

THE DETERMINANTS OF ECOTOURISM BEHAVIORAL INTENTIONS

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ABSTRACT

With the recent promotion of ecotourism in Taiwan, one strategy for developing sustainable ecotourism is to increase the competitiveness of tourism through experiential marketing and superior service quality. This study examines the effects between experiential marketing and service quality of ecotourism and tourists' behavioral intentions. The results show that experiential marketing, and service quality of ecotourism were positively correlated with tourists' behavioral intentions; experiential marketing and service quality had a positive influence on tourists' behavioral intentions; the perceptions of affective experiences or feel of tourist clusters segmented by ecotourism service quality differed significantly; and according to marital status of the demographic variables, tourists' perceptions of experiential marketing, service quality, and behavioral intentions differed significantly. These findings indicate that biodiversity ecotourism could provide optimal experiential marketing and prompt tourists who are satisfied with the service quality to return for another ecotourism experience. Tourism management could better plan the development of ecotourism by the results of this study.

JEL: M1, M10

KEYWORD: Ecotourism, Experiential Marketing, Service Quality, Tourists' Behavior Intentions

INTRODUCTION

Tourism is considered the most promising industry of the twenty-first century and is crucial to economic development. With greater tourism and service quality expectations, tourism service providers might adjust their management styles to increase competitiveness and conquer the challenge of emerging demands. In the National Development Plan outlined by the authorities in Taiwan, the doubling tourist arrivals plan was one of the ten priority investments. In the year 2011, tourism policies promoted the implementation of pilot projects for tourism excellence and tour Taiwan and experience the centennial, which were geared toward “international tourism, better quality of domestic tourism, and more foreign exchange earnings,” introducing Taiwan to foreign tourists. Tourism service providers face numerous competitors and specific laws and regulations amidst an ever-changing business environment (Annual Tourism Market Profile, 2011; Survey of People Tourism, 2011; The Doubling Tourist Arrivals Plan, 2007). Since the 1970s, increasing ecological and environmental protection awareness, combined with the transformation of consumer market, has led to a new mode of tourism, which combines ecological conservation, environmental education, and cultural experiences.

This type of tourism differs from traditional recreational activities (Taiwan Sustainable Eco-Tourism Association, 2002). In 2007, ecotourism accounted for 7% of the international tourism market, increasing rapidly at an annual rate of 10% to 30% (Lin, 2007). To reduce the environmental impact of recreational activities, to encourage local residents to participate, and to conserve natural and cultural resources, the Tourism Bureau in Taiwan is promoting the ecotourism policies that focus on “local, ecological, and diversified tourism.” In 2000, the Plan to Boost Tourism in Taiwan in the 21st Century included ecotourism as one of the development focuses of the tourism industry. Inspired by the environmental planning and development strategies of the United Nations and World Tourism Organization, Lin(2007) assigned the period between 1990 and 1999 into the development stage of ecotourism in Taiwan, 2000

onwards as the peak, and 2002 as the “Year of Ecotourism.” Lin(2007) anticipated that the promotion of ecotourism and development of experiential ecotourism would lead to a culture and knowledge-based experience economy after 2010. A few studies examined ecotourism issues. Chaminuka, Groeneveld, Selomane & van Ierland (2012) investigated the ecotourism potential of rural communities near the Kruger National Park in South Africa. Olson (2012) explored two unique ecotourism projects in the Sierra of Manantlán Biosphere Reserve in west central Mexico by using anthropological methods. Buckley (2009) studied what outcomes ecotourism has completed in regard to environmental issues.

This study also presented an analytic framework to classify four types of mechanism, and the barriers to assessing environmental records of the ecotourism were analyzed such as problems of definition, the use of eco-labels, and the range of inclusion within any analysis. According to a report by the World Tourism Organization in 2000, understanding tourists’ expectations and providing high-quality services that meet their expectations and needs is crucial to maintain the advantage ecotourism has on the tourism market (Parasuraman, Zeithaml & Berry, 1988). In addition to service quality, ecotourism also emphasizes “experience” and “education,” enabling consumers to enjoy the positive emotions through recreational experiences. Therefore, understanding consumers’ feelings, demands, and experiences, as well as the environment and ecology, is essential. Pine & Gilmore(1998) found that when a company’s products or service increasingly resemble those of its competitors, it should emphasize enhancing the customers’ experience. Therefore, creating diverse ecotourism experiences through experiential marketing can increase potential tourists’ motivation to tourism, and is vital for enhancing tourists’ behavioral intentions. With ecotourism flourishing in Taiwan, the tourism industry might consider how to use diverse experiences and service qualities to increase tourists’ motivation to revisit instead of only one-time visits.

