

Does Tourist Satisfaction and Perception Change Over Time?: A Study on Spring Break Tourists in Negril, Jamaica

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Abstract : This study has two objectives. One is to examine factors that influence the satisfaction level of visitors to Negril, Jamaica during spring break season in terms of the tourists' experiences in accommodations; activities; (perceptions of) the attitude of local people; attractions; and transportation. The second objective is to study the tourists' concern for the destination's environment in terms of their approval of environmental impact fees and collection methods. In order to investigate the reliability of the research findings, this study compares the results from 1998 and 2002 surveys. The similarities and differences among the two surveys' results were captured by comparing the responses at an 84% level of confidence. For research objective one, there were statistically significant improvements in spring break tourists' satisfaction level in 'attractions', 'accommodations', and 'transportation'. Overall, the approval rate of environmental impact fee in 2002 survey declined from 1998 rate. More respondents are in favor of charging an on-site visitor's fee, but were less in favor of taxing tour companies/cruise ships as a fee collection method. Both studies identified 'visitors have already paid for visit' as the main reason for disapproval of the fee.

Keywords : tourists, satisfaction, approval, environment, fee, spring break

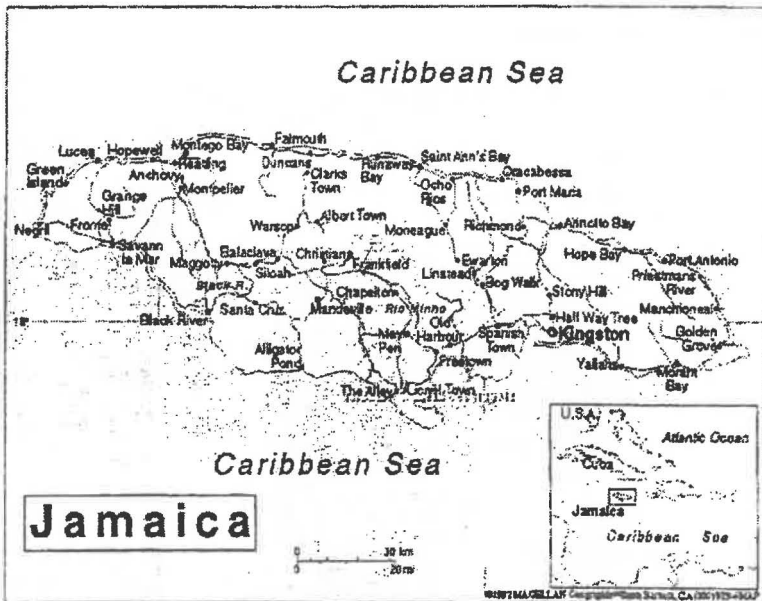
Introduction

International tourism has become a major international trade category and has maintained a steady increase in both arrivals and expenditures over the last six decades. A specific destination's tourism demand varies depending on the destination's economic and non-economic situations and tourists' confidence in security (WTO, 2008). For many developing economies, international tourism has become the economic mainstay.

Jamaican tourism has recovered from safety and security woes, after enduring a short-run tourism decline resulting from the terrorist attack on the World Trade Center in 2001 and has significantly improved since (CIA, 2005). In 2006, Jamaica hosted over 3 million international tourists, including 1.3 million cruise passengers and has earned over 1.4 billion US dollars (Caribbean Tourism Organization, 2008). With 60 percent of the Jamaican population employed in the service industry, most of which depends upon tourism businesses, it is natural and essential to focus on the growth of their tourism industry. In addition, the international tourism industry ranks as the number one earner of foreign exchange, a necessity for the country's economic development (Luntta, 2000).

Lying just to the south of Cuba in the Caribbean, Jamaica is one-tenth of Cuba's size (110,860 square kilometers and 10,991 kilometers, respectively) (Figure 1).

Figure 1. Map of Jamaica



Jamaica continuously competes with a growing number of Caribbean tourism destinations. It is essential that Jamaican tourism organizations and

industries seek information that increases their market share and enhances the quality of their tourism products and services. Doing so will enable tourism stakeholders in Jamaica to enhance the country's competitive advantage in the Caribbean, which significantly relies on satisfying the international tourists' expectations and needs. Such efforts help to boost a destination's reputation and attract return visitors.

Many international tourists come to Jamaica to experience and enjoy the natural environment (beaches, reefs, waterways, and so forth). Consequently, the principle of conservation and management of these resources has become important for both private industries and environmental organizations to enhance the sustainability of Jamaican tourism.

Among Jamaica's tourism communities, Negril may be its most celebrated. Negril lies on the western tip of the country, spanning two of the country's 14 parishes (Figure 2). Negril bases its economy primarily on tourism and tourism related businesses. Its pristine beaches and extensive coral reefs just offshore make it an attractive destination for those seeking a tropical seaside vacation.

Figure 2. Map of Negril, Jamaica



With tourism crucial to its local economy, stakeholders in Negril are interested in developing a clear understanding of the service features tourists associate with the destination. Of particular interest is ascertaining tourists' preferences for a quality travel experience. In addition, the negative impacts on a destination's environment can be a major obstacle for tourism development, particularly for a sensitive destination like Negril. Since Negril's tourism industry has heavily relied on nature-based tourism activities, successful conservation and maintenance of the environment is crucial. Negril, therefore, needs strategies for funding the preservation of its natural attractions.

