making travel-related decisions. This provides a chance to re-evaluate their tourism planning and development to ensure sustainability [5]. So, we think, in the light of the theoretical framework [1–5], that structures immersed in nature and/or the rethinking of spaces in the logic of spacing (e.g., with more zones outside) could play a fundamental role in satisfying latent and explicit demands of customers. Hence, it is increasingly important that researchers can benefit from technical studies that present tools (in our case a scale) to measure the preferences of tourists. In particular, for an understanding of how global hospitality practices are likely to change as a result of the pandemic, our paper intended to help other scholars to measure the sustainable stay construct. Consequently, we think this instrument can also help the industry's practitioners to tailor their products and services to post-COVID-19 recovery. In particular, we have separated adults and youngsters because the new generations are our future and we must consider any difference. Therefore, to consider the specificities of millennials within the entire sample, the study will verify the adequacy of the scale among young people and adults.

2. Sustainable Tourism and Hospitality

According to Pencarelli and Splendiani [6], in considering sustainable tourism, three types of tourist destinations can be distinguished as follows:

- (1) destination target in the formation phase, which allows ample scope for growth with regard to attendance and arrivals, without the risk of compromising a territory's environmental and social balance;
- (2) sustainable destination, one that has a balance in terms of usage for tourism purposes and ecological conditions. With this approach, the tourist flow does not jeopardise sustainability and can provide the region with economic and social benefits, as well as environmental well-being;
- (3) unaffordable destination, in this kind of destination, the development of tourism is exclusively designed to increase the flow in terms of arrivals and tourist presence. However, ecological and social problems threatening the destination's survival arise in this case. This leads to a decline in competitiveness, and consequently, the target destination's image is damaged [6].

Considering the available literature proliferation of such studies on sustainable tourism provides strong testimony to the continuing importance and legitimacy of tourism development and also impacts studies, in post-COVID-19 [1,7–11]. Two major events, in particular, influence the changes in the quality of life of the local community, namely the tourist-resident relationships and the development of the tourism industry itself [12].

Into this second branch, it is possible to mention some studies that employed the Ecological Footprint (EF) [12,13]. EF is a mathematical indicator that considers the problem of environmental sustainability starting from the load capacity of a specific territory. Studies that have adopted the EF seem to have a common point. Through some of the studies available in the literature, such as those analysing EF in Amsterdam [14] and Seychelles [15], there is a preponderance of the transport factor in the evaluation of the local and national ecological load [16], as well as the need to integrate EF with other tools to carry out more accurate assessments at the local level [17]. The role of transportation in sustainability has recently been confirmed in connection with social and economic problems such as the loss of community in neighbourhoods and less productive rural lands, like a connection among the three areas of sustainability (environmental, economic, and social) established with the Bruntland commission [18–21].

To meet the requirement of sustainability in tourism, instruments have been developed to assess the attitudes of the residents of a specific location towards sustainable tourism [22]. The importance of sustainability has an impact on the everyday behaviours of individuals, from an emotional point of view to a social one [23,24].

The relevance of this connection between everyday life and global sustainability was also underlined in a recent study that pointed out the way in which managers can adjust what the authors refer to as ‘Warm Global Thermostat’ [25]. In this study, researchers highlighted how the use of incentives for guests to participate in green programs by service managers can lead to greater involvement and satisfaction of the guests for carrying out a pro-environmental action.

These elements render the issue of who prefers sustainable accommodation and the reason behind it in sustainable tourism interesting.

In a specific study [26], the authors found that the values of sustainability can predict particular behaviours with actions to reduce energy consumption and pollution. Specifically, sustainable values can predict tourists’ preference with regard to a sustainable hospitality business over environmental behaviours. To assess their preference regarding sustainable business hospitality, the authors employed five items that are included in the sustainable values scale. In this case, the scale used to measure propensity towards sustainable hospitality consisting of items that were closely related to the concept of eco-friendly practices, in line with the focus of the study.

In a more qualitative work, Millar and Baloglu [27] indicated the principal characteristics that guests are willing to accept and prefer in hotels with regard to eco-friendly hotels. The most frequently used words/expressions were ‘efficiency’, ‘recycling’, ‘environmental-friendly’ and ‘sustainability’, as well as practices related to these words.

3. Sustainable Tourists

Sustainable tourists were at first generally considered as a softer kind of ecotourists, because the term ecotourist indicated various types of tourists interested in protecting the environment. Lindberg [28] identified four types of ecotourists, ranging from those who are motivated to travel to unspoiled and unpopular places. to those who include a naturalistic destination on a wider and more traditional tour. Over time, the concept has become more complex and increasingly associated with the theoretical issues related to the classification of sustainable tourist falls under. For example, Dinan and Sargeant [29] (p. 7) defined a sustainable tourist as “someone who appreciates the notion that they are a visitor in another person’s culture, society, environment and economy and respects this unique feature of travel”. More recently, Shamsub and Lebel [30] visualised sustainable tourists as those who agree with a code of conduct that recommends the way in which they should behave

as visitors; they further appreciate the fact that their activities have an impact on the environment and modify their actions accordingly; they would like to make an economic contribution to the host economy and therefore purchase local products such as crafts and food.

With respect to this last perspective, young people seem to play a specific role [31], in particular the millennials (born after 1984). The “Y generations” is associated with the following characteristics that may arise in classroom or work settings [32]: (a) higher self-esteem, (b) narcissism, (c) anxiety, (d) depression, (e) lower need for generalised social approval, (f) more external locus of control orientation, and (g) more agentic traits such as assertiveness, especially for women. Moreover, as reported by the Pew Research Center [33,34], millennials are more likely to support renewable energies and consider the issue of global warming, as a real threat compounded by concrete evidence. Nevertheless, young people choose to not define themselves as environmentalists. Millennials indeed have shown specific features regarding sustainability in some European research [35,36], confirming the international tendency to consider them as strongly involved in environmental and sustainable issues even if they do not consider themselves as such.

Schoolman and Coll’s research [37] observed that millennials currently enrolled in a major public university, while broadly supportive of public transportation, recycling, and energy and water conservation, and were much less interested in incorporating environmental concerns into decisions regarding food and in actively reducing their consumption of material things. This information suggests that young people may constitute a different survey population as compared to adults and specifically in the Italian context.

There are some characteristics of the millennials’ segment that are most likely to cause a significant disruption in the current structure of the tourism sector. They have strong digital skills and a high degree of permanent connectivity and search for outstanding experiences and altruistic behaviours [38]. In the study by Veiga et al. [39], emerges that these are the practice of volunteer tourism, search for places not connected with tourism and adoption of new, disruptive technologies. These aspects are relevant for the millennials and useful for a better understanding of their tourism experience by connecting their value orientations to their meaning travel and discovering profiles of young tourists that can be targeted both now and in the future by tourism organisations [35].

Further, new technologies have enabled the customisation of tourist experiences. Young travellers, both millennials and Post-millennials, consider contemporary tourism as a social and cultural experience that encourages socialisation and identity construction, thus according to a new meaning to their choices as tourists. Holidays are planned according to their taste and expectations, with a growing interest in new tourism practices and niche proposals [40].