This study investigates the combined effects of experiential marketing and service quality on tourists’ behavioral intentions. By examining the tourists visiting ecotourism attractions in Taiwan, this study explores whether experiential marketing increases tourists’ perception of service quality and subsequently enhances their behavioral intentions. This study also analyzes the relative importance of various factors of experiential marketing. Considering the essential dimensions, we might provide implications for improving industry marketing strategies to increase efficiency and boost tourists’ behavioral intentions. The results of this study also provide a reference for ecotourism management to improve their management strategies. The remainder of this paper as follows. We align our work with the relevant literature in section 2. The research methodology and empirical results are illustrated in sections 3 and 4, respectively. Finally, conclusions and implications are drawn in Section 5.

LITERATURE REVIEW

Ecotourism: Hetzer(1965) proposed that traditional tourism be replaced with “ecological tourism.” Additionally, Hetzer(1965) also identified four core principles of ecotourism, namely, minimizing the environmental impact, respecting and minimizing the impact on local culture, maximizing the economic benefits for local residents, and maximizing tourist satisfaction. Ceballos-Lascurain(1983) used the term “ecotourism” when advocating the conservation of the northern Yucatan wetland, a American flamingo habitat. To persuade developers to terminate construction of a pier, Ceballos-Lascurain(1983) highlighted that conserving the wetland would attract tourists for bird watching, stimulating local economic activities.

They contended that ecotourism is a method for minimizing the impact of tourism on the local culture and environment while maximizing economic benefits and tourist satisfaction. Examining ecotourism-related products and activities, Jaafar & Maideen(2012) discussed the economic sustainability of chalets on four Malaysian islands and other small islands in the area. To increase the sustainability of tourism to the islands, they proposed a best-fit business model for small- and medium-sized island chalets, explaining how a small local business community operates on an island. With ecological sustainability as the starting point, ecotourism is a mode of tourism that emphasizes the careful selection of recreation sites, the

nature-loving cultivation, respect for local residents' life and culture, and the sharing of benefits with local residents.

Experiential Marketing

Schmitt(1999) developed a conceptual framework for managing customer experience, which was extended into strategic experiential modules. He also identified five different types of experiences or strategic experiential modules including sensory experiences or sense, affective experiences or feel, creative cognitive experiences or think, physical experiences and entire lifestyles or act, and social-identity experiences or relate; the sum of which comprises one strategic experiential module. Depending on the project goals or demands, these five experience forms could be implemented independently or with other forms. On the basis of the strategic modules of experiential marketing proposed by Schmitt (1999), we developed measurement dimensions for experiential marketing in ecotourism, namely, sense, feel, think, act, and relate experiences.

Service Quality: The American Marketing Association defines a service as “activities, benefits, or satisfactions that are offered for sale or provided in connection with the sale of goods.” A service could be provided in three classifications: as intangible benefits or products that can be sold independent of other properties, such as legal services; intangible activities provided by tangible properties, such as transport and aviation; and intangible services related to purchases, such as after-sales service (Alexander, 1960).

For customers, assessing service quality is more difficult than assessing product quality because services are often intangible, inseparable, heterogeneous, and transient. Because production and consumption occur simultaneously, other external factors must be considered to assess service quality (Schiffman & Kanuk, 2000). Additionally, Lovelock (2001) suggested that for customers, adding services to products increased their perceived utility and value. Parasuraman *et al.*(1988) defined service quality as the disparity between consumers' anticipation and cognitive perceptions of a service, meaning service quality = cognitive perceptions of service – anticipation of a service. Their study also proposed five factors of service quality: reliability, responsiveness, assurance, empathy, and tangibles, introducing the well-known Service Quality (SERVQUAL) scale. By modifying Maryam's (2003) Ecology Service Quality (ECOSERV) scale, we measured ecotourists' quality expectations of the services offered by service providers in ecotourism. Originally comprising six dimensions and 29 questions, the scale includes dimensions such as ecotangibles, reliability, responsiveness, assurance, empathy, and tangibles. Combining ecotangibles and tangibles into one dimension, the modified scale contains five dimensions that measure service quality in ecotourism: ecotangibles, reliability, responsiveness, assurance, and empathy. These dimensions are employed in this study to measure service quality.

