Do young sustainable tourists build better relationships with destinations?

By Mitsuru Sato¹, Ruethai Onbhuddha², Bingying Ma³, Seiichi Ogata⁴

ABSTRACT:
Sustainable tourists play a crucial role in achieving sustainable tourism in destinations. Previous studies have identified a segment of sustainability-friendly tourists. In recent years, some studies have focused on the youth generation as sustainable tourists. It is a useful strategy for destinations to build better relationships with sustainable youth tourists in order to construct a competitive advantage in the long term. However, it remains unclear that the characteristics and behaviors of young sustainable tourists and how they relate to destinations. The aim of this study is to examine sustainable young generation tourists who contribute to a destination’s sustainability. The study was based on data from a web-based survey of Japanese respondents aged between 20 and 39 years, who had experienced domestic travel. We conducted exploratory factor analysis and cluster analysis and identified a segment of sustainable youth tourists. The intention to build relationships with destinations was analyzed using the chi-square and Kruskal-Wallis tests. The results confirmed that young sustainable tourists were highly loyal to the destinations they visited and intended to involve the destination after their trip. They are actors who actively seek to increase the sustainability of their destinations.

Keywords: sustainable tourism, destination management, sustainable tourist, youth tourism, tourist loyalty

1. Introduction

Tourism activities have environmental, social, and economic impacts on destinations, and sustainable tourism has become a key goal of tourism policy (Šaparnienė et al., 2022). Sustainable tourism refers to a form of tourism in which sustainability in the economic, environmental, and social dimensions is considered while seeking to balance the interests of current and future generations (UNEP & UNWTO, 2005; Cavagnaro & Staffieri, 2015).

The segment of sustainable tourists is important for achieving sustainable tourism at destinations. Sustainable tourists are those who are strongly committed to tourism behavior that considers the three dimensions of sustainability: environmental, social, and economic (Passafaro et al., 2015; Holmes et al., 2019). They agree and cooperate with the norms of behavior desired as tourists in destinations, understand that their behavior affects the natural environment and cultural fabric of the destination, and choose their behavior accordingly (Dinan, 2000; Shamsub & Lebel, 2012). Sustainable tourists also understand the impact of tourism activities on the local economy and prefer to buy local products,
such as food and crafts, thus contributing to the local economy of the destination (Shamsub & Lebel, 2012; Holmes et al., 2019).

In recent years, the youth generation of tourists has attracted increasing attention as a sustainable tourists. They tend to buy more local products, also value building relationships with local people and are highly aware of sustainability principles (Nafi & Ahmed, 2017; Šaparnienė et al., 2022). In addition, Generation Z, born in the mid-1990s, has shown great concern about climate change and willingness to choose environmentally friendly tourism behaviors (World Tourism Organization and Global Tourism Economy Research Centre, 2022b). In this context, a growing number of studies have analyzed the attitudes and behaviors of the younger generation toward sustainable tourism (Buffa, 2015; Cavagnaro & Staffieri, 2015; Butnaru et al., 2022; Pinho & Gomes, 2023). However, the sustainability-conscious tourism behaviors of the youth generation of tourists have not been sufficiently clarified (Buffa, 2015; Šaparnienė et al., 2022).

It is an effective strategy for destinations to build better relationships with sustainable tourists from the youth generation in order to develop their sustainability and build a long-term competitive advantage. In a destination's marketing strategy, it is important to identify the segment of sustainable tourists among the youth generation of tourists and to build long-term relationships with them (Buffa, 2015; Cavagnaro et al., 2018; World Tourism Organization, 2016). In other words, it is desirable to reach and nurture the younger generation of tourists with high tourist loyalty, who repeatedly visit their favorite destinations and provide positive word-of-mouth referrals (Oppermann, 2000; Lee et al., 2012). However, little attention has been paid to whether these tourists are sustainable tourists.

This study aimed to determine whether young sustainable tourists, who play an important role in improving the sustainability of destinations, also build better relationships with the destinations they visit after they have traveled. Using data from a web-based survey of Japanese people aged 20-39 who had traveled domestically, this study identified a segment of sustainable tourists based on their intentions for sustainable behavior at destinations. The study then analyzed the relationship between the segments and indicators measuring tourists' loyalty to the destinations they visited.