The destinations will be critical for building resilience, agility and speed to combat future risks and accelerate the sustainability transition. In the immediacy of the pandemic, health and safety concerns have taken precedence, but the need for sustainable, resilient businesses is even greater during the rebuild.

In terms of choosing sustainable travel options, millennials exhibit the strongest interest while higher prices are likely to decrease interest for Generation Z [41,42]. Overall, consumers of all ages will increasingly seek out sustainable travel experiences. In any case, younger generations, such as millennials, will help bring about the radical change in behaviour and attitudes with regard to how and why people travel.

In synthesis, if the World Economic Forum [43] argues that business around the world could shift more rapidly to implementing green practices, the hospitality industry itself should innovate in this sector in order to survive. Therefore, academia could also help to better understand the implementation of the green economy principles’ [44]. To measure tourists’ perceptions regarding the degree to which they prefer accommodation in tourism according to sustainable characteristics is an important point where the hospitality industry can start.

4. Method

4.1. Research Goals

The purpose of this study is to address this gap in current research on sustainable accommodation by developing the Sustainable Tourist Stay Scale (STSS). It constitutes a self-report instrument designed to measure tourists' perceptions regarding the degree to which they prefer accommodation in tourism according to sustainable characteristics. The aim of this study is to test and refine the 12 items proposed for the test including the invariance test for the subgroups of young people and adults.

4.2. Participants

The sample ($n = 621$) was composed of 360 females (58.0%) and 258 males (41.5%) (Missing = 3; 0.5%) with a mean age of 33.05 (DS = 13.76; range 18–74).

The young people group ($n = 434$) was formed by 279 females (64.3%) and 152 males (35.0%) (Missing = 3; 0.7%) with a mean age of 25.40 (DS = 3.96). The adult sample ($n = 187$) consisted of 106 males (56.7%) and 81 females (43.3%) with a mean age of 50.80 (DS = 11.89).

4.3. Procedure and Materials

In order to assess the preference of sustainable hospitality in tourism, we have developed a short questionnaire as an adaptation of a survey conducted in 2012 from Ces. Co. Com. (Advanced Studies Center about Consumption and Communication) [45]. The instrument was utilised by the University of Macerata [10,30]. The scale is a 12-item—self-report instrument. Each item is rated on a 5-point Likert-type, ranging from 1: “Strong Disagreement” to 5: “Strong Agreement”. Examples of items are: “Program with a series of actions carried out to enhance local characteristics”, “Program with actions to reduce energy consumption and pollution”. The instrument assesses contact and respect for the environment, sustainable mobility, and choice of vacation less standardized. The title of the questionnaire is “Sustainable tourist stay scale” (Appendix A). Each participant anonymously completed the questionnaire and provided his/her informed consent. The sample is a convenience sample and the participants are taken from a group of people easy to contact or to reach: young and adult people. Young people were asked to participate in a study concerning social psychology issues, whose participation would have been voluntary, without any extra credit for the course. Adults were contacted on the Italian territory directly by the researchers. Completing the questionnaire took 15 min and all participants accepted.

This research was conducted by respecting the Apa Ethical Principles of Psychologists and Code of Conduct (<https://www.apa.org/ethics/code/ethics-code-2017.pdf>) and the rules of the Declaration of Helsinki of 1975 (<https://www.wma.net/what-we-do/medical-ethics/declaration-of-helsinki/>) revised in 2013. As per the point 23 of the declaration, this study was approved by the institutional ethic committee of the PhD meeting curriculum in the University of Macerata., University of Macerata (number cycle 31, 11-09-2017).

4.4. Statistical Analyses

Descriptive Statistics: For each subject, the missing values have been replaced with the mean [46]. In the sample, the normality of data distributions for each item was analysed by the skewness and kurtosis [47]. Following these descriptive statistics, seven univariate outliers were removed [48].

Exploratory and Confirmatory Factor Analysis: The sample was randomly split into two sub-samples [49]. To test the factor structure of the instrument, the Exploratory Factor Analysis (EFA) was performed in the first sub-sample. The approach to extracting factors was the Principal Axis Factoring; the criterion for determining the number of factors to extract was the scree plot [50] and the eigenvalue > 1.0 [51]. Confirmatory Factor Analysis (CFA) was performed to evaluate whether the factor models tested via EFA provide a good fit to the data in the second sub-sample [52]. The factorial structure of the instrument was examined within the framework of structural equation modelling (CFA). The CFA was

carried out through the Maximum Likelihood procedure [53]. The adequacy of confirmatory solutions was assessed using the following different Fit Indexes [54,55]: traditional chi-square (χ^2) goodness of fit test (a model fits the data well when χ^2 is not significant: $p \geq 0.05$), RMSEA (Root-Mean-Square Error of Approximation), CFI (Comparative Fit Index), GFI (Goodness of Fit Index), and AGFI (Adjusted Goodness of Fit Index). The satisfactory values were as follows: RMSEA ≤ 0.08 ; CFI ≤ 0.95 ; GFI ≤ 0.90 ; AGFI ≤ 0.85 . The acceptable values were as follows: CFI $<0.90-0.94>$; RMSEA = 0.08. The good values were the following: CFI ≥ 0.95 ; RMSEA = 0.06 [56–58]. The Modification Indexes were computed to analyse the parameter that could contribute to improving the goodness of fit [59].

Measurement Invariance: To verify the measurement invariance of the instrument with respect to digital natives and non-digital natives, a Multigroup Confirmatory Factor Analysis (MG-CFA) was performed, that began with a separate baseline model for each group. The configural invariance model (M1) was established when the same factorial pattern was specified for each group but with factor loadings and intercepts free across samples; in the metric invariance model (M2), factor loadings were constrained to be equal across groups; in the scalar invariance model (M3), factor loadings and intercepts were constrained to be equal across conditions [52,60–62].

Model fit was assessed using χ^2 statistical tests, the Root Mean Square Error of Approximation (RMSEA) and the Comparative Fit Index (CFI). The evaluation of invariance was estimated on the difference between CFIs (Δ CFI). A value of Δ CFI smaller than or equal to $|0.010|$ (in absolute values) indicates that the null hypothesis of invariance should not be rejected [63–67].

Internal Consistency: Internal consistency of the factors was estimated by the Cronbach's alpha. Cronbach's alpha values were as follows: >0.90 Excellent; $<0.80-0.90>$ Good; $<0.70-0.80>$ Acceptable; $<0.60-0.70>$ Questionable; <0.60 .

SPSS V.16.0 [68] was used to calculate Descriptive Statistics, EFA, and Alpha reliability coefficient. Also, AFC, Modification Indexes, and Invariance Measurement were computed through LISREL V.8.71 [69].

5. Results

5.1. Descriptive Statistics

Table 1 shows the descriptive statistics of the instrument in the total sample. The inspection of skewness and kurtosis indicated that the values respect the normality of data distributions.

Table 1. Mean, standard deviation, normality indices of the instrument items ($n = 621$).