Tourists' Behavioral Intentions

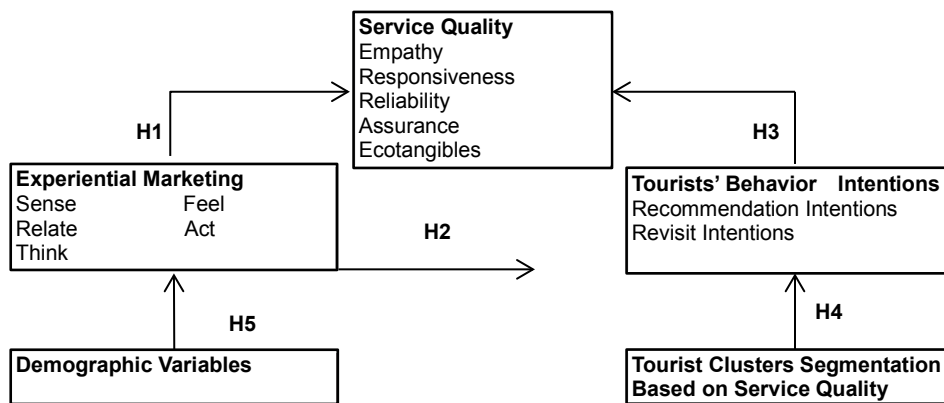
Tourists' behavioral intentions are typically generated after the tourism process. In the tourism industry, this is referred to as tourists' behavioral intentions. Parasuraman, Zeithaml & Berry(1985) concluded that consumers' behavioral intentions comprise repurchase intentions and likelihood of recommending the product/service to others through positive word of mouth. Bigne, Sanchez & Sanchez(2001) proposed that tourists' behavioral intentions are an important indicator of their perceptions and satisfaction of a tourism destination. In the literature on tourism and recreation, “revisit intentions” are equivalent to “repurchasing intentions” in product and service marketing. Most of the studies employed consumers' revisit intentions and willingness to recommend as measurement factors of tourists' behavioral intentions and tourist loyalty. Kotler (2003) argued that customers experience to some extent of satisfaction or dissatisfaction with the service provided, and this psychological change influences their subsequent behavior. In other words, satisfied customers are more likely to have stronger revisit intentions. Bigne *et al.*(2001) divided tourists' behavioral intentions into two dimensions: revisit intentions and recommendation intentions,

where revisit intentions refers to the possibility of tourists revisiting the ecotourism destinations, and recommendation intentions refers to the likelihood of tourists recommending their experience to others. Based on the studies summarized above, we adopted the two factors proposed by Bigne *et al.*(2001) to measure behavioral intentions in ecotourism, namely, revisit intentions, which refers to the likelihood of tourists revisiting the ecotourism destination, and recommendation intentions, which refers to the likelihood of tourists recommending the trip to others.

AN ANALYTIC FRAMEWORK AND METHODOLOGY

This study examines the effects among experiential marketing and service quality, and tourists’ behavioral intentions, and tourists’ perceptions on them in ecotourism and proposed the following hypotheses. The research framework of this study is shown in figure 1.

Figure 1: Research Framework



This figure shows the research framework of the effects among experiential marketing and service quality, and tourists’ behavioral intentions, and tourists’ perceptions on them.

RESEARCH HYPOTHESIS

The Effect of Experiential Marketing on Service Quality: Examining performance, customer value, and service quality, Hume, Sullivan Mort & Winzar (2004) found that a significantly positive correlation exists between experience and service quality. Investigating high school students participating in camps, Wei (2005) also found a significantly positive correlation between experience and service quality. From the perspective of experiential marketing and using cross-strait cultural exchange trips as an example, Kao & Huang (2006) found a significant relationship between experience and service quality. Thus, it could be concluded that to promote service quality, educational institutes and other non-profit organizations should design ecotourism tours that could satisfy and inspire the tourists and motivate them to consider and experience ecotourism. Experiential marketing has a significantly positive influence on service quality, indicating that tourists’ participation in experiential marketing activities in ecotourism generates the effect of positive perceptions on service quality in ecotourism destinations. Accordingly, Hypothesis 1 is established as follows:

Hypothesis 1 (H1): Experiential marketing has a significantly positive effect on service quality. The Effect of Experiential Marketing on Tourists’ Behavioral Intentions Examining customers’ emotions and behaviors in business environments, Mehrabian & Russel(1974) found that customers’ attitudes based on their emotional response to the experience would affect their subsequent behavior. Boulding, Kalra, Richard & Zeithaml(1993) concluded that customers’ assessment and feelings after experiencing experiential marketing affects their future attitudes, consumer orientation, and likelihood of positive

recommendations. Therefore, experiential marketing is related to tourists' behavioral intentions. In other words, the service tourists experience in consumption settings affects their subsequent revisit intentions through their satisfaction level from the products or services. Thus, experiential marketing influences and is positively correlated to tourists' behavioral intentions. When tourists possess positive perceptions of experiential marketing in ecotourism, their behavioral intentions toward that specific ecotourism site increases. Therefore, Hypothesis 2 is proposed as follows:

Hypothesis 2 (H2): Experiential marketing has a significantly positive effect on tourists' behavioral intentions. The Effect of Service Quality on Tourists' Behavioral Intentions After examining the influence of service quality on consumer behavior, Parasuraman, Zeithaml & Berry (1996) stated that excellent service quality enhances consumers' behavioral intentions, including their repurchase intentions, recommendation intentions, and loyalty. Butcher, Sparks & O'Callaghan (2002) also concluded that a good service directly influences tourists' recommendation intentions. Regarding long-term consumer relationships, we explored customer loyalty, relationship marketing, service quality, and customer satisfaction; which proved the necessary cause-and-effect relationship between service quality, customer satisfaction, and behavioral intentions (Thorsten, Gwinner & Gremler, 2002). Service quality influences and is positively correlated with tourists' behavioral intentions; therefore, the higher the ecotourism service quality experienced by tourists, the stronger their behavioral intentions toward that particular ecotourism site. Accordingly, Hypothesis 3 is constructed as follows:

Hypothesis 3 (H3): Service quality has a significantly positive effect on tourists' behavioral intentions. Differences in the Perceptions of Experiential Marketing and Behavioral Intentions among Tourists Clusters Segmented by Service Quality Chih, Yang & Ho (2007) classified viewers (browser) into three clusters according to their differing expectations of service quality in relation to news websites: tolerant customers, regular customers, and strict and picky customers. These clusters show significantly perceptible differences in customer satisfaction and loyalty, with strict and picky customers providing low scores for all the service dimensions. Therefore, increased service quality is crucial to ensure that customers are satisfied, use the service again, and recommend the service to others. Wang(2010) used consumers' service quality expectations for market segmentation. The results showed that customers in various clusters differed in their satisfaction with TV shopping channels. Thus, we can conclude that the perceptions on customers' satisfaction and loyalty differ significantly among various clusters segmented based on service quality, which indicates that service quality could be employed to segment tourist clusters to examine the different perceptions on experiential marketing and tourists' behavioral intentions among them. Therefore, Hypothesis 4 is proposed as follows:

Hypothesis 4 (H4): The perceptions of experiential marketing and behavioral intentions differ significantly between tourist clusters segmented by service quality. Differences in Tourists' Perceptions of Experiential Marketing, Service Quality, and Behavioral Intentions According to Demographic Variables This study investigates whether tourists with varying demographic variables have significantly different perceptions of experiential marketing, service quality, and tourism behavioral intentions. Caruana & Msida(2002) documented that different demographic variables had different influences on consumers' perceptions of service quality and other related factors. Investigating Taiwan's leisure industry, Orth(2005) found that consumers' perceptions of service quality differed according to various demographic variables and residential areas. Therefore, we can infer that the perceptions of experiential marketing, service quality, and behavioral intentions of tourists with various demographic variables differ significantly. Therefore, Hypothesis 5 is proposed as follows:

Hypothesis 5 (H5): The perceptions of experiential marketing, service quality, and behavioral intentions of tourists with various demographic variables differ significantly.

DATA ANALYSIS METHODS

The data analyses were performed on SPSS 12.0 and AMOS 5.0. The methods adopted included reliability analysis, the t-test analysis, correlation analysis, factor analysis, linear structural relation model, cluster analysis, and single-factor analysis of variance.

EMPIRICAL RESULTS

The questionnaires of this study were distributed at various ecotourism sites including the northern area, the central area, the southern area, and the eastern area in Taiwan. The data were collected for the period 1/3/ 2012 until 5/28/2012.

Reliability Analysis: This study was based on data from the questionnaire titled “The Determinants of Ecotourism Behavioral Intentions” Ruling out copies with incomplete answers or too many unanswered questions, out of the 610 questionnaires responded, 566 were acceptable, with an acceptable response rate of 92.79%. In the reliability analysis, the reliability values of all main dimensions were 0.7 (or more), with the overall reliability coefficient at 0.943, which shows high-level stability of the reliability of questionnaires administered in this study. The correlation coefficient between revised items and overall items in this study was 0.5 or more. Therefore, the data gathered with the questionnaire adopted in this study demonstrate high level of stability and consistency, enabling subsequent analysis results to be more significant.

The t Test Analysis: This study adopted the t-test analysis to show the degree of satisfaction (agreement) analyzed by each question of the questionnaire. In the areas of tourists experiential marketing, service quality, and tourism behavioral intentions, for all questions with $p=0.000$ less than the level of significance of $\alpha= 0.001$. The results show that for questions on experiential marketing, service quality, and tourism behavioral intentions, most participants selected the options satisfied (agreed) or very satisfied (very agreed). Therefore, we can conclude that questions on experiential marketing, service quality and tourism behavioral intentions have reached the “satisfy” (“agree”) or above consensus level.

Correlation Analysis: Using correlation analysis, we assessed whether a significantly positive correlation exists between experiential marketing, service quality, and tourists’ behavioral intentions. Pearson’s correlation analysis method was employed to analyze the correlation between experiential marketing, service quality, and tourists’ behavioral intentions, as shown in Table 1. The results show that a significantly positive correlation exists between experiential marketing, service quality, and tourists’ behavioral intentions.

