Article

College Students’ Perceptions of and Place Attachment to Rural Areas: Case Study of Japan and China

Yingming Mao 1, Lei He 1, Dibyanti Danniswari 2 and Katsunori Furuya 1,*

1 Graduate School of Horticulture, Chiba University, Chiba 271-8510, Japan
2 Faculty of Landscape Architecture and Environmental Technology, Trisakti University, Grogol, Jakarta 11440, Indonesia
* Correspondence: k.furuya@faculty.chiba-u.jp

Abstract: Rural areas are facing increasing challenges including declining populations, advanced aging, and a lack of successors. This study aimed to investigate the perceptions of rural areas among Chinese and Japanese university students living in urban areas and analyze the determinants influencing their rural attachment and willingness to reside there. A total of 259 students (126 Japanese students in Chiba and 133 Chinese students in Zhengzhou) were surveyed using the place attachment scale, and asked to describe their past experiences in rural areas. Semantic analysis was employed to further explore issues related to their previous rural visit experiences. The results revealed that students’ place of birth, visiting experience, satisfaction with rural areas, interaction with local people, and convenience of accessing rural areas all influenced their attachment and willingness to move to rural areas. Chinese students expressed greater concerns regarding hygiene issues, while Japanese students were more concerned about safety. This study offers some recommendations: promoting educational resources in rural areas and addressing hygiene issues, such as unclean restrooms, in China. In Japan, the focus should be on continued promotion of rural tourism, providing more education on safe driving and environmental safety for university students, and enhancing more access to rural areas through student transportation discounts.

Keywords: place attachment; rural area; young generation; China; Japan; rural experience; rural visiting; migration; text-mining

1. Introduction

Rural areas, vital for food production, natural resource management, and cultural heritage preservation [1,2], are grappling with challenges such as depopulation, aging populations, and successor shortages due to urbanization [3–6]. These challenges underline the importance of rural revitalization, a process that aims to reinvigorate these regions through strategies that promote sustainable development, local economic growth, environmental conservation, and cultural preservation.

Rural revitalization is of paramount importance because it contributes to the overall sustainability of a nation by ensuring balanced growth between urban and rural areas. It addresses socio-economic disparities, preserves cultural heritage, and promotes environmental conservation [7]. The concept is crucial to our study as we aim to understand the determinants influencing young people’s attachment to rural areas, which plays a significant role in rural revitalization. By analyzing university students’ perceptions and attachment towards rural areas, our study can offer valuable insights and potentially contribute to the development of effective strategies to counter rural depopulation and decline.

Japan has the fastest-declining population in Asia, which began in 2010 and has since become a major issue [8,9]. Depopulation was primarily a concern for developed countries; however, it has recently emerged as an issue for some developing nations, including China,
which has experienced declining fertility rates over the past decades [10]. In 2022, China’s total population declined for the first time since the 1960s [11]. Factors such as declining fertility rates, increasing life expectancy, China’s one-child policy, and the high cost of raising children in Japan contribute to the challenges faced by both countries [12–14]. Given the challenges faced by rural areas in these countries, comparing their situations is crucial for understanding the determinants influencing young people’s attachment to rural areas. As both countries aim to revitalize rural regions and promote sustainable development [15,16], examining young people’s attitudes can offer valuable insights for developing effective strategies to address rural depopulation and decline [17]. Moreover, rural areas with similar contexts, such as South Korea and Taiwan, could also benefit from this comparison, as they face comparable challenges in their rural areas [18,19]. This analysis may contribute to the development of tailored policies and strategies to tackle the challenges faced by rural areas in these nations and beyond.

Young people’s lack of attachment to rural areas may be influenced by various factors. Among these are the perceived disadvantages of living in rural areas, such as less employment and higher education opportunities compared to urban counterparts [20], limited public services that discourage young people from residing in rural areas [21], and the proliferation of online social media enabling young rural individuals to compare their lives with urban peers, potentially leading to dissatisfaction with their rural lives [22]. While these factors are not exhaustive, they play a significant role in shaping young people’s attachment to rural areas and their decision to move to the cities. This study focuses on university students for several reasons. First, university students are often more mobile and open to exploring new living environments than other population groups [23]. Second, attracting young and educated people to rural areas can help revitalize local economies and support sustainable development [24]. Finally, understanding the factors that influence university students’ attachment to rural areas can inform the development of targeted policies and initiatives aimed at encouraging young people to visit and potentially settle in rural areas.