Items	Mean	SD	Skewness	Kurtosis
Item 1	3.386	1.2909	−0.350	−0.935
Item 2	3.794	1.1223	−0.796	−0.121
Item 3	2.767	1.1958	0.116	−0.835
Item 4	2.619	1.1655	0.280	−0.734
Item 5	3.436	1.1350	−0.317	−0.752
Item 6	3.643	1.1274	−0.470	−0.552
Item 7	3.842	1.0523	−0.839	0.190
Item 8	3.561	1.1178	−0.436	−0.573
Item 9	3.958	1.0040	−0.942	0.532
Item 10	2.940	1.0842	−0.011	−0.519
Item 11	2.702	1.2123	0.244	−0.867
Item 12	2.789	1.1814	0.138	−0.728

5.2. Exploratory Factor Analysis

The sub-sample for EFA was composed of 310 subjects (males = 128; females = 180; and non-specified gender = 2). The age ranges from 18 to 74 years (mean age = 29.14; SD = 14.65). The statistical procedure of initial EFA indicated good values of items (Bartlett's Test: $\chi^2_{(66)} = 1380.373$; $p < 0.001$). Kaiser-Meyer-Olkin showed an adequate factor structure (KMO = 0.767). Scree Plot (Figure 1) and Eigenvalue > 1 procedures identified a three-factorial structure. The initial eigenvalues were as follows: 4056; 1952 and 1545.

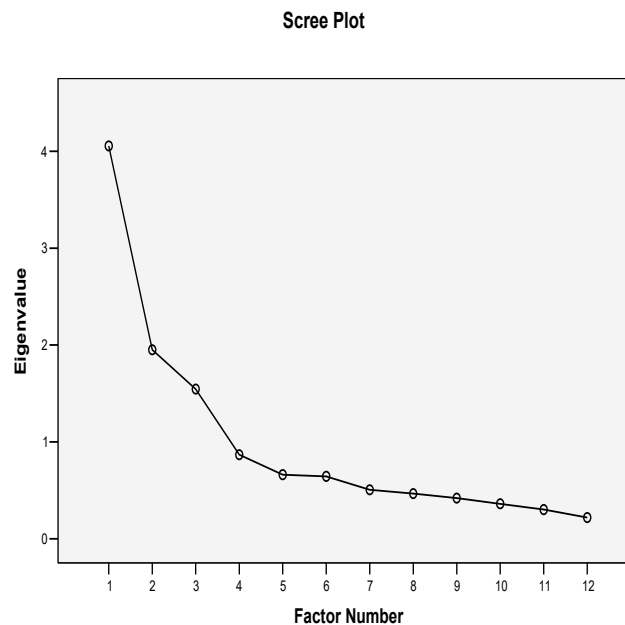


Figure 1. The scree plot identified a three-factorial structure.

In the three-factorial structure (Table 2), all items showed loadings higher than |0.30| for the latent factor, except item 4 (with loading values of 0.472 on the second factor and -0.435 on the third dimension). Factor 1 accounted for 29.675% of the total variance; factor 2 for 12.001% and factor 3 for 9.609% of the total variance. Therefore, this factor solution explained 51.28% of the total variance. The factorial solution with oblique rotation is shown in Figure 1.

Table 2. Factor loadings of items in three-factorial model ($n = 310$).

Item	Factor Loadings		
	1	2	3
7	0.835	-0.128	0.041
9	0.749	0.103	0.019
6	0.739	-0.058	-0.050
8	0.661	0.057	-0.011
5	0.327	0.288	-0.291
11	-0.022	0.704	-0.001
12	-0.048	0.691	-0.015
10	0.076	0.586	0.115
4	0.001	0.472	-0.435
3	0.025	0.214	-0.756
2	0.033	-0.103	-0.727
1	0.019	-0.108	-0.619

5.3. Confirmatory Factor Analysis

The sub-sample for CFA was composed by 311 subjects (males = 130; females = 180; gender not specified = 1). The age range was from 26 to 73 years (mean age = 36.95; SD = 11.584).

The aim of the CFA was to confirm the factor structure of the instrument that emerged in the EFA. In this model items 5-6-7-8-9 loaded on the first factor; the second factor included items 10-11-12 and items 1-2-3 loaded on the third factor.

Results are shown in Table 3. The three-factor oblique model, without item 4 with double factor loadings, showed an acceptable fit. Based on the content of the items the factors have been labelled as follows: the first as ‘Sustainable stay features’, the second as ‘Less-massified conditions’ and the third as ‘Destination facilities options’.

Table 3. Fit Indices for the structural model tested ($n = 311$).

Model	χ^2	df	RMSEA	90% RMSEA	CFI	GFI	AGFI
Three-factorial model	96.15 *	38	0.070	0.0529; 0.0879	0.948	0.947	0.907

* $p < 0.001$. df = degrees of freedom; RMSEA = Root-Mean-Square Error of Approximation; CFI = Comparative Fit Index; GFI = Goodness of Fit Index; AGFI = Adjusted Goodness of Fit Index.

5.4. Measurement Invariance

Measurement Invariance across age was tested through a multiple-group confirmatory factor analysis. The baseline model tested was the three-factorial model, without item 4. The instrument showed a metric invariance because the value of Δ CFI was smaller than $|0.010|$ cut-off (Table 4). Therefore, the loadings invariance of the “Sustainable tourist stay scale” was confirmed between young people (millennials) and adults

Table 4. Tests of measurement invariance across age.

Model	χ^2	df	Δ df	RMSEA	RMSEA90% CI	CFI	Δ CFI	Model Comparison
Baseline model millennials ($n = 434$) *	109.56 *; $p < 0.001$	38		0.066	0.0517; 0.0806	0.956		
Baseline model non-digital native ($n = 187$) **	136.44 *; $p < 0.001$	38		0.118	0.0970; 0.140	0.896		
M1	317.38 *; $p < 0.001$	87		0.092	0.0817; 0.104	0.899		
M2	349.51 *; $p < 0.001$	98		0.091	0.0808; 0.101	0.887	-0.002	2 vs. 1
M3	490.96 *; $p < 0.001$	117		0.102	0.0924; 0.111	0.840	-0.047	3 vs. 2

Note: M1 = Configural invariance; no constraints. M2 = Weak or metric invariance; with the factor loadings identical across the group. M3 = Strong or scalar invariance; with factor loadings and latent means identical across the group. * Error Covariance of TUR5 and TUR3; TUR8 and TUR6; TUR10 and TUR3. ** Error Covariance of TUR5 and TUR3; TUR11 and TUR7; TUR12 and TUR5.

5.5. Internal Consistency

Internal consistency of the subscales was good: $\alpha = 0.81$ for the first factor; $\alpha = 0.69$ for the second factor and $\alpha = 0.65$ for the third factor. According to the corrected item-total correlation, items appeared suitable as an indicator of their construct.

6. Discussion

The COVID-19 pandemic has changed the world forever and impacted heavily on all individuals, and on the tourism demand and hospitality industry [1].

