U.S. Ecotourists’ Travel Experience and Satisfaction Reported on the World Wide Web:
A Case of Costa Rica Ecolodges

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ABSTRACT

Ecotourism is gaining popularity. Ecolodge is a unique lodging sector because it provides both accommodation and comprehensive ecotourism experience. This study aims at constructing ecotourists’ travel experience to ecotourism destinations and stay at ecolodges and finding the factors contributing to the consumption satisfaction. Costa Rican ecolodges are used as a case study. The online user-generated reviews posted by travelers were used as the qualitative material. The study methodology is content analysis. Research results indicated that ecotourists’ travel experience and stay with ecolodges could be categorized to 7 categories and 27 attributes. A typology of factors contributing to ecotourists’ satisfaction with eco-experience at ecolodges was proposed: criticals, satisfiers, dissatisfiers, and neutrals.

Keywords: ecotourism, ecolodge, user-generated content, travel experience, satisfaction.

INTRODUCTION

Fennell (2007, p. 24) summarized ecotourism as “a sustainable, non-invasive form of nature-based tourism that focuses primarily on learning about nature first-hand, and which is ethically managed to be low-impact, non-consumptive, and locally oriented… typically occurs in natural areas, and should contribute to the conservation of such areas.” The Tourism Network rated ecotourism as one of the fastest-growing sectors in the tourism industry, with an annual growth rate of 5% worldwide, representing 6% of the world gross domestic product and 11% of all consumer spending (tourismknowledge.com, 2005). Ecolodge, the accommodation base of ecotourists, is the important industrial sector in the ecotourism market by largely providing the ecotourism experience. An ecolodge is a “nature-dependent tourist lodge that meets the philosophy and principles of ecotourism” (Russell, Bottrill, & Meredith, 1995, p. 147). It offers natural resource-oriented ecotourism activities and opportunities for learning about the environment (Lai & Shafer, 2005). Ecotourists staying in ecolodges typically have direct access to nature reserves and a variety of nearby nature-based attractions where they explore local flora and fauna, view wildlife, and participate in nature-based activities such as nature hikes and birdwatching. Although not all of the ecotourists stay at ecolodges, customers of this lodging segment present a sizable tourist market and an appropriate group to study demand for ecotourism.
The purpose of the study is to discover the travel experience components from the perspective of ecotourists and to understand the issues contributing to ecotourists’ satisfaction/dissatisfaction with travel experience. The guiding research questions addressed in this study are: 1) what are the components that constitute the ecotourists’ travel experience reported by ecotourists themselves? (RQ1) and 2) what are the factors that increase satisfaction or generate dissatisfaction among ecotourists staying at ecodges in ecotourism destinations? (RQ2) The data source is the online user-generated reviews. Online user-generated content provides opinions, reviews, and travel advice by real travelers. Hospitality researchers view consumer-created reviews of businesses as a kind of the information that has substantial impact on accommodation decisions (Schmallegger & Carson, 2008; Ye, Law, & Gu, 2009; Vermeulen & Seegers, 2009). The essentially self-reported travel experience is given freely, with no format imposed on them by neither practitioners nor researchers. There are no financial strings attached to travelers by service providers, either. Travelers spontaneously relate information that matters to them or they consider would be of interest to others when posting reviews or blogs. For these reasons, the authors believe that using such accessible, credible, and readily available user-generated information for analysis has high potential and apply this approach to study ecotourists’ travel experience and satisfaction.

LITERATURE REVIEW

Ecotourists’ activity defines ecotourism (Meric & Hunt, 1998). Ballantine and Eagles (1994) defined ecotourists by a couple of criteria: traveling to learn about nature; visiting wilderness or undisturbed areas in natural surroundings, and time commitment (i.e., 33% of one’s vacation time spent in the field). In particular, McKercher (2002) indicated that different types of ecotourists had different needs and had been divided into two groups: “specialist” (“experienced”) and “generalist” ecotourists. Travelers’ commitment to ecotourism and the centrality of an ecotourism experience in their vacation choice determines the type of ecotourists (Wight, 1997; Acott, La Trobe, & Howard, 1998; Meric and Hunt, 1998; McKercher, 2002). Getting close to nature is the major motivation of ecotourists’ making eco-trips, followed by learning new experiences and meeting people (Eagles, 1992; Crossley and Lee, 1994; Wight, 1996; Wight, 2001; Holden and Sparrowhawk, 2002; Kerstetter et al., 2004).