Place attachment refers to an emotional bond between a person and a specific place, influenced by personal experiences, memories, and cultural/social connections. This connection can impact the well-being, identity, behavior, and desire to preserve the place [25–27]. Place attachment plays a crucial role in shaping individuals’ attitudes, behaviors, and well-being toward a place and can guide and encourage their visits to it [28]. Young people’s attachment to rural areas is influenced by socioeconomic, cultural, and geographic determinants. Those who grew up in rural areas are more likely to have a strong attachment compared to those with urban and suburban backgrounds [29,30].

To assess young people’s place attachment, this study used the 12-item place attachment scale [31]. This scale was developed by Otani and Haga based on a process of recognizing information from the environment, generating emotions, and evaluating it [32]. It was further refined by Hagiwara, Fujii, and Suzuki into three dimensions: preference, affection, and desire for continuity [31]. In these three dimensions of place attachment, “preference” refers to the degree to which a person positively evaluates an area from the perspective of personal preference. Meanwhile, “affection” refers to a person’s deep attraction to the area above preference and feeling unwilling to leave. Lastly, “desire for continuity” refers not only to the cognitive and emotional engagement with the current place, such as thoughts and feelings, but also to a desire that arises from the development of the place itself. There are differences in the development period of these three dimensions of place attachment. This is also true for the process of emotion generation from the recognition of a place [33]. This scale has mostly been used in Japan, but this study explores its potential usage in a country other than Japan.

Research has shown a correlation between higher place attachment and increased participation in community development policies and activities [33,34]. Studies on place attachment to rural areas have also found a relationship between attachment and decisions related to environmental governance and migration [35–38]. Therefore, understanding
young people’s attitudes and attachment to rural areas is crucial to promote sustainable rural development, especially as they are viewed as the future of these areas [30].

This research studies place attachment in young people, specifically university students. Existing studies show that university students with similar ages and education tend to be more mobile and that their perceptions of place are fluid and complex [39,40]. Previous research has shown that university students have low levels of place attachment and complex, fluid perceptions of place influenced by determinants such as their geographical mobility, educational background, and past experiences [41–43]. These findings highlight the importance of studying university students in relation to place attachment.

Studies on young people’s place attachment have mainly focused on their attachment to the rural areas where they grew up or their attachment to urban and rural areas after moving to the city [44–46]. However, there are only a few studies on the attachment of young people studying in cities to rural areas and their intention to visit. Understanding the attitudes and perceptions of young city-dwellers towards rural areas is important to support and developing rural communities [47–49]. Further, encouraging young urban dwellers to focus on and strengthen their attachment to rural areas is crucial for enhancing the quality of life, economic opportunities, and environmental sustainability in these regions, in line with national policies and global sustainable development goals [50–53].

This study aims to examine the perceptions of young university students in Chiba City (Japan) and Zhengzhou City (China) toward rural areas and identify determinants affecting their attachment and willingness to live there. Chiba City and Zhengzhou City were selected due to their status as regional economic and transportation hubs with high urbanization, a concentration of universities and research institutions, and young, educated populations [54,55]. Both cities face common urban development and sustainability challenges, such as a declining birthrate, and an increasing migrant population. The study investigates young people’s attitudes towards rural areas, determinants contributing to attachment, and differences based on birthplace, culture, rural experiences, and geographic background. Comparing the perceptions and attachments of young people in China and Japan can reveal similarities and differences in their rural experiences.

We address two main research objectives in this study. The first objective is to explore strategies to encourage more college students to visit rural areas and identify determinants that support this, including gender analysis and differences. The second objective is to determine how to make college students more willing to live in rural areas by identifying determinants that contribute to their attachment and willingness to settle in these regions. By addressing these two interconnected research objectives, we aim to provide a comprehensive understanding of university students’ attitudes towards rural areas and inform the development of targeted policies and strategies to address the challenges faced by rural communities.

2. Materials and Methods
2.1. The Participants

During the period of 2021–2022, this study surveyed university students in Zhengzhou City and Chiba City using snowball sampling. Students distributed the questionnaire among their peers at their universities or cities, targeting those who had at least one experience of visiting rural areas. In Japan, Google Forms was employed, while in China, a Tencent questionnaire was used. The variables in the questionnaire are discussed in Section 2.2. Although online questionnaires, such as Google Forms and the Tencent questionnaire, may have limitations in terms of response accuracy and representativeness, their convenience and privacy assurance encourage honest feedback from the participants. To ensure the data reliability and validity, we employed snowball sampling and carefully designed our questionnaire to capture relevant and reliable information on students’ perceptions and attachment to rural areas. Furthermore, to guarantee the accuracy of the collected data, we screened the received questionnaires and removed those with incomplete responses.
We collected a total of 259 valid questionnaires from college students in Zhengzhou City (China) and Chiba City (Japan), aged 19 to 26, currently living in urban areas, and having at least one experience of visiting rural areas. The students were from comprehensive universities with diverse major disciplines, primarily concentrated in engineering, arts, humanities, and horticulture. The questionnaire was conducted in the native language of each country. The Chinese sample comprised 133 participants (63 males and 67 females) from urban, suburban, and rural birthplaces. The Japanese sample included 126 participants (61 males and 65 females). Both Chinese and Japanese students had a similar distribution of birthplaces. Our analysis suggests that the variety of majors did not have a significant impact on our findings.

