

Direct and Indirect Effects on International Tourists' Destination Satisfaction — The Case of the World Natural Heritage of Halong Bay, Vietnam

Mai Ngoc Khuong, Nguyen Thi Hong An, and Nguyen Thi Mai Uyen

Abstract—The purpose of this research was to determine the factors that directly or indirectly affect foreign tourists' destination satisfaction toward the World Natural Heritage of Halong Bay. These factors consist of natural environment and resources, cultural factor, leisure and entertainment, shopping, infrastructure, accessibility, and safety and security. Quantitative approach was majorly used, with statistical techniques applied including factor, multiple regression, and path analyses. The unit of analysis was at individual level with the target population of 302 foreign tourists visiting to Halong Bay. The findings of this research showed that leisure and entertainment was the most important factor that affected tourists' satisfaction towards Halong Bay, followed by infrastructure, safety and security, cultural factor, and shopping. Besides, it could not be denied that perceived service quality also contributed an important part in tourists' destination satisfaction toward Halong Bay.

Index Terms—Tourist destination satisfaction, world natural heritage of Halong Bay, perceived service quality, path analysis.

I. INTRODUCTION

A. Background of Tourism Industry

At present, the tourism industry is showing a significant growth in over the world. It has received special attentions from every country because of the benefits it brings to these countries as well as tour enterprises. In some countries such as Switzerland, Macau, revenue from tourism industry is accounted as a main contribution in Gross Domestic Product (GDP). In Vietnam, total revenue from tourism is significantly increasing: 96 trillion in 2010, 130 trillion in 2011 and 160 trillion in 2012, accounting for over 5% of the GDP (General Statistic Officer of Vietnam), and tourism has confirmed its own important role in the economic development of the country day by day. In addition, according to the statistic of General Statistic Officer of Vietnam, after being dropped in 2009 due to the impact of the financial crisis and global recession, from 2010 up to now, the number of international visitors to Vietnam has increased year by year: about 5 million in 2010 up to 7.5 million in 2013. This indicates a huge potential for the development of tourism in Vietnam in the future. However, the tourism industry of Vietnam is still young and has to face with many competitions

from other countries in area. According to [1], obtaining a sustainable development in tourism and making it as a vehicle for economic development in any destination depends on maintaining destination competitiveness. Reference [2] also claimed that in a competitive market where business competes for customers, customer satisfaction is considered as a key element of business strategy. This is also true in the tourism industry. Therefore, to be successful in tourism, the very first step need to be taken is to understand tourists' satisfaction and identify which factors those affect to it.

B. Brief Introduction to Halong Bay

Halong Bay is located in the Northeast of Vietnam in the Gulf of Tonkin, within Quangninh province. It includes the sea area of Halong City, CamPha Town and a part of the island district of Van Don. It has a coastline of 120 km with total area of 1,553 square kilometers including 1,969 islands in which 989 islands are already named and 980 islands are not. In 1994, in the 18th meeting of the Committee of the World Heritages of UNESCO held in Thailand, Halong Bay was officially recognized as the World Natural Heritage because of its universal aesthetic value according to criteria of the Convention. On 2nd December, 2000, at the 24th session of the World Heritage Committee held in Cairns, Queensland, Australia, the World Heritage Committee unanimously decided to recognize the universal geological value of Halong Bay for the second time. Additionally, in 2012, after voted for four years in over the world, Halong Bay was officially recognized as one of the New Seven Wonders of Nature by New7Wonder, beside South America's Amazon rain forests, and Argentina's Iguazu Falls, South Korea's Jeju Island, Indonesia's Komodo Island, the Philippines' Puerto Princesa Underground River, and South Africa's Table Mountain. With the values and beauties which are internationally recognized, Halong Bay has become one of seven most attractive destinations in Vietnam to foreign tourist according to the Huffington Post magazine of the United State.

II. LITERATURE REVIEW

A. Tourists' Satisfaction

Tourists' satisfaction was considered as "one of the crucial elements of successful destination's marketing", which affected the choice of destination and the decision to return [3]. Therefore, enhancing tourists' satisfaction should be one of the functions of a destination management organization [4]-[6] and a prerequisite for the development of a strategy leading to a destination's enhanced attractiveness and its

Manuscript received January 5, 2015; revised March 4, 2015.