Research Objectives

In order to adequately determine how visitors feel about specific dimensions of their travel experience, and to assess their perception of environmental impact fees, this study compares the survey results conducted over two different years in Negril, Jamaica. The focus of the research is to determine if any statistically significant differences exist in the responses from spring break tourists in Negril from surveys collected 1998 and 2002. First, the level of tourist satisfaction on Negril as a tourism destination is measured using the following factors: transportation; accommodations; activities; attractions; and (tourists' perception of) the attitude of the local residents. This study also examines the Negril tourists' perception of the environmental impact fee proposal. Specific questions address how tourists felt the fee should be collected if they approved; and what the main reasons for disapproval might be. Differences and similarities between the two survey results are examined to explore the reliability of the study findings.

Literature Review

Tourist Satisfaction Factors in the Tourism Industry

Tourists presently enjoy access to more information than in the past, making them more sophisticated in their preferences (Williams & Uysal, 2003). It is critical for tourism organizations and industry to understand the factors affecting tourist satisfaction, in order to develop long term policies and business strategies that focus on the attractive dimensions of its tourism products and services.

Customer satisfaction factors have been analyzed in various industries. Chadee and Mattson (1996) found the cleanliness of accommodations to be a chief generator of satisfaction with hospitality facilities among college students. The location of the hotel also proved to be an important factor when customers evaluated their accommodations. Cost, on the other hand, appeared to be a relatively minor factor on satisfaction whereas educational value exerted some influence on activities. Boughton and Fisher (1999) found the quality of a leisure activity as the most important factor influencing country club customer's satisfaction followed by price and service. Study results showed that the country club was able to increase its revenue by 30 percent over a two-year period by focusing the club's efforts on these three factors.

Customer satisfaction has also been studied in relation to customer loyalty (e.g. repeat purchase from the customer's perspectives). For example, Skogland and Siguaw (2004) found employee engagement with guests and hotel amenities to be among the key factors in developing customer loyalty in the hotel industry. They also noted the importance of examining the demographics of their customers to identify factors that might lead to return visits.

Tourist satisfaction on a particular destination has also been extensively studied. Tian-Cole and Crompton (2003) found the quality of experience and the quality of performance attracting different definitions depending on the level from which one viewed them. Accordingly, they referred to previous studies to develop a model to illustrate the relationship between the concepts of tourist satisfaction and service quality. Among the terms used in this study, quality of experience was defined as the psychological effect of taking part in tourism activities. At the transactional level, satisfaction was found to be an emotional response to a destination, whereas satisfaction depended on the overall quality of the experience at the global level. The perceived service quality, at the global level, appeared to rest on an overall evaluation of the destination; while at the transactional level, the perceptions depended on a visitor's perceptions of the destination.

Fallon and Schofield (2003) examined tourist satisfaction in Orlando, FL with respect to five factors: core, secondary, and tertiary attractions,

facilitators, and transportation. Core attractions were the primary reason for the destination choice (e.g. resorts, amusements, participatory activities, and so forth); secondary attractions included shopping and dining facilities; tertiary attractions were identified as activity opportunities such as night life, sports, wildlife, and cultural attractions. Accommodation providers (e.g. hotels) were identified as facilitators and the fifth factor referred to transportation within the destination (i.e. local mobility). The study results found secondary attractions to be the most influential factor on overall tourist satisfaction, followed by facilitators, core attractions, tertiary attractions, and transport.

Danaher and Arweiler (1996) conducted a similar study, addressing customer satisfaction in New Zealand. They identified four components of the tourism experience all customers would necessarily have encountered during their stays. The factors included accommodations, transportation, outdoor activities, and attractions. By examining these variables in terms of tourist satisfaction, the study found accommodations, outdoor activities, attractions, and transportation to be influential in that order. Satisfaction with outdoor activities proved to have the strongest relationship on a visitor's likelihood of recommending New Zealand to others. Shanka and Taylor (2003), in their study of hotel guest preferences in Perth, Australia, found that guests ranked physical facilities, the services they experienced, and the services provided as most important factors. International travelers named the physical facilities most important to them, possibly implying that facility upgrades and proper building maintenance are important focal points for managers.

The existing studies have identified and analyzed factors utilizing a one-time survey among a limited number of samples. Consequently, their findings might have significant limitations in terms of the result's reliability and external validity. In order to explore the consistency of a particular study on tourist satisfaction or perception, it may be ideal to conduct surveys over multiple years utilizing homogeneous groups of tourists at a certain destination. This study differentiates itself from existing literature in that it analyzes the results from two identical surveys conducted on spring break tourists in Negril, Jamaica on two different years.

Tourists' Perception on Environmental Impact Fees

The second research objective stems from the need to develop strategies for funding the preservation of Negril's nature-based tourism resources. A tourism destination such as Negril provides key tourism products and services that rely a great deal on the natural environment. Effective management of the environment is a major success factor for tourism policy makers and organizations. Studies have criticized the reduction in, or lack of, public funds to maintain natural attractions in many tourism destinations (Eagles, McCool, & Haynes, 2002 cited in Reynisdottir, Song, & Agrusa, 2008). Securing financial resources to protect those natural attractions has always been a top priority of a destination for its sustainable tourism management (Reynisdottir, Song, & Agrusa, 2008).