This study focuses on young Japanese travelers for two reasons. First, the scale of the domestic travel market in Japan in 2019 was the fifth largest in the world and occupied an important position globally (World Tourism Organization, 2023). Second, while awareness of sustainability among travelers is increasing worldwide, it remains a pressing issue in Japanese travelers (Booking.com 2022). Against this background, this study focuses on young Japanese sustainable tourists and it is hoped that this will contribute to marketing strategies to promote sustainable tourism.

In the following section, the concept of sustainable tourists and the link between the youth generation of tourists and sustainability are summarized through a literature review. The methodology and data of this study are then described, and the results of the analysis are explained. The paper concludes with a discussion of the characteristics of

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5 The domestic tourism market in Japan, the region covered by this study, had approximately 590 million travelers and a tourism consumption value of approximately 22 trillion yen (US$158 billion) in 2019, before Covid-19, according to the Japan Tourism Agency (2022). In recent years, sustainable tourism in destinations has become an important policy goal (Japan Tourism Agency, 2022).
sustainable youth tourists, based on the findings of this study, from the perspective of building relationships with destinations, and presents implications for marketing strategies for destinations that promote sustainable tourism.

2. Literature review

2.1 The concept of sustainable tourists and its measurement

Sustainable tourists are those who are interested and involved in tourism behavior that respects the three dimensions of environmental, social, and economic sustainability (Dolnicar, 2004; Passafaro et al., 2015). Dinan (2000) identified three specific manifestations of this. These were agreeing with and actively cooperating with the desired code of behavior as a tourist in a destination, understanding that one’s behavior affects the physical environment of the destination and acting accordingly, and understanding the impact of the destination on the local economy and preferring to buy local products (Dinan, 2000).

Defining sustainable tourism is a challenging task, as there are many similar concepts (Bufa, 2015; Jani, 2018). The main concepts that are similar to those of sustainable tourists include ecotourists, green tourists, and responsible tourists (Bufa, 2015; Juvan & Dolnicar, 2016). Ecotourists are those who are interested in the preservation of the natural and social environment of the destinations and show a special interest in education and learning through tourism (Buffa, 2015; Jani, 2018). Green tourists are those who have a strong interest in the conservation of the environment of destinations and show an interest in rural destinations (Buffa, 2015; Jani, 2018). Third, responsible tourists are considered to be those who are interested in the social aspects of sustainability and are particularly sensitive and concerned about the relationship between tourists and host communities and the socio-cultural impact of tourism on destinations (Buffa, 2015). The commonality of these different concepts is that they show a high level of interest in tourist behavior that is consistent with the principles of sustainability, while they are said to have different levels of sensitivity to each aspect of sustainability (Buffa, 2015).

Studies on sustainable tourists have identified some of their characteristics: Dolnicar (2004) identified a segment of sustainable tourists and found that they conserve nature, choose responsible behavior, and spend more on tourism in destinations than other segments that do not show interest in sustainability issues. On the other hand, Passafaro et al. (2015) used an environmental psychology approach to identify the influence of individual values and personality traits on the formation of sustainable tourist attitudes. Similarly, Jani (2018) found significant differences between sustainable and nonsustainable tourists in terms of sustainable values, travel motivations, and demographic characteristics.

One way of understanding sustainable tourists has been to segment them based on their orientation toward sustainability (Jani, 2018). Nickerson et al (2016) point out that demographic and psychographic variables are mainly used in the segmentation of sustainable tourists. On the other hand, Buffa (2015) suggested that tourist segments are differentiated according to the strength of their motivation for sustainable tourism, forming a spectrum from those with weak to strong sustainability considerations.

However, research on the concept of sustainable tourists and their segmentation has not been well-documented (Jani, 2018). Previous studies in this area have paid little
attention to the long-term relationship between sustainable tourists and the destinations they visit. This study identifies segments of sustainable tourists based on their intentions to engage in comprehensive sustainability-oriented behaviors at destinations in three dimensions: environmental, social, and economic. It then identifies the relationships that sustainable travelers seek with the destinations they visit.

2.2 Youth Tourism and Sustainability

Youth-generation tourists are expected to play a leading role in promoting sustainable tourism. Youth tourists represent the largest part of the total tourist population and are considered an important predictor of future markets (Buffa, 2015; European Travel Commission, 2020; Šaparnienė et al., 2022). Šaparnienė et al. (2022) found that youth generation travelers tend to save on travel and accommodation costs, spend more money on attractions and value their relationships with local people. They are also more curious about new cultures and have a strong interest in the local culture (Šaparnienė et al., 2022). According to the European Travel Commission (2020), the youth generation of tourists is more concerned about climate change and the impact of global warming on biodiversity.

