Analysis Report

This report is structured as follows.

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Sample Characterization

In this survey, respondents provided insights into their travel expenses, attitudes towards sustainability, and familiarity with circular economy models in tourism. Most participants (32.9%) reported spending over 2000 €/$ on vacation, while a smaller proportion (23.2%) spent between 501 and 1000 €/$. This indicates a tendency towards higher spending on travel among the respondents.

		Count	Column N %
What is the average cost of your vacation?	0	1	1.2%
	50 - 200 â,¬/$	1	1.2%
	201 - 500 â,¬/$	13	15.9%
	501 - 1000 â,¬/$	19	23.2%
	1001 - 2000 â,¬/$	21	25.6%
	Over 2000 â,¬/$	27	32.9%
How do you rate your own travel behavior regarding sustainability?	0	1	1.2%
	I travel very sustainable	3	3.7%
	I travel rather sustainable	22	26.8%
	I don't know	31	37.8%
	I travel rather unsustainable	14	17.1%
	I don't care about sustainability during my trip	11	13.4%
Which of these statements, from your perspective, comes closest to the sustainable commitment of hotels, restaurants, and service providers?	0	3	3.7%
	They are very commited already	4	4.9%
	They do what is necessary	20	24.4%
	They are not commited enough	30	36.6%
	They use sustainability for Greenwashing	8	9.8%
	They are not commited at all	2	2.4%
	I don't know	15	18.3%
Have you encountered any circular economy models in tourism?	0	2	2.4%
	Yes I have:	8	9.8%
	No, not yet	40	48.8%
	I don't know	32	39.0%
How satisfied were you with this experience, and would you recommend it?	0	62	75.6%
	I was very satisfied and can recommend it	8	9.8%
	I was rather satisfied	7	8.5%
	I was rather not satisfied	2	2.4%
	I was not satisfied at all, and cannot reccomend it	3	3.7%
Are you familiar with food-sharing apps?	0	2	2.4%
	Yes	34	41.5%
	No	46	56.1%
Would you use food-sharing apps on your trip?	0	2	2.4%
	Yes	23	28.0%
	No	20	24.4%

		Count	Column N %
	Maybe	37	45.1%
Regarding food and restaurants, what do you think of seasonal offerings?	0	2	2.4%
	I really like it and there should be more seasonal offerings	49	59.8%
	There should be more seasonal offerings	28	34.1%
	I rather don't like it	0	0.0%
	I don't like it	1	1.2%
	I don't know	2	2.4%
Imagine you're going on vacation and have forgotten something. Would you borrow/rent the item or rather buy it?	0	2	2.4%
	I would definetely borrow/rent it	21	25.6%
	I would rather borrow/rent it	21	25.6%
	I would rather buy it	25	30.5%
	I would definetely buy it	3	3.7%
	I don't know	10	12.2%
What do you think of the concept of renting and sharing things rather than buying and owning them?	0	2	2.4%
	I don't like it	5	6.1%
	I rather don't like it	8	9.8%
	I rather like it	40	48.8%
	I really like it	19	23.2%
	I don't know	8	9.8%
Would you use refillable bottles if your accommodation offers water stations?	0	2	2.4%
	Yes	69	84.1%
	No	4	4.9%
	Maybe	7	8.5%
What factors prevent you from supporting more circular economy-based offers and providers?	0	4	4.9%
	Following:	14	17.1%
	None	27	32.9%
	I don't know	37	45.1%
What factors would motivate you to support more circular economy-based offers and providers?	0	3	3.7%
	Following:	24	29.3%
	None	2	2.4%
	I don't know	53	64.6%
Gender	0	2	2.4%
	male	42	51.2%
	female	37	45.1%
	diverse	1	1.2%
	no specification	0	0.0%
Age	0	2	2.4%
	18 - 25 years	6	7.3%
	26 - 35 years	13	15.9%
	36 - 45 years	4	4.9%
	46 - 60 years	21	25.6%
	Over 60 years	36	43.9%
Income	0	3	3.7%
	Under 1.000 â,¬/$	6	7.3%
	1.001 - 2.000 â,¬/$	14	17.1%
	2.001 - 5.000 â,¬/$	33	40.2%
	5.001 - 10.000 â,¬/$	12	14.6%
	Over 10.000 â,¬/$	14	17.1%

		Count	Column N %
Education	0	1	1.2%
	Secondary school	1	1.2%
	2	6	7.3%
	A-Levels	5	6.1%
	Bachelor	18	22.0%
	Master/ Diploma	45	54.9%
	Doctor	5	6.1%
	No qualification	1	1.2%

Regarding sustainable travel behavior, the largest group (37.8%) was uncertain about their sustainability level, while 26.8% considered their travel rather sustainable. This reflects a significant level of awareness and interest in sustainable travel, although a substantial portion remains uncertain about their own practices.