One of a limited number of studies evaluating tourists' approval of environmental impact fees is Lee and Pearce (2002). In their study on northern Australia, tourists' perception was analyzed in relation to different tourism settings and activities. The researchers found tourists are more likely to approve of fees for the use of world heritage sites, ski fields, hot springs, rainforests, wilderness areas, national parks, and the Great Barrier Reef. They were less likely to approve of fees for the use of beaches, rivers, lakes, dams, city parks, city beaches, and parks and gardens. The study results demonstrate the importance of considering the type of tourist activities when local governments and tourism organizations design strategies to levy environmental impact fees. Rivera-Planter and Munoz-Pena (2005) analyzed responses from visitors to four Mexican coral reef natural protected areas in terms of an increase in protection fees, a proposed demand management tool. They found that tourists were willing to pay more if their fees were assured to be used for nature conservation and claimed this fee system as a positively effective management tool to deliver a healthy, biodiverse, and enjoyable reefs for current and future tourists and local residents.

This study intends to apply a similar approach as the existing studies to investigate a destination's environment management issues. A particular research interest is funding the conservation of the natural tourism resources of Negril, Jamaica. As an exploratory study, international tourists' perceptions

of the implementation of environment protection fees, and their preferences on the method of fee collection, were surveyed.

Methodology

Conducting a onetime survey may not be sufficient to eliminate concerns of reliability of study results, since the consistency of research findings can't be examined over an extended period. Replicating the same study in other settings or using other subjects also exposes it to a potential lack of control because of confounding factors from the variability of the settings or subjects. In order to address these concerns, it would be ideal to conduct research over an extended period in a consistent manner (i.e. the same survey instrument, the same or similar study subjects both in location and in population). It is expected that more meaningful outcomes for a destination's tourism organizations and businesses can be derived from this approach.

In order to identify the differences in survey results conducted on two different occasions in Negril, Jamaica, a survey was conducted in 2002 and compared with the results from a 1998 survey analysis done by Lee (1999). The first part of the survey questionnaire assessed the tourists' satisfaction with Negril as a spring break destination in terms of attractions, activities, transportation, accommodations, and the attitude of the local people. The second portion asked the tourists to provide their opinions (approval or disapproval) concerning charging fees to protect the Negril environment; and their thoughts on how those fees should be collected.

This study relied on the comparison of confidence intervals around individual means or percentages of responses to a survey instrument, in order to assess the existence of statistically significant changes in the spring break tourists' responses between 1998 and 2002. A confidence interval is the range of values within which the population mean would fall a certain percentage of the time. When the confidence intervals around two sample means don't overlap, a statistically significant difference exists between the two groups (Julious, 2004). According to Newcombe (2000) who advocated the use of confidence intervals as an alternative approach to a typical mainstay of statistical inference - hypothesis testing (e.g. *t-tests*), a confidence interval provides much more information such as the range of

values in original units, whereas the hypothesis test simply gives a very indirect measure.

For this study, 84% confidence intervals were calculated rather than more typical 90% or 95% confidence intervals, in order to conduct comparative analysis between the two survey results. This is to avoid confusion regarding the cases where confidence intervals (95%, for example) overlap, but significant *P-values* are observed. Non-overlapping 84% confidence intervals around individual means would equate *P-values* approximately close to a 5% level of significance. In other words, 84% confidence intervals would ensure a level of statistical significance between the two groups at 5% or lower when the two confidence intervals do not overlap (Julious, 2004; Newcombe, 2000).

Survey Location

Seven Mile Beach, Negril's ocean front, extends from Bloody Bay on the east to the Negril River on the west. This pristine beach is only 50 miles southwest of Montego Bay, Jamaica's chief tourism gateway, and is now one of the most heavily used beaches in the Caribbean. It is a popular destination for the typical "sun, sand, and swimming" vacation among U.S. college students during spring break season. Vendors on the beach prosper during this period. Along with daytime activities such as sailing and SCUBA diving, it also offers an attractive night life, with numerous bars and restaurants along its ocean front.

The Questionnaire

The Coral Reef Preservation Society, a non-government organization (NGO) in Negril, is interested in specifying factors that influence tourist satisfaction and in identifying feasible strategies to manage one of its most important tourism assets, the natural environment. One possible strategy is to collect environmental impact fees to help protect the Negril's environmental resources. At the request of, and in consultation with, the Coral Reef Preservation Society of Negril, a survey questionnaire was designed in order to ascertain customers' perceptions of their experience while visiting Negril, as well as to reflect their approval of proposed fees to

protect the environment.

The first part of the survey refers to tourist satisfaction in relation to certain dimensions of the overall travel experience. Based on a literature review, the five factors used as indicators of tourist satisfaction on a destination were: transportation; accommodations; activities; attractions; and attitude of the local residents. An 11-point Likert scale was used for measurement to allow the respondents to record their evaluations with a degree of precision, and to treat the data as continuous in its analysis (Cummins & Gullone, 2000). The 11-point scale used three anchors, with an answer of 1 indicating the subjects' lowest "dissatisfaction," an answer of 6 indicating "no opinion," and an answer of 11 indicating the highest level of "satisfaction".

Each of the five factors was subdivided into individual elements relating to their respective categories. For instance, transportation includes plane, rental car, moped or motorbike, bus tour, and taxi. The average of the sum of responses applied to the subcategories was then used as an indicator of overall satisfaction. Both 1998 and 2002 surveys were conducted the same way, so the results from two studies are comparable.