The authors are with the School of Business, International University –VNU-HCM, Vietnam (e-mail: mnkhuong@hcmiu.edu.vn, nthan@hcmim.edu.vn, maiuyennghuyen512@gmail.com).

competitive positioning.

In marketing literature, the definition of customers' satisfaction has been discussed in many researches for many years. Reference [7] defined customers' satisfaction as "the consumer's fulfillment response. It was a judgment that a product or service feature, or the product or service itself, provided (or was providing) a pleasurable level of consumption-related fulfillment, including levels of under- or over fulfillment". Reference [8] stated that customers' satisfaction was "an experience-based assessment made by the customer of how far his own expectations about the individual characteristics or the overall functionality of the services obtained from the provider have been fulfilled". Besides, reference [9] argued that customers' satisfaction "is based on a customer's estimated experience of the extent to which a provider's services fulfill his or her expectations" [9]. For this study, the customers' satisfaction definition defined in [10] was used. It stated that satisfaction is a subjective perception, evaluation, or judgment held by customers based on their experience with a service performance rather than a firm's objective standards of quality. The relevance of this definition to this study was that it indicates that customers evaluate the destination based on their actual experiences of traveling to this destination and the rating was done in accordance with their experiences with service performance in this destination. In term of tourism, reference [11] also defined satisfaction as the tourist's emotional state after experiencing the trip.

In the tourism literature, there were a variety of approaches to measure the customers' satisfaction. However, only two main approaches were employed to measure it, those were disconfirmation theory and performance-only approach [12]-[14]. The disconfirmation theory is used as a comparison between pre-travel expectations with actual travel experiences. According to [15], tourists had some pre-travel expectation to the destination to which they would come. After they took a trip to that destination to consume products, use services, and had experiences, they form their judgment of the destination by comparing its actual performance with their pre-expectation. If performance exceeded expectations, they were satisfied. However, according to [16], this theory had some problems, particularly in tourism context. It had been argued that expectations were inevitably less concrete and less useful because of the intangibility of tourism and leisure product.

The performance-only approach measured the tourists' satisfaction as the tourists' satisfaction by the tourists' evaluation of destination attributes [17]-[19]. Some researcher pinpointed that the tourists' satisfaction with individual component of the destination led to their satisfaction with the overall destination [18], [20], [21]. That's why tourists' satisfaction could be measured through the summation of the tourists' evaluation of each destination attribute [19]. However, this approach also involved some problems. Firstly, consumers normally did not simply sum up their evaluations of each characteristic and did not give an equal weight to each characteristic, as assumed by a summated scale that was often used in such an approach [7]. In addition, as the offer's characteristics were not separated

from the measurement of satisfaction, so researchers were unable to analyze the impact of each specific antecedent (set of characteristics) on customer satisfaction.

Additionally, numerous studies used a summative overall item to measure overall tourists' satisfaction [22]-[26].

B. Factors Affecting Tourists' Destination Satisfaction

In tourism literature, many studies were conducted to find out factors affecting tourists' satisfaction toward a destination. Reference [14] tried to identify the destination's attributes at a sea destination that affect tourist satisfaction, which include: tourist infrastructures (accommodation facilities, quality of accommodation, restaurant facilities), general infrastructure (parking facilities) shop/store offering, personal safety (drinkable water, traffic flow), natural environment (beach cleanliness), and state of the roads. Reference [27] also found out that accommodation, events and activities, environment and accessibility have effects on tourists' destination satisfaction. Reference [28] also pinpointed that attributes like comfort facilities, safety, infrastructure, cultural attractions, shopping, and accessibility affects tourist satisfaction. By reviewing the literature, this research tried to examine some main elements affecting to tourists' satisfaction which appear in most of the previous researches including natural environment and resources, entertainment activities, culture, shopping, safety and security, infrastructure, accessibility.

Natural resource includes all things that exist in nature and are not made or caused by human. In the field of tourism, natural resource consists of weather, beach, lake, mountain, desert, etc. [29]. Reference [30] asserted that natural environment had always played an important role and is seen as a main source to tourism sector. Reference [31] discovered that the satisfaction level tourist depends on the natural ambiance and climate condition of the geographical location.