Table 1: Correlation Analysis between Experimental Marketing, Service Quality, and Tourists’ Behavioral Intentions

Dimensions		Experimental Marketing	Service Quality	Tourists’ Behavioral Intentions
Experimental Marketing	Pearson Coefficient	Correlation 1		
	Sample size	566		
Service Quality	Pearson Coefficient	0.569***	1	
	Sample size	566	566	
Tourists’ Behavioral Intentions	Pearson Coefficient	0.598***	0.689***	1
	Sample size	566	566	566

*This table shows *** indicates significance at the 0.1 percent level.*

Factor Analysis

Dimensions of Experiential Marketing: To analyze experiential marketing, we extracted and categorized 20 questions on experiential marketing into five dimensions based on their similarity through factor analysis. These five dimensions were sensory experiences or sense, social-identity experiences or relate, creative cognitive experiences or think, affective experiences or feel, and physical experiences and entire lifestyles or act. The eigenvalues for these dimensions were all greater than 1 at 4.317, 3.227, 2.421, 1.857, and 1.467, respectively, indicating that the clustering was appropriate. The factor loadings of the experiential marketing variables were all greater than 0.4, indicating that more characteristics can be measured for common dimensions (Tabachnick & Fidell, 2007). The cumulative explanatory variance was 66.445%, which is greater than 60%, indicating that the common dimensions were reliable. For communality, the explanatory ability of the dimensions extracted from different variables must exceed 0.5. The communality of the dimensions of experiential marketing was greater than 0.5, indicating that the extracted dimensions had significantly explanatory ability.

Dimensions of Service Quality: To examine the dimensions of service quality, we extracted and categorized 20 questions on service quality into five dimensions based on their similarity by factor analysis. These factors were empathy, responsiveness, reliability, assurance, and ecotangibles. The eigenvalues of these dimensions were all greater than 1 at 2.642, 2.631, 2.633, 2.288, and 2.823, respectively, indicating that the clustering was appropriate. The factor loadings of the service quality variables were all greater than 0.4, indicating that more characteristics can be measured for common dimensions (Tabachnick & Fidell, 2007). The cumulative explanatory variance was 61.049%, which is greater than 60%, indicating that the common dimensions were reliable. For communality, the explanatory ability of the dimensions extracted from different variables must exceed 0.5. The communality of the dimensions of service quality was greater than 0.5, indicating that the extracted dimensions possessed significantly explanatory ability.

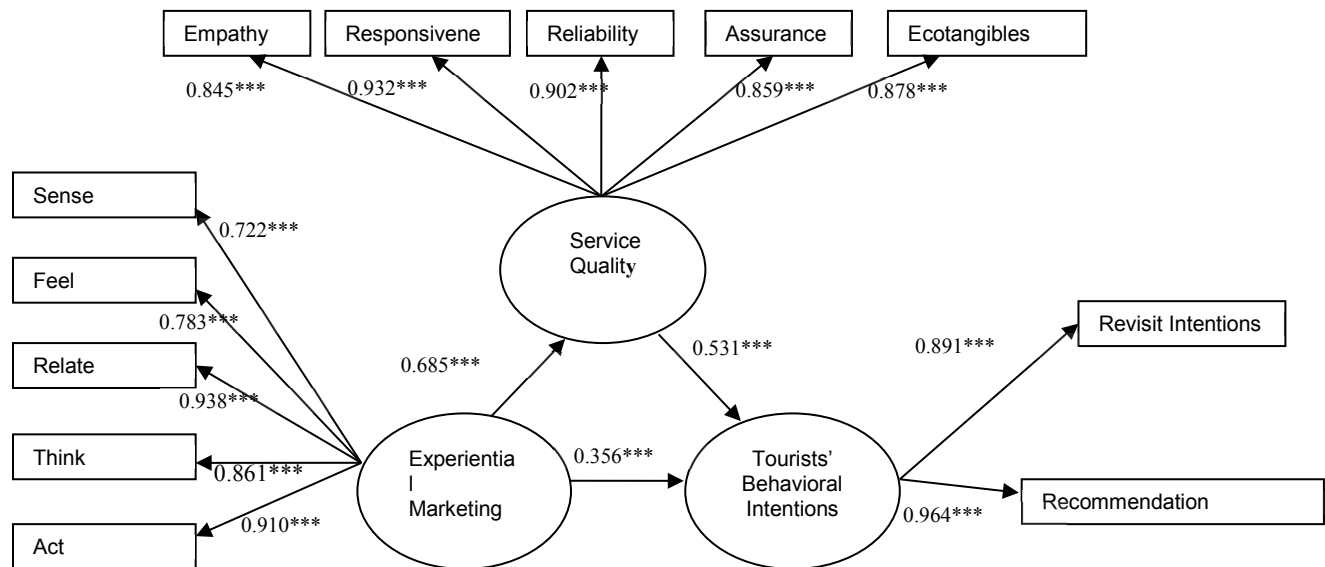
Dimensions of Tourists' Behavioral Intentions: To analyze tourists' behavioral intentions, we adopted the principal component method of factor analysis to extract the dimensions and categorized tourists' behavioral intentions into two dimensions, namely, recommendation intentions and revisit intentions. The eigenvalues of the dimensions were both greater than 1 at 2.128 and 1.611, indicating that the clustering was appropriate. The factor loadings of tourists' behavioral intentions variables were all greater than 0.4, indicating that more characteristics can be measured for common dimensions (Tabachnick & Fidell, 2007). The cumulative explanatory variance was 62.308%, which is greater than 60%, indicating that the common dimensions were reliable. For communality, the explanatory ability of the dimensions extracted from different variables must exceed 0.5. The communality of the dimensions of tourists' behavioral intentions were greater than 0.5. Based on the dimensions extracted, we can conclude that the dimensions of tourists' behavioral intentions possessed acceptable explanation ability.

