

# **Customer Satisfaction on Dinning Area/Hotel Circumstance and Service Quality in the Tourist Industry: A Case Study of Visitors to the Green Island**

**Dr. Tsou, Hui-fen, Associate Professor of Dept. of Hospitality Mgt., National Taitung Junior College, Taiwan  
Lin, Lee-Hui, Doctorate Student, Dept. of Business Education, National Changhua University of Education,  
Taiwan**

## **ABSTRACT**

*The authors tried to find the major factors for the tourists unwilling to come to Green Island again. The study was focusing on the Green island tourists during July and August for the year of 2007 and 2008. Therefore, to measure customer satisfaction and to determine the factors which influence overall customer satisfaction in the Green Island.*

**Keywords:** *customer satisfaction, service quality.*

## **BACKGROUND**

In 1990, Barsky pointed out the most important facing business is how to improve customer satisfaction. According to Peterson and Wilson's(1992) research, over 15,000 academic articles have been published on the topic of customer satisfaction.

However, little customer satisfaction research has been conducted in some small island, especially the Green Island. First, the purpose of this research examined to measure customer satisfaction and determines the factors that influence overall customer satisfaction in the Green Island. Second, we tried to identify the duration differences among tourists that may arise when evaluation satisfaction levels with their vacation. The tourism industry in Green Island, has easily identified components such as transportation, water sports, out activities, and attractions. All tourists should have experienced each of these components to a greater or lesser extent during their vacations. Therefore, we focused our research on customer satisfaction, especially in restaurant and hotel quality satisfaction.

## **RESEARCH METHODOLOGY**

### **Introduction**

This study was use the Delphi method, which included two parts: one was using the Delphi method reach the consensus between industrial managers and school educators; the other one was use the consensus to build a set of questions, and to make a quantitative survey to validate consensus. A Delphi method was used to build a consensus in the hospitality management internship program. In the Delphi process, the participants/experts generate their own opinions, and also have the opportunity to think about the judgments of others on the topic. In this process, the individuals participated in creating an aggregate opinion and then determined a consensus on the topic through a structured series of questions stemming from previously formed answers. The researcher, then, built a 6-point Likert-type scale according to their consensus.

Finally, the questionnaire was distributed to all the hospitality industry managers in Green Island and tourists who was visiting Green Island during June to August in 2008. According to this structured satisfaction survey and analysis the results, the researcher then made some suggestions to Green Island hospitality industry managers.

### **Population**

This study involved two parts: the first part was around thirty-six home-stay managers, 18 hotel managers, 22 restaurant owners, 14 souvenirs owners, and 50 snorkeling companies in Green Island ; the second part was the tourists

during the beginning of June to the end of August in 2008. These first part participants were divided into two groups. Half of each independent company managers are in one group while the rest of them in the other group. Ten from each group were randomly selected to be the participants in the first, second and third round of Delphi Method research. The rest of 70 managers were asked to answer the final quantitative questionnaire.

### **Delphi Methodology**

This section provides an overview of the Delphi method, including its origin, a description of the standard model, the participant selection process, instrument development process, typical application, and limitations.

### **Definition**

The Delphi process is an under-used research method that combines quantitative and qualitative methods to explore the future (Ludwig, 1997). It recognizes human judgment as legitimate and useful input in generating forecasts, but acknowledges the issues that arise from conventional meetings. According to Gatewood (1983), single experts sometimes suffer biases, and group meetings often suffer from follow-the-leader tendencies and a reluctance to abandon previously stated views (cited in Illinois Institute of Technology, n.d.). The Delphi method was designed to overcome these disadvantages by allowing a group of experts to reach consensus.

### **Model**

Adler and Ziglio (1996) describe the Delphi method as an exercise in group communication among a panel of geographically dispersed experts (as cited in Illinois Institute of Technology, n.d.). These experts share a common interest (the subject of the Delphi), but usually represent different points of view. The original Delphi process consisted of three key elements: a structured information flow, feedback to the participants, and anonymity for the participants. Fowles (1978) describes the following ten steps for the Delphi method (as cited in Illinois Institute of Technology, n.d.):

1. Formation of a team to undertake and monitor a Delphi on a given subject.
2. Selection of one or more panels to participate in the exercise.
3. Development of the first round Delphi questionnaire.
4. Testing the questionnaire for proper wording, ambiguities, and vagueness.
5. Transmission of the first questionnaires to the panelists.
6. Analysis of the first round responses.
7. Preparation of the second round questionnaires.
8. Transmission of the second round questionnaire to the panelists.
9. Analysis of the second responses.
10. Preparation of a report to present the conclusions of the exercise.