The Oxford advanced learner's dictionary defined culture as the ideas, customs, and social behavior of a particular people or society [32]. In tourism, reference [29] mentioned quality of life; language barriers; hospitality and friendliness of the local residents; festival or concert; religion; historic attractions; customs and ways of life; political and economic factors as factors of cultural resources. Some researchers had focused on a single event, for instance, a country corn festival [33] and a hot-air balloon festival [34] in South Carolina, a jazz festival in Umbria [35], etc.

According to [32], leisure is time that is spent doing what you enjoy when you are not working or studying, and entertainment is films/ movies, music, etc. used to entertain people. Reference [36] chose several important attractions as well as entertainment opportunities such as theatre, concerts, bars, restaurants, discos, etc. Reference [29] also referred some activities as outdoor activities, nightlife, adventure activities, zoos, etc.

Shopping is defined as the purchasing of goods from shops [32]. It was considered as one of the main activities undertaken by tourists [37]-[39]. For some tourists, shopping might be the single most important purpose of tourism [40]-[42], or be viewed as a vital part of being a tourist [43], [44]. Reference [29] showed terrorist attacks or crime rate as

the items of safety and security in tourism.

Reference [32] defined infrastructure as the basic physical and organizational structures and facilities (e.g. buildings, roads, power supplies) needed for the operation of a society or enterprise. In term of tourism, according to reference [29], infrastructure included general infrastructure (transport facilities, health services, telecommunications etc.) and tourist infrastructure (accommodations, restaurants, hotels, tourist center, etc.)

Reference [45] mentioned that accessibility as the ability to reach desired goods, services, activities and destinations such as availability, affordability and convenient of transport facilities, information or geographic distribution of activities and destinations.

In the tourism literature, the linkage among tourists' satisfaction and perceived service quality has been widely studied by many researchers. However, there had been many debates among the constructs. While many researchers such as in [7] and [46] suggested that perceived service quality and tourists' satisfaction were distinct constructs, other researchers had a view of direct effect of the perceived service quality and tourist attraction on tourist satisfaction [16], [47]. In this research, the view as in [48] was applied in which the perceived service quality was an antecedent to customer's satisfaction. Many tourism researches had been done to confirm a positive relationship between perceived service quality at destination and tourists' satisfaction [11], [49], [50]

Besides, reference [51] proved a complex relationship between main constructs and behavioral intention modeled in which destination attributes affected perceived quality which then affected satisfaction. And then, perceived quality and tourists' satisfaction affected revisit intention. Although this complex relationship was confirmed, some recommends were given to future studies to test the universality of such a model separately from (destination-specific) attributes set used as indicators for the perceived quality. Reference [52] also pinpointed that perceived quality acts as a mediator between destination image and satisfaction. Therefore, this study proposed that tourists' satisfaction was affected by factors of natural environment and resources, entertainment activities, culture, shopping, safety and security, infrastructure, accessibility through the mediating variable of perceived service quality.

Thus, the research proposed:

H1: Factors of natural environment and resources, cultural factor, leisure and entertainment, shopping, safety and security, infrastructure, and accessibility directly affect perceived service quality.

H2: Factors of perceived service quality directly affect tourists' destination satisfaction.

H3: Factors of natural environment and resources, cultural factor, leisure and entertainment, shopping, safety and security, infrastructure, and accessibility directly affect tourists' destination satisfaction.

H4: Tourists' destination satisfaction is indirectly affected by factors of natural environment and resources, cultural factor, leisure and entertainment, shopping, safety and security, infrastructure, and accessibility through perceived service quality.

III. METHODOLOGY

This research mainly applied quantitative approach. Data was collected from sample of 302 international leisure tourists in the target population. All questions in the survey were used 5 point Likert scale to measure in which 1 was "strongly disagree" and 5 was "strongly agree". After survey had finished, collected data were analyzed by using SPSS software. The statistical techniques were applied including factor analysis, multiple regression analysis and path analysis.

A. Sample Size

The sample size for this study was 302 respondents. According to [53], a minimum subject to item ratio must be at least 5:1 in Exploration Factors Analysis (EFA). Based on the number of items used to measure dependent variables of tourists' destination satisfaction and perceived service quality including 14 items and seven independent variables including 29 items in this study, with sample size of 302 respondents, the ratio applied for EFA of dependent variables was 21:1 and the ratio for EFA of independent variables was 10:1. Statistically, these ratios promised a better reliability and validity of this study.