Linear Structural Relation Model

A linear structural relation model (Structural Equation Modeling; SEM) is created to examine whether the path coefficient of the variables was significant. The goodness-of-fit test was conducted on the factors of experiential marketing, service quality, and tourists' behavioral intentions. For assessment indices of the goodness-of-fit of the overall model, chi-square/ degree of freedom (χ^2/df) value of this study was 1.391, which means that it had considerable explanatory abilities. Moreover, goodness-of-fit index (GFI) 0.916, adjusted goodness-of-fit index (AGFI) 0.901, normed fit index (NFI) 0.924, and comparative fit index (CFI) 0.977 were obtained from this study, which means that they were acceptable values greater than 0.9 (inclusion; the lowest standard value). Root mean square residual (RMR) value was 0.023, within the acceptable level, and root mean square of approximation (RMSEA) value was 0.026, which is also within an acceptable level. Results show that the overall structure of the model employed in this study possessed

good fit, with a level of significance of $\alpha = 0.001$. The standardized regression coefficient of tourists' perceptions of experiential marketing related to service quality was 0.685, with a p -value less than significance level of $\alpha = 0.001$. The results show that a positive and direct correlation exists between the two variables. Higher satisfaction of experiential marketing increases consumers' satisfaction with service quality. The standardized regression coefficient of experiential marketing related to tourists' behavioral intentions was 0.356, with a p -value below the level of significance $\alpha = 0.001$. This finding shows that a positive and direct correlation exists between the two variables. Higher satisfaction of experiential marketing increases tourists' behavioral intentions. The standardized regression coefficient of service quality related to tourists' behavioral intentions was 0.531, with the p -value below the level of significance of $\alpha = 0.001$. The findings show that a positive and direct influence exists between the two variables. Higher satisfaction of service quality increases tourists' behavioral intentions. Overall, the results support Hypotheses 1, 2, and 3. The path analysis of the goodness-of-fit of the overall model is displayed in Figure 2.

Figure 2: The Path Analysis of the Goodness-of-Fit Structure of the Overall Model



This figure shows the regression estimates of the equation: $Y_1=0.685X_1$ (Y_1 : service quality; X_1 : experiential marketing; the standardized regression coefficient was 0.685); the regression estimates of the equation: $Y_2=0.356X_1$ (Y_2 : tourists' behavioral intentions; the standardized regression coefficient was 0.356); the regression estimates of the equation: $Y_3=0.531Y_1$ (the standardized regression coefficient was 0.531). *** indicates significance at the 0.1 percent level.

Cluster Analysis

Wu (2001) pointed out that K – Means cluster analysis should be used when the number of observations is more than the expected number or the data files is large (usually more than 200 observations). The sample size of this study was 566, and K – Means cluster analysis of non-hierarchical clustering was adopted because the sample size was more than 200. The analytical result indicates that three clusters was more appropriate than two, four, five and six clusters formed by the cluster analysis because they (three clusters) had the highest overall forecasting accuracy rate of 97.9%. Accordingly, the tourists were classified as three clusters based on the five dimensions of service quality of the tourism by using the cluster analysis in this study. The findings of this cluster analysis show that the average satisfaction level of the cluster 3 for service quality was the highest than that of other clusters, which means the tourists for

cluster 3 had the highest evaluation on service quality, and therefore, this cluster including 96 tourists was called as "easily satisfied". The average satisfaction level of the cluster 1 for service quality was the lowest than that of other clusters, which means the tourists for cluster 1 had the lowest evaluation on service quality, and therefore, this cluster including 188 tourists was called as "strict harshness", and the average satisfaction level of the cluster 2 for service quality was median, which means the tourists for cluster 2 had a middle evaluation on service quality, and therefore, this cluster including 282 tourists was called as "general feeling". The mean of the satisfaction level of each dimension of service quality for three clusters segmented according to service quality by cluster analysis is shown in Table 2.