Most studies on youth travelers focus on millennials and Generation Z to create a typology of travelers and identify their motivations for tourism and their behavior while traveling (Cavagnaro & Staffieri, 2015; Cavagnaro et al., 2018; Mirea et al., 2021; Šaparnienė et al., 2022). Generations refer to identifiable groups with shared experiences of a particular birth year, age group, or significant life stage (ÇALIŞKAN, 2021; Walters, 2021). In the context of tourism, generational values and beliefs are said to influence travel motivations and desired travel behaviors (Corbisiero et al., 2022). Millennials and Generation Z travel more than other generations and play a role in shaping future travel demands (European Travel Commission; Corbisiero et al., 2022). For the purposes of this study, the two generations were defined as the 'youth generation.' Of course, each generation is not a homogeneous group, as they represent broad trends but are composed of different segments (Corbisiero et al., 2022).

There is a segment of millennial tourists who value social and economic sustainability in their travel behavior. Millennials refer to the generation born between 1981 and 1995 that has grown under the influence of globalization (Walters, 2021; Bialik & Fry, 2019). This generation of tourists not only contributes to the economy by favoring and purchasing local products from destinations but also has a strong desire to experience the culture of the destination, understand local customs, and interact with local people (World Tourism Organization, 2011; World Tourism Organization, 2016). Cavagnaro and Staffieri (2015) examined the impact of sustainability values on the travel needs of millennial tourists, and found that women of this generation seek self-empowerment through engagement with local communities.

There is a segment of Generation Z tourists who are found to have a strong interest in environmental sustainability. This generation was born between 1996 and the early 2010s, grew up amidst the proliferation of social media, and is referred to as digital natives (World Tourism Organization and Global Tourism Economy Research Centre, 2022b; Corbisiero et al., 2022). Generation Z is a new actor in tourism that has supported the rapid growth of international tourism (Butnaru et al. 2022; Pinho & Gomes, 2023).
They have experienced the effects of climate change and are more aware of the challenges of global warming and biodiversity than other generations (World Tourism Organization and Global Tourism Economy Research Centre, 2022b). Therefore, they are more likely to be concerned about reducing the environmental impact of tourism and the livelihoods of local people and are interested in sustainable accommodation, zero-emission transport, and the provision of eco-friendly tourism experiences (European Travel Commission, 2020).

In recent years, research on youth tourism and sustainability has become an important topic. While research on this topic is increasing, there is still a lack of research exploring sustainable tourist segments of the youth (Buffa, 2015; Cavagnaro et al., 2018; Šaparnienė et al., 2022). This study focuses on millennials and Generation Z tourists to identify segments of sustainable tourists and whether they can contribute to increasing destination sustainability. It then considers whether they are loyal tourists to their destination.

3. Methods

This study employed an exploratory quantitative survey using a web-based survey methodology. The survey identified those who were interested in domestic travel by asking the question, 'Before the outbreak of Covid-19, did you usually travel domestically (including day trips) for tourism and leisure purposes? It was distributed to 1276 panel members registered with GMO Research and collected a sample of men and women aged 20-39 (n=1000) based on their place of residence and age. For the selection of respondents, the allocation number of respondents for each 5-year age group between 20 and 39 years old was determined based on the domestic travel participation rate by age group in Japan to approximate the overall young traveler population in Japan. The survey was conducted between March 1 and March 4, 2022. However, 54 responses were dishonest and excluded. In this study, to detect this fraud, respondents who provided the same answer consecutively to all subscale items were identified, and those whose response times were extremely short were classified as Satisficers (Krosnick, 1991). Therefore, 946 responses were considered valid for the data analysis.

The intention to engage in sustainable tourist behavior at destinations was measured comprehensively across the three principles of sustainability: environmental, economic, and social. The questions were adapted from Dinan (2000), Shamsub & Lebel (2012), Lee et al. (2013), and Holmes et al. (2019). The question wording presented in these previous studies was modified to be more appropriate for Japanese tourists, and six
questions were assigned to each dimension of sustainability, making a total of 18 questions. (See Table 1).

To measure the intention to build a relationship with a visited destination, the intention to return to the same destination and word-of-mouth to family and friends are commonly used as indicators (Oppermann, 2000; Chi & Qu, 2008; Zhang et al., 2014). According to Prayag & Ryan (2012), three approaches to its measurement have been presented: behavioral data, attitudinal data, and composite (a combination of both), but this study adopted the attitudinal data of behavioral intention, for which data are easier to obtain. In addition to the intention to revisit and word-of-mouth, questions included following the destination’s SNS, purchasing local products sold by the destination, and making donations to the destination after visiting.