The second set of questions related to impact fees. The first of these questions asked, "Because a majority of tourists derive enjoyment from natural environments, it has been suggested that each tourist pay a fee to help protect them. Do you approve or disapprove of this suggestion?" If they approved, they were then asked to check the boxes corresponding to what they considered to be the best methods of collecting the fee. The choices included: "on-site visitor's fee" (at waterfall, trail entrance, and so forth), "embarkation or debarkation fee", "environmental protection fee added to hotel bills", "tax on tour companies and/or cruise ships", or "other." The last question adduces reasons for the disapproval of environmental impact fees. Those who disapproved were asked to check a box corresponding to what they considered to be the best reasons for their disapprovals. The choices included, "visitors should not have to pay to protect the natural environments", "visitors have already paid to come to the Caribbean", "people who live in the Caribbean should pay the cost", and "other".

The Survey

Sixteen college students enrolled in the "Island Eco-tourism" class were involved in data collection. Before a field trip to Negril, Jamaica, they attended classes preparing them to conduct on-site surveys, including obtaining Institutional Review Board (IRB) certification. These classes taught techniques for administering the surveys, familiarized the students with the community they would be visiting, and allowed the students to address any concerns that they might have related to the study procedures.

Data collection was conducted during the first week of March, 2002. Each student administered 30 surveys. They were instructed to alternate genders when selecting subjects so that the sample would contain 50 percent males and 50 percent females. Ten surveys were administered by each student on Monday, Wednesday, and Friday. Each survey lasted about 20 minutes. Since spring break season is considered the peak season for Negril tourism, and that very little study has been conducted on this unique travel market (Matilla, Apostolopoulos, Sonmez, Yu, & Sasidharan, 2001), this study was conducted among college student tourists who traveled to Negril during their spring break. The non-response rate was negligible. In the 1998 study, the data were collected under similar circumstances; however, the sample size (145) for 1998 was significantly smaller than 2002 survey sample size (470).

Study Results

Descriptive summary of 2002 survey respondents

According to the 2002 survey, the majority of the respondents were first-time visitor to Negril (67%) with the travel purpose of pleasure (94%). Over 90% of the respondents were attending or finished their college education at the time of survey. The majority (85%) of the respondents were from the United States. Hence, the homogeneity of study samples is expected to ensure a credible representation of a spring break tourist population. Males (49%) and females (51%) were evenly represented in the survey sample.

Table 1 summarizes some of the key characteristics of the respondents from the 2002 survey.

First visit to Jamaica	67%	
Number of nights already in Jamaica	1-5 days	72%
	5-10 days	22.5%
	11-15 days	2.5%
	others	3%
Purpose of trip	pleasure	94%
	business	3%
	visit relatives/friends	3%
Travel arrangements	all-inclusive	32%
	partial-inclusive	34%
	non-package	33%
Gender	male	49%
	female	51%
Age	less than 25 yrs. old	46%
	25-34 yrs. old	20%
	35-44 yrs. old	19%
	45-54 yrs. old	10%
	older than 54 yrs. old	5%
Education	some high school or less	1%
	high school graduate	6%
	some college	46%
	college graduate	32%
	post graduate	14%
Country of residence	United States	85%
	England	7%
	other European countries	7%
	other countries	1%

Objective 1

The first objective of the study was to determine if any significant differences in the tourists' satisfaction levels existed between the surveys from 1998 and 2002. The respondents' satisfaction levels were measured in the following five dimensions:

1. transportation,
2. accommodations,
3. activities,
4. attractions, and
5. attitude of local residents.

For the 2002 survey, respondents rated 'activities' (average rating of 9.33 out of 11) as the most satisfying factors of their trip to Negril, followed by 'attractions' (8.95), 'accommodations' (8.66), 'attitudes of local people' (8.60). The least satisfactory factor was 'transportation' (8.03). The order of spring break tourists' satisfaction factors is similar to the results from 1998 survey, except that 'attitudes of local people' (8.46) ranked ahead of 'accommodations' (8.14) in 1998 study.

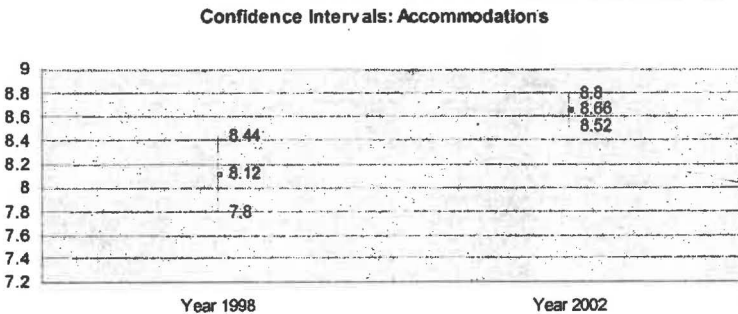
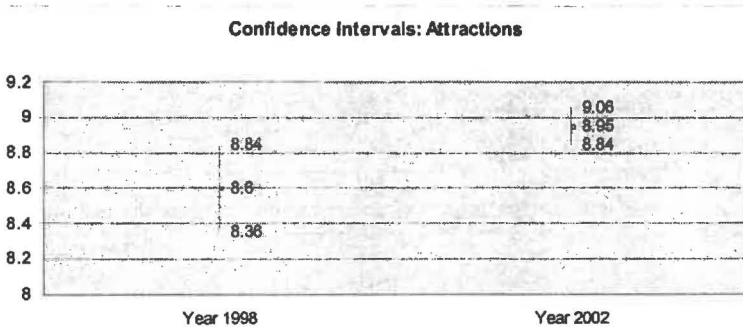
As Table 2 shows, the means improved in all five factors between 1998 and 2002. In order to see if there were any statistically significant changes in tourists' satisfaction level in each of the five factors, confidence intervals (at 84% significance level) around the mean values of the responses have been computed and compared (Table 2).