In Italy, 88% of tourists, even before the COVID-19 pandemic, had replied that they expected having moments of contact with nature from a sustainable holiday. Furthermore, the following labels influenced the sustainable choice: environmental sustainability certification and energy-saving

certification [45]. These attitudes were reiterated and implemented during the pandemic which, in part, was attributed to indiscriminate use of the environment and favoured in its spread by pollution. A transition to a more environmentally sustainable future might also pose major economic and social challenges for tourism, particularly in the less developed communities, where people depended on the hospitality industry for their livelihoods, prior to the COVID-19 crisis. In this sense, Jones's study [70] is significant, which aimed at reviewing changes in the relationships between sustainability and the hospitality industry following the COVID-19 crisis.

Tourism cannot be easily automated and people are central to successful hospitality. Nevertheless, sustainable tourism's existing ideas as strategy planning, energy consumption cuts, local food production, and short-haul travel could become an opportunity.

According to Bernard Lane as affirmed in his blog [11]:

"New marketing, stressing quality not growth, should be used. [...] Better traveller care is needed on public transport systems [...]. Pilot projects should test slow tourism, rail-based low emission tourism, hands-on cultural and heritage tourism [...]. The sustainable tourism can help conservation and can use exciting new ideas, including re-wilding, live heritage interpretation, and biodiversity experiences. There should be competitions for new forms of sustainable tourism [...]. Tourism's financial base rests on accommodation: it is central to recovery. To calm visitor fears, a certified programme of deep cleaning is needed. It may be easier and quicker to get small scale locally owned accommodation back into use than large company-owned hotels [...]. Change is difficult. It needs risk-taking, persuasion and a passion to succeed".

For the above reasons, scholars, local governments, and businesses should now work in partnership to develop the market research, training and governance systems.

Unfortunately, the literature has, for years, already presented a gap in the measurement of sustainable hospitality. There are no validated scales that consider this construct by measuring the preferences of tourists, both the millennials (the clients of today and tomorrow) and the elderly (the clients that are currently attractive because of a consolidated economy).

This research tries to test the validity of an instrument that can fill this gap and can provide a valid help in understanding sustainable tourism demand, also considering that sustainable tourism will increasingly be a resource for the hospitality industry post-COVID-19.

In synthesis, the present study was the first step of the Sustainable Tourist Stay Scale (STSS) validation work in Italy, and the main aim of this paper was to explore and validate its psychometric characteristics. In particular, the objective was to ascertain if the STSS forms a valid and useful instrument for measuring sustainable accommodation preference in tourism in a sample of young and adult Italians.

Sustainable tourists can be defined as those who agree with a code of conduct, appreciate the fact that their activities have an impact on the environment and tailor their actions accordingly; furthermore, they are those who would like to make an economic contribution to the host community [29]. In accordance with the available literature [34,35] on the subject and previous works conducted in Italy [36,45], the STSS scale was constructed and validated with the intent to define a set of items in order to determine the preference of a tourist towards a sustainable stay in a destination.

The results of both EFA and CFA revealed a three-factor structure appearing consistent with the available literature and research already conducted in the field. The three factors were the following: 'sustainable stay features', 'less-massified conditions', and 'destination facilities options'.

In the first factor, the following core features of the destination relevant to sustainability have been included: the enhancement of the area and its characteristics and, the moments of contact with nature and programs with actions to reduce energy consumption and pollution. These features are considered, as a whole, as different aspects of the same concept of sustainability [1,28,29,71].

On the other hand, the second and the third factors include the conditions regarding the possible 'sacrifice' that can lead to a sustainable holiday and the optional features of destination facilities.

The 'less massified conditions' factor seems to be a related condition but is not involved in the core features of sustainability like the third factor that refers to another choice in order to stay in a facility with environmental certification and where one can move with a bike or public transportation.

From a general point of view, these results seem to privilege the first factor like a centre of gravity of the fundamental characteristics of sustainable stay, while the second and the third ones may be seen as a related variable that people may adopt or not.

These results are consistent with the literature [11,31,35]. The first factor collects the characteristics of sustainability established in the aforementioned definitions and the most recent ones [1,29,70]. Moreover, the inclusion of item 5 in the first factor has a specific value. In the literature, the implication of nature protection is a determining element in defining the number of people who have sustainable behaviours towards the environment [71].

The EFA and CFA showed that the protection of nature and the appreciation of an intact nature could be purposes belonging to a larger concept, connected with the community development and the local people meeting.

The second factor seems to define sustainable hospitality as a condition that is distinct from the possibility of adaptation. This data could indicate that sustainability is included in the characteristic of the destination like a combination of different features connected to each other and that the condition of adaptations is only a secondary issue. This second factor could represent a choice of the tourist but not a characteristic of the place of destination where one wishes to stay. The third factor refers to the specific target destination options that are the environmental certification and sustainable transportation to arrive and move around the destination. This third factor confirmed the importance of sustainable transportation into features of sustainability, although these items are expected in the first factor considering the relevance of transportation for the general topic of sustainability [1,11,14,15,21].

Concerning the invariance across the subgroups of young people (millennials) and adults of the Italian version of the STSS, results confirm that even if the configural and metrical three-factor structure is the same across the groups, there are differences in latent means between the groups. This seems to confirm that millennials and adults have some specific differences concerning sustainability that should be examined separately. Consequently, all these results lead to a necessary distinction between young people and adults regarding tourism accommodation and programs with sustainability characteristics, addressing the gap in the evaluation of sustainable stay in tourism and indicating two different markets. For example, as confirmed by Lane [11]: 'special emphasis should be given to the 60–80 years-old market. This market often has secure disposable incomes: it receives secure pensions and is unlikely to have unemployment issues. This target group is keen to have holiday experiences before it is no longer physically or mentally viable'. The characteristics of the millennials with the greatest potential to disrupt the tourism sector are their strong digital skills and altruistic and/or sustainable behaviours, while also searching for exciting experiences. Millennials will not respond positively to only a hedonic travel offer because they are pushed by self-transcending values and they withdraw themselves from escapism travel. On one hand, the search for places that are not connected to tourism and adoption of new, disruptive technologies can have harmful implications for tourist destinations and residents. On the other hand, tourism agents who fulfil the millennials' demands can reduce relation and interactions highly valued by millennials. According to the literature [39], this requires close monitoring.

7. Conclusions and Limitations

In this work, we tried to test the structure of a series of items to build a small scale, the Sustainable Tourist Stay Scale, in a sample of young people (millennials) and adults. Specificities have emerged in the literature in the youth group as opposed to the adult group. The CFA analyses provided a sufficiently good three-factor structure, and the structural invariance analyses confirmed the reliability of the scale with certain differences between the subgroups starting from a common structure. These differences should be further investigated, however, the scale structure was coherent both analytically and

theoretically for the following three factors: sustainable stay features, less-massified conditions, and destination facilities options. These factors suggest the idea of a sustainable permanence based on some more conceptual and perspective elements (first factor) and some operational choices related to the actualisation of that perspective (second and third factors). In other words, the environmental protection in the perspective of a sustainable tourist seems to be like a result of economic and practical choices carried out by tourists. This point of view seems to be in line with the first definition of sustainable tourist, like a soft ecotourist proposed by Lindberg [28], making the theoretical distinction between sustainable tourism and ecotourism still a bit nuanced.