The measurement of tourists' intentions to act sustainably at the destination and the measurement of tourists' intentions to build a relationship with the destination they visited were measured on a five-point Likert scale.

The analysis of the response data from the web-based survey in this study was performed using SPSS 27.0 and JMP 16.0. First, exploratory factor analysis was conducted to analyze the latent variables influencing tourists’ intentions to engage in sustainable behavior at destinations. As no scale has yet been developed to measure sustainable tourists among the Japanese population, exploratory rather than confirmatory factor analysis was used in this study. A hierarchical cluster analysis was then conducted using the factor scores of the factors from the exploratory factor analysis. The study used hierarchical clustering rather than k-means clustering, which is a non-hierarchical clustering method, because it is difficult to determine the number of clusters in advance. As a result, respondents were grouped into six clusters based on their intentions to adopt sustainable behavior at their destinations. The associations between each cluster, demographic items, and intention to build a relationship with the visited destination were then identified. For associations with demographic items, the $\chi^2$ test was used to test for associations between the categorical data. For the intention to establish a relationship

\begin{table}

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
<td>I would like to stay at accommodations that are energy- and water-efficient.</td>
<td>En1</td>
</tr>
<tr>
<td></td>
<td>I would like to take as much garbage home with me as possible.</td>
<td>En2</td>
</tr>
<tr>
<td></td>
<td>I would like to respect the natural environment of the places I visit.</td>
<td>En3</td>
</tr>
<tr>
<td></td>
<td>I would like to avoid activities that spoil the scenery of the places I visit</td>
<td>En4</td>
</tr>
<tr>
<td></td>
<td>I would like to walk or ride a bicycle to and from the destination.</td>
<td>En5</td>
</tr>
<tr>
<td></td>
<td>I would like to use environmentally friendly transportation to get to the destination.</td>
<td>En6</td>
</tr>
<tr>
<td>Economy</td>
<td>I would like to buy local souvenirs at the destination</td>
<td>Ec1</td>
</tr>
<tr>
<td></td>
<td>I would like to eat locally grown food at the destination.</td>
<td>Ec2</td>
</tr>
<tr>
<td></td>
<td>I would like to stop by a local restaurant at the destination.</td>
<td>Ec3</td>
</tr>
<tr>
<td></td>
<td>I would like to stay longer and spend more time at the destination.</td>
<td>Ec4</td>
</tr>
<tr>
<td></td>
<td>I would like to participate in an experience program (for a fee) at the destination.</td>
<td>Ec5</td>
</tr>
<tr>
<td></td>
<td>I would like to take a guided tour (for a fee) at the destination.</td>
<td>Ec6</td>
</tr>
<tr>
<td>Society</td>
<td>I would like to gain a deeper understanding of the history and culture of the destination.</td>
<td>So1</td>
</tr>
<tr>
<td></td>
<td>I would like to enjoy conversation with the people of the destination.</td>
<td>So2</td>
</tr>
<tr>
<td></td>
<td>I would like to avoid disturbing the lives of the people living in the destination.</td>
<td>So3</td>
</tr>
<tr>
<td></td>
<td>I would like to observe the rules and manners of the destination.</td>
<td>So4</td>
</tr>
<tr>
<td></td>
<td>I would like to know about the daily life of the destination.</td>
<td>So5</td>
</tr>
<tr>
<td></td>
<td>I would like to avoid visiting crowded facilities or places at the destination.</td>
<td>So6</td>
</tr>
</tbody>
</table>

Source: Created by the author.
with the visited destinations, a non-parametric test, the Kruskal-Wallis test, was used, as the normality of the data distribution could not be fully assumed.

4. Results
4.1 Summary of Respondents
The gender of the respondents was 457 (48.3%) male and 489 (51.7%) female. In terms of age group, the largest number of respondents were aged between 25 and 29 years (304 (32.1%)), whereas the smallest number of respondents were aged between 20 and 24 years (150 (15.9%)). The majority of respondents were millennials. The highest frequency of domestic travel in the year before Covid-19 was once every six months with 321 (33.9%), followed by once every two to three months with 282 (29.8%), and once a year with 250 (26.4%). Many respondents traveled less frequently in the country.