Significant differences emerged between the years 1998 and 2002 in three key factors (Attractions, Accommodations, and Transportation), since no part of the two confidence intervals overlapped with one another for these (Newcombe, 2000). For 'attractions', the mean of the survey outcome in 2002 (8.95) increased from the 1998 survey data (8.60) and the lower bound of the 2002 confidence interval (8.84) is the same as the upper bound of 1998 confidence interval, with no overlapping between the two confidence intervals. Tourist's satisfaction on 'accommodations' also revealed a statistically significant improvement from 1998 (mean = 8.12) to 2002 (mean = 8.66). In addition, neither confidence interval overlaps, with the lower

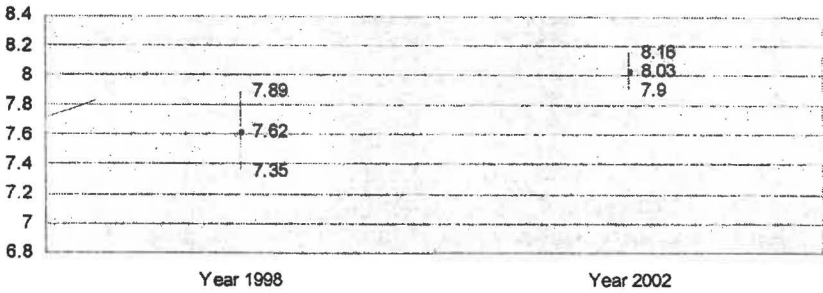
bound of 2002 confidence interval (8.52), being higher than the upper bound of 1998 data (8.44). A similar result was identified for 'transportation'. A significant improvement was detected between 1998 (mean = 7.62) and 2002 (mean = 8.03). The two confidence intervals don't overlap with each other, with the lower bound of 2002 data (7.90) being higher than the upper bound of 1998 survey result (7.89).

No statistically significant difference emerged for the respondents' evaluation on 'Attitude of local people' and 'Activities'. For both factors, minor improvement in the mean value of tourists' satisfaction level has been observed - 'attitude of local people' (8.46 to 8.6) and 'activities' (9.2 to 9.433). The 84% confidence intervals from the 1998 and 2002 study responses overlapped over significant part of the intervals for both factors.

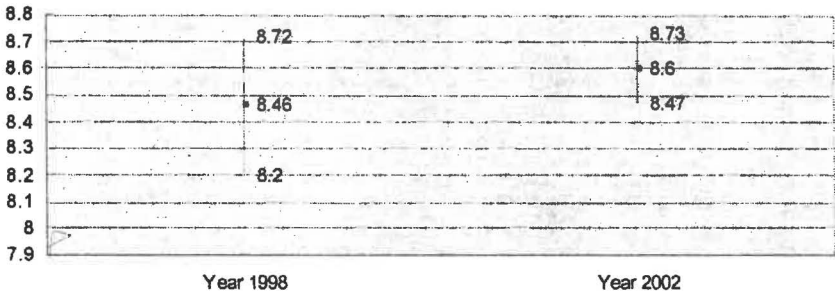
Table 2: Confidence intervals around the mean score values for five customer satisfaction factors from 1998 and 2002 surveys (at 84% level of confidence)



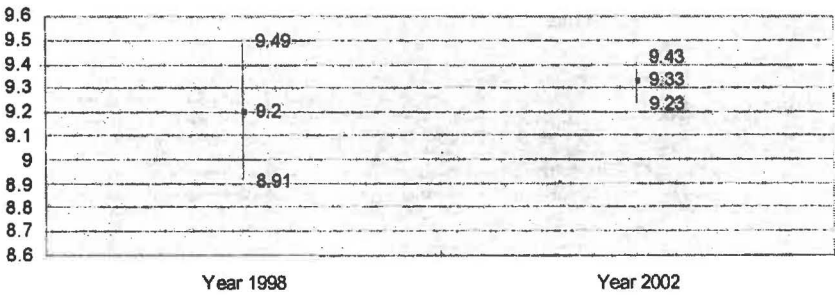
Confidence Intervals: Transportation



Confidence Intervals: Attitude of Local People



Confidence Intervals: Activities



Objective 2

This study set out to determine if any significant differences occurred in tourists' perception of environmental management issues in terms of: (1) tourists' approval rates for the prospect of an environmental impact fee; (2) how tourists felt that fee should be collected if they approved of it; and (3) the individual reasons for those who disapproved of the fee. Survey responses from 1998 and 2002 studies were compared. After a discussion and consultation with The Coral Reef Preservation Society of Negril, the following five options were provided as the means of fee collection:

1. On-site visitor's fee (e.g. at a waterfall, trail entrance, and so forth);
2. Embarkation or debarkation fee;
3. Environmental impact fee on the hotel bill;
4. Tax on tour companies and/or cruise ships; and
5. Other.

In addition, the following four options were listed as the 'reasons for disapproval.'

1. Visitors should not have to pay to protect environment;
2. Visitors have already paid for visit;
3. People living in Caribbean should pay the cost; and
4. Other

First, the confidence intervals for the percentage of visitors who approved of environmental impact fees were computed and compared between the two years (Table 3). The approval rate fell from 70% (1998) to 65% (2002). However, no statistically significant differences emerged in the approval rates, with the lower bound of 1998 rate (64%) below the upper bound of the 2002 rate (68%).