B. Questionnaire Design and Data Collection

The questionnaire was designed in the typical form of fixed-response alternative questions that require the respondent to select from a predetermined set of answers to every question. This survey approach is the most common method of primary data collection in marketing research because of simple administration and data consistency [54]. The questionnaire was built based on the 29 items of seven independent variables and 14 items of two dependent variables that the literature reviews in section II were mentioned. Besides, the questionnaire was also designed to ask respondents some personal information in order to gather respondent demographic details.

C. Factor Analysis and Reliability

Two exploratory factor analysis was applied separately for 29 items of seven independent factors and 14 items of two dependent factors using the principal component extraction method and Varimax rotation. After the test, 8 items of two dependent variables and 15 items of six independent variables were remained. The independent factor of natural environment and resource were excluded after test.

The group of two dependent factors accounted for 50.7 percent of the total variance with the Cronbach's coefficients ranged from .615 to .669 among the factors, indicating acceptable subscale reliability.

TABLE I: SUMMARY OF DEPENDENT VARIABLES

Factors	Number of items	Cronbach's Alpha (N = 302)
Perceived Service Quality (PERSEQUA)	4	0.669
Tourists' Destination Satisfaction (TODESA)	4	0.615

The group of six independent factors accounted for 75.13 percent of the total variance with the Cronbach's coefficients ranged from .659 to .887 among these factors indicating good subscale reliability.

TABLE II: SUMMARY OF INDEPENDENT VARIABLES

Factors	Number of Items	Cronbach's Alpha (N=302)
Cultural Factors (CULFA)	4	.831
Leisure and Entertainments (LEINENT)	3	.694
Accessibility (ACCESS)	2	.887
Infrastructures (INFRAS)	2	.791
Shopping (SHOP)	2	.702
Safety and Security (SAFSEC)	2	.659

IV. RESEARCH FINDINGS

A. Profile of Tourists Involved in the Study

TABLE III: PROFILE OF RESPONDENTS

	Frequency	Percentage (%)
Gender		
Male	137	45.4
Female	165	54.6
Total	302	
Age		
< 18	9	3.0
18-25	91	30.1
26-30	67	22.2
31-40	8	2.6
41-60	59	19.5
>60	68	22.5
Total	302	
Nationality		
Europe	110	36.4
USA/Canada	82	27.2
Latin America	19	6.3
Asia	7	2.3
Australia / NZ	65	21.5
Africa	19	6.3
Total	302	
Education		
High-school degree	10	3.3
College Degree	80	26.5
Studying University	22	7.3
Bachelor Degree	64	21.2
Master degree or higher	126	41.7
Total	302	
Purpose of visits		
Business	2	.7
Leisure	300	99.3
Total	302	

TABLE IV: VARIABLES' CORRELATIONS

	TODESA	1	2	3	4	5	6
1. PERSEQUA	.331**	1					
2. CULFA	.255**	.100	1				
3. LEINENT	.231**	.098	.216*	1			
4. ACCESS	.143*	.025	.133*	.143*	1		
5. SHOP	-.018	.127*	-.042	-.145*	-.056	1	
6. INFRAS	.224**	.216*	.175*	-.073	-.011	.101	1
7. SAFSEC	.184**	.165*	.030	-.108	.074	.065	.191*
Mean	3.14	3.83	1.86	2.02	3.36	3.54	2.80
SD.	.530	.496	.581	.612	.769	.798	.743

B. Correlation between Variables

The Table IV shows the results of correlation between variables. From the table, it can be seen that there were significant relationships between the dependent variable, TODESA, and six independent variables including PERSEQUA, INFRAS, SAFSEC, CULFA, LEINENT, and ACCESS. In these significant relationships, PERSEQUA, CULFA, LEINENT, SAFSEC, and INFRAS positively correlate with TODESA at $p < .001$, while ACCESS positively correlate with TODESA at $p < 0.05$. This means that the

higher Perceived Service Quality, Cultural Factor, Infrastructure, Entertainment, Safety and Security, and Accessibility can lead to the higher level of Tourists' Destination Satisfaction.