4.2 Exploratory factor analysis
This study used exploratory factor analysis to identify potential factors associated with intentions to engage in sustainable behavior at destinations. Using the means and standard deviations of the 18 measured items, an item analysis was first conducted to ensure that an extremely large number of responses were not concentrated on certain scores. As a result, three items (En4, Ec2, and So4) were excluded from the factor analysis, as they were found to be concentrated in some scores. Factor analysis (using the maximum likelihood method with promax rotation) was performed on 15 observed variables. The Kaiser-Meyer-Olkin (KMO) measure was 0.91, indicating a high level of sampling adequacy. Bartlett's test of sphericity produced an approximate chi-square value of 5784.190 (degrees of freedom = 105) with a significance level of $p < .001$, suggesting that the sample was appropriate for factor analysis. Two factors were extracted based on eigenvalues greater than 1. The cumulative contribution of these two factors was only 46.5% (Factor1:33.5%, Factor2:13.0%), which was lower than expected. However, Cronbach's alpha coefficient, which indicates the internal consistency of each factor, was 0.887 for Factor 1 and 0.804 for Factor 2, confirming the reliability of the observed variables constituting each factor. Based on these multiple goodness-of-fit indices, this study employed the results of exploratory factor analysis. Although the cumulative contribution was low, other goodness-of-fit indicators, including KMO and Cronbach's alpha coefficients, were high, yielding a theoretically explainable factor structure.

Table 2 presents the results of the factor analysis. Factor 1 consisted of eight items, them of high-factor loadings, indicating an intention to deepen understanding of the destination. Therefore, this factor was named 'Intention to learn about the destination' (hereafter referred to as 'learn intention'). Factor 2 consisted of four items, them of high-factor loadings, indicating an intention to consume local products when visiting the destination. Therefore, this factor was named 'intention to consume that contributes to the economy of the place visited' (hereafter referred to as 'consumption intention').

4.3 Hierarchical cluster analysis
The study used factor scores obtained from the response data on intentions to practice sustainable behavior at destinations to perform hierarchical cluster analysis to statistically categorize respondents. The analysis used Euclidean distance for dissimilarity
Table 2. Results of exploratory factor analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>h2</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>So5</td>
<td>2.87</td>
<td>1.16</td>
<td>0.847</td>
<td>-0.117</td>
<td>0.662</td>
<td></td>
</tr>
<tr>
<td>Ec6</td>
<td>2.63</td>
<td>1.20</td>
<td>0.833</td>
<td>-0.200</td>
<td>0.620</td>
<td></td>
</tr>
<tr>
<td>So2</td>
<td>2.84</td>
<td>1.20</td>
<td>0.725</td>
<td>-0.023</td>
<td>0.514</td>
<td></td>
</tr>
<tr>
<td>En1</td>
<td>2.98</td>
<td>1.15</td>
<td>0.689</td>
<td>0.024</td>
<td>0.487</td>
<td>0.887</td>
</tr>
<tr>
<td>Ec5</td>
<td>2.93</td>
<td>1.11</td>
<td>0.687</td>
<td>0.022</td>
<td>0.483</td>
<td></td>
</tr>
<tr>
<td>En6</td>
<td>3.14</td>
<td>1.10</td>
<td>0.664</td>
<td>0.097</td>
<td>0.495</td>
<td></td>
</tr>
<tr>
<td>En5</td>
<td>3.24</td>
<td>1.09</td>
<td>0.594</td>
<td>0.075</td>
<td>0.390</td>
<td></td>
</tr>
<tr>
<td>So1</td>
<td>3.27</td>
<td>1.09</td>
<td>0.581</td>
<td>0.190</td>
<td>0.449</td>
<td></td>
</tr>
<tr>
<td>En2</td>
<td>3.38</td>
<td>1.20</td>
<td>0.359</td>
<td>0.264</td>
<td>0.264</td>
<td></td>
</tr>
<tr>
<td>Ec3</td>
<td>4.06</td>
<td>0.92</td>
<td>-0.164</td>
<td>0.820</td>
<td>0.606</td>
<td></td>
</tr>
<tr>
<td>So3</td>
<td>4.00</td>
<td>0.94</td>
<td>-0.077</td>
<td>0.782</td>
<td>0.575</td>
<td></td>
</tr>
<tr>
<td>Ec1</td>
<td>3.90</td>
<td>1.00</td>
<td>-0.051</td>
<td>0.660</td>
<td>0.415</td>
<td></td>
</tr>
<tr>
<td>En3</td>
<td>3.84</td>
<td>1.00</td>
<td>0.200</td>
<td>0.633</td>
<td>0.529</td>
<td></td>
</tr>
<tr>
<td>Ec4</td>
<td>3.69</td>
<td>1.04</td>
<td>0.228</td>
<td>0.400</td>
<td>0.275</td>
<td></td>
</tr>
<tr>
<td>So6</td>
<td>3.62</td>
<td>0.98</td>
<td>0.220</td>
<td>0.341</td>
<td>0.216</td>
<td></td>
</tr>
</tbody>
</table>

