Recreation Benefit, Recreation Experience, Satisfaction, and Revisit Intention – Evidence from Mo Zai Dun Story Island

Ya-Hui Wang
Assistant professor
Department of Business Administration
National Chin-Yi University of Technology
Zhongshan Rd., Taiping Dist.
Taichung 41170
Taiwan, R.O.C

Yu-Hsiu Wang
Jo-Han Chiu
Jia-Yu Liou
Yu-Shiang Yang
Undergraduate Student
Department of Business Administration
National Chin-Yi University of Technology
Zhongshan Rd., Taiping Dist.
Taichung 41170
Taiwan, R.O.C.

Abstract
Ecotourism is a rapidly growing form of tourism today, because it not only benefits the Earth by conserving it, but also provides cultural and economic benefits as well. Mo Zai Dun Story Island is an ecological leisure farm which is the only area in Taiwan that has oxbow lake topography. Thus, this study uses Mo Zai Dun Story Island as an example to investigate the relationships and effects of recreation benefit, recreation experience, satisfaction, and revisit intention through a questionnaire. The research findings show that recreation benefit has a significantly positive impact on revisit intention, but it does not have an indirect impact on revisit intention via satisfaction. Additionally, recreation experience has a significantly positive impact on satisfaction. Satisfaction also has a significantly positive influence on revisit intention. Results of this study can be a reference for authorities and ecotourism practitioners in marketing ecotourism as well as in developing ecotourism programs.

Keywords: Ecotourism; recreation benefit; recreation experience; satisfaction; revisit intention

1. Introduction
Ecotourism is a rapidly growing form of tourism today, because it not only benefits the Earth by conserving it, but also provides cultural and economic benefits as well. Ecotourism has been extensively promoted worldwide since the United Nations designated 2002 as the International Year of Ecotourism (IYE). Because most people have greater discretionary income, place a higher emphasis on leisure activities, and have an increasing awareness about environmental preservation, there has been a significant rise in people choosing ecotourism as their leisure activity.

Mo Zai Dun Story Island is an ecological leisure farm located in TouBiaKeng, which is the only area in Taiwan that has oxbow lake topography. Mo Zai Dun Story Island is also a natural nursing education center that was constructed under the concept of nature, ecological, and environmental conservation. It is a good place for both adults and children to be near nature, and it is also suitable for children’s outdoor teaching. Visitors can experience activities such as feeding goats, climbing rocks, observing plants and insects, camping, etc.
Therefore, this study collected the opinions of 122 visitors of Mo Zai Dun Story Island, and from their perspectives this study shall explore the relationships and effects of recreation benefit, recreation experience, satisfaction, and revisit intention. Results of this study can be a reference for authorities and ecotourism practitioners in marketing ecotourism as well as in developing ecotourism programs.

The rest of this paper is organized as follows. Section 2 reviews previous research on ecotourism, recreation benefit, recreation experience, satisfaction, and revisit intention. Section 3 describes the data and method we employ. Section 4 reports the empirical results, and section 5 concludes the paper.

2. Literature Review

2.1. Ecotourism

The concept of ecotourism can be traced back to Hetzer (1965), who suggested a rethinking of culture, education, and tourism through a new form of responsible tourism that includes four elements: minimizing environmental impacts, respecting host cultures with minimum cultural impacts, maximizing economic benefits to local people, and maximizing visitors’ recreation satisfaction. However, the first formal definition of ecotourism was proposed by Ceballos-Lascurain (1987), who defined it as “traveling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring, and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas”. Ecotourism is now generally defined as “responsible travel to natural areas that conserves the environment, sustains the well-being of the local people, and involves interpretation and education” (The International Ecotourism Society, 2015).

Ross and Wall (1999) outlined five basic functions of ecotourism: protection of natural area, generation of money, environmental education, quality tourism, and local participation. Blamey (2001) argued that three characteristics can represent the main essence of ecotourism: nature based, environmentally educated, and sustainably managed.

2.2. Recreation Benefit

Recreation benefit is the realization of a specific satisfying recreation activity that improves physical and mental health, promotes self-esteem, enhances self-skills, or expands one’s field of knowledge (Driver & Brown, 1975). It also refers to fulfilling the needs of an individual or a group in the process of resource usage, or an advantageous change that improves an existing condition (Driver, Brown and Peterson, 1991). However, recreation benefit is also defined as a measure of facilities and activities required by recreationists (Crompton & Witt, 1996) or a measure of the utility that a consumer obtains from the recreation experience (Loomis and Walsh, 1997).