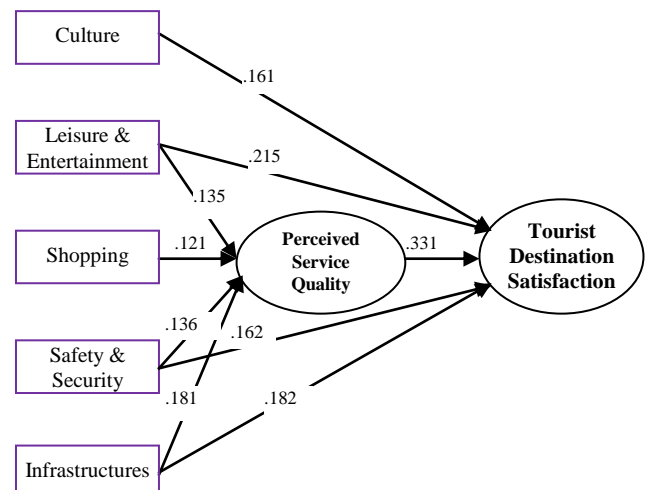
C. Factors Directly Affect TODESA

A multiple regression analysis was undertaken to identify which of the independent factors directly affects tourists' destination satisfaction. The model was statistically significant at $p < .0005$ with $F(6, 295) = 10.289$. According to the result of coefficients between each independent variable and tourists' destination satisfaction, the four out of six independent variables of this research had direct effect on tourists' destination satisfaction. Those were CULFA, LEINENT, SAFSEC, INFRAS. Look at the standardized coefficient (Beta) included in the table V, it can be seen that leisure and entertainment possesses the highest Beta with ($\beta = .215, p < .001$), the second-ranked factors are Infrastructure with ($\beta = .182, p < .001$), and the two smallest Beta belong to cultural factors and safety and security with close Beta of ($\beta = .161, p < 0.5$), ($\beta = .162, p < 0.5$) respectively. These findings indicated that the factors of leisure and entertainment, infrastructure, cultural factors, and safety and security had significant and positive effects on tourists' destination satisfaction. Thus, it can be concluded that the more tourists feel that they are satisfied to the factors of leisure and entertainment, infrastructure, cultural factors, and safety and security, the more satisfaction they have with Halong Bay destination.

D. Factors Indirectly Affect TODESA

The indirect effect of an independent variable on the dependent variable through the intervening variable was the total product of the effects of that independent variable on the intervening variables and the effect of the intervening variable on the dependent variable of passenger satisfaction [55].

From the result of simple linear regression analysis, it was significantly noted that perceived service quality provided moderate positive effect on tourists' destination satisfaction with ($\beta = .331, p < .001$). This means the better service quality tourists' perceived, the more they feel satisfy with the destination.



Note: All coefficients were significant at the .05 level.

Fig. 1. Path coefficients of TODESA model.

Besides, the result of multiple regression analysis showed that the perceived service quality was significantly affected by four factors: infrastructure with ($\beta = .181$), leisure and entertainment with ($\beta = .135$), and safety and security with ($\beta = .136$), and shopping with ($\beta = .121$). These four independent factors directly affected the mediating variable of perceived service quality, and perceived service quality then directly affected tourists' destination satisfaction with ($\beta = .331$). That's why, through mediating variable of perceived service quality, the factor of infrastructure, leisure and entertainment, safety and security, and shopping indirectly affected tourists' destination satisfaction at (.059), (.045), (.045), (.040) respectively.

E. Significance of the Indirect Effects

Table V showed the results of the bootstrapping method recommended as in [55] to test the significance of indirect effects or mediations. The output provided the bootstrapped confidence intervals (at the 95%). If there is a ZERO (0) lies within the interval range between the lower boundary (LL) and the upper boundary (UL), then we can conclude that, with 95% confidence, there is no mediation or indirect effect. On the other hand, if zero does not occur between the LL and the UL, then we can conclude that, with 95% confidence, the mediation or indirect effect is significant [56]. As can be seen in the output of Table V, the indirect effects of SHOP, LEINENT, SAFSEC, and INFRAS on TODESA through the mediation of PERSEQUA were estimated to lie between .0060 (LL) and .0566 (UL); .0002 (LL) and .0621 (UL); .0139 (LL) and .1089 (UL); and .0229 (LL) and .0787 (UL) with 95% confidence, respectively. Because zero is not in the 95% confidence interval, we can conclude that the indirect effects of SHOP, LEINENT, SAFSEC, and INFRAS on TODESA were indeed significantly different from zero at $p < .05$ (two tailed) and the mediation of PERSEQUA in this study was true.