Regarding the sample size, previous studies, such as those conducted by Gay and Diehl [56], Roscoe [57], Fraenkel and Wallen [58], and Prita [59], suggest that a sample of 30 or more respondents can be considered sufficient. In our study, we collected data from over 120 respondents from each country, exceeding the recommended minimum. To further ensure the reliability of our findings, we conducted statistical tests to assess the reliability and validity of the collected data and the significance of the differences observed in our analysis. These tests include Cronbach’s Alpha (α) analysis, Kaiser-Meyer-Olkin (KMO) test, and factor-loading analysis (Section 2.2).

The administered questionnaire included not only items from the widely used place attachment scale in Japan [31–33] but also questions designed to measure the impact of various variables on the students’ attachment to and willingness to move to rural areas, such as place of birth, visiting experience, satisfaction with rural areas, interaction with local people, and convenience. The selection of these variables is explained in detail in Section 2.2. Additionally, students were asked to provide open-ended responses regarding their interest in rural visits, past experiences in rural areas, and any related issues they encountered.

2.2. Research Item

In this study, we examined the determinants of students’ attachment to an area, i.e., “students’ place of birth” [60,61]. Considering the effect of multiple covariates, we classified students’ birthplaces as rural, suburban, and urban areas. Rural, suburban, and urban areas are classified by the population density, land use, and proximity to each country and area has its own set of rules [62]. Rural areas have agricultural land and low population density; suburban areas have higher population density near cities; and urban areas have high population density, mixed land use, and proximity to cities and transportation [63].

Moreover, Taniguchi notes that the “number of visits” may also be a determinant of local attachment [64–66]. The more opportunities there are for contact, the greater the favorable impression of the place. Some tourism studies also note that locality attachment is determined by the number of visits to the area and the experience of visiting it. The more a person is exposed to a place, the stronger his attachment is likely to be. Therefore, using visit experience as a variable, students in this study were categorized into those who had no residential experience of day trips (attending farmhouses, one-day rural tours, etc.), those who had lodging experience (short rural trips, visiting relatives for short stays, etc.), and those who had long-term rural residential experience (regular annual family visits to the countryside, annual visits to grandparents’ homes for New Year’s celebrations, rural-born students, etc.).

Regarding the examination of students’ attributes, we also analyzed gender specificity. Males and females may have different needs and views of satisfaction or dissatisfaction with the community, and therefore, their respective attachment to rural areas may differ [67]. In addition, those with high levels of satisfaction with their visit are also likely to have high levels of attachment to the community [66]. According to previous research, the better the relationship with rural residents in terms of contact, the stronger the attachment to the area [68,69]. Attachment may increase as the relationship between young visitors and the area’s residents deepens. Convenience and willingness to move are also thought to
be associated with place attachment [70–72]. This study examined these factors using a questionnaire designed to test the rural attachment of university students in both cities.

A five-point scale was used to measure place attachment, with 5 being “strongly agree” and 1 being “strongly disagree”. In terms of scale reliability, we utilized SPSS Statistics to conduct the Cronbach’s Alpha (α) analysis and found that the reliability coefficients of the questionnaires in both China and Japan were all above 0.7. In addition, the overall KMO value of the scale was greater than 0.8, and the factor-loading coefficient of each item on the corresponding factor was greater than 0.4. Thus, the scale has sufficient reliability and validity.

Furthermore, to understand the general impressions of and intention to live in rural areas among Japanese university students, the KH Coder 3 software was used for text mining, and a map of “co-occurrence” was obtained [73]. A co-occurrence network is a network representation method of the relationship between codes with similar appearance patterns. When creating the co-occurrence network, co-occurrence relationships with a Jaccard coefficient of 0.3 or higher were employed and drawn.