2.3. Recreation Experience

Driver and Tocher (1970) employed a behavioral definition of recreation opportunity that moved beyond the conventional activity-opportunity definition, describing recreation as an intrinsically rewarding experience that is freely chosen and occurs during non-obligated time. Schmitt (1999) considered experience as an individual event in response to certain stimuli, usually caused by a direct observation or participation in an event, and it is often not spontaneous, but rather induced. From a psychological perspective, recreation experience is defined as a series of psychological outcomes desired from a recreation engagement (Driver & Brown, 1975; Driver, 1976).

Driver and Tocher (1970) suggested that recreation experience includes five phases: planning phase, travel to the site, on-site experience, travel back to home phase, and recollection phase. Recreation experience is dynamic, multiple dimensional, and complex (Ittelson, 1978; Hull, Michael, Walker, and Roggenbuck, 1998).
Ittelson (1978) argued that the recreation experience is a combination of the activity itself and the environment, and different combinations result in different experience perceptions. Manfredo, Driver, and Tarrant (1996) conducted a meta-analysis to develop Recreation Experience Preference (REP) scales for measuring the goals of leisure and divided recreation experience into fifteen domains. Hull, Michael, Walker, and Roggenbuck (1998) concluded the recreation experience has eight dimensions: anxiety, dullness, excitement, calmness, love, power of concentration, freedom, and self-esteem.

2.4. Satisfaction
Cardozo (1965) was the first to propose the concept of customer satisfaction, defining it as an emotional response that results from the disconfirmation between the pre-purchase expectations concerning the product and perceived actual product performance. Customer satisfaction is also defined as “a person’s feeling of pleasure or disappointment resulting from comparing a product’s perceived performance (or outcome) in relation to his or her expectations” (Kotler, 1997). Hampel (1977) pointed out that customer satisfaction is a subjective evaluation and is the result of consistency of expected performance with actual performance. Oliver (1980) expressed consumer satisfaction as a function of expectation and expectancy disconfirmation. Baker and Crompton (2000) referred to satisfaction as a tourist’s emotional state after exposure to the destination.

Customer satisfaction is influenced by a customer’s expectations concerning the product and the effort expended to acquire the product (Cardozo, 1965). It is believed to influence attitude change and purchase intention (Oliver, 1980). Satisfaction is determined by the congruence between aspiration and perception, and it can be explained in terms of a summation of satisfaction with four elements of the experience: expectations about a recreation engagement, expected experience before participating in a recreation, actual experience after participating in a recreation, and satisfaction weights in the regression model (Peterson, 1974). Dorfame (1979) took satisfaction to be an individual’s subjective evaluation about a recreation activity and recreation experience, and it is influenced by a number of subjective and objective factors related to the recreation experience process. Thus, he incorporated perceptions, preferences, expectations, and importance to develop several satisfaction measures.

2.5. Revisit Intention
Intention is defined as the individual’s subjective probability that he or she will perform a specific behavior (Fishbein and Ajzen, 1975) or “a stated likelihood to engage in a behavior” (Oliver, 1997). Revisit intention is the possibility for the tourist to visit a destination again, and this behavior is considered as an expression of loyalty (Baker and Crompton, 2000; Gronhold, Martensen and Kristensen, 2000), or an actual action that refers to the willingness of a tourist to revisit the same destination (Kozak, 2001). Factors influencing tourists’ revisit intentions include satisfaction (Baker & Crompton, 2000; Kozak, 2001; Valle, Silva, Mendes, and Guerreiro, 2006; Jang and Feng, 2007; Chi and Qu, 2008; Faullant, Matzler, and Füller, 2008; Huang and Hsu, 2009), past travel experience (Kozak, 2001; Huang and Hsu, 2009; Kim, Hallab, and Kim, 2012), perceived attractiveness (Um, Chon, and Ro, 2006), and novelty seeking (Jang and Feng, 2007; Assaker, Vinzi, and O’Connor, 2011).

Ajzen and Driver (1992) proposed a two-dimensional scale to measure revisit intention: personal intuition and the willingness to make recommendations. On the other hand, revisit intention can be viewed as an extension of repurchase or loyalty, and can be measured by repeat purchase intention, willingness to recommend to others, and cross-buying intention (Gronhold, Martensen and Kristensen, 2000). Following Ajzen and Driver’s (1992) line of thought, in this study we measure revisit intention by the likelihood to return to the destination again and the willingness to recommend it to others.