Factor correlations

<table>
<thead>
<tr>
<th></th>
<th>F1</th>
<th>F2</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>—</td>
<td>0.345</td>
</tr>
<tr>
<td>F2</td>
<td>0.887</td>
<td>—</td>
</tr>
</tbody>
</table>

Source: Created by the author.

and the Ward method for distance between clusters. The choice of the number of clusters was based on the value of the Cubic Clustering Criterion (CCC) in JMP 16.0; a higher value of CCC indicates a better fit in terms of the number of clusters (SAS Institute Inc., 1983). As a result, the maximum value of CCC was -13.59 for six clusters, so six clusters were considered appropriate for this analysis. A one-way analysis of variance was used to test the validity of the six clusters. The results showed that there were significant differences between the clusters in the two factor scores [learn intention: F (5, 940) = 946.48, p<0.01; consumption intention: F (5, 940) = 494.99, p<0.001]. Furthermore, multiple comparisons between clusters for each factor score showed that there were significant differences between clusters and that the clusters were reasonably distinct.

Table 3 summarises the results of the hierarchical cluster analysis: of the six clusters, cluster 5 had positive mean scores for learning intention and consumption intention at the destinations. Both means were higher and largest compared to the other clusters. On the other hand, cluster 3 had negative mean values for learning intention and consumption intention at destinations. Both means were lower and the lowest compared to the other clusters.

Table 3. Descriptive statistics for clusters

<table>
<thead>
<tr>
<th></th>
<th>Learning intention</th>
<th></th>
<th>Consumption intention</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Cluster 1</td>
<td>214</td>
<td>22.6</td>
<td>-0.09</td>
<td>0.56</td>
</tr>
<tr>
<td>Cluster 2</td>
<td>116</td>
<td>12.3</td>
<td>0.80</td>
<td>0.26</td>
</tr>
<tr>
<td>Cluster 3</td>
<td>112</td>
<td>11.8</td>
<td>-1.23</td>
<td>0.58</td>
</tr>
<tr>
<td>Cluster 4</td>
<td>174</td>
<td>18.4</td>
<td>-1.00</td>
<td>0.42</td>
</tr>
<tr>
<td>Cluster 5</td>
<td>144</td>
<td>15.2</td>
<td>1.41</td>
<td>0.41</td>
</tr>
<tr>
<td>Cluster 6</td>
<td>186</td>
<td>19.7</td>
<td>0.19</td>
<td>0.28</td>
</tr>
</tbody>
</table>

Source: Created by the author.
4.4 Clusters and demographic variables

For each of the clusters analyzed using hierarchical cluster analysis, we examined whether there were differences in gender, age, and frequency of travel (see Tables 4 and 5).

The χ2 test for the association between clusters, gender, and age showed that there was a significant association between clusters and gender and age (χ2 (35) = 56.86, p<.05). The results of the residual analysis showed that there were differences in the frequencies of the gender and age categories in each cluster. Cluster 1 had lower frequencies than expected for women aged 25-29. Cluster 2 had higher frequencies expected for males aged 25-29. Cluster 3 had lower-than-expected frequencies for women.

6 Cells with significant differences as a result of the residual analysis are shaded gray, and cells in bold indicate higher-than-expected frequencies.
aged 30-34. Cluster 4 had higher than expected frequencies for women aged 30-34 but lower than expected frequencies for men aged 25-29 and 35-39. Cluster 6 had higher than expected frequencies for women aged 35-39.

The $\chi^2$ test for the association between clusters and frequency of travel showed a significant association between clusters and gender and age ($\chi^2 (15) = 25.58, p<.05$). Cluster 3 had a higher frequency of once a month or more than expected. Cluster 4 had a higher frequency of once every six months than the expected frequency. Cluster 5 had a frequency of at least once a month higher than the expected frequency.

### 4.5 Clusters and Intention to build relationships with Destinations

Hierarchical cluster analysis was used to examine whether there were differences in the intention to build a relationship with the destination visited in each cluster. The results showed significant differences between the clusters for all items (see Table 6).