Each round poses a series of Likert-type questions; the answers are tabulated, and the results are used to form the basis for the next round of questions. Through several iterations, usually three, this process synthesizes the experts' responses, resulting in a consensus that reflects the group's intuition, savvy, and expert knowledge (MG Taylor Corporation, 2001). Although the outcome of a Delphi sequence is opinion, it is the opinion of the experts who made up the panel, and the panel viewpoint is summarized statistically rather than in terms of a majority vote (Illinois Institute of Technology, n.d.).

### **Research Sites and Participants Selection for Delphi Study**

Participant selection for a Delphi forecasting study is critical. The researcher needs to target individuals who have not only the knowledge and experience in the subject at hand, but also self-motivation. These individuals who the researcher chooses are from two groups: half of Green Island hospitality industry managers are in one group while the rest of them in the other group. These participants remain anonymous to facilitate the free expression of ideas without bias. According to Ludwig (1997), the majority of Delphi studies used between 15-20 respondents, but Daley, Rourke, Lewis, and Snyder (1972) reported a definite and monolithic increase in the reliability of group responses with increased group size. They reported reliability, with a correlation coefficient approaching .9, from a group size of 13 (as

cited in Ludwig, 1997). Experiments by Brockhoff (1975), however, suggest that, under ideal circumstances, groups as small as four can perform well (as cited in Illinois Institute of Technology, n.d.).

The questionnaire was developed with the intent of asking respondents about ten primary components of their vacation: including sanitation, service attitude, meal quality, dining area, and facilities in two dimensions which including both restaurant and hotel. In turn, each of these five components was further divided into a number of subcomponents. For example, for the service attitude in restaurant subcomponents, respondents were asked to rate their servant service attitude satisfaction, including communication, service techniques, speed of service, work enthusiasm, professional knowledge, the reaction for customer complaints, the speed of turn over, and resourcefulness.

The scale used to gauge these subcomponents was the six-point disconfirmation scale: better than expected, about as expected, as and worse than expected (Rust, Zahorik, and Keiningham 1994). We chose this scale to avoid the common problem of an asymmetric distribution of satisfaction scores (Rust, Zahorik, and Keiningham 1994), because we expected, a priori, that *satisfaction* levels would be very low. After respondents rated the subcomponents, they were asked, for instance, "How satisfied or dissatisfied were you with the transport in Green Island overall?" A show-card with a 6-point semantic differential scale, ranging from very dissatisfied to very satisfied, was shown to the respondent for this overall satisfaction question. The expanded scale was used to better approximate interval-level data for subsequent regression analyses (see Neter, Wasserman, and Kutner 1985 for distributional assumptions required for regression analyses).

Similar blocks of questions for the subcomponents, followed by the relevant overall satisfaction question. This last question was used as a proxy for repurchase intention, as most tourists would probably have the opportunity to return to Green Island themselves.

### **Instrument(s) Development and Data Collection**

In a Delphi study, the developing and processing questionnaires are interconnected. The researcher ascertained that the most important key success factors of a hospitality management internship program could be selected and described on the basis of the literature, and that these could then be submitted to panels of experts. The literature interview will round out responses of 10 experts from Green Island hospitality managers. The research participants will agree to receive and respond to a series of questionnaires. The first questionnaire will take open-ended questions related to the key success factors of the hospitality management internship program. The second questionnaire is a culmination of information collected from the answers of first questionnaire which will consist of a series of structured questions developed by the researcher. On the second questionnaire, participants will use a Liker-type 6-point scale to prioritize items, and will be asked to comment on their rationale and add additional items. The third questionnaire will ask participants to re-rate each item. Altschuld (1993) found that three iterations were usually sufficient because not enough new information was gained to warrant the cost of more iteration (Ludwig, 1997).

To avoid an ambiguous definition of most important key success factors, this study will only focus on restaurant and hotel/home-stay: servant service attitude satisfaction, including communication, service techniques, speed of service, work enthusiasm, professional knowledge, the reaction for customer complaints, the speed of turn over, and resourcefulness.

After the third questionnaire result returns, the researcher will build a questionnaire for satisfaction on dining area/hotel circumstance and service quality according to the answers which given by Green Island hospitality managers.

### **Population-Selecting Tourists**

The best time to interview these tourist was just before they left Green Island. About 99% of all departing tourists leave Green Island from Nan-Liau Harbor, which is an idea place to interview tourists about their entire vacation. In fact, tourists who were approached for an interview were generally very enthusiastic to be asked about their vacation, because our interview overlapped with a time when they were already reflecting on their holiday. This high level of interest in the survey was supported in the exceptionally high response rate of 1049 interviews from 1060 contacts, a response rate of 98.9%. Six interviewers were used, with interviewing conducted over two one-month period in August of 2007 and 2008. The interviewers entered the departure area of the harbor about 30 minutes before ferry boarding.

Those interviewers then attempted to identify tourists by walking through the boarding area and looking for travelers who were casually dressed. Many tourists travel as a couple or in tour groups and since we did not want to interview everyone in the group, one person per group was randomly selected.