Following Oliver’s Expectancy Confirmation Theory, tourist satisfaction was defined: “tourist satisfaction is the result of the interaction between a tourist’s experience at the destination area and the expectations he had about that destination. When weighted sum total of experiences compared to the expectations results in feelings of gratification, the tourist is satisfied; otherwise he is dissatisfied with the feelings of displeasure” (Pizam, Neumann, & Reichel, 1978; p. 315). Researchers suggested that the satisfaction level of individual elements/attributes of all the products/services that made up the travel experience, such as accommodation, weather, natural environment, social environment, and etc., would contribute to the overall satisfaction (Lounsbury and Hoopes, 1985; Pizam and Ellis, 1999).

Herzberg’s Motivation-Hygiene Theory of job satisfaction asserts that satisfaction and dissatisfaction are different constructs; the satisfiers/motivators and dissatisfiers/hygiene factors are two significantly independent sets of factors (Herzberg, Mausner, & Snyderman, 1959). The
presence of dissatisfies/hygiene factor will not necessarily cause satisfaction but its absence result in dissatisfaction. The fulfillment of satisfiers/motivators leads to satisfaction. For instance, dissatisfiers/hygiene factors (e.g., good rapport with a supervisor, salary, working conditions and environment) need to be met to avoid dissatisfaction, but they do not necessarily contribute to one’s satisfaction with the job. One needs a presence of satisfiers/motivating factors (e.g., opportunities for professional growth) to be satisfied at the workplace. Tourism and recreation researchers adapted Herzberg’s theory to identify satisfiers and dissatisfiers (Balmer & Baum, 1993; Crompton, 2003; and Chan & Baum, 2007). Based on the above factorial structure, Cadotte and Turgeon (1988) suggested an underlying framework of consumer satisfaction. Some attributes (satisfiers) of the lodging products and services could be the source of satisfaction while others (dissatisfiers) could be the source of dissatisfaction. A third group of attributes (criticals) could be the source of both satisfaction and dissatisfaction. The final set (neutrals) was suggested having little effect on either satisfaction or dissatisfaction. However, the authors suggested that the applicability of such a pattern was unknown beyond the restaurant and lodging industry. Other studies are clearly needed to confirm the theoretical and managerial implication of proposed concepts.

User-generated contents such as online consumer reviews and travel blogs are regarded as a form of digital word-of-mouth, which are freely available online and tell every aspect of a visitor’s trip (Pan, MacLaurin, and Crotts, 2006; Crotts, Manson, and Davis, 2009). They are thought of constituting a valuable source of management information for organizations and of affecting brand-perceptions and customer relations (Dellarocas, 2003; Papathanassis and Knolle, 2010). Online reviews posted by travelers have been ever more available and used to inform travel-related decisions (Gretzel and Yoo, 2008). Papathanssis and Knolle (2010) declared negative reviews had a greater impact than positive ones.

RESEARCH METHODS

Sample selection

Sample selection included three steps: selection of ecotourism destination, selection of ecododge, and selection of user-generated review. First, Costa Rica and the Costa Rican ecododges at the key ecotourism regions (Puntarenas, Alajuela, and Limon) were selected as the source of qualitative data material to study tourist experience and satisfaction/dissatisfaction issues with travel experience. Costa Rica is a successful example of the country reaping the rewards of rapid growth in ecotourism. It possesses a rich resource of biodiversity (6% of the world’s total within 0.035% of the earth's surface). The country has experienced a dramatic tourism growth from 792,000 arrivals in 1995 to 1,659,000 arrivals in 2005, when the tourism gross receipts accounted for 22% of the country’s total foreign exchange (Visitcostarica.com).