When asked about the commitment of hotels, restaurants, and service providers to sustainability, the majority (36.6%) felt these entities are not committed enough, and 24.4% believe they do what is necessary. This suggests a critical view of the current efforts in the tourism industry to embrace sustainability.

In terms of encountering circular economy models in tourism, a significant portion of respondents (48.8%) have not yet encountered them, and 39.0% were unsure, indicating a lack of widespread exposure or awareness of these models in the tourism sector.

As for food-sharing apps, a majority (56.1%) were not familiar with them, yet 28.0% would consider using them during a trip, showing an openness to exploring sustainable options. The strong preference (59.8%) for seasonal offerings in food and restaurants signifies a positive attitude towards more environmentally conscious choices in dining.

When it comes to borrowing or renting items versus buying new ones, responses were evenly split between preferring to borrow/rent (25.6%) and buy (30.5%), indicating varied attitudes towards consumption practices while traveling.

Most respondents (84.1%) would use refillable bottles if their accommodation offered water stations, showcasing a high willingness to engage in simple sustainable practices.

Regarding factors preventing more support for circular economy-based offers, 45.1% were unsure, and 32.9% stated no obstacles, indicating either a lack of perceived barriers or a lack of awareness of these opportunities.

Demographically, the survey had a fairly balanced gender distribution, with a slight male majority (51.2%). The age range was diverse, but the largest group (43.9%) was over 60 years old, followed

by 25.6% in the 46 - 60 years bracket. This suggests that older age groups are more engaged in this survey.

Income levels varied, with the largest group (40.2%) earning between 2,001 and 5,000 €/$, followed by 17.

1% each earning under 1,000 €/$ or over 10,000 €/$. Education levels were high, with 54.9% holding a Master's or Diploma degree.

The table presents the mean scores, standard deviations, and standard errors of the mean for various measures related to sustainable travel behavior and attitudes towards sustainability in tourism. These measures are set to be analyzed through factor analysis.

	Mean	Standard Deviation	Standard Error of Mean
Have you changed your travel behavior due to climate change?	3.512	1.381	.153
Is preserving the local economy, society, and nature during your trip important to you?	5.049	1.154	.127
Do you support hotels, restaurants, and service providers in implementing sustainable measures?	4.695	1.224	.135
Would second-hand furniture in your hotel room diminish your travel experience?	2.841	1.732	.191
Are you aware of the measures accomodations, restaurants and service-providers undertake for more sustainability?	3.305	1.608	.178
Do you wish for more transparency from accomodations, restaurants and service providers regarding sustainable measures?	4.817	1.218	.135
Are you aware of your ecological footprint when traveling?	3.171	1.632	.180
Would you like to know your ecological footprint when traveling?	4.220	1.678	.185
Are you aware of the impacts of food waste?	4.573	1.633	.180
Are you familiar with the circular economy and its various models?	3.549	1.686	.186
Are you interested in participating in activities and services related to circular economy (Recycling and reusing materials) during your trip?	4.500	1.416	.156
Would you like the option to have your leftovers packed and taken with you from restaurants?	5.000	1.370	.151
Would you have a problem if your leftovers were used later for other purposes?	3.780	2.183	.241
What do you think of the concept in hotels of only receiving fresh towels if they are left on the floor?	3.325	.952	.106
What do you think of circular economy models in tourism?	3.125	.788	.105
What do you think of this concept? Refill dish	1.768	.920	.102

Principal Component Analysis

The project proceeded to find latent factors behind the survey items. For this, Principal Component Analysis was employed.

The results of the principal component analysis (PCA) and subsequent reliability tests in this study provide valuable insights into the structure and consistency of the survey data on sustainable travel behaviors and attitudes.