3. Results

3.1. Descriptive Statistics

Table 1 shows the results of the descriptive analysis of the 12-item place attachment scale and 5 questions on resident communication, satisfaction, expenses, convenience, and willingness to move to rural areas in the future. Chinese students answered positively to the six questions on the place attachment scale, with the majority expressing a liking for rural areas, including 89% feeling relaxed and 71% liking the atmosphere. Japanese students also expressed a liking for rural areas, with 95% indicating that rural areas are nice to walk in, and 73% liking the atmosphere. The results of the questionnaire suggest that both Chinese and Japanese college students have positive perceptions and attachment to rural areas, with potential implications for promoting sustainable and livable urban-rural environments. In addition, compared with Chinese students, 57% of Japanese students answered disagree to the question, “I think rural areas are good places to live”.

The results of the study on young university students’ perception of and place attachment to rural areas in Japan and China showed that Chinese students had a more positive attitude towards living in rural areas compared to Japanese students. A total of 88% of Chinese students responded positively to the four questions on the affection scale of the place attachment scale, with 98% of Japanese students responding positively to the question “I think rural areas are important”. However, Japanese students had a stronger desire for rural areas to remain unchanged with 85% hoping they would not change, compared to 31% of Chinese students. These findings suggest that the attitudes towards rural areas and the desire for continuity vary between the two countries, possibly due to the difference in the development of rural planning in China.

Overall, in the descriptive analysis of the three dimensions of place attachment (preference, affection, and desire for continuity), Regarding the three dimensions of place attachment (preference, affection, and desire for continuity), Chinese students showed the strongest affection towards rural areas, followed by preference and desire for continuity. On the other hand, Japanese students had the highest desire for continuity with a place, followed by preference and affection. Thus, we found that Chinese students have a strong emotional attraction (Place Attachment-Affection) to rural areas, while Japanese students have a deeper cognitive and emotional engagement and desire for the development of rural areas (Place Attachment-Desire for continuity).

Many prior studies have mentioned that preference, affection, and desire for continuity are generally affective incremental processes, and the differences between Chinese and Japanese students on the issue of continuity may also be related to the history and processes of rural planning in each country, which we discuss more in-depth using ANOVA (analysis of variance) in Section 3.2, and correlation analysis in Section 3.3.
This study found that Chinese university students have a more favorable view of living in rural areas compared to their Japanese counterparts. The differences between the two groups are evident in their desire to live in rural areas and their expectations of interacting with locals. Specifically, 88% of Chinese students consider rural areas important, and 65% express a desire to live in one. In contrast, only 56% of Japanese students feel attached to rural areas, and merely 29% desire to live in one. Furthermore, 90% of Chinese students expect many opportunities to interact with locals in rural areas, while only 46% of Japanese students share this sentiment. Although both groups view their past experiences in rural areas positively, they find rural areas to be inconvenient in general. A detailed text analysis of the inconveniences of rural areas is provided in Section 3.3.
3.2. Discrepancy Analysis for Place Attachment by Place of Birth, Gender, and Rural Visit Experience

Table 2 presents the results of a t-test analysis conducted on the three dimensions (preference, affection, and desire for continuity) of place attachment between Chinese and Japanese students, considering factors such as gender, place of birth, and rural visit experience. Some studies have indicated that females generally exhibit a higher attachment to regions [67]. However, based on the data collected in this study, no significant difference in place attachment was observed between genders among Japanese students. In contrast, among Chinese students, males demonstrated significantly higher attachment than females. Consequently, it appears that male college students residing in urban China possess a stronger attachment to rural areas compared to their female counterparts.

<table>
<thead>
<tr>
<th></th>
<th>Male N</th>
<th>Mean</th>
<th>SD</th>
<th>Female N</th>
<th>Mean</th>
<th>SD</th>
<th>T-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Chinese students N = 133)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Place Attachment-Preference</td>
<td>64</td>
<td>3.07</td>
<td>0.5</td>
<td>69</td>
<td>2.91</td>
<td>0.55</td>
<td>1.82</td>
</tr>
<tr>
<td>Place Attachment-Affection</td>
<td>64</td>
<td>4.07</td>
<td>0.73</td>
<td>69</td>
<td>3.82</td>
<td>0.68</td>
<td>2.03*</td>
</tr>
<tr>
<td>Place Attachment-Desire for continuity</td>
<td>64</td>
<td>3.81</td>
<td>0.78</td>
<td>69</td>
<td>3.6</td>
<td>0.69</td>
<td>1.66</td>
</tr>
<tr>
<td>(Japanese students N = 126)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Place Attachment-Preference</td>
<td>61</td>
<td>3.77</td>
<td>0.66</td>
<td>65</td>
<td>3.72</td>
<td>0.65</td>
<td>0.38</td>
</tr>
<tr>
<td>Place Attachment-Affection</td>
<td>61</td>
<td>3.59</td>
<td>0.73</td>
<td>65</td>
<td>3.52</td>
<td>0.73</td>
<td>0.55</td>
</tr>
<tr>
<td>Place Attachment-Desire for continuity</td>
<td>61</td>
<td>4.16</td>
<td>0.67</td>
<td>65</td>
<td>4.19</td>
<td>0.65</td>
<td>0.24</td>
</tr>
</tbody>
</table>

Note. * p < 0.05.