Second, Tripadvisor.com was selected as a platform for collecting ecotourists’ genuine and representative reviews on travel experiences, with a large database of such reviews. TripAdvisor®-branded sites alone make up the most popular and largest travel community in the world, with more than 32 million unique monthly visitors, 15+ million members, and more than 30 million reviews and opinions, featuring real advice from real travelers (Tripadvisor.com). TripAdvisor users can add any destination, hotel, or restaurant that is not listed to the website.
and post reviews on it. The key words “Costa Rica lodge” were input to the search field on TripAdvisor homepage; there were 187 Costa Rican lodges listed (Last accessed: June 24, 2010). Eleven lodges with the largest number of online reviews (i.e., more than 100 posted online reviews) from the above three Costa Rican provinces were selected for this study (Figure 1).

![Ecolodges and location in this study](image)

Figure 1
Ecolodges and location in this study

Homepages of these lodges were reviewed. It was found that all of these lodges are nature-based, committed to the sustainability (e.g., water recycling, water and garbage treatment, use of alternative energy, use of organic, environmentally friendly and bio-degradable products) and the support of local enterprises and organizations (e.g., setting up the weekly visits with local schools, participation in conservation projects such as The liberation of Young Turtles). In other words, these lodges are qualified for the classification of “ecolodge.”

Third, online user-generated reviews containing the textual articles, rating scores, information on trip characteristics, and demographic characteristics of reviewers were collected. Only online reviews posted by travelers from North American countries (i.e., United States, Canada, and Mexico) and written in English were included. There are two justifications for this decision. First, the North American market is the primary tourism market to Costa Rica. The tourism income from North American international tourists accounted for almost a half (48.2%) of Costa Rica’s total in 2009 (Canatur.org). Second, the choice of English language helps maintain the data authenticity by avoiding translation from other languages (Chan & Baum, 2007b). This is particularly important to the qualitative data, since language nuances may be lost in translation. Additionally, the extracted reviews were limited to those that were posted online within one year from the “date of stay” to avoid the influence of memory effect.

In total, 920 reviews of the 11 ecolodges were collected, within initially specified latest 100 online reviews of each ecolodge. Out of 920 reviews, the majority (90.2%) were posted by US travelers, followed by Canada travelers (9.3%) and Mexican travelers (0.4%). Considering the potential of marketable results specialized in US outbound ecotourism market, the researchers decided to focus on those reviews only created by US travelers (830 out of 920). Out
of 830 reviews, there were 757 Positive and 73 Negative Reviews. A review was considered “positive” if the reviewer stated “I would recommend this hotel to a friend or relative,” and “negative” if he or she stated “I would not recommend this hotel to a friend or relative.” This dichotomy was supported by the results of the Mann-Whitney U test (Mann-Whitney U=54,600, p<0.001) confirming that the satisfaction score (i.e., “overall rating”) given by travelers indicating that they would make a recommendation was significantly higher than that by those who would not recommend.

The 73 Negative Reviews and 182 randomly selected Positive Reviews were retained for qualitative content analysis. The split-half technique (Krippendorff, 2003) was implemented to confirm the adequateness of current sample size. On average, each ecolodge had 17 Positive Reviews and 7 Negative Reviews. The selected 255 reviews were posted between August 29, 2006 and June 8, 2010. The time spans for posting Positive and Negative Reviews were September 2006 – June 2010 and August 2006 – May 2010, respectively.

Content analysis methods

This study constituted a content analysis of online user-generated reviews. The travel experience representing by ecotourists’ staying at ecolodges was categorized to answer RQ1. Identification of the satisfying/dissatisfying factors pertinent to travel experience and saty at ecolodges (RQ2) was also based on the content analysis results. Content analysis is based on capturing the concepts relevant to certain topics within the textual data and summarizing the results in a quantitative way (Roberts, 2000).

The primary researcher coded 200 reviews independently as a pretest. This resulted in a drafted list of attributes and categories. The other coder, graduate student from the same department of the university, was invited to a training session discussing appropriateness of the developed attributes and categories. Revision was made based on the disagreement and argument between two coders. Twenty-seven attributes and 7 categories were established as shown in Table 1. Attributes being indentified, a matrix table was created in Microsoft Excel Worksheets to keep the key words and statements extracted from each article. In particular, the negative comments were highlighted in red to differentiate them from positive comments that were in black. The matrix table was converted to a coding sheet where each article was coded across attributes by “1” for positive comments, “2” for negative comments, or “0” for the attribute not being mentioned.