## RESULTS

Pre-test questionnaires were reviewed and modified, according to the suggestions provided from Green Island hospitality managers in order to determine the validity and reliability. Reliability for both restaurant and hotel/home-stay satisfaction tests was 0.97 which indicated that the consistence was high. The cumulative interpretation variances were 66.73% and 67.31%, respectively. There were nine factors extracted after factor analysis which were then utilized to construct the nine dimensions of questionnaire which include sanitation, service attitude, food quality, dining area, and facilities for both restaurant and hotel/home-stay.

The questionnaire was divided into five sections for each part (restaurant and hotel/home-stay): overall customer satisfaction, overall customer satisfaction for restaurants and hotel/home-stay, and demographic information of participants (tourists). Likert-type Scale was applied in this questionnaire with scores from 1 to 6 (1=very unsatisfied, 2=unsatisfied, 3=slightly unsatisfied, 4=slightly satisfied, 5=satisfied, and 6=very satisfied.) SPSS version 12.0 was utilized for statistical analyses included frequency distribution, mean analysis, paired-sample t-test, reliability, and factor analysis.

### Average Lower Satisfaction Scores for the Components and Subcomponents

It shows average low *satisfaction* levels with almost all the components and subcomponents of the vacation. The numbering for the *satisfaction* scales with the primary components was 1 for very dissatisfied to 6 for very satisfied. The highest overall *satisfaction* score was for servant work enthusiasm for both restaurant and hotel. In both cases every respondent who rated them as worse than expected.

Only one of the few medium average scores reported in both restaurant and hotel is for toilet facility clean. The interviewer noted that a number of respondents commented on the poor facilities of the island which is including transportation, often requiring people to ride motorcycle to get to destinations across the island. Another comparatively low average *satisfaction* score was for servant professions. In fact, 61% of respondents rated this as worse than expected, while 39% rated it as better than expected. The interviewer reported that those who gave servant professions a low rating usually stated that they neither feel any service during having meal nor hotel/home stay.

*Types of tour (company/school tour, tourism, and others) satisfaction showed significant view in restaurant on Green Island*

### ANOVA

restaurant

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	637852.675	5	127570.535	88.350	.000
Within Groups	229505451.306	158945	1443.930		
Total	230143303.981	158950			

*Types of tour (company/school tour, tourism, and others) satisfaction showed significant view in hotel or home-stay on Green Island*

### ANOVA

hotel

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4557536.347	5	911507.269	449.379	.000
Within Groups	318391571.341	156969	2028.372		
Total	322949107.688	156974			

*Living places of tour (north, middle, south, eastern, islands, and others) satisfaction showed significant view in restaurant on Green Island*

**ANOVA**

restaurant					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4031350.595	5	806270.119	565.296	.000
Within Groups	228641350.115	160306	1426.281		
Total	232672700.710	160311			

*Living places of tour (north, middle, south, eastern, islands, and others) satisfaction showed significant view in hotel or home-stay on Green Island*

**ANOVA**

hotel					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5484399.010	5	1096879.802	543.315	.000
Within Groups	319642801.107	158328	2018.865		
Total	325127200.117	158333			

*Male/female of tourist's satisfaction showed significant view in restaurant on Green Island*

**ANOVA**

restaurant					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3203890.309	5	640778.062	458.056	.000
Within Groups	216973491.998	155102	1398.908		
Total	220177382.307	155107			

*Male/female of tourist's satisfaction showed significant view in hotel or home-stay on Green Island*

**ANOVA**

hotel					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2233620.725	5	446724.145	220.305	.000
Within Groups	310746475.593	153247	2027.749		
Total	312980096.318	153252			

**CONCLUSIONS AND SUGGESTIONS**

Tourists in Green Island possessed apparent lower satisfaction on service quality and overall satisfaction toward Island food service facilities than Taiwan facilities. However, Taiwan facilities had higher sanitation scores than Island facilities even restaurant or hotel. The greatest difference was found on the quality of food offered, visitors preferred food which provided by Taiwan facilities over Island facilities, followed by sanitation, dining areas, service attitude, and the least difference was identified as equipments and facility. Based on the findings of this study, the authors may provide following suggestions: First of all, the administration unit should be exercising ongoing sanitation management and invest their efforts on more important issues such as improving service attitude. The quality of food offered in restaurants should also be continuing monitored and elevated in order to attract more tourists. Second, it is necessary to conduct periodical and unscheduled investigations on sanitation conditions and practices for Island restaurants to ensure safety and quality. It is also recommended that a certain type of evaluation system must be established to provide tourists with current conditions of surrounding food service facilities. Last, it is necessary for local government to provide more courses to educate restaurant managers concerning nutrition and food sanitation to change their thoughts and attitudes toward preparing and serving food with a more healthy and safe diet.

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