Different places of birth were determinants of place attachment. The results showed that Chinese students born in rural areas had higher levels of place attachment (preference and affection) than those born in urban and suburban areas. However, suburban-born students had higher levels of place attachment (preference, affection, and desire for continuity) than urban-born students. This may be related to the distance between their region of origin and the rural area as well as their familiarity with the rural area (Table 3). Among Japanese students, those born in rural areas had higher levels of place attachment (preference, affection, and desire for continuity) than both urban- and suburban-born students. Interestingly, unlike in China, urban-born Japanese students had relatively higher levels of place attachment (preference, affection, and desire for continuity) than those born in suburban areas. We suspect that this may be due to urban-born students’ curiosity about rural cultural influences, which is discussed in the text-mining analysis section in Section 3.4.

In addition, the experience of visiting rural areas, day trips, lodging, and long-term residential experiences were determinants of place attachment. The results for Chinese students showed that those with long-term residential experience had relatively higher place attachment (preference, affection, and desire for continuity). Interestingly, students with lodging experience had relatively higher levels of place attachment than those with residential experience (Table 3). In the subsequent, free text description section, we found that the issue of sanitation plagued the students in their lodging experiences, and this may have influenced the attachment levels of students with lodging experience, which was lower than those without it. Regarding the Japanese students, it was found that those with long-term rural residence experience had significantly higher levels of place attachment (preference, affection, and desire for continuity). Unlike Chinese students, Japanese students who had lived in rural areas had relatively higher levels of place attachment than those who had no live-in experience (Table 3). This may also be related to their familiarity with rural areas.
Table 3. Results of ANOVA analysis for place attachment by birthplace and rural visit experiences.

<table>
<thead>
<tr>
<th></th>
<th>Place Attachment Preference</th>
<th>Place Attachment Affection</th>
<th>Place Attachment Desire for Continuity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>Chinese students</td>
<td>133</td>
<td>2.74</td>
<td>3.74</td>
</tr>
<tr>
<td>Place of Birth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>76</td>
<td>3.13</td>
<td>4.19</td>
</tr>
<tr>
<td>Suburban</td>
<td>26</td>
<td>3.49</td>
<td>4.22</td>
</tr>
<tr>
<td>Rural</td>
<td>31</td>
<td>35.11</td>
<td>7.60</td>
</tr>
<tr>
<td>F-Value</td>
<td>35.11</td>
<td>7.60</td>
<td>1.79</td>
</tr>
<tr>
<td>p-Value</td>
<td>0.00***</td>
<td>0.01**</td>
<td>0.17</td>
</tr>
<tr>
<td>Experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day trip</td>
<td>31</td>
<td>2.84</td>
<td>3.9</td>
</tr>
<tr>
<td>Lodging</td>
<td>49</td>
<td>2.79</td>
<td>3.79</td>
</tr>
<tr>
<td>Long-term residence</td>
<td>53</td>
<td>3.26</td>
<td>4.11</td>
</tr>
<tr>
<td>F-Value</td>
<td>14.12</td>
<td>2.87</td>
<td>1.95</td>
</tr>
<tr>
<td>p-Value</td>
<td>0.00***</td>
<td>0.06</td>
<td>0.15</td>
</tr>
<tr>
<td>Japanese students</td>
<td>126</td>
<td>3.69</td>
<td>3.50</td>
</tr>
<tr>
<td>Place of Birth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>62</td>
<td>3.60</td>
<td>3.35</td>
</tr>
<tr>
<td>Suburban</td>
<td>37</td>
<td>4.05</td>
<td>3.96</td>
</tr>
<tr>
<td>Rural</td>
<td>27</td>
<td>4.24</td>
<td>6.32</td>
</tr>
<tr>
<td>F-Value</td>
<td>5.21</td>
<td>7.71</td>
<td>3.98</td>
</tr>
<tr>
<td>p-Value</td>
<td>0.01***</td>
<td>0.00**</td>
<td>0.02</td>
</tr>
</tbody>
</table>

Note. *p < 0.05, **p < 0.01, ***p < 0.001.

3.3. Correlation Analysis

To clarify whether the five factors of “degree of communication with local residents”, “spending”, “convenience”, “satisfaction of visiting”, and “intention to live in a rural area” affect students’ rural attachment, a correlation analysis was conducted, and the results are shown in Table 4.