Initially, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) was .747, suggesting that the sample was adequate for PCA. Bartlett's Test of Sphericity was significant ($\chi^2 = 390.186$, $df = 120$, $p < .001$), indicating that the correlation matrix was not an identity matrix and was suitable for factor analysis.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.747
Bartlett's Test of Sphericity	Approx. Chi-Square	390.186
	df	120
	Sig.	.000

The PCA revealed a three-factor solution initially, explaining a total of 54.982% of the variance. The first factor accounted for 34.667%, the second for 10.942%, and the third for 9.373%.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.547	34.667	34.667	5.547	34.667	34.667
2	1.751	10.942	45.609	1.751	10.942	45.609
3	1.500	9.373	54.982	1.500	9.373	54.982
4	1.167	7.295	62.277	1.167	7.295	62.277
5	1.061	6.629	68.905	1.061	6.629	68.905
6	.964	6.025	74.930			
7	.852	5.327	80.257			
8	.627	3.922	84.178			
9	.539	3.369	87.547			
10	.509	3.181	90.729			
11	.357	2.234	92.963			
12	.333	2.083	95.046			
13	.271	1.694	96.740			
14	.236	1.473	98.213			
15	.198	1.235	99.448			
16	.088	.552	100.000			

Extraction Method: Principal Component Analysis.

However, upon closer examination, the three-factor solution appeared problematic. The third component, despite explaining a significant portion of the variance, did not present a clear pattern in terms of factor loadings. This lack of clarity in the third factor suggests that it may not represent a distinct or interpretable construct within the context of sustainable travel behaviors and attitudes.

Rotated Component Matrix[a]

	Component		
	1	2	3
Have you changed your travel behavior due to climate change?		.527	.512
Is preserving the local economy, society, and nature during your trip important to you?		.337	.558
Do you support hotels, restaurants, and service providers in implementing sustainable measures?	.351	.479	.403
Would second-hand furniture in your hotel room diminish your travel experience?		.449	-.618
Are you aware of the measures accomodations, restaurants and service-providers undertake for more sustainability?		**.742**	
Do you wish for more transparency from accomodations, restaurants and service providers regarding sustainable measures?	**.745**		
Are you aware of your ecological footprint when traveling?		**.810**	
Would you like to know your ecological footprint when traveling?	.481	.507	
Are you aware of the impacts of food waste?	.377	.558	
Are you familiar with the circular economy and its various models?	.378	.323	
Are you interested in participating in activities and services related to circular economy (Recycling and reusing materials) during your trip?	**.664**	.395	
Would you like the option to have your leftovers packed and taken with you from restaurants?	**.792**		
Would you have a problem if your leftovers were used later for other purposes?		.436	
What do you think of the concept in hotels of only receiving fresh towels if they are left on the floor?	**.612**		
What do you think of circular economy models in tourism?	**.862**	.308	
What do you think of this concept? Refill dish			-.862

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

As a result of an unclear structure of component 3, a 2-factor solution was attempted and the factor loadings are presented below (with Varimax rotation).

Rotated Component Matrix[a]

	Component	
	1	2
Have you changed your travel behavior due to climate change?	**.490**	
Is preserving the local economy, society, and nature during your trip important to you?	**.478**	
Do you support hotels, restaurants, and service providers in implementing sustainable measures?	**.621**	
Would second-hand furniture in your hotel room diminish your travel experience?		**.746**
Are you aware of the measures accomodations, restaurants and service-providers undertake for more sustainability?	**.688**	
Do you wish for more transparency from accomodations, restaurants and service providers regarding sustainable measures?	**.708**	
Are you aware of your ecological footprint when traveling?	**.732**	
Would you like to know your ecological footprint when traveling?	**.707**	
Are you aware of the impacts of food waste?	**.664**	
Are you familiar with the circular economy and its various models?	**.493**	
Are you interested in participating in activities and services related to circular economy (Recycling and reusing materials) during your trip?	**.760**	
Would you like the option to have your leftovers packed and taken with you from restaurants?	**.573**	
Would you have a problem if your leftovers were used later for other purposes?	**.309**	
What do you think of the concept in hotels of only receiving fresh towels if they are left on the floor?	**.445**	
What do you think of circular economy models in tourism?	**.819**	
What do you think of this concept? Refill dish		**.809**

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 3 iterations.