The results indicated a distinction between millennials and adults regarding tourism accommodation with sustainability characteristics, showing two different markets for the sustainable stay in tourism. In any case, it seems clear that the future travel experience will be personalised, delivering seamless and safe services that are high value and consumer-centric and have a low impact [11,72].

The results indicate the need for further research that test these items on two different samples, namely the young people and the adults, in order to define the usefulness of the items for evaluations and practical applications. Even if the CFA has found a common structure between millennials and adults, there is a difference due to the absence of the scalar invariance on the three confirmed factors. It would also be useful to replicate the study on larger subsamples to verify the stability of the results. Finally, future research could consider the relations among the STSS and other scales with regard to the attitude towards environmental sustainability or eco-friendly behaviours to further assess the construct validity.

Author Contributions: For research articles with several authors, a short paragraph specifying their individual contributions must be provided. Conceptualization, A.F., A.C., A.S., L.P. and I.C.; methodology M.R.S. and A.C.; software, M.R.S.; formal analysis, M.R.S.; investigation, A.F. and A.C.; resources, A.F., A.C., A.S. and I.C.; data curation, M.R.S., A.C., and A.F.; writing—original draft preparation, A.F., A.C., M.R.S. and I.C.; writing—review and editing, I.C. and A.F.; visualization, M.R.S.; supervision, A.S. and A.F.; project administration, A.S., A.F. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

How much attention do you give when you go on vacation?

1. Location easily accessible by public transportation
2. Places to move easily on foot or by bike
3. Accommodation facilities with environmental certification
4. Family-run accommodation facilities
5. Places where nature is intact and protected
6. Program with actions to reduce energy consumption and pollution
7. Program with a series of actions carried out to enhance local characteristics
8. Authentic relationship with the local population
9. Moments of contact with nature
10. Having to adapt to greater inconveniences
11. Where there are few tourists
12. Opt for off-season period

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Article

Sustainable Tourism Attitude and Preference in Italian Adults: Value Orientation and Psychological Need Satisfaction

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Received: 13 November 2020; Accepted: 12 December 2020; Published: 15 December 2020



Abstract: Sustainability became a leading concept in tourism development practice and research. Several studies have shown the relationship between sustainability choices and value orientation. However, there is a lack of studies that explore how autonomous motivation, based on the satisfaction of the basic psychological needs, might predict sustainability attitudes and preference. The present study aims to explore the relationship between attitudes towards sustainable tourism, preference for a sustainable stay, values orientation, and psychological need satisfaction in Italian adults, testing the hypothesis that also basic needs satisfaction and tourist preferences should contribute to increasing a positive attitude toward sustainable tourism. Participants are 142 Italian adults ($M = 42,11$ years, 80% women). This research used the online survey method collection and snowball strategy recruitment. The results showed that participants have a high level of attitude and preference towards sustainable tourism. Correlation indicated that there is a positive association between positive attitudes towards sustainable tourism, self-transcendence, and basic psychological need satisfaction. Furthermore, regression revealed that psychological basic need satisfaction, preference for a sustainable stay and value orientation explain people's attitudes towards sustainable tourism. These findings imply more attention may be needed to psychological needs to understand how people might deal with environmental sustainability.

Keywords: sustainable tourism attitude; tourist's preferences; value orientation; psychological need satisfaction

1. Introduction

In the last decades, sustainability has been prominent in international discourse, goals and development policy as a development strategy bring an enhanced quality of life for all people while preserving the destination's natural and cultural heritage [1]. Sustainability is closely linked to the theme of global environmental changes; local events are connected to people's behaviors and causes at a global level [2]. In this regard, the tourism experience is part of those human activities that can affect environmental changes and have a considerable impact [3]. Furthermore, sustainable tourism has grown in popularity because the increased awareness that consumers' decisions about where to spend their vacation have a large environmental and economic impact. Initiatives that intend to promote responsible tourism are growing in collaboration with and respecting the local population [4]. On the other hand, the efforts to decrease the negative impacts of tourism are essential, and an important transition towards more sustainable tourism might be to study more about the determinants of tourists' choices.

The past 30 years of research on sustainable tourism have seen an exponential increase [5] and it has been defined in many ways [6]. One of the most cited definitions is provided by the World Tourism

Organization, which defines sustainable tourism as “tourism that takes full account of its current and future economic, social, and environmental impacts, addressing the needs of visitors, the industry, and the environment and host communities” (UNEP and UNWTO, 2005, pp. 11–12), however, it has been criticized as vague and biased [7].

Although it is a controversial topic in the literature, sustainability in tourism is generally considered a goal to find a balance between the economic, environmental, and social demands of all stakeholders in considering the influences of tourism [8]. Sustainable tourism activities focus on environmental, economic, social, and cultural development. Maintaining a holistic balance between these four dimensions is crucial to ensuring the short- and long-term development of sustainability for the tourism sector. In addition, the sustainability of tourism has a value of immediate economic interest. In fact, it characterizes the future of the sector and is reflected in a variety of key elements in different dimensions. We can consider, for example, practices such as ecotourism and nature-based tourism in the context of sustainable environmental development; cultural tourism and rural tourism in the context of sustainable culture development; community tourism and accessible tourism in the context of sustainable society development, and behavioral economics and circular economics in the context of sustainable economic development [9].

In other words, sustainability refers to tourism activities developed in such a way as to remain viable in a tourist area for an unlimited time, without altering the natural, social, and artistic environment and without hindering the development of local social and economic activities. It is, therefore, an ecological, socio-cultural, and economic compatibility with respect to the territorial community. In Italy, the relationship between population and sustainable tourism, defined as tourism that respects the environment and seeks to reduce the energy and resource consumption of the territory, has been monitored for ten years at the national level. The data of the X report „Italians, sustainable tourism, and ecotourism” presented in September 2020, underline that the percentage of people that consider that today there is an emergency in Italy for the damage that tourism can bring to the environment is in decline compared to the data from 2019, while the percentage of those who believe that tourism is always a resource and not a problem is stable.

Arrobas and colleagues (2020) [10] underline the importance of exploring people’s attitudes because only by changing them, adequate behavior and action will be guaranteed in the future. They refer to a conceptual framework to understand how pro-environmental behavior has exhibited [11], indicating the positive beliefs as at the core, then a disposition for a behavior intention arises, based on attitudes, models, and capabilities. This need for an attitude change in sustainability has been the subject of constant debate for several years, given the significant decline of natural resources. Passafaro (2019) [12] identifies some key characteristics of attitudes that refer to the environment and organizes them based on their distance from behavior and their level of abstraction (from the worldview related to environment protection to the cycle tourism), in line with classical theories by Ajzen and Fishbein (1977) [13] on attitudes. General environmental attitudes seem to be more influenced by values and beliefs [14]. Furthermore, the type of motivation an individual owns might influence the selection of actions, attitudes toward these actions, the effort and persistence one devotes to them, and also the emotions experienced [15]. Tourists’ attitudes represent key determinants of tourists’ choices and activities that are cases of ecological behavior [16].