Table 4 shows a significant correlation between Chinese students’ responses to all five questions and place attachment (preference, affection, and desire for continuity). First, the greater the interaction with rural residents, the closer the psychological distance to the rural area, the deeper the awareness of the attractiveness of the area, and the greater the degree of place attachment (preference, affection, and desire for continuity). In addition, past ease of access to rural areas was positively correlated with place attachment; the easier the access, the deeper the place attachment, and the higher the satisfaction with past visits to rural areas, the higher the attachment level. The intention to move to a rural area was also significantly positively correlated with place attachment. Spending also showed significant correlation with the degree of place attachment. The lower the cost of the experience, the higher the attachment to rural areas; however, this correlation is not as significant as that of the other four factors. Therefore, spending is not as important for Chinese college students, but it should not be ignored.
Table 4. Correlation analysis of place attachment.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Place Attachment Preference Correlation</th>
<th>Place Attachment Affection Correlation</th>
<th>Place Attachment Desire for Continuity Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese students</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of communication with local residents</td>
<td>133</td>
<td>0.50 ***</td>
<td>0.50 ***</td>
<td>0.46 ***</td>
</tr>
<tr>
<td>Thinking of less spending</td>
<td></td>
<td>0.21 *</td>
<td>0.19 *</td>
<td>0.35 ***</td>
</tr>
<tr>
<td>Thinking of convenience</td>
<td></td>
<td>0.54 ***</td>
<td>0.53 ***</td>
<td>0.52 ***</td>
</tr>
<tr>
<td>Satisfaction of visiting</td>
<td></td>
<td>0.64 ***</td>
<td>0.65 ***</td>
<td>0.65 ***</td>
</tr>
<tr>
<td>Intention to live in a rural area</td>
<td></td>
<td>0.66 ***</td>
<td>0.49 ***</td>
<td>0.33 ***</td>
</tr>
<tr>
<td>Place Attachment-Preference</td>
<td></td>
<td>0.77 ***</td>
<td></td>
<td>0.54 ***</td>
</tr>
<tr>
<td>Place Attachment-Affection</td>
<td></td>
<td></td>
<td></td>
<td>0.57 ***</td>
</tr>
<tr>
<td>Japanese students</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of communication with local residents</td>
<td>126</td>
<td>0.38 ***</td>
<td>0.47 ***</td>
<td>0.30 **</td>
</tr>
<tr>
<td>Thinking of less spending</td>
<td></td>
<td>0.06</td>
<td>0.09</td>
<td>0.16</td>
</tr>
<tr>
<td>Thinking of convenience</td>
<td></td>
<td>0.28 **</td>
<td>0.29 **</td>
<td>0.10</td>
</tr>
<tr>
<td>Satisfaction of visiting</td>
<td></td>
<td>0.55 ***</td>
<td>0.53 ***</td>
<td>0.31 ***</td>
</tr>
<tr>
<td>Intention to live in a rural area</td>
<td></td>
<td>0.59 ***</td>
<td>0.63 ***</td>
<td>0.40 **</td>
</tr>
<tr>
<td>Place Attachment-Preference</td>
<td></td>
<td>0.80 ***</td>
<td></td>
<td>0.56 **</td>
</tr>
<tr>
<td>Place Attachment-Affection</td>
<td></td>
<td></td>
<td></td>
<td>0.58 **</td>
</tr>
</tbody>
</table>

Note. * p < 0.05, ** p < 0.01, *** p < 0.001.

The four factors of “level of interaction with residents”, “ease of visiting rural areas in the past”, “satisfaction with the visit”, and “willingness to live in rural areas in the future” were all significantly correlated with place attachment (preference, affection, and desire for continuity) among Japanese students. As with the Chinese students, the more past interactions with rural residents, the more convenient the arrival process, and the higher the satisfaction with past visit experiences, the greater the degree of place attachment (preference, affection, and desire for continuity), and the higher the willingness to move to a rural area for Japanese students. Unlike Chinese students, cost was not significantly correlated; therefore, cost is not important for Japanese students.

According to previous descriptive statistics, Chinese and Japanese college students’ intention to live in rural areas in the future is generally low, and this factor is most likely related to previous experience, living environment, etc. To more deeply understand why, the reasons will be explored through the text analysis in the next section.