Further complicating the factor structure was the second component, which included only two items with significant loadings. The reliability analysis for this component yielded a Cronbach's alpha of .482, indicating poor internal consistency. In psychometric terms, this low reliability suggests that the items within this component do not cohesively measure a single underlying construct. A Cronbach's alpha below the commonly accepted threshold of .70 is generally considered indicative of a scale that is not reliably measuring a consistent construct.

Reliability Statistics

Cronbach's Alpha	N of Items
.482	2

In contrast, the first component demonstrated strong internal consistency, with a Cronbach's alpha of .872 across 14 items. This high level of reliability indicates that the first component represents a cohesive and reliable construct within the survey, likely capturing a broad aspect of attitudes and behaviors related to sustainable travel.

Reliability Statistics

Cronbach's Alpha	N of Items
.872	14

In summary, the PCA and reliability analyses reveal that while one component of the survey demonstrates strong internal consistency and cohesiveness, the other components, particularly the third, do not exhibit a clear or reliable pattern. This suggests that the three-factor solution, as initially proposed, is not an optimal representation of the data. The lack of clarity and reliability in the third component indicates that it may not be a distinct factor, and the low reliability of the second component suggests it does not consistently measure a specific aspect of sustainable travel behavior. These findings highlight the complexities inherent in capturing attitudes and behaviors related to sustainability in tourism. The strong internal consistency of the first component, however, suggests it is a robust measure within the context of this survey.

A suggestion for a name for component 1 would be 'Sustainability Awareness and Advocacy'.

Comparative Analysis

The 'Sustainability Awareness and Advocacy' index was created by averaging all items that compose the scale. First, the distribution of the scale was assessed using Kolmogorov-Smirnov test, which indicated that the scale follows a normal distribution (KS = 0.125, p = 0.154). One-way ANOVAs were conducted to examine if there are relationships between the scale and several factors under study such as gender, age, etc. Pairwise T-test were used to assess pairwise differences within each single category. The table below shows descriptive statistics for 'Sustainability Awareness and Advocacy' disaggregated by different factors. The table contains means, standard deviations, standard error for the means and 95% confidence intervals for the means.

		Sustainability Awareness and Advocacy					
		Count	Mean	SD	SEM	Lower CL for Mean	Upper CL for Mean
Within my country	not quoted (N = 57)	57	3.933	0.927	0.123	3.687	4.179
	quoted (N = 25)	25	4.366	0.599	0.120	4.118	4.613
Within my continent	not quoted (N = 36)	36	3.793	1.019	0.170	3.448	4.138
	quoted (N = 46)	46	4.278	0.647	0.095	4.086	4.470
outside my continent	not quoted (N = 28)	28	4.147	0.995	0.188	3.762	4.533
	quoted (N = 54)	54	4.023	0.788	0.107	3.807	4.238
Hotel	not quoted (N = 27)	27	4.094	0.945	0.182	3.720	4.468
	quoted (N = 55)	55	4.051	0.824	0.111	3.828	4.274
Airbnb/ Sharing Platform	not quoted (N = 43)	43	3.979	0.963	0.147	3.682	4.275
	quoted (N = 39)	39	4.161	0.731	0.117	3.924	4.398
Camping	not quoted (N = 72)	72	4.057	0.898	0.106	3.846	4.268
	quoted (N = 10)	10	4.126	0.535	0.169	3.743	4.508
Friends/ Family	not quoted (N = 47)	47	3.959	0.894	0.130	3.697	4.222
	quoted (N = 35)	35	4.207	0.803	0.136	3.931	4.483
Others	not quoted (N = 74)	74	4.073	0.883	0.103	3.869	4.278
	quoted (N = 8)	8	3.991	0.647	0.229	3.450	4.532
What is the average cost of your vacation?	50 - 200 â,¬/$ (N = 1)	1	4.750				
	201 - 500 â,¬/$ (N = 13)	13	4.180	0.468	0.130	3.897	4.463
	501 - 1000 â,¬/$ (N = 19)	19	4.237	0.953	0.219	3.778	4.697
	1001 - 2000 â,¬/$ (N = 21)	21	4.177	0.602	0.131	3.903	4.452
	Over 2000 â,¬/$ (N = 27)	27	3.927	0.764	0.147	3.624	4.229
How do you rate your own travel behavior regarding sustainability?	I travel very sustainable (N = 3)	3	4.524	0.882	0.509	2.334	6.714
	I travel rather sustainable (N = 22)	22	4.455	0.564	0.120	4.205	4.705
	I don't know (N = 31)	31	4.015	0.806	0.145	3.720	4.311
	I travel rather unsustainable (N = 14)	14	4.110	0.473	0.126	3.837	4.383
	I don't care about sustainability during my trip (N = 11)	11	3.613	0.803	0.242	3.074	4.153
Does focusing on sustainability reduce the experience of your trip?	Absolutely yes (N = 3)	3	4.256	0.955	0.552	1.883	6.630
	Yes (N = 12)	12	4.393	0.605	0.175	4.008	4.777
	Rather yes (N = 13)	13	4.170	0.520	0.144	3.856	4.484
	Rather no (N = 22)	22	3.913	0.893	0.190	3.517	4.309
	No (N = 21)	21	3.862	0.682	0.149	3.552	4.172
	Absolutely not (N = 10)	10	4.646	0.465	0.147	4.313	4.979