The confidence intervals for the preference of the four collection methods of the environment impact fee were computed and compared. Since there was no response for the "other" category in the 1998 survey, it was not included in the comparison. In both surveys, respondents chose

'embarkation/debarkation fee' as the most preferable method of collecting the fee, followed by 'on-site visitor's fee'. According to responses from two surveys, no significant difference appeared among three of the four methods. A significant difference did appear for the "tax on tour companies and/or cruise ships" variable between the two years. The preference for this method by the 2002 survey respondents was significantly lower than that of respondents from 1998 study (Table 4).

Table 3: Confidence intervals around the respondents' approval rate of environmental impact fees from 1998 and 2002 surveys (at 84% level of confidence)

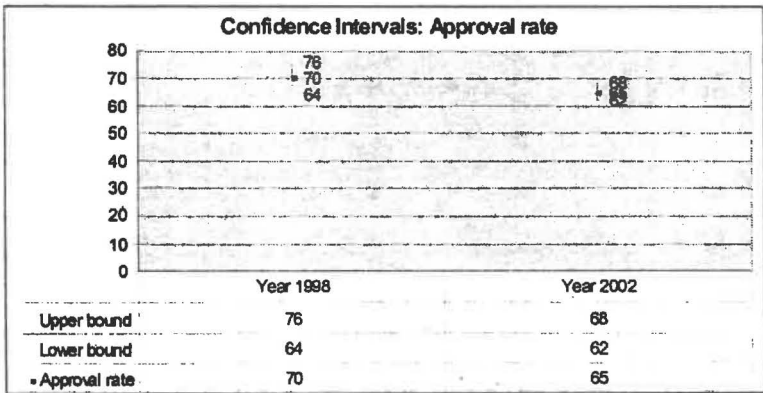
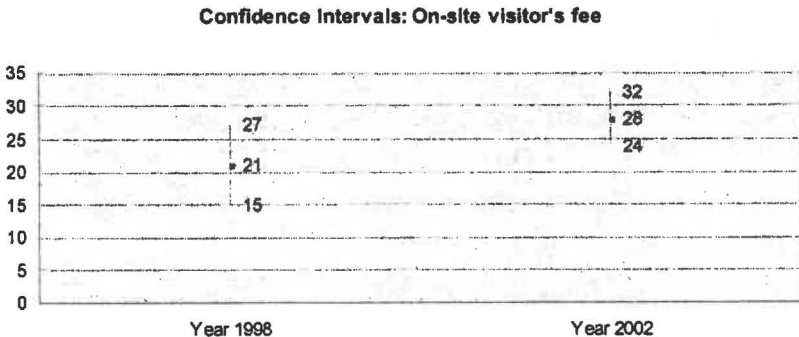
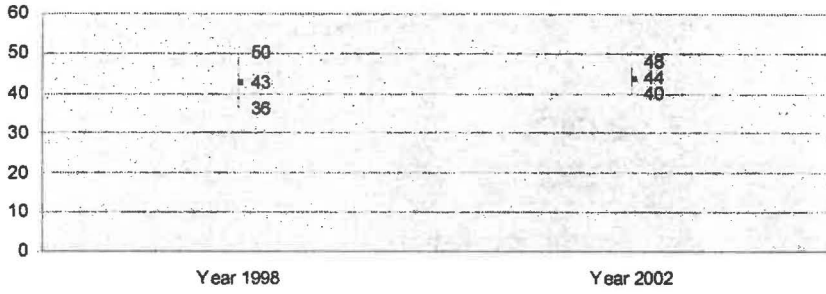


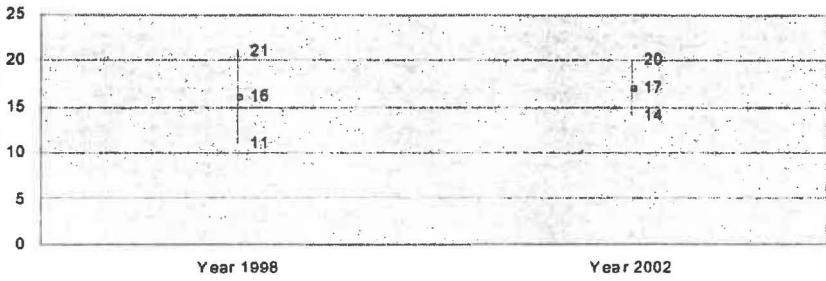
Table 4: Confidence intervals around the percentage of respondents' preference (among those who approved of fee) on the environmental impact fee collection method from 1998 and 2002 surveys (at 84% level of confidence)



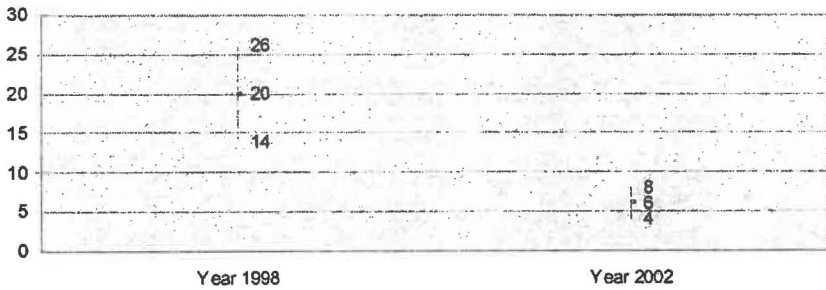
Confidence Intervals: embarkment/debarkment fee