3.4. Text Mining Analysis

This study analyzed the past rural visit experiences of all 133 Chinese students and 126 Japanese students through a co-occurrence network of frequently used words in their answers. The network, created using KH Coder 3 [73], shows the problems encountered by university students in Zhengzhou city (China) during rural visits based on their place of origin (urban, suburban, or rural) (Figure 1). The semantic analysis found that rural and suburban students were correlated, with both groups focusing on transportation, poverty, infrastructure, and convenience. Rural students had deeper experiences and concerns about practical issues, such as education and poverty, while suburban students were more concerned with environmental aspects such as development, medicine, environment, structures, and insects. Urban students focused on hygiene, communication, dialect communication, and shopping difficulties, possibly due to their distance from rural areas.

In Figure 2, the text mining results of past rural visit experiences for Chinese college students were analyzed. The results showed that students with lodging experience and long-term residence were correlated with words such as supermarket shopping, medicine, unexplored, convenience, and take-out questions. Day trip students also correlated with long-term residents, including population, and structures. Day trip students focused on transportation, convenience, infrastructure, poverty, and recreation, while those with lodging experience focused on development. Long-term residents were more concerned about convenience and neighborhood issues. The ANOVA findings from Section 3.2 showed that students without lodging experience had stronger place attachments. This was also evident in the higher focus on shopping and take-out issues among students.
with lodging experience, indicating potential problems with food and shopping during their stay.

![Figure 1. The central co-occurrence between problems and different places of birth (Chinese Students).](image1)

![Figure 2. The central co-occurrence between different problem experiences (Chinese students).](image2)
The results of the text mining analysis on Japanese students’ rural visit experiences are shown in Figure 3. Rural and suburban students had similar concerns, focusing on old age, education, and inadequate public services. Suburban students had more concerns about hazards, technology, driver’s licenses, population loss, and labor, while rural students focused on employment, supermarkets, activities, and bicycles. Urban students were more concerned with accessibility, lack of maintenance, culture, forests, and agriculture. Rural students focused on substantive issues, while suburban students were more concerned with the social status quo and population loss. Urban students were primarily concerned with access to rural areas (the routes to rural areas appear to be more complicated).

The text mining analysis results of Japanese students’ experiences with different rural visit types are shown in Figure 4. Japanese students with lodging and long-term residence experience had similar concerns, such as activities, landscape, agriculture, culture, and bear infestation. Long-term residents were concerned about employment, education, old age, recreation, physical illness, and lack of children. Students with lodging experience were worried about rural management, loss of culture, successors, danger, and the need for a driver’s license. Day-trip students focused on population loss, opportunity, future, and worry. All students were concerned about rural population, but those with lodging experience were more concerned about practical issues such as safety and having a driver’s license.

Chinese and Japanese students shared similar concerns about rural living, such as transportation and shopping convenience. Japanese students were more concerned with access and safety issues, such as driving, streetlights, and wild animals in rural areas. In contrast, Chinese students were more worried about sanitation, poverty, and education in rural areas. Both groups faced difficulties in communicating with rural neighbors due to dialect differences.
Figure 4. The central co-occurrence between different problem experiences (Japanese students).

4. Discussion

This study explores place attachment to rural areas, the description of past experiences, and the willingness to move to rural areas among Chinese and Japanese university students living in urban areas. Unlike older adults, college students are extremely flexible in their actions, and most of them have left their hometowns where they have grown up to go to college in a new city and are in the stage of adaptation from a familiar area to a new environment. We must understand and promote to the new generation of young people the need to contribute to the rural economy by maintaining rural areas or visiting them in the future.

The results found that Chinese university students were concerned about sanitation, poverty, and rural education in rural areas, while Japanese students were more concerned about access, safety, and wild animals. The concerns of Chinese students reflect the lack of basic amenities and widespread poverty in rural areas, as well as the underfunding of rural education and its impact on access to education and personal and professional growth. With schools being underfunded and lacking resources to provide quality education this can lead to a lack of access to education and limited opportunities for personal and professional growth [74]. Gender inequality in rural areas is also a problem. Addressing these issues is crucial for improving the quality of life for rural residents and promoting sustainable development in these areas. On the other hand, Japanese students were concerned about access issues, such as limited public transportation, and safety issues, such as limited street lighting and the presence of wild animals, in rural areas. Both Chinese and Japanese students shared similar concerns about transportation and shopping convenience, and both groups experienced communication difficulties due to dialect differences in rural areas. Addressing these issues is crucial for improving the quality of life in rural areas and promoting sustainable development.