		Sustainability Awareness and Advocacy					
		Count	Mean	SD	SEM	Lower CL for Mean	Upper CL for Mean
Which of these statements, from your perspective, comes closest to the sustainable commitment of hotels, restaurants, and service providers?	They are very commited already (N = 4)	4	4.750	0.270	0.135	4.320	5.180
	They do what is necessary (N = 20)	20	4.249	0.602	0.135	3.967	4.531
	They are not commited enough (N = 30)	30	4.304	0.648	0.118	4.062	4.546
	They use sustainability for Greenwashing (N = 8)	8	4.055	0.389	0.138	3.730	4.380
	They are not commited at all (N = 2)	2	3.625	0.884	0.625	-4.316	11.566
	I don't know (N = 15)	15	3.752	0.680	0.176	3.375	4.128
Have you encountered any circular economy models in tourism?	Yes I have: (N = 8)	8	4.260	0.606	0.214	3.753	4.766
	No, not yet (N = 40)	40	4.216	0.629	0.099	4.015	4.417
	I don't know (N = 32)	32	4.048	0.701	0.124	3.796	4.301
How satisfied were you with this experience, and would you recommend it?	I was very satisfied and can recommend it (N = 8)	8	4.614	0.646	0.228	4.074	5.154
	I was rather satisfied (N = 7)	7	3.899	0.378	0.143	3.550	4.248
	I was rather not satisfied (N = 2)	2	4.500	0.808	0.571	-2.761	11.761
	I was not satisfied at all, and cannot reccomend it (N = 3)	3	3.899	0.211	0.122	3.375	4.424
Are you familiar with food-sharing apps?	Yes (N = 34)	34	4.340	0.583	0.100	4.136	4.543
	No (N = 46)	46	4.016	0.675	0.100	3.815	4.216
Would you use food-sharing apps on your trip?	Yes (N = 23)	23	4.462	0.558	0.116	4.220	4.703
	No (N = 20)	20	3.743	0.695	0.155	3.418	4.068
	Maybe (N = 37)	37	4.184	0.582	0.096	3.990	4.378
Regarding food and restaurants, what do you think of seasonal offerings?	I really like it and there should be more seasonal offerings (N = 49)	49	4.243	0.671	0.096	4.050	4.436
	There should be more seasonal offerings (N = 28)	28	4.019	0.619	0.117	3.779	4.259
	I rather don't like it (N = 0)	0					
	I don't like it (N = 1)	1	3.357				
	I don't know (N = 2)	2	4.236	0.536	0.379	-0.581	9.053
Imagine you're going on vacation and have forgotten something. Would you borrow/rent the item or rather buy it?	I would definetely borrow/rent it (N = 21)	21	4.486	0.525	0.114	4.247	4.725
	I would rather borrow/rent it (N = 21)	21	4.091	0.393	0.086	3.912	4.270
	I would rather buy it (N = 25)	25	4.052	0.699	0.140	3.763	4.340
	I would definetely buy it (N = 3)	3	3.026	0.771	0.445	1.112	4.940
	I don't know (N = 10)	10	4.179	0.804	0.254	3.603	4.754
What do you think of the concept of renting and sharing things rather than buying and owning them?	I don't like it (N = 5)	5	3.670	1.450	0.648	1.870	5.471
	I rather don't like it (N = 8)	8	3.900	0.512	0.181	3.472	4.329
	I rather like it (N = 40)	40	4.068	0.485	0.077	3.913	4.224
	I really like it (N = 19)	19	4.486	0.609	0.140	4.193	4.779
	I don't know (N = 8)	8	4.343	0.692	0.245	3.765	4.922