F. Total Causal Effects of TODESA

As shown in Table V, among independent variables, regarding to the total effects, it can be seen that, the factor that had the strongest effects on tourists' destination satisfaction is leisure and entertainment with $\beta = .260$. This can be considered as a moderate effect [57]. The three next factor are infrastructure, safety and security, and cultural factors with ($\beta = .241$) and ($\beta = .207$), and ($\beta = .161$) respectively. According to reference [57], this can be considered as a low effect. Besides, the factors of Shopping have very low effects on tourists' destination satisfaction with ($\beta = .040$) [57]. The total effect of these independent factors on tourists' destination satisfaction was .909.

V. DISCUSSIONS AND RECOMMENDATIONS

From the result of above analyses, it can be concluded that the leisure and entertainment was the most important factor that affects tourists' destination satisfaction toward Halong Bay, followed by infrastructure, safety and security, and cultural factor. In other word, the better cultural factor, entertainment, infrastructure, and safety and security are, the higher satisfaction customer will gain. These positive impacts of these four factors were also proved in some previous studies as in [14], [27], [28]. However, the result also pinpointed that shopping and accessibility did not have direct impacts on tourists' satisfaction toward Halong Bay. This point was different with previous researches. As pointed earlier in this paper, most of the respondents were young and first time coming to Halong Bay, the most important things they wanted were to explore a new destination and experience new things. That's why, accessibility was not a big challenge to them, and shopping was not their main purpose when they came to Halong Bay. Therefore, the research suggested that to enhance foreign tourists' satisfaction toward Halong Bay, the tourism managers should have an accurate attention in promoting leisure and entertainment activities in Halong Bay such as building a combination of amusement with casino, high-quality bars or clubs, etc. These entertainment activities are really favorable in time that the research was conducted. Additionally, Halong Bay should also enhance cultural promotions with more cultural activities to attract more tourists coming here.

Regard to the factors that indirectly affect tourists' destination satisfaction through perceived service quality, it can be seen that infrastructure is factor that had most indirect impact on tourists' destination satisfaction, followed by entertainment, safety and security, and shopping. This result has some similarities as in [51]. In that research, they found that destination attributes affected perceived service quality and then through it affected tourists' destination satisfaction. However, their destination attributes included accessibility, amenity, available packages, entertainment activities, and ancillary services, meanwhile in this study, infrastructure, entertainment, safety and security, and shopping affect perceived service quality, and then affect tourists' destination satisfaction. That was because each tourist destination has its own characteristics and attributes. In Halong Bay, infrastructure (including accommodations and restaurants), safety and security, and shopping were considered as important factors for tourists to evaluate the quality of service here. And through perceived service quality, these factors affected tourists' satisfaction. Thus, to enhance perceived service quality in Halong Bay, this study suggested that Halong Bay should improve the quality of hotels and restaurants in order to satisfy tourists coming here. Besides, the price and the quality of the product for shopping should also be improved to reach the requirement of the foreign tourists coming here because most of them were from developed countries. Finally, safety and security for the tourists coming to Halong Bay should also be noticed and improved.

TABLE V: DIRECT, INDIRECT AND TOTAL CAUSAL EFFECTS

Variables	Causal effects			LL	UL
	Direct	Indirect	Total		
SHOP	----	.040	.040	.0060	.0566
LEINENT	.215	.045	.260	.0002	.0621
SAFSEC	.162	.045	.207	.0139	.1089
INFRAS	.182	.059	.241	.0229	.0787
CULFA	.161	----	.161		
PERSEQUA	.331	----	.331		

VI. FURTHER RESEARCH

The research could not avoid some limitations. The first limitation was the target population. Because of limitations of time, budget of researcher, the questionnaire was designed in English only. However, many foreign tourists coming to Ha Long Bay were from countries that English is not their language such as China, Korea, Japan, etc, the results might be a little bit difference compared to the opinions of the tourists coming from English-speaking countries. Another huge limitation of the research was that the survey was conducted in unfavorable conditions; the weather was really bad with rain and fog, the temperature was cold and that season was not really a good time for travelling in Halong Bay because many activities were stalled. Thus, the result of the research was only true in time it was conducted, and could not be applied for other seasons in year, especially in summer – tourism season in Halong Bay. Besides, although natural environment and resources was a really important factor regarding to Halong Bay, because of the bad weather, the evaluation of tourists on this factor seems to be bias and unreliable. As the results, it was excluded in the Exploratory Factor Analysis by SPSS. This created a major flaw in this research.