Reliability check was done based on the codes by two coders. The process followed the standard intercoder reliability check guideline and procedure (Neuendorf, 2002). The percent agreement (PA) was calculated on each attribute. The average PA on Positive Reviews was 87.08% and the average PA on Negative Reviews was 86.26%. A 70% agreement or above is considered reliable (Frey, Botan, and Kreps, 2000; Shoemaker, 2003). However, PA on the attribute of “nature-based attractions” among Positive Reviews was 48.94%; PAs on “room/bathroom décor and layout” and “room/bathroom facilities” were 65.79% and 68.42%, respectively, among Negative Reviews. The two coders discussed the problematic attributes and made the adjustment accordingly.
Nonparametric test

The Mann-Whitney U test was used to confirm the validity of a dichotomy analysis of
textual reviewing articles. The dependent variable was the overall satisfaction rating score (i.e.,
“1 - terrible,” “2 - poor,” “3 - average,” “4 – very good,” and “5 - excellent”). The grouping
variable was the likelihood of recommendation (i.e., “I would (not) recommend this hotel to a
friend or relative”). Non-parametric tests were also used to identify the satisfying/dissatisfying
factors. First, the independent-samples Kruskal-Wallis test was implemented to find the
relationship between satisfaction with individual ecododge attributes and the overall satisfaction
with the stay at ecododge. The dependent variable was the overall satisfaction rating score and
the independent variable was the type of comments on attributes (i.e., “positive comment”,
“negative comment”, “not mentioned”). Second, the one-sample Chi-square goodness of fit test
was used to test difference between the distribution of overall satisfaction rating scores given by
ecotourists who commented certain attributes and the hypothesized distribution of a 5-point
Likert scale. These attributes must have significant influence on the overall satisfaction. Each
level of the Likert scale should occur with equal probabilities.

Attributes were classified as “neutrals” if no relationship was statistically found between
satisfaction with such attributes and overall satisfaction. This means that “neutrals” have little
effect on either satisfaction or dissatisfaction. Attributes were classified as “satisfiers” if the
relationship between satisfaction with such attributes and overall satisfaction could be found and
the ecotourists providing positive comments on such attributes tended to be satisfied. These
attributes are satisfying. Attributes were classified as “dissatisfers” if the ecotourists providing
negative comments on such attributes tended to be dissatisfied. These attributes are dissatisfying.
If certain attributes were found to be both “satisfying” and “dissatisfying”, they were classified
as “criticalls”.

RESULTS

Profiling

Among the 255 online reviews, the majority (80.22%) of them were posted by ecotourists
aged between 25 and 49 years old and nearly one fifth (15.93%) were by 50 years old or above
aged people. More female ecotourists (63.12%) posted the online travel reviews than male
(36.88%). The reviews reported the trips taken in between 2006 and 2010. The most were taken
in 2009 as collected, accounting for 41.18%, followed by 2008 (24.31%) and 2010 (16.47%). In
terms of seasonality, most trips were taken in March (14.12%), January (10.98%), and August
(10.98%). Least trips were taken in September (2.35%) and October (2.75%). Most of the trips
were made for leisure (98.82%) and 1.18% were for business purposes. More than a half were
made by couples (62.18%), followed by families (24.79%), friends getaway (10.08%), solo
travelers (1.68%), and business (1.26%). The overall rating scores on ecododges averaged at 3.9
out of 5 (i.e., “1 - terrible,” “2 - poor,” “3 - average,” “4 – very good,” and “5 - excellent”). More
than a half (67.84%) of ecotourists reported their trips to and stay at the ecododges being "good"
or "excellent", at 20.39% and 47.45%, respectively. Not surprisingly, the overall rating scores by
those ecotourists who would recommend the accommodation to friends or relatives were higher
than those who would not, 4.59 out of 5 versus 2.21 out of 5 (Mann-Whitney U=13,050, p<0.001).