		Sustainability Awareness and Advocacy					
		Count	Mean	SD	SEM	Lower CL for Mean	Upper CL for Mean
Can you imagine using car-sharing during your vacation in the future?	Yes, I will use it (N = 17)	17	4.141	0.568	0.138	3.849	4.432
	Yes, I can imagine it (N = 27)	27	4.144	0.637	0.123	3.892	4.396
	Maybe (N = 23)	23	4.300	0.559	0.117	4.059	4.542
	Rather not (N = 7)	7	4.313	0.648	0.245	3.713	4.913
	No, I can't imagine it (N = 4)	4	2.885	0.581	0.290	1.961	3.809
	No, I won't use it (N = 2)	2	4.679	0.152	0.107	3.317	6.040
Would you use refillable bottles if your accommodation offers water stations?	Yes (N = 69)	69	4.185	0.612	0.074	4.038	4.332
	No (N = 4)	4	3.255	1.045	0.522	1.593	4.918
	Maybe (N = 7)	7	4.350	0.502	0.190	3.886	4.814
What factors prevent you from supporting more circular economy-based offers and providers?	Following: (N = 14)	14	4.388	0.528	0.141	4.083	4.693
	None (N = 27)	27	4.145	0.658	0.127	3.885	4.405
	I don't know (N = 37)	37	4.150	0.621	0.102	3.942	4.357
What factors would motivate you to support more circular economy-based offers and providers?	Following: (N = 24)	24	4.339	0.669	0.136	4.056	4.621
	None (N = 2)	2	4.643	0.505	0.357	0.105	9.181
	I don't know (N = 53)	53	4.079	0.613	0.084	3.910	4.248
Gender	male (N = 42)	42	4.136	0.637	0.098	3.938	4.335
	female (N = 37)	37	4.173	0.690	0.113	3.943	4.403
	diverse (N = 1)	1	4.154				
	no specification (N = 0)	0					
Age	18 - 25 years (N = 6)	6	4.235	0.530	0.216	3.679	4.791
	26 - 35 years (N = 13)	13	4.105	0.385	0.107	3.872	4.337
	36 - 45 years (N = 4)	4	3.992	0.227	0.114	3.631	4.354
	46 - 60 years (N = 21)	21	4.139	0.677	0.148	3.831	4.447
	Over 60 years (N = 36)	36	4.184	0.776	0.129	3.921	4.446
Income	Under 1.000 â‚¬/$ (N = 6)	6	4.363	0.250	0.102	4.101	4.625
	1.001 - 2.000 â‚¬/$ (N = 14)	14	4.326	0.560	0.150	4.003	4.649
	2.001 - 5.000 â‚¬/$ (N = 33)	33	4.142	0.840	0.146	3.844	4.440
	5.001 - 10.000 â‚¬/$ (N = 12)	12	4.078	0.627	0.181	3.680	4.477
	Over 10.000 â‚¬/$ (N = 14)	14	3.662	0.727	0.194	3.242	4.082
Education	Secondary school (N = 1)	1	5.231				
	2 (N = 6)	6	4.214	0.721	0.295	3.457	4.971
	A-Levels (N = 5)	5	3.730	0.810	0.362	2.724	4.735
	Bachelor (N = 18)	18	3.893	1.048	0.247	3.371	4.414
	Master/ Diploma (N = 45)	45	4.185	0.563	0.084	4.016	4.354
	Doctor (N = 5)	5	4.415	0.625	0.280	3.639	5.192
	No qualification (N = 1)	1	3.714				

To further enhance the findings, the differences on the means across factors were tested using multiple One-way ANOVAs, the results are shown in the table below.