Of the six clusters, Cluster 5 had the highest intention to buy local products after the trip, intention to follow the destination on social networking sites after the trip, intention to tell friends and acquaintances after the trip, intention to return to a favorite destination, intention to donate tax money to a favorite destination, and intention to spread information about the destination on social networking sites, all with the highest values. Cluster 3, on the other hand, had the lowest scores for all five items except the intention to return to a favorite destination.

### 5. Discussion

This study aimed to determine whether younger sustainable tourists contribute to the sustainability of destinations and build good relationships with them. Based on an analysis of response data from a web survey targeting young domestic travelers in Japan, this study analyzed two factors that constituted sustainable tourists based on their intentions for sustainable behavior at destinations, and divided them into six clusters using hierarchical cluster analysis. The relationships between each cluster and demographic items as well as the intentions to build relationships with destinations for each cluster were clarified.

This study first identified two factors that make up sustainable tourists: learning intentions and consumption intentions. Learning intention was interpreted as an intention to gain a better understanding of the visited destination and concern for the destination's contribution to social sustainability. Consumption intentions were interpreted as the intention to consume local products in the visited destination and thus contribute to the economic sustainability of the destination. However, no factors were extracted to explain intentions related to the environmental sustainability of the destination. This may reflect the complexity of the relationships between the items being measured as the cumulative contribution was low. With this in mind, it can be speculated that the group of items containing both factors is covered by their respective factors, as they include behavioral intentions to respect the environmental aspects of the visited destination.

Respondents were then grouped into six clusters based on two factors that make up sustainable tourists: learning intention and consumption intention. Of these, the cluster with the highest mean scores for both learning and consumption intentions in destinations
(Cluster 5) accounted for 15.2% of the respondents. The respondents in this cluster were expected to be sustainable tourists. On the other hand, the cluster with the lowest mean values for both learning and consumption intentions in destinations (cluster 3) accounted for 11.8% of respondents. It could be inferred that the respondents in this cluster were tourists who did not care at all about the sustainability of the destination. At either end of these two clusters, four other clusters were distinguished according to the strength of their intentions toward sustainable behavior in destinations. This is in line with the formation of a spectrum based on sustainability considerations, as pointed out by Buffa (2015), and it was inferred that there are shades of sustainable tourists.

Third, an examination of the demographic differences among the six clusters revealed significant differences in gender, age, and travel frequency. Regarding gender and age, Cluster 2, which had a higher-than-average learning intention, tended to include more males aged 25-29. Cluster 6, which had a higher-than-average consumption intention, tended to include more females aged 35-39. Cluster 4, which had a lower-than-average learning intention, tended to include more individuals aged 30-34. Among women in their 30s, there were variations in intentions toward sustainable behavior. When examining the relationship between travel frequency and clusters, Cluster 5 was predicted to be sustainable tourists, and Cluster 3, presumed to have no interest in the sustainability of destinations, both tended to travel at least once a month. This indicates that among frequent travelers, there are both desirable and undesirable tourists from the perspective of tourism sustainability.

Fourth, we examined whether there were differences in the intention to build a relationship with the visited destination in each of the six clusters, and found that there were significant differences between the clusters for all question items. In particular, the cluster with the strongest degree of sustainable tourists (Cluster 5) had the highest for all items. This finding suggests a strong intention to build a relationship with the destination and a high level of tourist loyalty. On the other hand, the cluster of tourists who did not care at all about the sustainability of destinations (cluster 3) showed the lowest scores for all five questions, except for the intention to return to their favorite destinations. They were expected to have no interest in engaging with the destination. It was therefore inferred that targeting the young generation of sustainable tourists is an effective marketing strategy for tourism destinations to increase their sustainability and build a competitive advantage in the long term.

Figure 1 shows six clusters, the strength of the intention to build a relationship with the destination on the vertical axis. Each cluster was named based on its characteristics. Cluster 1 was called 'non-spending tourists' because they are travelers with lower-than-average consumption intentions and somewhat weaker intentions to build relationships with the destinations they visit. Cluster 2 was defined as 'tourists who want to create another hometown,' as they have higher than average learning intentions and slightly stronger intentions to build relationships with the destinations they visit. Cluster 3 was defined as 'tourists who want to enjoy the theme parks,' as they are travelers with lower-than-average learning and consumption intentions and weak intentions to build relationships with the destinations they visit. Cluster 4 was defined as 'tourists who want to relax in resorts,' as they are travelers with lower-than-average learning intentions and
slightly weaker intentions to build relationships with the destinations they visit. Cluster 5 was defined as 'tourists who want to be highly involved in the various activities of the destination,' as they have higher than average learning and consumption intentions and a strong intention to build a relationship with the destination. Cluster 6 was defined as 'tourists who want to buy local products,' as they have higher than average consumption intentions and a slightly stronger intention to build relationships with the destinations they visit.