1.1. Sustainable Tourism and Value Orientation

In tourism research, several studies have examined the relationship between tourist behavior and values [17–21]. In the field of psychosocial sciences, Schwartz’s contribution represents a widely accepted theorization about value orientation. According to this model, values are conceptualized as important standards serving as guiding principles in people’s lives. Schwartz’s value theory [22] includes 10 distinct values that vary along two dimensions, openness to change versus conservation and self-transcendence versus self-enhancement.

The first dimension (openness to change vs. conservation) describes the antithesis between values that emphasize independence and the readiness for change (hedonism, self-direction, stimulation) and values that emphasize order and the resistance to change (security, conformity, tradition).

The second dimension (self-transcendence vs. self-enhancement) describes the antithesis between values that emphasize concern for the welfare and for the others (universalism, benevolence) and values that emphasize the pursuit of personal interests and relative success and dominance over others (power, achievement). Universalism expresses altruism towards humanity and comprises aspects like equality, social justice, and peace on earth, whereas benevolence expresses altruism towards in-groups and comprises principles such as cooperation, indulgence, care, and responsibility [21]. According to this structure, values are interdependent.

In the area of sustainable tourism, Fairweather and colleagues (2005) [23] examined the relationship between the anthropocentric and biocentric value orientations of tourists to a destination and their responses to eco-labels. Recent research underlines that people who tend to prefer more sustainable tourism features show higher levels of pro-social and biocentric values. This group believes, more often than others, that people should reflect on the possible social and environmental impact of their tourism choices when planning their holiday [3].

Recently Osikomunu and Bocken (2020) [24] chose the Schwartz Model of Universal Human Values Model to analyze the voluntary simplicity lifestyle by analyzing values and practices. The study analyses how people that adopt a voluntary lifestyle of simplicity change their consumption habits towards more sustainable vacation models like individual trips backpacking or camping, community gardens, or visiting friends [24].

In this regard, other authors [2] combine psycho-cultural perspectives with cultural ecosystem services and use the Environmental Schwartz Value Survey [25] to explain individuals' environmental thoughts and behaviors. It delineates four value groups: biospheric (e.g., concern for the environment), altruistic (e.g., concern for others), egoistic (e.g., concern for personal resources), and hedonic (e.g., concern for pleasure and comfort).

1.2. Psychological Needs and Preference for a Sustainable Stay

People have basic psychological needs to feel competent, autonomous, and a sense of belonging or relatedness to others [26]. This assumption represents a central aspect of the self-determination theory [27] that underlines that individuals might be more or less proactive, according to the social conditions in which they live. The vitality of basic psychological needs allows people to act more autonomously and to persist more at important actions [28] like sustainable choices in tourism experience. Basic psychological need satisfaction refers to people's need for competence, autonomy, and relatedness in their life activities. Competence satisfaction involves feeling effective in the social environment and being able to express one's abilities and achieving positive outcomes. Autonomy satisfaction denotes the feeling of being the perceived source of one's behavior and the experience of being full self-determined when engaging in one's activities. Finally, relatedness satisfaction refers to the experience of closeness and connection with others [29,30]. Self-determination theory differentiates two main types of motivation. Autonomous motivation includes both intrinsic and extrinsic motivation, which people have identified with an activity's value that they would ideally assimilate into their sense of self. Controlled motivation, in contrast, consists of both external and introjected regulation of some elements, such as avoidance of shame, contingent self-esteem, and ego-involvement.

The autonomous motivation, in the interpretation of Deci and Ryan (1985) [31], represents the highest level of development, the maturity that permits one to independently adjust one's action in agreement with the surrounding environment and to reach good satisfaction in the interpersonal relationships, as well as a sense of self-realization. Literature underlines that being autonomous supports internalization of values, awareness of intrapersonal dynamics and their relation to behavior, and satisfaction of the basic psychological needs in line with the psychosocial approach [32,33].

In the literature about Sustainable Tourism, some authors explore preferences for a sustainable stay that could represent specific pro-environment behavior and includes contact and respect for nature, sustainable mobility, and choice of vacation less standardized in their experience [34]. In today's highly competitive and dynamic context, the knowledge of tourist preferences that might correspond to "attractive" qualities of the place is central to the hospitality industry [35]. Tourist preferences may be influenced by socio-demographic, travel characteristics, and destinations [36–38].

Previous research projects, in the context of tourism and hospitality, have highlighted the relationship between sustainable tourism and value orientation and self-determination theory was used to understand workers' attitudes [39], the association between subjective well-being and spiritual tourism [40] and customer satisfaction with the tourism experience and its impact on their lives [41].

However, there are no studies that explore how autonomous motivation, based on the satisfaction of the psychological needs of autonomy, competence, and relatedness, could predict tourists' sustainability attitudes and preferences.

The present work will examine the relationship between sustainable tourism attitudes, preferences for a sustainable stay, value orientation, and psychological basic need satisfaction in Italian adults. In line with previous research [42], our proposed model expects that value orientation toward concern for the welfare and for others (self-transcendence) should predict a more sustainable tourism attitude. Therefore, the main objective of the study was to test the hypothesis that also basic needs satisfaction and tourist preferences should contribute to increasing a positive attitude toward sustainable tourism, overcoming the gap in the literature.

2. Materials and Methods

2.1. Participants and Procedure

For this study, we recruited a convenience community sample of 142 people with an average age of 42.10 years (range = 20–74), 80% of the participants were women, and this reflects the common female majority in response degrees. Fifty percent of participants have a university degree, 27% a college degree, 19% a postgraduate degree, and only 4% high school.

Most of the respondents (81.7%) were employed, followed by a small group of students (9.2%). Unemployed and retired people represented 9.1% of the total respondents.

This research used the online survey method for data collection and participants were recruited using a snowball strategy. The online self-report questionnaire comprised several constructs with various items and was designed by using the application 'survio.com' and diffused through social networks. Completing the questionnaire took a mean of 20 min.

The objectives and the voluntary nature of the study were written explained, and informed consent was obtained by having them fill out a form on the above platform. The data collection procedure was in accord with the Research Ethical Code of the Italian Association of Psychology and the ethical recommendations of the Declaration of Helsinki, as well as the American Psychological Association (APA) standards for the treatment of human volunteers.

2.2. Instruments

Socio-demographic information. Respondents were asked to provide some socio-demographic data (age, gender, educational level, last destination travel).

Questions about Sustainable Tourism definition and experience. Respondents were asked to indicate the most important element to consider a tourist destination sustainable and to provide some examples of a sustainable tourist destination.

General Attitudes Towards Sustainable Tourism (ATST) [42]. This scale was composed of seven items that assess the inclination to promote the sustainability principles about tourism issues. The scale measures individual beliefs concerning two core topics of tourism sustainability: First, the importance of accepting both social and environmental responsibilities during holidays (e.g., vacationers should

not be concerned with respecting the local environment, this task should be left to the local authorities), second, the interest in making contact with the hosts' culture (e.g., during the holiday, it is important to dedicate time to the understanding of the present and past history, culture, and traditions of the place visited). Seven-point Likert scales were used, ranging from 1 (completely disagree) to 7 (completely agree). The scale includes two factors: Positive and negative attitudes, but in the present work, we choose to use only the positive ones. Cronbach's alpha coefficient computed on the present sample was acceptable: 0.67 for Positive attitude.

