Effects of place attachment on participation intentions for local tourism development

H. Zhang & S. L. Lei
Department of Architecture, National Cheng Kung University, Taiwan

Abstract

Researchers in tourism development have often suggested that the participation of local residents is essential for sustainable tourism, and for identifying and understanding the factors affecting residents’ willingness to participate (“participation intention”) is instrumental in tourism development. “Place attachment” refers to the emotions and feelings people have for places or landscapes. When residents develop deeper bonds to their nearby settings, they are more willing to be involved in the development of the area. This study aims to examine residents’ attachment to nearby landscapes and investigate the effects of attachment on residents’ participate intention in local tourism. From the findings, three categories of attachment to different landscape attributes were extracted: cultural and historical landscapes, everyday landscapes, and natural landscapes. Moreover, regression analysis showed that attachment to cultural and historical landscapes can serve as a predictor of participation intention in tourism development. Under these circumstances, tourism authorities should give greater priority to enhancing residents’ attachment to cultural and historical landscapes, which would, in turn, increase their participation intention, thus fostering sustainable tourism.

Keywords: place attachment, participation intention, sustainable tourism, cultural and historical landscape, everyday landscape, natural landscape.

1 Introduction

Sustainability has come to be widely accepted as a key issue facing today's tourism industry. Participation by residents would likely strengthen communications between residents and tourism authorities and reduce conflicts. Many studies have demonstrated that residents’ participation is an essential
factor in sustainable tourism. Wells and Brandon [1] have suggested that the successful management of protected areas such as national parks ultimately depends on the cooperation and support of local people. Swarbrooke [2] noted that the host community should be actively involved in tourism planning, one of the cornerstones of sustainable tourism. Little is currently known about how to best promote residents’ participation intention in local tourism, but this subject is worthy of closer examination.

“Place attachment” refers to the positive emotional bonds that develop between individuals and their environment [3]. Williams and Vaske [4] proposed that place attachment can be identified and measured in two dimensions: place dependence and place identity. Place dependence reflects the functional attachment that is embodied in the area’s physical characteristics. Place identity is an emotional attachment that refers to the symbolic importance of a place [4]. Moore and Graefe [5] suggested frequency of visitation increases dependence on the setting and ultimately leads to an emotional attachment with the area. In this case, place attachment is a variable that expresses the meanings people assign to a specific setting through their experience with it.

In recent years considerable concern has arisen over the relationship between place attachment and environmental attitudes and behaviours. Vorkinn and Riese [6] examined the role of place attachment in predicting local attitudes toward a proposed environmental degradation. Uzzell et al. [7] suggested socially cohesive communities that have a strong sense of social and place identity will be more supportive of environmentally sustainable attitudes and behaviours compared to less cohesive communities. Stedman [8] showed higher place attachment is associated with greater willingness to engage in place-protective action. In a tourism context, Kyle et al. [9] examined the effects of place attachment on visitors’ perceptions of social and environmental conditions in a recreational setting. McCool and Martin [10] indicated residents’ attachment was associated with their attitudes toward tourism. Moreover, Gursoy and Rutherford [11] demonstrated that community attachment is a determinant of residents’ support for local tourism. This leads us to assume that place attachment may be a significant factor affecting residents’ participation intention in tourism development.

Ryan [12] developed a photo-based methodology to examine attachment to landscape features in natural areas. Walker and Ryan [13] then used the same method to examine residents’ level of attachment for different rural landscape types. However, that research did not identify settings related to residents’ daily activities as a category of place attachment. Vaske and Kobrin [14] noted that the presence of local recreational resource areas (e.g. community open space, etc.) leads residents to repeat visitation and then build up an emotional attachment. Settings related to residents’ daily activities are also critical for their place attachment. Thus, the objectives of this study are to examine residents’ feelings of attachment to certain places or landscapes with different attributes (including settings related to their everyday lives), and the effects of attachment on residents’ participation intention in local tourism development. It is worth examining which categories of landscape are generate more attachment by
residents, and to identify which categories of landscape attachment are most predictive of residents’ involvement in tourism.

2 Method

2.1 Study site

The Beimen wetland area is located along the western coastline of Taiwan (see Figure 1). This area is surrounded by a wide range of wetlands such as Beimen lagoon, estuaries, fish farms and abandoned salt pans. It offers a diverse ecology for tourism attractions such as coastal landscapes, mangrove swamps, and migratory birds. Previous development of the Beimen area focused mainly on the salt production industry, which came to a complete halt in 2000. The decline of traditional salt production drove the government to explore other industries, which could make use of the area’s huge stretch of wetlands to improve the local economy, and the government is hoping that tourism can promote local economic development and ecological conservation.