Attribute and category frequency

**Positive Reviews**

The ecotourists mentioned the “lodge settings” category most often in Positive Reviews, followed by “room,” “nature,” “service,” “food,” “location,” and “value for money.” However, the “food quality” attribute was the one that was most frequently emphasized on, followed by “customer service,” “nature-based activities,” “room/bathroom décor and layout,” “room amenities,” “nature-based attractions,” and “grounds/surroundings.” In general, over a half of Positive Reviews mentioned these topics (Table 1).

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Freq.</th>
<th>%*</th>
<th>Attribute</th>
<th>Freq.</th>
<th>%*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lodge settings</td>
<td>281</td>
<td></td>
<td>Service</td>
<td>197</td>
<td></td>
</tr>
<tr>
<td>Grounds/surroundings</td>
<td>93</td>
<td>51.1%</td>
<td>Customer service</td>
<td>121</td>
<td>66.5%</td>
</tr>
<tr>
<td>Lodge amenities</td>
<td>79</td>
<td>43.4%</td>
<td>Tour/tour guide service</td>
<td>53</td>
<td>29.1%</td>
</tr>
<tr>
<td>Ambiance</td>
<td>66</td>
<td>36.3%</td>
<td>Restaurant service</td>
<td>6</td>
<td>3.3%</td>
</tr>
<tr>
<td>Ecofriendliness</td>
<td>24</td>
<td>13.2%</td>
<td>Entertainment choice</td>
<td>5</td>
<td>2.7%</td>
</tr>
<tr>
<td>Noise</td>
<td>13</td>
<td>7.1%</td>
<td>Management policies</td>
<td>5</td>
<td>2.7%</td>
</tr>
<tr>
<td>Other guests</td>
<td>6</td>
<td>3.3%</td>
<td>Reservation process</td>
<td>4</td>
<td>2.2%</td>
</tr>
<tr>
<td>Room</td>
<td>232</td>
<td></td>
<td>Food</td>
<td>141</td>
<td></td>
</tr>
<tr>
<td>Room/bathroom décor and layout</td>
<td>107</td>
<td>58.8%</td>
<td>Food quality</td>
<td>141</td>
<td>77.5%</td>
</tr>
<tr>
<td>Room amenities</td>
<td>99</td>
<td>54.4%</td>
<td>Location</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td>Room/bathroom facilities</td>
<td>14</td>
<td>7.7%</td>
<td>Closeness to town</td>
<td>39</td>
<td>21.4%</td>
</tr>
<tr>
<td>Insect problem</td>
<td>12</td>
<td>6.6%</td>
<td>Accessibility</td>
<td>26</td>
<td>14.3%</td>
</tr>
<tr>
<td>Nature</td>
<td>231</td>
<td></td>
<td>Closeness to attraction</td>
<td>19</td>
<td>10.4%</td>
</tr>
<tr>
<td>Nature-based activities</td>
<td>111</td>
<td>61.0%</td>
<td>Value for money</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Nature-based attractions</td>
<td>96</td>
<td>52.7%</td>
<td>Room rates</td>
<td>29</td>
<td>15.9%</td>
</tr>
<tr>
<td>Weather</td>
<td>24</td>
<td>13.2%</td>
<td>Food/drink price</td>
<td>28</td>
<td>15.4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Other prices</td>
<td>8</td>
<td>4.4%</td>
</tr>
</tbody>
</table>

Note: *Percentage out of the number of reviews (N=182)

**Negative Reviews**

The ecotourists mentioned the “lodge settings” category most often in Negative Reviews, followed by “room,” “service,” “nature,” “food,” “value for money,” and “location.” However, the “customer service” attribute was the one that was most frequently emphasized on, followed by “room amenities,” “room/bathroom décor and layout,” and “food quality.” In general, over a half of Negative Reviews mentioned these (Table 2).
Table 2
Attribute and Category Frequency in Negative Reviews