Preferences for a Sustainable stay [34,43]. Based on surveys and reports of two major national Italian institutes of research: ISTAT and IPR Marketing, authors developed 12 items about the preference of people towards a sustainable stay in a destination (e.g., the location is easily accessible by public transportation). These items measure perceptions regarding people's preferences on a five-point Likert scale, ranging from 1 (Strong Disagreement) to 5 (Strong Agreement). Cronbach's alpha coefficient for these items computed on the present sample was 0.82.

The Portrait Values Questionnaire (PVQ) [44]. The scale was composed of 40 items and allowed scoring of ten value scales, each consisting of three to six items. Participants read a description of an individual and then they were asked to respond on a six-point Likert scale the degree to which the description was similar to them (e.g., Thinking up new ideas and being creative is important to this person. They like to do things in their original way, with responses ranging from 1 (Not like me at all) to 6 (Very much like me). The scores were calculated by averaging the items for each of the ten value types: the higher the score assigned, the higher the importance given to the corresponding value. Cronbach's alpha coefficients computed on the present sample were all acceptable, ranging from 0.70 for conservation to 0.84 for self-enhancement.

Basic Psychological Need Satisfaction and Frustration Scales (BPNSFS) [45]. The scale has 12 items related to need satisfaction: Four items for each basic psychological need (autonomy, e.g., I feel free to decide what to do; relatedness, e.g. I feel I'm perfectly integrated into a group; and competence, e.g., I feel I can accomplish even the most difficult tasks), and 12 items related to need frustration: Four items for each of the basic psychological needs. Responses range on a Likert scale from 1 (Strong Disagreement) to 5 (Strong Agreement). In the present work, we choose to use only the first factor (need satisfaction), Cronbach's alpha coefficient computed on the present sample is acceptable: 0.85.

2.3. Data Analysis

For the statistical data analysis, the statistics program IBM SPSS 20 was used. All significance tests are two-sided with a Type I error rate of 5%. Descriptive statistics were used to characterize the sample and the study variables. We used bivariate correlation analyses based on Pearson's r and linear regression analyses to test our hypothesis. Tolerance values (cut-off points greater than 0.1) were used as measures to detect multicollinearity between independent variables.

3. Results

Participants were asked to indicate what they consider the most important factor in order to consider a tourist destination "sustainable". Most participants indicated a low environmental impact (43%) that included both pollution reduction, low plastic use, but also structures that did not disfigure the landscape from an architectural point of view. Fourteen percent referred to energy-saving and therefore to a limitation of waste (e.g., food, water). Ten percent of participants stressed the importance of using local resources, in particular, local staff within the tourist facility, but also food products at km 0. The fact that the structure is immersed in nature is an element to define its sustainability for 9.1% of respondents. Recycling activity is a sustainability indicator for 7.4% of participants. The importance of the use of energy from renewable sources (6.6%) and respect for local traditions and culture (4.1%) is highlighted. Finally, the participants indicate the fact that the destination is not mass (overtourism)

(2.5%), that it is accessible to the disabled (0.8%), that there is a relationship of trust between client and manager (0.8%), and that the value for money is good (0.8%).

When the participants had to indicate a destination that, according to the criteria defined by them, could be considered sustainable, 33.1% said they did not have an answer, 18.3% indicated camping, 16.2% bed and breakfast, 14.1% agritourism. They follow with lower percentages: Mountain refuge (4.9%), residence (3.5%), rented flat (2.8%), albergo diffuso (2.1%), the second house (1.4%), guesthouse (1.4%), hostel (0.7%), treehouse (0.7%), and camper (0.7%).

This high percentage of participants who have not been able to indicate a destination could indicate the existence of a gap between the representation of "sustainable tourism" and the concrete operational translation of this concept into tourist facilities where to go on holidays.

Means and standard deviations and correlation among the study's variables are presented in Table 1.

Table 1. Means, standard deviations, and correlation among variables.

	1	2	3	4	5	6	7	M	SD	Range of Score
1. Positive Attitudes Towards Sustainable Tourism	1							5.62	1.12	1–7
2. Preferences for a sustainable stay	0.330 **	1						3.57	0.61	1–5
3. Openness to change	0.018	0.150	1					4.03	0.70	1–6
4. Conservation	0.129	0.246 **	−0.045	1				4.05	0.58	1–6
5. Self-Enhancement	−0.114	−0.081	0.468 **	0.045	1			3.13	0.88	1–6
6. Self-Transcendence	0.394 **	0.247 **	0.228 **	0.416 **	−0.043	1		4.92	0.56	1–6
7. Basic Psychological Need Satisfaction	0.333 **	0.276 **	0.254 **	0.210 *	0.050	0.393 **	1	4.16	0.48	1–5

* $p < 0.05$; ** $p < 0.005$.

The positive attitude towards sustainable tourism in our participants appears high ($m = 5.62$). These scores indicate the sensitivity of the study participants towards sustainable tourism. However, this positive attitude does not seem to be matched by the choice of sustainable tourist destinations. When asked where they had spent their last holiday, 29.6% of participants indicated a hotel, which they themselves do not mention among the choices they consider "sustainable".

Next, 25.4% went on holiday in an apartment for rent, in a bed and breakfast (12%), in the second house (8.5%), in camping (7%), at friends' home (3.5%), in residence (2.8%), in agritourism (2.8%), in tourist village (2.8%), in hotel (1.4%), guesthouse (1.4%), hostel (0.7%), religious hospitality (0.7%), camper (0.7%), and cruise (0.7%). If we consider the value orientation and the two dimensions described above (self-transcendence vs. self-enhancement, and openness to change vs. conservation), we can notice how self-transcendence, that includes benevolence and universalism, refers to people that transcend selfish concerns to promote the welfare of others, presents the higher score in our participants means ($m = 4.92$), followed by conservation ($m = 4.05$) that includes tradition, conformity, and security, and that is characterized by self-limitation, preserving traditional practices, and safeguarding stability.

Basic psychological need satisfaction mean ($m = 4.16$) is higher than the theoretical mean.

As expected, results indicated a significant correlation between the positive attitudes toward sustainable tourism and self-transcendence, $r = 0.39$, $p < 0.000$, as well as basic psychological need satisfaction, $r = 0.33$, $p < 0.000$, and preferences for a sustainable stay, $r = 0.33$, $p < 0.000$.

Descriptive statistics about participants' Preferences are summarized in Table 2.

In general, the mean scores show that the aspects that impact the most the preference to choose sustainable hospitality are whether accommodation minimizes inconveniences ($m = 4.44$), whether accommodations are in places where nature is intact and protected ($m = 4.10$), and whether it consents one to visit the place even during low season ($m = 4.01$).

Family-run accommodation facilities obtain a lower score ($m = 2.51$) from our participants.

A hierarchical regression model was used to assess the associations between the study's variables (Table 3).

Table 2. Means and standard deviations regarding preferences for a sustainable stay.