2.2 Data collection

Data on residents’ feelings of attachment to local landscapes and their willingness to contribute to local tourism development was gathered through on-site interviews conducted from August through October 2008 in the Beimen wetland area. The measurement of place attachment draws on the photo-based methodology developed by Ryan [12], and Walker and Ryan [13]. Participants were asked to rate some photos of three study sites according to their attachment to these specific locations or views. According to previous research [3, 4, 14, 15], place dependence and place identity are two underlying dimensions of place attachment. Thus, we measured place dependence and place identity for each

![Figure 1: Beimen wetland area.](image-url)
setting. With place dependence implying functional attachment [3, 4, 16], and place identity implying emotional attachment [3, 4, 9]. Participants were asked to view photos of 14 locations and assess their feelings of place dependence (i.e. “This is a good setting for the activities I do here.”) and place identity (i.e. “I have a special connection to this setting.”) for each location (see Fig. 2). These settings (photos 1-11) were selected a tourism promotion website operated by the Beimen Township Administration. Residents’ attachment was also measured for three settings related to their daily activities: a park, a religious shrine and a community centre (photos 12-14). In addition, residents’ participation intention in tourism development was measured by surveying their intention in discussion meetings, management training programs and community committees for tourism development [1, 17, 18]. A 5-point Likert scale ranging from “strongly disagree” to “strongly agree” was utilized for all survey items.

### 2.3 Data analysis

To categorize participants’ attachment to selected settings, we performed a factor analysis with principal components extraction and varimax rotation. The appropriateness of factor analysis was determined by examining the Kaiser-
Meyer-Olkin measure of sampling adequacy and Bartlett’s test of sphericity. Moreover, the criteria used to designate factors were as follows: eigenvalues greater than or equal to 1.00, loadings greater than 0.50, exclusion of items with loadings of 0.40 or greater on multiple factors. After identifying the factors, a Cronbach’s alpha reliability test was conducted to evaluate the reliability of each category. In addition, multiple regression analysis was used to find the effects of attachment on residents’ participation intention in local tourism development.

3 Results and discussion

A total of 361 questionnaires were collected from on-site interviews. After eliminating incomplete responses, 332 complete questionnaires were retained for the analysis. Approximately 54% of the participants were male. Most (64%) participants were between the ages of 30 and 59. Before using factor analysis to identify the categories of attachment, we conducted the Pearson product-moment correlations to examine the relationship between the two dimensions, place dependence and place identity, for place attachment at each setting. For all 14 locations, the correlation coefficient scored in the 0.58-0.88 range at 0.01. These results showed that place dependence and place identity are strongly positively correlated. Thus, we summed the ratings of place dependence and identity to derive one score of attachment for each setting. Factor analysis of attachment to landscape revealed three categories (Table 1), including twelve settings which

<table>
<thead>
<tr>
<th>Category/Item</th>
<th>Loading</th>
<th>Variance</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cultural and historical landscapes</strong></td>
<td></td>
<td>31.17%</td>
<td>0.89</td>
</tr>
<tr>
<td>Yonglong Trench</td>
<td>0.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blackfoot Disease Memorial House</td>
<td>0.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Church of Christ</td>
<td>0.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salt washing factory</td>
<td>0.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abandoned chemistry factory</td>
<td>0.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salt Company Office</td>
<td>0.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Everyday landscapes</strong></td>
<td></td>
<td>19.63%</td>
<td>0.83</td>
</tr>
<tr>
<td>King's Ship Pavilion</td>
<td>0.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keliao Folk Park</td>
<td>0.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Senior Center</td>
<td>0.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Natural landscapes</strong></td>
<td></td>
<td>18.35%</td>
<td>0.76</td>
</tr>
<tr>
<td>Abandoned salt pan</td>
<td>0.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rebuilt salt pan</td>
<td>0.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beimen Lagoon</td>
<td>0.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kaiser-Meyer-Olkin measure of sampling adequacy</td>
<td>0.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bartlett’s test of sphericity (significance level)</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
completely explained 69.15% of the variance. Two settings (photo 7 and 8) were eliminated because of dual loadings. The three categories were cultural and historical landscapes (photos 2, 5, 6, 9, 10, and 11); everyday landscape settings related to residents’ daily activities (photos 12, 13 and 14); and natural landscapes with water scenes (photos 1, 3, and 4). In addition, the scores of Cronbach’s alpha indicated a high goodness-of-fit between items in each category.