<table>
<thead>
<tr>
<th>Category/Attribute</th>
<th>Freq.</th>
<th>%*</th>
<th>Category/Attribute</th>
<th>Freq.</th>
<th>%*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lodge settings</strong></td>
<td>114</td>
<td></td>
<td><strong>Nature</strong></td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Lodge amenities</td>
<td>34</td>
<td>46.6%</td>
<td>Nature-based attractions</td>
<td>29</td>
<td>39.7%</td>
</tr>
<tr>
<td>Grounds/surroundings</td>
<td>32</td>
<td>43.8%</td>
<td>Nature-based activities</td>
<td>28</td>
<td>38.4%</td>
</tr>
<tr>
<td>Ambiance</td>
<td>26</td>
<td>35.6%</td>
<td>Weather</td>
<td>8</td>
<td>11%</td>
</tr>
<tr>
<td>Noise</td>
<td>15</td>
<td>20.5%</td>
<td>Food</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Ecofriendliness</td>
<td>5</td>
<td>6.8%</td>
<td>Food quality</td>
<td>38</td>
<td>52.1%</td>
</tr>
<tr>
<td>Other guests</td>
<td>2</td>
<td>2.7%</td>
<td><strong>Value for money</strong></td>
<td>38</td>
<td></td>
</tr>
<tr>
<td><strong>Room</strong></td>
<td>107</td>
<td></td>
<td><strong>Room rates</strong></td>
<td>18</td>
<td>24.7%</td>
</tr>
<tr>
<td>Room amenities</td>
<td>42</td>
<td>57.5%</td>
<td>Food/drink price</td>
<td>17</td>
<td>23.3%</td>
</tr>
<tr>
<td>Room/bathroom décor and layout</td>
<td>41</td>
<td>56.2%</td>
<td>Other prices</td>
<td>3</td>
<td>4.1%</td>
</tr>
<tr>
<td>Room/bathroom facilities</td>
<td>11</td>
<td>15.1%</td>
<td><strong>Location</strong></td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Insect problem</td>
<td>13</td>
<td>17.8%</td>
<td>Closeness to town</td>
<td>16</td>
<td>21.9%</td>
</tr>
<tr>
<td><strong>Service</strong></td>
<td>83</td>
<td></td>
<td>Accessibility</td>
<td>12</td>
<td>16.4%</td>
</tr>
<tr>
<td>Customer service</td>
<td>43</td>
<td>58.9%</td>
<td>Closeness to attraction</td>
<td>5</td>
<td>6.8%</td>
</tr>
<tr>
<td>Reservation process</td>
<td>10</td>
<td>13.7%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tour/tour guide service</td>
<td>9</td>
<td>12.3%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entertainment choice</td>
<td>7</td>
<td>9.6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management policies</td>
<td>7</td>
<td>9.6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restaurant service</td>
<td>4</td>
<td>5.5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Room/housekeeping service</td>
<td>3</td>
<td>4.1%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *Percentage out of the number of reviews (N=73)

Positive vs. Negative Reviews

Chi-square test was used to see if there was difference on frequencies of each attributes being mentioned between Positive Reviews and Negative Reviews. The statistical significant difference was detected on 4 attributes – “noise” (χ² = 9.578, p=0.002), “insect problem” (χ² = 7.411, p=0.006), “tour/tour guide service” (χ² = 7.984, p=0.005), “food quality” (χ² = 16.089, p<0.001), and “nature-based activities” (χ² = 10.763 p=0.001). A disproportionally higher percentage of Negative Review reported the problem of “noise” or “insect.” A disproportionally higher percentage of Positive Reviews mentioned “food” or “nature-based activities” topics.

Satisfying vs. dissatisfying factors with travel experience

Kruskal-Wallis test results (Table 3) indicated the statistical relationship between overall satisfaction and satisfaction with 16 individual attributes (out of 27). It was suggested that the overall satisfaction level with travel experience and stay at ecolodges was related to the satisfaction with these specific attributes.