Confidence Intervals: fee on hotel bill



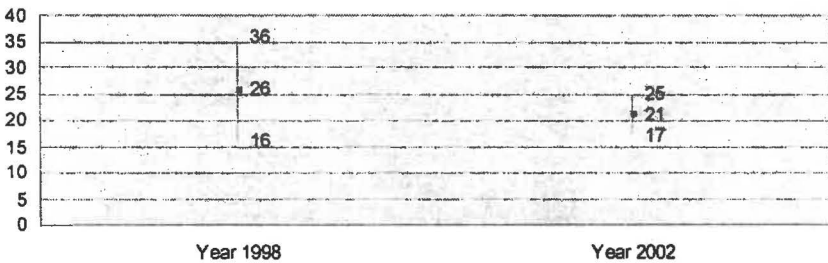
Confidence Intervals: tax tour company/cruise ship



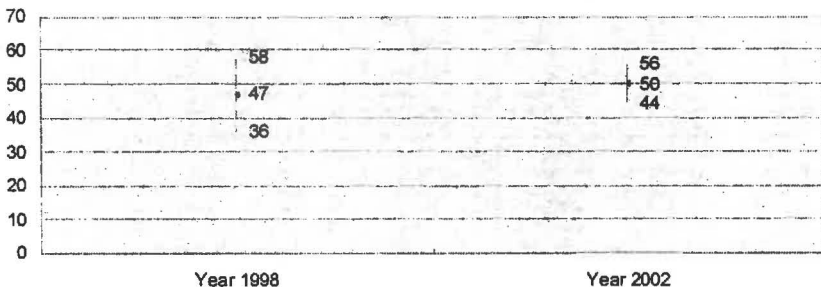
Finally, Table 5 compared the percentages and confidence intervals of each of the reasons for the respondents' disapproval of the fee. No significant differences appeared between the two survey results. In both studies, respondents chose 'visitors have already paid for visit' as the main reason for their disapproval of environmental impact fees (47% and 50%, respectively).

Table 5: Confidence intervals around percentage values for reasons of disapproval of environmental impact fee from 1998 and 2002 surveys (at 84% level of confidence)

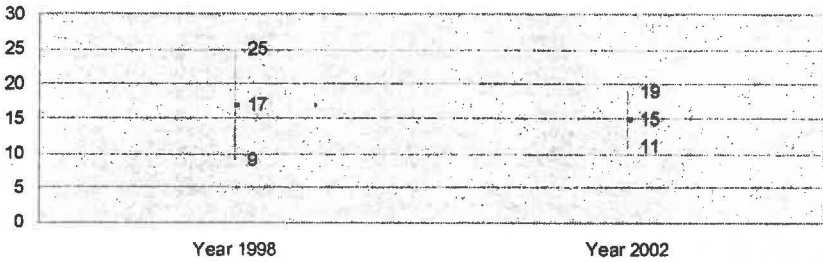
Confidence Intervals: visitors should not have to pay to protect environment



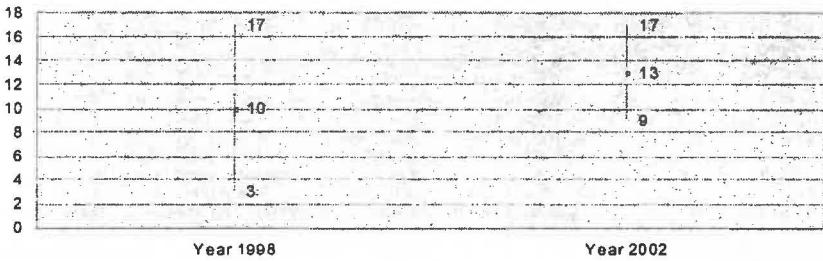
Confidence Intervals: visitors have already paid for visit



Confidence Intervals: people living in the Caribbean should pay the cost



Confidence Intervals: other



Discussions and Concluding Remarks

The first objective of the study was to determine if the satisfaction level of spring break travelers to Negril, Jamaica has changed over certain period of time. The 2002 survey results were analyzed and compared with the 1998 study in terms of transportation, accommodations, activities, attractions, and attitude of local people.

For both surveys, the respondents' overall evaluation on their satisfaction levels was quite satisfactory, with every factor's mean score over 8.0 (based on 11-point Likert scale) except 'transportation'. Based on survey responses, it is clear that Negril, as a spring break destination, achieved a significantly higher overall tourist satisfaction level in 2002, compared to the 1998 study results.

Statistically significant improvements have been detected in three factors - attractions, accommodations, and transportation. Even though some

improvements have been observed in 2002 survey, the respondents' evaluations of 'attitude of local people' and 'activities' did not seem to be significantly different between the two survey results. This study finding provides significant implications toward Negril's tourism management and development. First, depending on the characteristics of tourist satisfaction factors, the impact of efforts by the tourism destination might be quite heterogeneous. During the 4 years between the two surveys, the tourists' satisfaction increased more dramatically for the physical and tangible factors in comparison with that for intangible factors. Second, in order to see the short-run impact of policy development (by tourism organizations) and business practices (by tourism industry) in a destination like Negril, Jamaica, it makes more sense to put more emphasis and invest on the development of infrastructure, lodging facilities and major sites that tourists visit. However, it may require more long-run planning and patience for the tourism stakeholders in Negril to achieve improvement in tourist satisfaction factors, in terms of tourist activities and the tourists' perception of the local population's attitude toward tourism.