Table 2: The Mean of the Satisfaction Level of Each Dimension of Service Quality for Three Clusters

Dimensions of service quality	Clusters		
	Cluster 1(n=188) Strict harshness	Cluster 2(n=282) General feeling	Cluster 3(n=96) Easily satisfied
Empathy	3.15	3.82	4.58
Responsiveness	3.15	3.87	4.61
Reliability	3.10	3.76	4.56
Assurance	3.36	3.83	4.66
Ecotangibles	3.27	3.80	4.55

This table shows the mean of the satisfaction level of each dimension of service quality for three clusters segmented according to service quality by cluster analysis.

Single-Factor Analysis of Variance

Marital Status of the Demographic Variables versus Experiential Marketing, Service Quality, and Tourists' Behavioral Intentions Regarding the analysis of variance of the marital status of demographic variables related to experiential marketing, the *p*-value was 0.000, less than a level of significance of $\alpha = 0.001$, which means that people with different marital statuses differed significantly regarding their perceptions of experiential marketing. Scheffe's multiple comparison tests were also adopted to determine whether the married (with children) and single participants had significantly higher levels of satisfaction of experiential marketing in ecotourism compared to that of married (with no child) participants. Regarding the analysis of variance of the marital status related to service quality, the *p*-value was 0.005, which is less than a level of significance of $\alpha = 0.01$, indicating that participants with varying marital statuses had significantly different perceptions of service quality. Scheffe's multiple comparison tests were further conducted to determine whether the married (with no child) and single participants had significantly higher levels of satisfaction of service quality in ecotourism compared to that of the married (with children) participants. Regarding the analysis of variance of marital status related to tourists' behavioral intentions, the *p*-value was 0.002, which is less than a level of significance of $\alpha = 0.01$, indicating that participants with differing marital statuses had significantly different perceptions of tourists' behavioral intentions. Scheffe's multiple comparison tests were further conducted to determine whether the married (with children) and single participants had a significantly higher level of agreement with tourists' behavioral intentions compared to that of the married (with no child) participants.

Tourist Clusters Segmented According to Service Quality versus Experiential Marketing Regarding analysis of variance of the tourist clusters segmented based on the service quality on "affective experiences or feel", the *p*-value was 0.000, which is less than a level of significance of $\alpha = 0.001$, indicating that the participants in the three clusters had significantly different perceptions of affective experiences or feel. Results from the Scheffe's multiple comparison tests show that the participants in Cluster 3 were the most satisfied. They expressed a significantly higher level of satisfaction with affective experiences or feel in ecotourism compared to that of Cluster 2, who had ordinary feelings; whereas, the participants in Cluster 1 were strict and harsh (the lowest satisfied). The single-factor analysis of variance of tourist clusters segmented according to service quality on experiential marketing is shown in Table 3.

Tourist Clusters Segmented by Service Quality versus Tourists' Behavioral Intentions Before conducting single-factor analysis of variance, we examined the variance homogeneity of the population. With a level of significance of $\alpha=0.05$, both the p -values of revisit intentions and recommendation intentions were 0.000, less than $\alpha = 0.05$, which violates the assumption of homogeneity variance among the population, indicated that it is unsuitable for analysis of variance. Moreover, we also found that age, educational level, occupation, place of residence, and average monthly income of the demographic variables had no significant influence on the participants' perceptions of experiential marketing, service quality, and tourists' behavioral intentions. The only except was marital status, which significantly influenced the participants' perceptions of experiential marketing, service quality, and tourists' behavioral intentions. Therefore, Hypothesis 5 is partly supported. On another note, tourist clusters segmented by service quality demonstrate significantly different perceptions of affective experiences or feel, which partly supports Hypothesis 4.

Table 3: Single-Factor Analysis of Variance of Tourist Clusters Segmented According to Service Quality on Experiential Marketing

Dimensions	Homogeneity test	F value	p value	Scheffe's multiple comparison tests
Sense	0.004	—	—	—
Relate	0.002	—	—	—
Think	0.038	—	—	—
Feel	0.317	118.149	0.000***	Cluster 3>Cluster 2>Cluster 1
Act	0.002	—	—	—

This table shows *** indicates significance at the 0.1 percent level.

The Results of Research Hypothesis Tests

The results of the proposed hypothesis tests are listed in Table 4.

Table 4: Results of Research Hypothesis Tests

	Hypotheses	Results
H1	Experiential marketing has a significantly positive effect on service quality.	Supported
H2	Experiential marketing has a significantly positive effect on tourists' behavioral intentions.	Supported
H3	Service quality has a significantly positive effect on tourists' behavioral intentions.	Supported
H4	The perceptions of experiential marketing and behavioral intentions differ significantly between tourist clusters segmented by service quality.	Partially supported
H5	The perceptions of experiential marketing, service quality, and behavioral intentions of tourists with various demographic variables differ significantly.	Partially supported

This table shows summary statistic results of research hypothesis tests.