Sustainable Characteristics of Tourism Facilities	M	SD
Location easily accessible by public transportation	2.75	1.44
Places to move easily on foot or by bike	3.68	1.24
Accommodation facilities with environmental certification	3.04	1.09
Family-run accommodation facilities	2.51	1.26
Places where nature is intact and protected	4.10	1.07
Program with actions to reduce energy consumption and pollution	3.52	1.11
Program with a series of actions carried out to enhance local characteristics	3.96	1.09
Authentic relationship with the local population	3.82	1.21
Moments of contact with nature	3.84	1.17
Accommodation minimizes inconveniences	4.44	0.85
Where there are few tourists	3.18	1.16
Opt for off-season period	4.01	1.00

Table 3. Regression model.

	B	SE	Beta	95% CI for B
(Constant)	−0.12	0.91		−1.922, 1.674
Self-Transcendence	0.55	0.16	0.28 ***	0.228, 0.876
Preferences for a sustainable stay	0.39	0.14	0.22 **	0.111, 0.678
Basic Psychological Need Satisfaction	0.39	0.19	0.17 *	0.006, 0.773
Adjusted R ² 0.24				

Dependent variable: Positive attitude toward sustainable tourism. * $p < 0.05$; ** $p < 0.005$; *** $p < 0.001$.

The model predicted 24% (Adjusted R², $F = 14.11$, $p < 0.000$) of the variance in positive attitudes toward sustainable tourism, and tolerance levels were high (>0.81), indicating no multicollinearity among predictor variables. Having higher self-transcendence value orientation ($\beta = 0.28$, $p < 0.001$), higher preferences for a sustainable stay ($\beta = 0.22$, $p < 0.01$), and higher basic psychological need satisfaction ($\beta = 0.17$, $p < 0.05$) were significantly associated with positive attitudes toward sustainable tourism.

4. Discussion

The purpose of this study was to extend current knowledge on how sustainable tourism attitude and preference are associated with value orientation and psychological needs. In contrast to previous studies, we examined the relationship between tourist attitude and values, including psychological needs, because the vitality of psychological needs permits people to persist more at important actions like sustainable choices in tourism experience.

According to the literature [42], understanding tourist preferences, values, and attitudes might be useful in predicting their environmental behavior once in place and in responding to their educational needs regarding sustainability.

Our participants reported high positive attitudes toward sustainable tourism, indicating their perception of the importance of accepting both social and environmental responsibilities while on holiday and expressing interest in getting in touch with the hosts' culture and with nature.

Some dimensions were more relevant to our participants in the choice of accommodation. In particular, less-massified conditions like the possibility to visit the place even during low season and the attempt to minimize any inconvenience to its patrons.

Preferences for a sustainable stay also referred to places where nature is intact and protected, moments of contact with nature, and actions that reduce energy consumption and pollution like moving by bike or public transportation, indicating the centrality of environmental concern as a core aspect of sustainability [46]. Data underline that participants consider environmental, economic, social, and cultural development in their idea of sustainability in tourism experience [9], however, low environmental impact is the key element in their representation.

Preferences for more sustainable activities in our study correlated positively with a self-transcendence value orientation, consistently with the literature that highlights the relationship between altruistic and pro-ecological values to tourist preference oriented to sustainability [3]. This aspect suggests the need for increased efforts to encourage the implementation of awareness programs for tourism choices. Many of the participants failed to provide an example of a destination they considered sustainable on the basis of the indicators that they had highlighted. This suggests the importance of increased information and the dissemination at the community level of a “culture of sustainability” [47] also in the tourism sector. Furthermore, tourist preferences were associated with basic psychological need satisfaction, so in line with the previous studies that had proven the importance of individual functioning in affecting tourist experience and choices [38,48,49], we think that self-determination represents an important element to add to this area of study.

From our results, it emerged that among the values, self-transcendence obtained the highest scores. This indicates attention to others and the environment and the idea of being only a small part of a larger world and acting accordingly. Although Italian culture may be portrayed as adhering to an Occidental value model, with a majority of individualistic values, it has some collectivistic elements [50], such as self-transcendence.

The results of this study reaffirm and give empirical support to previous studies that underlined participants with a self-transcendent value orientation reported a stronger environmental concern [46] that might be considered an important element in sustainable tourism. Furthermore, this appears in line with the literature that underlines that value orientation could be related to a change in consumption towards more sustainable vacation models [24].

Moreover, this study examined the role of basic need satisfaction, as defined within self-determination theory [28], in the relationships between value orientation and sustainable tourism attitudes. Our results confirmed the importance of basic psychological needs satisfaction in defining our attitudes and expectations towards sustainability in tourism choices.

Sustainable tourism is characterized by a series of choices concerning the selection of accommodations, destinations, and types of travel [51]. Having higher self-determination, and therefore, an autonomous, rather than heterodirect, motivation in making these choices may influence effort and persistence one devotes to those actions [26]. Similarly, the literature underlines that the type of individual’s motivation influences the attitudes toward behavior and choices [28]. If basic psychological need satisfaction causally promotes the positive attitudes toward sustainable tourism, it would be beneficial for people to get trained in self-determination.

The present study is one of the first that explores the role of psychological needs satisfaction to explain a positive attitude toward sustainable tourism in Italy. This approach provided a more inclusive description of the relationship between individual variables and attitudes toward sustainable tourism. Additionally, we also considered value orientation and preferences for a sustainable stay, according to the literature that underlines that variation in people’s attitudes may be explained from a value orientation perspective [52].

It is essential to assess our results in light of study limitations. In the present research, the data were gathered from a convenience sample (non-probability sampling), therefore, most of the data were derived from women, consequently, findings raised the topic of self-selection bias and generalization. Furthermore, due to the limited amount of work in this area, future studies should continue investigating psychological need satisfaction in tourism research. Although our sample size was sufficient for this exploratory study, a larger and more diverse sample would be more informative and could also ensure the inclusion of a more representative range of people. Studies may incorporate other viewpoints to provide a deeper understanding of the factors affecting attitudes and preferences in men and younger people. Future research would benefit from examining ethnic and social-economic differences in the relationship between psychological need satisfaction, value orientation, and tourism choices. The use of self-reported data might not provide an in-depth understanding of the role of different need. Future research may apply a mixed-method [53] to deepen the impact of autonomy, competence,

or relatedness on tourism attitudes. Furthermore, this work did not examine possible moderating and control variables (e.g., age, gender, and income) in the relationship between need satisfaction, value orientation, and positive attitudes.

Beyond these limitations, however, our findings highlight the association between attitudes towards sustainable tourism, preference for a sustainable stay, value orientation, and psychological need satisfaction. Furthermore, these findings might imply more attention may be needed to psychological needs in understanding how people might deal with environmental sustainability.

In conclusion, the current study added to the research, pointing at psychological basic need satisfaction, inside the self-determination theory, as a promising underlying mechanism in explaining people's attitudes towards sustainable tourism, to understand how people could deal with environmental sustainability.

Author Contributions: P.C. and L.M. contributed to project conception, design, and recruitment of data. P.C. and L.M. contributed to analysis and interpretation of data and P.C. drafted the manuscript. N.V. critically revised the manuscript and gave final approval. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Acknowledgments: We would like to express our appreciation to people who participated in this study.

Conflicts of Interest: The authors declare no conflict of interest.

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