3. Data and Methods
3.1. Hypotheses
Consumers usually evaluate the utility and benefits of a product from consumption experience, which in turn affect their satisfaction (Mano and Oliver, 1993). Tomas, Scott, and Crompton (2002) investigated the relationships of service quality, benefits sought, satisfaction, and future intention to visit among visitors to a zoo, finding that intention to revisit or to recommend it to others is dependent upon the quality of service delivered, the recreation benefits received, and overall satisfaction.
Kil, Holland, Stein, and Ko (2012) examined the relationships between consumers’ perceived benefits, place attachment, and future visit intention at nature-based recreation and tourism areas, and they proved that recreation benefits desired and recreation benefits attained are both important antecedents of behavioral intention. Accordingly, we set up the following two hypotheses.

H1: Recreation benefit has a significantly positive impact on satisfaction.
H2: Recreation benefit has a significantly positive impact on revisit intention.

Satisfaction has been identified as an overall evaluation of the psychological outcomes that result from the recreation experience (Driver and Tocher, 1970; Driver and Knopf, 1976). Satisfaction is a presentation of tourists’ inner feeling of the recreational experience and is also an effective predictor of revisit intention (Mannell, 1989). Many studies identified satisfaction with travel experience as the major antecedent of revisit intention (Kozak, 2001; Tomas, Scott & Crompton, 2002; Valle, Silva, Mendes, and Guerreiro, 2006; Jang and Feng, 2007; Huang and Hsu, 2009). Valle, Silva, Mendes, and Guerreiro (2006) examined the importance of satisfaction as a determinant of destination loyalty, noting that higher levels of satisfaction result in an increased likelihood of future revisits and recommendation to others. The findings of Assaker, Vinzi, and O’Connor (2011) also indicate that both novelty seeking and low satisfaction among travelers reduce immediate revisit intention. Accordingly, we build up the following hypotheses.

H3: Recreation experience has a significantly positive impact on satisfaction.
H4: Satisfaction has a significantly positive impact on revisit intention.

### 3.2. Questionnaire Design and Data Collection

According to the research framework, we design the items of the questionnaire for the four dimensions: recreation benefit, recreation experience, satisfaction, and revisit intention. These items are measured on Likert’s five-point scale, ranging from 1 point to 5 points, denoting “very disagree”, “disagree”, “neutral”, “agree”, and “very agree”, respectively.

We administered the questionnaires to visitors of Mo Zai Dun Story Island from September 27, 2014 to October 19, 2014. A total of 125 responses were distributed, and 122 usable responses were collected. An acceptable response rate was 97.60%.

### 3.3. Measurement

The gauging scales are selected from the literature. Recreation benefit is gauged by 5 items taken from Ewert (1986). Recreation experience is measured by 5 items taken from Manfredo, Driver, and Tarrant (1996). Satisfaction is gauged by 5 items taken from Peterson (1974). Revisit intention is gauged by 5 items taken from Ajzen and Driver (1992).

### 3.4. Pre-test

We selected 30 visitors based on convenience sampling for the pre-test of the questionnaire. The pre-test results show that all the dimensions have a Cronbach’s α between 0.785 and 0.935. This means a good reliability, because the Cronbach’s α coefficient has a value greater than 0.7 (Nunnally, 1978; Wortzel, 1979). The results from factor analysis indicate that all factors have an eigenvalue greater than 1, a factor loading greater than 0.6, a cumulative explained variation greater than 50%, and all the correlations between each factor and their items are greater than 0.5. This meets the criterion of convergent validity proposed by Kaiser (1958). Accordingly, we use this pre-test questionnaire as our formal questionnaire.

### 4. Analyses and Results

We perform data analyses on SPSS 20.0 and AMOS 21.0. The methods adopted include descriptive statistics analysis, reliability and validity analysis, correlation analysis, and structural equation modeling (SEM) analysis.