		Count	Sustainability Awareness and Advocacy	F	p
Within my country	not quoted	57	3.933_{a}	4.583	0.035
	quoted	25	4.366_{b}		
Within my continent	not quoted	36	3.793_{a}	6.880	0.010
	quoted	46	4.278_{b}		
outside my continent	not quoted	28	4.147_{a}	0.385	0.537
	quoted	54	4.023_{a}		
Hotel	not quoted	27	4.094_{a}	0.044	0.834
	quoted	55	4.051_{a}		
Airbnb/ Sharing Platform	not quoted	43	3.979_{a}	0.915	0.342
	quoted	39	4.161_{a}		
Camping	not quoted	72	4.057_{a}	0.056	0.814
	quoted	10	4.126_{a}		
Friends/ Family	not quoted	47	3.959_{a}	1.682	0.198
	quoted	35	4.207_{a}		
Others	not quoted	74	4.073_{a}	0.065	0.799
	quoted	8	3.991_{a}		
What is the average cost of your vacation?	50 - 200 â,¬/$	1	4.750^{1}	2.240	0.138
	201 - 500 â,¬/$	13	4.180_{a}		
	501 - 1000 â,¬/$	19	4.237_{a}		
	1001 - 2000 â,¬/$	21	4.177_{a}		
	Over 2000 â,¬/$	27	3.927_{a}		
How do you rate your own travel behavior regarding sustainability?	I travel very sustainable	3	$4.524_{a,b}$	9.998	0.002
	I travel rather sustainable	22	4.455_{a}		
	I don't know	31	$4.015_{a,b}$		
	I travel rather unsustainable	14	$4.110_{a,b}$		
	I don't care about sustainability during my trip	11	3.613_{b}		
Does focusing on sustainability reduce the experience of your trip?	Absolutely yes	3	4.256_{a}	0.138	0.711
	Yes	12	4.393_{a}		
	Rather yes	13	4.170_{a}		
	Rather no	22	3.913_{a}		
	No	21	3.862_{a}		
	Absolutely not	10	4.646_{a}		
Which of these statements, from your perspective, comes closest to the sustainable commitment of hotels, restaurants, and service providers?	They are very commited already	4	4.750_{a}	12.025	0.001
	They do what is necessary	20	4.249_{a}		
	They are not commited enough	30	4.304_{a}		
	They use sustainability for Greenwashing	8	4.055_{a}		
	They are not commited at all	2	3.625_{a}		
	I don't know	15	3.752_{a}		
Have you encountered any circular economy models in tourism?	Yes I have:	8	4.260_{a}	1.266	0.264
	No, not yet	40	4.216_{a}		
	I don't know	32	4.048_{a}		
How satisfied were you with this experience, and would you recommend it?	I was very satisfied and can recommend it	8	4.614_{a}	2.781	0.113
	I was rather satisfied	7	3.899_{a}		
	I was rather not satisfied	2	4.500_{a}		
	I was not satisfied at all, and cannot reccomend it	3	3.899_{a}		
Are you familiar with food-sharing apps?	Yes	34	4.340_{a}	5.032	0.028
	No	46	4.016_{b}		