Based on the results of the above analysis, three segments of tourists can be identified that are desirable for a destination and have a sustainable tourist shade: clusters 2, 5, and 6. The proportion of respondents belonging to these segments was 47.1%, representing almost half of the total respondents. A common element among them was a strong intention to be involved in the activities of the destination, suggesting that they were more than just visitors to the destination. In other words, the results suggest that when understanding sustainable tourists of the youth generation, it is preferable to see them as actors who contribute to the sustainability of the destination, rather than as actors who visit the destination. This may be related to attachment to the destination visited and emotional solidarity with the inhabitants of the destination visited, which are considered components of tourist loyalty (Patwardhan et al., 2020). However, it is necessary to pay attention to the possibility that these characteristics of travellers may be influenced by cultural factors, such as the values and customs formed among the younger generation of Japanese. It cannot be denied that cultural differences between countries and regions impact behaviour that considers sustainability at destinations. Therefore, interpreting the results when considering these cultural factors is advisable.

6. Conclusion

This study conducted a statistical analysis of web-based survey response data targeting young domestic travellers in Japan to determine whether sustainable young tourists who contribute to the sustainability of destinations develop positive relationships with the destinations they visit. The results identified a segment of Japanese Millennial and...
Generation Z travelers who have traveled domestically and who have the characteristics of sustainable tourists who care about the sustainability of their destinations. They were found to have a strong intention to build a relationship with the destinations they visited and to actively engage with the destinations they visited, even after their trip. Therefore, it was concluded that targeting young sustainable tourists is an effective marketing strategy for tourism destinations to increase their sustainability and create a long-term competitive advantage. On the other hand, it was suggested that young sustainable tourists are not only visitors but also actors who want to contribute to destinations' sustainability. Based on these results, it is advisable for stakeholders in destination management to identify tourists who are desirable for the long-term competitive advantage of these destinations. They not only encourage these tourists to leave positive reviews and revisit, but also invite them to participate in projects aimed at solving local issues.

However, it must be noted that the findings of this study cannot be easily generalized. This is because the web survey sample inherently contains several biases (Greenlaw & Brown-Welty, 2009; Kramer et al., 2014). For example, there is an issue of sample representativeness. Although the number of responses in the web survey was allocated by age group based on the proportion of domestic travelers in Japan, self-selection bias means that the sample does not necessarily represent young Japanese travelers. Additionally, since this study asked about intentions to engage in sustainable behavior at destinations, there is a risk of social desirability bias, meaning that some behavioral intentions might have been reported more positively than they actually were. Therefore, these points should be considered when interpreting the results of this study.

Five future research directions were identified. First, it is necessary to improve the scale used to measure sustainable tourists among Japanese travelers. Considering the characteristics of Japanese travelers’ attitudes and behavioral intentions, it is important to refine the content and wording of the measurement items and verify the validity and reliability of the measurement in other surveys targeting Japanese travelers. Second, in addition to young Japanese travelers, it is important to conduct an international comparative analysis by studying young travelers from other countries and regions. In this regard, it is necessary to identify sustainable tourists among the younger generation, taking into account the cultural differences in behavior that consider sustainability at destinations, as suggested by this study. Third, by conducting a longitudinal data analysis, we can understand how sustainable young tourists change their relationships with their destinations over time. Insights from this analysis will reveal methods for cultivating relationships with sustainable young tourists who are desirable destinations. Fourth, this study speculated that place attachment and emotional solidarity are related factors in forming attitudes towards sustainable young tourists. Identifying these factors will be an important research task for gaining insights into transforming tourists’ behavior toward sustainability. Finally, constructing and validating a more explicit theoretical model explaining the relationships among the attitudes, behaviors, and loyalty of young sustainable tourists, who greatly contribute to the long-term competitive advantage of destinations, is necessary. Since they are an important segment in tourism marketing strategies, elucidating a behavioral model based on findings from existing research will provide more specific and practical recommendations to destination stakeholders.
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