### 4.1. Descriptive Statistics Analysis

Through descriptive statistics analysis in Table 1, we found that the basic attributes of major group are female (54.92%), 31-40 years old (41.80%), live in central Taiwan, and work in service industry (20.49%) or manufacturing industry (20.49%).
Table 1: Descriptive Statistics Analysis of Sample

<table>
<thead>
<tr>
<th>Items</th>
<th>No. of respondents</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>55</td>
<td>45.08</td>
</tr>
<tr>
<td>Female</td>
<td>67</td>
<td>54.92</td>
</tr>
<tr>
<td>Age group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger than 20 years old</td>
<td>6</td>
<td>4.92</td>
</tr>
<tr>
<td>21-30 years old</td>
<td>33</td>
<td>27.05</td>
</tr>
<tr>
<td>31-40 years old</td>
<td>51</td>
<td>41.80</td>
</tr>
<tr>
<td>41-50 years old</td>
<td>27</td>
<td>22.13</td>
</tr>
<tr>
<td>older than 50 years old</td>
<td>5</td>
<td>4.10</td>
</tr>
<tr>
<td>Residential area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northern Taiwan</td>
<td>1</td>
<td>0.82</td>
</tr>
<tr>
<td>Central Taiwan</td>
<td>95</td>
<td>77.87</td>
</tr>
<tr>
<td>Southern Taiwan</td>
<td>26</td>
<td>21.31</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service industry</td>
<td>24</td>
<td>19.67</td>
</tr>
<tr>
<td>Manufacturing industry</td>
<td>25</td>
<td>20.49</td>
</tr>
<tr>
<td>Financial industry</td>
<td>25</td>
<td>20.49</td>
</tr>
<tr>
<td>Information technology</td>
<td>5</td>
<td>4.10</td>
</tr>
<tr>
<td>Public servants &amp; teachers</td>
<td>5</td>
<td>4.10</td>
</tr>
<tr>
<td>Students</td>
<td>14</td>
<td>11.48</td>
</tr>
<tr>
<td>Others</td>
<td>25</td>
<td>20.49</td>
</tr>
</tbody>
</table>

4.2. Reliability and Validity Analysis

As presented in Table 2, all the dimensions have a Cronbach’s α greater than 0.7, which complies with the criterion proposed by Nunnally (1978). Hence, the reliability coefficient (Cronbach’s α) of the questionnaire is within the acceptable level.

Convergent validity and discriminant validity are commonly regarded as subsets of construct validity. According to the results in Table 2, all factor loadings are greater than 0.5, all Eigen value are greater than 1, and all cumulative variance explained are greater than50% in these four dimensions. This is consistent with the criterion of convergent validity proposed by Kaiser (1958).

Table 3 presents the results of correlation analyses, with the values on the non-diagonal being Pearson correlation coefficients of our four dimensions (constructs): recreation benefit (RB), recreation experience (RE), satisfaction (SA), and revisit intention (RI). We note that the questionnaire has discriminant validity, because the correlation coefficient of each of the two constructs in Table 3 is lower than the Cronbach’s α of each dimension (Gaski and Nevin, 1985). In addition, it also has content validity, because our scale and item contents are constructed according to the literature review and do pass the questionnaire pre-test.
Table 2: Reliability and Validity Analysis

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Factor loading</th>
<th>Eigen values</th>
<th>Cumulative variance explained (%)</th>
<th>Cronbach’s α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreation benefit</td>
<td>0.670</td>
<td>2.703</td>
<td>54.056</td>
<td>0.780</td>
</tr>
<tr>
<td></td>
<td>0.825</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.827</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.621</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.709</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recreation experience</td>
<td>0.677</td>
<td>3.238</td>
<td>64.760</td>
<td>0.864</td>
</tr>
<tr>
<td></td>
<td>0.761</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.806</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.897</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.864</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>0.751</td>
<td>3.268</td>
<td>65.365</td>
<td>0.867</td>
</tr>
<tr>
<td></td>
<td>0.772</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.822</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.866</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.826</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revisit intention</td>
<td>0.848</td>
<td>3.264</td>
<td>65.279</td>
<td>0.863</td>
</tr>
<tr>
<td></td>
<td>0.852</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.811</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.825</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.693</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This table shows the reliability and validity analysis. The Cronbach’s α is used as a reliability coefficient. Factors with an eigenvalue greater than 1 and a factor loading greater than 0.5 are extracted.