The results reveal that participants’ attachment varied with the different landscape types, which is consistent Ryan’s [12] findings that environmental characteristics affect attachment. We also calculated the average ratings of the items that formed the three categories and used one-way ANOVA to revealing a significant difference in feelings of attachment across the three categories ($F = 23.52, p = 0.000<0.05$). The mean values for the three categories were 3.64, 3.89 and 3.83, respectively. These results indicated that attachment either to everyday landscapes or natural landscapes was higher than to cultural and historical landscapes. The stronger attachment to everyday landscapes is probably influenced by the higher frequency of use of these settings in residents’ everyday lives. Korpela et al. [19] suggested that favourite places are important and valued places for which the participants are able to describe the use and meaning in the context of their lives. Frequency of visit is one of the main characteristics to indicate whether a place is a “favourite place”. This information is useful for planners when taking into consideration residents’ attachment for environment planning.

Beckley et al. [20] suggest that attachment is complex and produced through personal experience with the sociocultural and biophysical attributes of a landscape. In addition, Eisenhauer et al. [21] believed people often develop strong feelings about outdoor places that have special meaning to them. These areas are where a person has spent time doing enjoyable activities, or places with special scenery, or historical, cultural and economic importance. In this study, we identified three categories associated with cultural, historical, social, and natural attributes according to the place dependence and identity of certain settings or landscapes in the study site. The settings not only have special cultural, historical or economic significance to local residents, but are also important in the context of residents’ everyday lives. Walker and Ryan [13] grouped 24 landscape scenes into four categories: water scenes, farm scenes, forested and open land scenes, and cultural features scenes. In comparison, this study found that everyday landscapes have the highest attachment, and that this association with daily life is critical to developing the sense of attachment. Tourism authorities and planners should give more consideration to these settings for environmental planning and tourism development.

Next, multiple regression analysis was conducted to explore the effects of residents’ feelings of attachment on their participation intention in tourism development. The results of factor analysis of place attachment were used to create the independent variables by calculating the average ratings of the items that formed the factor. Three items of willingness to become involved in tourism yield a single dimension with the average rating of the items regarded as the
dependent variable in the regression analysis. The results of multiple regression analysis (Table 2) show that place attachment had significant effects on participation intention in tourism development. The results support the finding of Höppner et al. [22] that a person's place attachment is a factor influencing his or her willingness to attend discussion events. More specifically, our study showed that participants’ feelings of attachment to cultural and historical landscapes are a predictor of their level of involvement in tourism. In other words, attachment to cultural and historical landscapes in the study site may be a motivation to become involved with tourism development. Cultural and historical landscapes arouse important memories and stories of the Beimen area. Residents probably recognize these landscapes are important resources for the tourism industry. Thus, the results showed that the higher the residents’ attachment to historical and cultural landscapes, the greater their involvement in tourism. Tourism authorities and planners should pay greater and earlier consideration to promote local attachment to cultural and historical landscapes, therefore encouraging residents to develop an enhanced motivation to participate in tourism development.

Ryan [12] suggested that it is valuable to identify special places and characteristics that are important to a particular group. It is essential that planners and managers incorporate these diverse viewpoints when making management or design decisions. In this study, the results suggest some implications for tourism authorities and planners which could lead to the proposal of more innovative policies for tourism development from an examination of the functional assessment or emotional meanings of particular landscapes.

### 4 Conclusion

The objectives of this study are to examine how residents’ attachment to landscapes with different attributes affects their participation intention in local tourism development. Results showed that residents’ attachment to landscapes could be split into three categories, each with its own attributes. Moreover, place attachment has significant effects on residents’ participation intention in tourism development. More specifically, attachment to cultural and historical landscapes is a predictor of residents’ involvement in local tourism. This study not only distinguishes attachment to landscapes with different attributes, but also takes into consideration the effects of attachment to landscapes on residents’

### Table 2: Predicting participation intention using multiple regression analysis.

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural and historical landscapes</td>
<td>0.47</td>
<td>0.07</td>
<td>0.43</td>
<td>6.76</td>
<td>0.000</td>
</tr>
<tr>
<td>Everyday landscapes</td>
<td>-0.07</td>
<td>0.07</td>
<td>-0.06</td>
<td>-0.98</td>
<td>0.33</td>
</tr>
<tr>
<td>Natural landscapes</td>
<td>-0.05</td>
<td>0.08</td>
<td>-0.05</td>
<td>-0.73</td>
<td>0.47</td>
</tr>
</tbody>
</table>

Note: $R^2 = 0.15$, adjusted $R^2 = 0.14$, $F = 19.34$, $p = 0.000$. 
willingness to engage in tourism. By demonstrating the linkage between landscape attachment and participation intention, this study highlights an approach for stimulating more participatory development, which is the ultimate goal of sustainable tourism development. This is critical for identifying residents’ emotional ties to special local settings and has important implications for tourism authorities or planners.

Acknowledgement

This study is supported by a grant from the National Science Council, Taiwan, Republic of China, under the project NSC96-2511-S006-002-MY3.

References