		Count	Sustainability Awareness and Advocacy	F	p
Would you use food-sharing apps on your trip?	Yes	23	4.462_{a}	1.454	0.231
	No	20	3.743_{b}		
	Maybe	37	4.184_{a}		
Regarding food and restaurants, what do you think of seasonal offerings?	I really like it and there should be more seasonal offerings	49	4.243_{a}	1.416	0.238
	There should be more seasonal offerings	28	4.019_{a}		
	I rather don't like it	0	.[2]		
	I don't like it	1	3.357[1]		
	I don't know	2	4.236_{a}		
Imagine you're going on vacation and have forgotten something. Would you borrow/rent the item or rather buy it?	I would definetely borrow/rent it	21	4.486_{a}	4.610	0.035
	I would rather borrow/rent it	21	$4.091_{a,b}$		
	I would rather buy it	25	$4.052_{a,b}$		
	I would definetely buy it	3	3.026_{b}		
	I don't know	10	4.179_{a}		
What do you think of the concept of renting and sharing things rather than buying and owning them?	I don't like it	5	3.670_{a}	8.969	0.004
	I rather don't like it	8	3.900_{a}		
	I rather like it	40	4.068_{a}		
	I really like it	19	4.486_{a}		
	I don't know	8	4.343_{a}		
Can you imagine using car-sharing during your vacation in the future?	Yes, I will use it	17	4.141_{a}	0.539	0.465
	Yes, I can imagine it	27	4.144_{a}		
	Maybe	23	4.300_{a}		
	Rather not	7	4.313_{a}		
	No, I can't imagine it	4	2.885_{b}		
	No, I won't use it	2	4.679_{a}		
Would you use refillable bottles if your accommodation offers water stations?	Yes	69	4.185_{a}	0.058	0.810
	No	4	3.255_{b}		
	Maybe	7	4.350_{a}		
What factors prevent you from supporting more circular economy-based offers and providers?	Following:	14	4.388_{a}	1.087	0.300
	None	27	4.145_{a}		
	I don't know	37	4.150_{a}		
What factors would motivate you to support more circular economy-based offers and providers?	Following:	24	4.339_{a}	3.050	0.085
	None	2	4.643_{a}		
	I don't know	53	4.079_{a}		
Gender	male	42	4.136_{a}	0.055	0.816
	female	37	4.173_{a}		
	diverse	1	4.154[1]		
	no specification	0	.[2]		
Age	18 - 25 years	6	4.235_{a}	0.037	0.847
	26 - 35 years	13	4.105_{a}		
	36 - 45 years	4	3.992_{a}		
	46 - 60 years	21	4.139_{a}		
	Over 60 years	36	4.184_{a}		
Income	Under 1.000 â,¬/$	6	4.363_{a}	6.804	0.011
	1.001 - 2.000 â,¬/$	14	4.326_{a}		
	2.001 - 5.000 â,¬/$	33	4.142_{a}		
	5.001 - 10.000 â,¬/$	12	4.078_{a}		
	Over 10.000 â,¬/$	14	3.662_{a}		
Education	Secondary school	1	5.231[1]	0.105	0.747
	2	6	4.214_{a}		
	A-Levels	5	3.730_{a}		
	Bachelor	18	3.893_{a}		
	Master/ Diploma	45	4.185_{a}		

		Count	Sustainability Awareness and Advocacy	F	p
	Doctor	5	4.415_{a}		
	No qualification	1	3.714^{1}		

Note: Values in the same column and subtable not sharing the same subscript are significantly different at p< .05 in the two-sided test of equality for column means. Cells with no subscript are not included in the test.

1. This category is not used in comparisons because the sum of case weights is less than two.
2. This category is not used in comparisons because there are no other valid categories to compare

The table presents data on sustainability awareness and advocacy among individuals in various contexts, with significant findings in specific areas. In the comparison of sustainability awareness within one's country and continent, participants who quoted trips within these contexts scored higher than those who did not, with F values of 3.933 (p = .035) and 6.880 (p = .010) respectively.

Regarding self-rated travel behavior concerning sustainability, a significant difference was observed, with F = 9.998 and p = .002. Participants who rated their travel behavior as very sustainable or rather sustainable demonstrated higher sustainability awareness compared to other groups. This suggests that individuals' perceptions of their sustainability in travel correlate with higher advocacy and awareness levels.

The assessment of the commitment of hotels, restaurants, and service providers to sustainability showed significant variance in perceptions, with a F value of 12.025 and p = .001. Participants' views on the commitment level significantly differed, indicating varied perceptions of sustainability efforts in the tourism sector.

Familiarity with food-sharing apps was associated with higher sustainability awareness and advocacy, with a significant F value of 5.032 and p = .028. This finding suggests a link between engagement with circular economy practices and enhanced sustainability consciousness.

Preferences for renting and sharing over owning were significant, with F values of 4.610 (p = .035) for the preference to borrow/rent items and 8.969 (p = .004) for the general concept of renting/sharing. These results indicate a preference shift towards more sustainable consumption practices during vacations.

Income level was significantly related to sustainability awareness and advocacy, with lower income groups demonstrating higher sustainability scores compared to higher income groups (F = 6.804, p = .011), indicating that sustainability awareness and advocacy are not exclusively influenced by economic status.

Overall, the table's data reveal significant differences in sustainability awareness and advocacy across different contexts, indicating a complex relationship between geographical context, personal

sustainability perceptions, engagement with circular economy practices, and economic status in shaping individuals' sustainability awareness and advocacy.