Table 3
Kruskal-Wallis Test Results

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Test</th>
<th>P value</th>
<th>Attribute</th>
<th>Test</th>
<th>P value</th>
</tr>
</thead>
</table>

One-sample Chi-square test was completed on 16 attributes. Table 4 depicted the results on 12 attributes whilst the other 4 attributes, “insect problem,” “restaurant service,” “reservation process,” and “management policies”, were excluded because of the low frequencies of being mentioned. The Chi-square goodness of fit test results indicated that 1) ecotourists providing positive comments on 12 attributes tended to be satisfied; 2) ecotourists providing negative comments on “grounds/surroundings” and “room rates” tended to be dissatisfied.

### Table 4

<table>
<thead>
<tr>
<th>Satisfaction with attributes</th>
<th>χ²</th>
<th>P value</th>
<th>Satisfaction with attributes</th>
<th>χ²</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grounds/surroundings, positive comments</td>
<td>81.13</td>
<td>&lt;0.001*</td>
<td>Customer service, positive comments</td>
<td>168.88</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>Grounds/surroundings, negative comments</td>
<td>7</td>
<td>0.03*</td>
<td>Customer service, negative comments</td>
<td>7.55</td>
<td>0.056</td>
</tr>
<tr>
<td>Ambiance, positive comments</td>
<td>69.43</td>
<td>&lt;0.001*</td>
<td>Tour/tour guide service, positive comments</td>
<td>48.75</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>Ambiance, negative comments</td>
<td>2</td>
<td>0.736</td>
<td>Tour/tour guide service, negative comments</td>
<td>3</td>
<td>0.223</td>
</tr>
<tr>
<td>Ecofriendliness, positive comments</td>
<td>14.18</td>
<td>0.001*</td>
<td>Food quality, positive comments</td>
<td>161.45</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>Ecofriendliness, negative comments</td>
<td>3</td>
<td>0.625**</td>
<td>Food quality, negative comments</td>
<td>4.86</td>
<td>0.302</td>
</tr>
<tr>
<td>Lodge amenities, positive comments</td>
<td>54.43</td>
<td>&lt;0.001*</td>
<td>Room rates, positive comments</td>
<td>19.14</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>Lodge amenities, negative comments</td>
<td>5.92</td>
<td>0.205</td>
<td>Room rates, negative comments</td>
<td>11.26</td>
<td>0.024*</td>
</tr>
</tbody>
</table>
**DISCUSSION**

Ecotourism is a unique lodging sector in the tourism market. Ecotourists have expected more than accommodation before they choose to stay at an ecolodge. In the post-trip reviews, they almost tell every aspect of the stay at ecolodges. The emotional attitudes can also be addressed through the wordings. Satisfaction with the stay goes far beyond the satisfaction with the size, cleanliness, or facilities’ working condition of the room. The study results suggested that each ecolodge attribute plays a role in generating satisfaction/dissatisfaction with the experience. Some of them have the capacity to cause satisfaction while others could be salient to generate dissatisfaction. Table 5 depicted the proposed typology of factors constructing ecotourists’ satisfaction/dissatisfaction with the travel experience and stay at the ecolodges in Costa Rican destinations.

<table>
<thead>
<tr>
<th>Attributes Defined type</th>
<th>Typology of Factors Constructing Satisfaction/dissatisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grounds/surroundings</td>
<td>Critical</td>
</tr>
<tr>
<td>Room rates</td>
<td>Critical</td>
</tr>
<tr>
<td>Ambiance</td>
<td>Satisfier</td>
</tr>
<tr>
<td>Ecofriendliness</td>
<td>Satisfier</td>
</tr>
<tr>
<td>Lodge amenities</td>
<td>Satisfier</td>
</tr>
<tr>
<td>Room/bathroom décor</td>
<td>Satisfier</td>
</tr>
<tr>
<td>and layout</td>
<td>Satisfier</td>
</tr>
<tr>
<td>Room amenities</td>
<td>Satisfier</td>
</tr>
<tr>
<td>Customer service</td>
<td>Satisfier</td>
</tr>
<tr>
<td>Tour/tour guide service</td>
<td>Satisfier</td>
</tr>
<tr>
<td>Food quality</td>
<td>Satisfier</td>
</tr>
<tr>
<td>Nature-based activities</td>
<td>Satisfier</td>
</tr>
<tr>
<td>Nature-based attractions</td>
<td>Satisfier</td>
</tr>
<tr>
<td>Restaurant service</td>
<td>Satisfier</td>
</tr>
<tr>
<td>Food quality</td>
<td>Satisfier</td>
</tr>
<tr>
<td>Nature-based activities</td>
<td>Satisfier</td>
</tr>
<tr>
<td>Nature-based attractions</td>
<td>Satisfier</td>
</tr>
<tr>
<td>Restaurant service</td>
<td>Satisfier</td>
</tr>
</tbody>
</table>