For the 'attractions' factor, a statistically significant difference emerged between the years 1998 and 2002. Over a 4-year period, improvements to existing attractions, access to new attractions, or changes in visitor preferences may have occurred. The result also might indicate a possible trend in attraction improvement or visitor preference when examining this particular population in relation to Negril.

The study identified a statistically significant difference for the 'accommodations' factor between the two years, as well. This might indicate the local lodging companies' tremendous effort to provide improved service quality to spring break travelers over the years, considering that the types of lodging facilities in which the survey subjects stayed were quite homogeneous and were all located along 7-mile Beach.

The 2002 survey respondents' evaluation for 'transportation' was significantly higher than that of 1998. This result supports the importance of investment in the tangible and supportive variables of tourism services. For example, a project to renovate and widen the main road between Montego Bay International Airport and Negril has been successfully constructed during the time between the 1998 and 2002 studies. This is likely to improve tourists' satisfaction concerning destination transportation.

In contrast with the three previous factors, no statistically significant

differences were identified for 'activities' and 'attitude of local people' between the two years. As the study mentioned previously, it is challenging and time consuming to significantly improve tourists' satisfaction. For example, the 'activities' in Negril, particularly for spring break tourists, are very specific and relatively time-invariant. Also, the spring breakers' encounters with local people might be limited to those who work for the hospitality and tourism industry in Negril.

The second objective of the study set out to determine if any significant differences exist in the spring break travelers' perception of environmental issues in terms of (1) the approval rates for the prospect of an environmental impact fee; (2) how tourists felt that fee should be collected if they approved of it; and (3) the reasons of disapproval.

For the 2002 survey, the respondents' approval rate of an environmental impact fee decreased significantly from 70% (1998) to 65%. Even though the upper bound (68%) of the confidence interval from the 2002 study is lower than actual approval rate (70%), it is still higher than lower bound (64%) of 1998 study. This result implies that it might become riskier for tourism-related government organizations in Negril to prospect and implement an environmental impact fee program as a burden on the tourist. With a lower percentage of tourists who approve of the idea of this type of fee, Negril should expect a certain degree of damage in demand, if fees are levied.

Among the four different fee collection methods provided in the study, the respondents from both surveys prefer 'embarkation/debarkation fee' as the most preferable method (43% and 44%, respectively). A significant percentage of the respondents from the 1998 study preferred a method of 'tax on tour company and/or cruise ship' (20%) but only 6% of the respondents preferred the method in 2002 survey. This may be due to significantly more respondents choosing 'other' as an alternative in 2002 than in 1998. Otherwise, there were no statistically significant differences between the confidence intervals for preference percentages among the three main methods. This implies a strong reliability of the respondents' preferences concerning the environment protection fee collection method, based on the surveys from 1998 and 2002.

Lastly, the respondents who disapproved of the environmental impact fee chose 'visitors have already paid for visit' as the main reason for their disapprovals (47% in 1998 and 50% in 2002), followed by 'visitors should

not have to pay to protect environment' (26% and 21%, respectively). In the 2002 survey, more respondents chose 'visitors have already paid for visit' and 'other', whereas a lower percentage chose 'visitors should not have to pay to protect environment' and 'people living in Caribbean should pay the cost'. Overall, the study results implies that spring break tourists in Negril may ask that more responsibilities be placed on the local government/residents for the protection of their environment and natural resources as a way to ensure the sustainability of the destination. The study identified no statistically significant difference between the years 1998 and 2002 when comparing disapproval reasons, which supports a high reliability for the responses.

Limitations

The study entails at least the following inherent limitations. First, the study samples of two years were both collected during early March, typically the spring break period for college students of the United States. Therefore, the study results may not be applicable to other tourist groups visiting Negril, Jamaica or other Caribbean destinations. Second, the 2002 survey occurred six months after the September 11 tragedy, a time when many Americans hesitated to travel. In other words, the respondents of the 2002 study may not represent typical travelers. Third, the survey assumes product continuity. Either deterioration or improvement in the tourism product that could have occurred over the two sampling periods has not been considered. Fourth, caution should be exercised in drawing inferences from the limited data. It should be noted that the sample size for 1998 was much smaller than that of 2002. Finally, the student surveyors used in this study were at liberty to choose their subjects. They may have rejected certain individuals out of personal prejudices.

Future Research

As mentioned in the introduction of this study, the Caribbean is a highly competitive international tourism market with a list of various destinations. Therefore, conducting additional surveys of spring break populations in other Caribbean destinations might enhance the external validity of the study results. In addition, a survey among visitors in Negril during different times of the year may help Jamaican tourism organizations and industry understand the similarities and differences among its heterogeneous international tourism market segments.

The differences between the attractions variable in the tourist satisfaction

portion of the survey may be due to changes in the characteristics of the destination. Since a significant improvement emerged between the years 1998 and 2002, research should investigate key changes in Negril's tourism-related characteristics during that period of time in order to develop more effective policies and strategies for tourism development in the area. Future studies in both supply side (e.g. development of tourism products and packages, improvement in quality of tourism-related infrastructure and superstructure) and demand side (e.g. tourists' awareness, preference, image, and expectations on Negril) are needed to provide balanced perspectives, particularly in terms of identifying any gaps between the two sides. Lastly, conducting the same survey using a 5- or 7-point Likert scale would be recommended to see if the results of this study with an 11-point scale are robust.

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