Table 3: Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>RB</th>
<th>RE</th>
<th>SA</th>
<th>RI</th>
</tr>
</thead>
<tbody>
<tr>
<td>RB</td>
<td>1</td>
<td>0.613 (0.000)</td>
<td>0.495 (0.000)</td>
<td>0.727 (0.000)</td>
</tr>
<tr>
<td>RE</td>
<td></td>
<td>1</td>
<td>0.620 (0.000)</td>
<td>0.558 (0.000)</td>
</tr>
<tr>
<td>SA</td>
<td></td>
<td></td>
<td>1</td>
<td>0.564 (0.000)</td>
</tr>
<tr>
<td>RI</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

This table shows Pearson correlation analysis of recreation benefit (RB), recreation experience (RE), satisfaction (SA), and revisit intention (RI). Values in parentheses are p-values.

4.3. Structural Equation Modeling Analysis

This section conducts structural equation modeling (SEM) analysis to test the fit of the factors (dimensions) of recreation benefit, recreation experience, satisfaction, and revisit intention. For a model with good fit, GFI (goodness of fit) should be greater than 0.8 (Browne and Cudeck, 1993). AGFI (adjusted goodness of fit) should be greater than 0.8, and CFI (comparative fit index) should be greater than 0.9 (Doll, Xia, Torkzadeh, 1994; MacCallum and Hong, 1997; Hair et al., 2009; Hu and Bentler, 1999; Gefen et al., 2000). RMSEA (root mean square error of approximation) should be under 0.08 (Browne and Cudeck, 1993), and the ratio of the chi-square value to degrees of freedom ($\frac{\chi^2}{df}$) should be no greater than 3 (Carmines and Maclver, 1981; Hair et al., 2009). The goodness-of-fit indices of the model are as follows: GFI is 0.761, AGFI is 0.696, CFI is 0.846, RMSEA is 0.10, and $\frac{\chi^2}{df}$ is 2.320. All these indices near the criteria, meaning that the overall model fitness is acceptable.
4.4. Results from the Hypotheses Verified

Figure 1 presents the path analyses from SEM. According to the estimated values of the standardized parameters of the relationship model in Figure 1, we find that recreation benefit has a significantly positive influence on revisit intention (H2 is supported), but it does not have a direct impact on satisfaction (H1 is not supported). Additionally, recreation experience has a significantly positive impact on satisfaction (H3 is supported). Satisfaction also has a significantly positive influence on revisit intention (H4 is supported).

![Figure 1: SEM from Path Analysis](image)

The results from H1, H2, and H4 indicate that recreation benefit has a direct effect on revisit intention but it has not a indirect effect on revisit intention via satisfaction. However, the results from H3 and H4 show that recreation experience has an indirect effect on revisit intention via satisfaction.

<table>
<thead>
<tr>
<th>Hypotheses and Paths</th>
<th>Standardized Factor Loadings</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Recreation benefit → satisfaction</td>
<td>0.086</td>
<td>Unsupported</td>
</tr>
<tr>
<td>H2: Recreation benefit → revisit intention</td>
<td>0.701***</td>
<td>Supported</td>
</tr>
<tr>
<td>H3: Recreation experience → satisfaction</td>
<td>0.629***</td>
<td>Supported</td>
</tr>
<tr>
<td>H4: Satisfaction → revisit intention</td>
<td>0.271***</td>
<td>Supported</td>
</tr>
</tbody>
</table>

This table shows the estimated values of standardized parameters and the hypothesis test results. ***, **, and * indicate significance at the 0.1, 1, and 5 percent levels respectively.

5. Conclusion and Implications

Ecotourism is a rapidly growing form of tourism today, because it not only benefits the Earth by conserving it, but also provides cultural and economic benefits as well. Mo Zai Dun Story Island is an ecological leisure farm and is the only area in Taiwan having oxbow lake topography. Thus, this study takes Mo Zai Dun Story Island as a case study to investigate the relationships and effects of recreation benefit, recreation experience, satisfaction, and revisit intention through a questionnaire. The research findings show that recreation benefit has a significantly positive influence on revisit intention, but it does not have a direct impact on satisfaction. Additionally, recreation experience has a significantly positive impact on satisfaction. Satisfaction also has a significantly positive influence on revisit intention.

The results from SEM show that both recreation benefit and satisfaction have a direct effect on revisit intention, and recreation experience also has an indirect effect on revisit intention via satisfaction. Therefore, we suggest that ecotourism practitioners pay more attention to strategies that primarily help to increase tourists’ satisfaction and recreation benefit when they are marketing an ecological farm or when developing recreation programs in the future.
Acknowledgement
We are grateful for the funding of Taiwan’s Ministry of Science and Technology for this study, and the project number is 103-2815-C-167-013-H.

References