CONCLUSION AND IMPLICATION

By exploring tourists visiting ecotourism attractions in Taiwan, the objective of this study is to examine the effects among experiential marketing, service quality, and tourists' behavioral intentions. We further argued whether tourists' perceptions of experiential marketing, service quality, and behavioral intentions differed significantly according to their clusters segmented by service quality and demographic variables. The findings of this study are summarized as follows: (1)Through the t-test analysis, for questions regarding tourists' perceptions of experiential marketing based on our findings, service quality, and behavioral intentions, the answers we received were primarily "satisfied/agree" or above. In the survey, the statement of experiential marketing that received the highest satisfaction rating was "The natural air and fragrance of this ecotourism site is refreshing and comfortable." The statement of service quality that received the highest satisfaction rating from tourists was "This ecotourism site provides an attractive and fascinating natural and cultural landscape." The statement that most participants agreed influenced their tourism behavior intentions was "I would be willing to revisit the new facilities, activities, or services

provided at this ecotourism site”; (2) Through linear structural relation model, experiential marketing had a significantly positive and direct influence on service quality and tourists’ behavioral intentions, indicating that higher satisfaction with experiential marketing had a greater influence on tourists’ satisfaction with service quality and agreement with their behavioral intentions.

We also found that service quality had a significantly positive and direct influence on tourists’ behavioral intentions; thus, higher satisfaction with service quality had a greater influence on tourists’ agreement with their behavioral intentions. Therefore, the results support Hypotheses 1, 2, and 3; (3) Through single-factor analysis of variance, regarding the influence of various tourist clusters segmented based on service quality on experiential marketing and tourists’ behavioral intentions, the results show that significant differences existed in tourists’ perceptions of the affective experiences or feel in experiential marketing, with the participants in Cluster 3 expressing a higher level of satisfaction toward affective experiences or feel than that of Clusters 2 and 1. Moreover, participants with different marital statuses had significantly different perceptions of experiential marketing, service quality, and tourists’ behavior intentions. Although the satisfaction of experiential marketing and tourists’ behavior intentions of the married (with children) and single participants were significantly higher than that of the married (with no child) participants, the satisfaction of service quality expressed by the married (with no child) and single participants was significantly higher than that expressed by the married (with children) participants. Finally, age, educational level, occupation, place of residence, and average monthly income of the demographic variables had no significant influence on tourists’ perceptions of experiential marketing, service quality, and tourists’ behavior intentions. Therefore, the results partly support Hypotheses 4 and 5.

The ecotourism industry should focus their attention on the determinants of affecting tourists’ behavioral intentions in order to enhance the competitive advantage of the ecotourism industry. The entrance of the tickets sold at ecotourism location with the description of drawings could attract tourists to experience different kinds of leisure facilities by tourism actions to promote the tourists’ recognition for the ecotourism due to experiential marketing would have significantly a positive influence on service quality. Unique facilities and related services could be provided to strengthen the interaction between tourists and service personnel to promote the tourists’ recognition and behavioral intentions for the ecotourism through the use of facilities and services to explain the process. The ecotourism industry could strengthen the experience environment of customer relationship because social-identity experiences or relate of experiential marketing would have the most effect on tourists’ behavioral intentions.

They should create and provide an easy and comfortable tourism environment, or establish tourist member club or friendship association to allow tourists to have a sense of belonging and activation of its social activities. The leisure activities of sensory experiences or sense and affective experiences or feel should be designed to induce tourists’ emotions and feelings in order to win the hearts of tourists. However, creative cognitive experiences or think must be utilized carefully; otherwise it would make the opposite effect on tourists’ behavioral intentions. In experiential marketing, the most important strategic service factor should enhance affective experiences or feel so that it could induce tourists to have strong feelings through the “face to face” interaction with service personnel in the ecotourism process. The ecotourism industry should also provide customized double package tours to married tourists with no child to promote tourists’ revisit or recommendation intentions by the implementation of experiential marketing strategy, for example, the personal service staff could be provided to increase their ecotourism intentions. In addition, for the analytical results of the marriage on service quality, service quality should be improved to meet the service needs of the married tourists with children such as the supply of nursery services, safety trails of children trolleys, and the safety chairs for children in the restaurants.

This study has a limitation in collecting the data of the questionnaires by the convenient sampling method due to limited time, labor and cost. The result of this study also could not show the perceptions of all ecotourism tourists in other countries because it only investigated the tourists for the domestic ecotourism

in Taiwan. Another limitation of this study shows that some tourists took a long time to fill out the questionnaires to produce an unserious attitude to do these because of a questionnaire which had many items. In a future research, we plan to explore other types of ecotourism such as adventure tourism and wildlife tourism to understand whether or not differences in tourists for a different type of ecotourism options in order to further enhance the value of the research. Moreover, we are going to use other service quality scale to examine whether or not there is a significant impact and difference in experience marketing and tourists' behavioral intentions for various service quality measurements. Another interesting issue would examine other interference variables such as relationship marketing and customer value on whether or not they would affect experiential marketing, service quality, and tourists' behavioral intentions.

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