This study confirmed that the number of visits affects students’ place attachment, as previously reported by Taniguchi [65–67]. However, the difference between Chinese and Japanese students was more pronounced, with Japanese students showing a stronger attachment to rural areas. This could be attributed to Japan’s rural tourism policy or the better construction of basic facilities. The study also found that gender plays a role in
place attachment among Chinese students, with males showing a stronger attachment to rural areas compared to females, which contradicts the previous research [68]. Therefore, addressing the sanitation concerns and negative past experiences of females in rural areas is important for promoting sustainable development. Furthermore, the study found that satisfaction with rural areas, interaction with rural residents, and convenience all positively impact place attachment, supporting previous research findings [67–73]. These findings offer insight into the factors affecting students’ attachment to rural areas and emphasize the need to consider these factors in promoting rural development.

There are several limitations to this study. First, although the study focuses on students with rural visitation experience, there is a lack of research on students who have not had any rural visitation experiences, which could be a potential avenue for future research. In addition, the study was limited to two representative countries in East Asia, and the findings may not be generalizable to other regions or countries and need to be explored further. Furthermore, the sample size of this study, limited to the cities of Zhengzhou and Chiba, may not be large enough to comprehensively capture the full range of perceptions and experiences of young people in these countries on a national scale.

5. Conclusions

In conclusion, this study provides a deeper insight into the perception and attachment of young university students towards rural areas in China and Japan. The results highlight the impact of various determinants, such as place of birth, visiting experience, satisfaction, interaction with local people, and convenience, on students’ attachment and willingness to live in rural areas. The findings of this study are valuable for rural community development, suggesting the need for educational resources, promotion of rural culture in urban education, and addressing hygiene issues in China, and promoting rural tourism, environmental safety, and access to rural areas in Japan. However, this study has limitations and further research is necessary to explore the emotional connection between young people and rural areas in more depth. Additionally, future studies could examine the perception of young people in other countries towards rural areas, contributing to a better understanding of the challenges and opportunities for rural development globally.

Author Contributions: Conceptualization, Y.M. and L.H.; methodology, Y.M. and L.H.; software, Y.M.; validation, Y.M., L.H. and K.F.; formal analysis, Y.M.; investigation, Y.M.; resources, Y.M. and K.F.; data curation, Y.M.; writing—original draft preparation, Y.M.; writing—review and editing, Y.M. and D.D.; visualization, Y.M.; supervision, Y.M., L.H. and K.F.; project administration, Y.M.; funding acquisition, K.F. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: This study was executed in strict conformity with the ethical principles set forth in the Declaration of Helsinki. Prior to their participation, verbal consent was procured from all the individuals involved in the survey. Also as delineated by the guidelines promulgated by the Japanese ethical committee, our research falls under category 1.1. This category pertains to studies that do not involve medical research targeting individuals and encompasses surveys and evaluations of educational or work-related activities, provided that the data is safeguarded and the methodology is non-invasive. Moreover, according to Chinese legislation on research ethics, specifically Article 9, studies utilizing public or anonymous data are exempted from ethical approval. Given the nature of our research, which aligns with these guidelines, the requirement for ethical review and approval was waived in this case.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Not applicable.

Acknowledgments: The authors acknowledge that respectable reviewers employed their utmost expertise, wisdom, and careful evaluation to make the study well presentable and ensure the quality of the writing.

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


4. Riethmuller, M.L.; Dzidic, P.L.; Newnham, E.A. Going Rural: Qualitative Perspectives on the Role of Place Attachment in Young People’s Intentions to Return to the Country. *J. Environ. Psychol.* 2021, 73, 101542. [CrossRef]


7. Xu, L.; Zhao, H.; Chernova, V.; Strielkowski, W.; Chen, G. Research on Rural Revitalization and Governance From the Perspective of Sustainable Development. *Front. Environ. Sci.* 2022, 10, 839994. [CrossRef]


29. Rodriguez-Diaz, P.; Almuna, R.; Marchant, C.; Heinz, S.; Lebuy, R.; Celis-Diez, J.L.; Diaz-Siefer, P. The Future of Rurality: Place Attachment among Young Inhabitants of Two Rural Communities of Mediterranean Central Chile. *Sustainability* 2022, 14, 546. [CrossRef]


42. Du, H. Mobilities and Identities of Educated Young Adults: A Life-History and Biographical Study. *China Rev.* 2018, 18, 35–58.


45. Rérat, P. Highly Qualified Rural Youth: Why Do Young Graduates Return to Their Home Region? *Child. Geogr.* 2014, 12, 70–86. [CrossRef]


62. Iwasaki, Y. Relationship between population change and resident characteristics: The case of the Nagasaki Prefecture in Japan. *J. Urban Manag.* 2019, 8, 435–446. [CrossRef]


74. Długosz, P. Mental Health Disorders among Students from Rural Areas Three Months after Returning to School: A Cross-Sectional Study among Polish Students. *Youth* 2022, 2, 271–278. [CrossRef]

**Disclaimer/Publisher’s Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.