Satisfiers appear to be those ecolodge attributes embracing ecotourists’ complements and the satisfaction with such attributes will certainly lead to the overall consumption satisfaction. In
the ecolodge context, the satisfiers are at the heart of both ecotourism and accommodation business and include “ambiance”, “ecofriendliness”, “lodge amenities”, “room/bathroom décor and layout”, “room amenities”, “customer service”, “tour/tour guide service”, “food quality”, “nature-based activities”, “nature-based attractions”, and “restaurant service.” They reflect the primary travel motive of ecotourists indicated by ecotourists motivation literature (Eagles, 1992; Wight, 2001; Holden and Sparrowhawk, 2002; Kerstetter et al., 2004). From a management perspective, the satisfiers represent an opportunity to move ahead of the pack (Cadott and Turgeon, 1988). The identification of satisfiers suggests that ecolodge managers focus on enhancing the core performance of ecolodge as a lodging sector as well as the aspects that stand them out from the mass accommodation business for example with enriching ecotourists’ ecotourism experience in the journey.

Dissatisfiers appear to be those ecolodge attributes where low level of performance of such features generates ecotourists’ negative feeling. Moreover, such negative feelings tend to result in overall dissatisfaction. A significantly higher percentage of dissatisfied ecotourists talk about “noise” and “insect problem.” The messed up reservation and the unfavorable management policies also have a potential to cause dissatisfaction. Ecotourists might not be aware of such issues if they are properly handled; otherwise, the presence of such issues possibly result in dissatisfaction. The minimum performance of such attributes is necessary but the high level of performance might not be the area to be complimented. The identification of dissatisfiers suggests ecolodge managers focusing on eliminating or minimizing common elements that lead to ecotourists’ dissatisfaction.

Criticals represent the ecolodge attributes that are the source of both satisfaction and dissatisfaction. The lodge grounds and its settings into the surrounding nature is one of the critical factors that satisfy and dissatisfy the ecotourists. It is an aspect that ecotourists are not only delighted to discover but one of the things they might be disappointed with. The other critical factor is ecotourists’ perception with the value for money they pay for the accommodation. Criticals are both threats and opportunities. The minimum maintenance of such aspects is a must and a higher level of performance is a plus.

Neutrals are the ecolodge attributes that are less frequently talked about as well as have little impact in creating satisfaction or dissatisfaction. They are not unimportant, though. They might previously be dissatisfiers. Only because the performance of such attributes is improved are they no longer generating satisfaction. They might fall into the category of dissatisfiers again if the minimum performance of such attributes cannot be guaranteed. They might also be the satisfiers if the management could impose some creative ideas on these components, which also constitute ecotourists’ travel related consumption experience. For example with the location related attributes, the ecotourists might be good with the current condition of the road leading to the ecolodge. If it became worse, they might be stopped from visiting.

CONCLUSION AND LIMITATION

Ecotourists’ travel experience and stay at ecolodges is constructed by several categories: lodge settings, room, service, nature, food, location and value for money. It is possible to typologize the ecolodge attributes based on their contribution to satisfaction/dissatisfaction. The
factorial structure is consistent with the underlying framework of consumer satisfaction proposed by Cadotte and Turgeon (1988). However, the current results cannot match the prediction by Balmer and Baum (1993) and Chan and Baum (2007) that satisfiers tended to be intangible while dissatisfiers were more likely to be tangible. The small numbers of Negative Reviews and dissatisfied ecotourists limit the validity of current research. The sub-sample drawn from the sample pool cannot support the further and deeper analysis efficiently. The researchers plan to expand sample and generalize the research conclusions at a large.

**REFERENCE**