Based on the limitation of this study mentioned above, some recommendations were given for further studies. Firstly, the further study should have more time and budget to have more appropriate sample size. The questionnaire should be designed in at least two language, those are English and China to cover and present all target population. The last important recommendation was about the condition to conduct the survey. With a tourist destination in which the nature plays an important role like Halong Bay, considering the time when survey is conducted is really important. Especially in Halong Bay, there are two main seasons including cold and hot season. To ensure for the most accurate results, the survey should be conducted in favorable season for tourism. For example, in Halong Bay, the time from May to October is the most favorable time that survey should have been conducted. However, because of time limitation, the survey must be completed as scheduled; it was done in a bad condition, and therefore led to some limitations for the research.

VII. CONCLUSION

All the objectives of this research had been successfully obtained; firstly to analyze and evaluate foreign tourists' satisfaction with The World Natural Heritage of Halong Bay; secondly to find out and evaluate direct and indirect effects of the independent factors of natural environment and resources, cultural factor, leisure and entertainment, shopping, safety and security, infrastructure, and accessibility on tourists' destination satisfaction through mediating variable of perceived service quality; finally to provide improvement suggestions to enhance quality of tourism service in Halong Bay.

The application of the multivariate statistical techniques with factor analysis, standard multiple regression analyses, and path analysis allowed for the exertion of a causal relationship between variables and their impacts on the

tourists' destination satisfaction model. Explanations and given suggestions were based on the review of the literature and the empirical findings of the study. Thus, the implications of this study provide both theoretical and practical contributions to the field of customer relationship management.

The result of this study showed that not all of the independent factors had direct and indirect effects on foreign tourists' satisfaction in Halong Bay because of some subjective and objective reasons. From it, some recommendations were given for further research to have better results in the future.

REFERENCES

- [1] E. Jones and C. Haven-Tang, *Tourism SMEs, Service Quality and Destination Competitiveness*, 1st ed., Wallingford, UK: CAB International, 2005, pp. 1-24.
- [2] L. J. Gitman and C. Mc Daniel, *The Future of Business: The Essentials*, Mason, 4th ed., Ohio: South-Western, 2005, pp. 46-48.
- [3] Y. Yoon and M. Uysal, "An examination of the effects of motivation and satisfaction on destination loyalty: A structural model," *Tourism Management*, vol. 26, pp. 45-56, 2005.
- [4] N. Morgan and A. Pritchard, *Tourism Promotion and Power: Creating Images, Creating Densities*, 1st ed., Wiley, Chichester, UK, 1998, pp. 12-18.
- [5] D. G. Pearce, "Competitive destination analysis in Southeast Asia," *Journal of Travel Research*, vol. 35, no. 4, pp. 16-24, 1997.
- [6] A. Seaton, "Destination marketing," in *Marketing Tourism Products: Concept, Issues, Cases*, Ed., London: Thomson Business Press, 1997, pp. 350-760.
- [7] R. L. Oliver, "A cognitive model of the antecedents and consequences of satisfaction decisions," *Journal of Marketing Research*, vol. 12, pp. 460-469, September 1980.
- [8] C. Homburg and M. Bruhn, "Kundenbindungs management - Eine Einfuhrung in die theoretischen und praktischen problemstellungen," *Handbuch Kundenbindungs Management*, vol. 6, pp. 3-35, December, 1998.
- [9] T. J. Gerpott, W. Rams, and A. Schindler, "Customer retention, loyalty, and satisfaction in the German mobile telecommunications market," *Telecommunications Policy*, vol. 25, no. 4, pp. 249-269, 2001.
- [10] T. C. Greenwell, J. S. Fink, and D. L. Pastore, "Assessing the influence of the physical sports facility on customer satisfaction within the context of the service experience," *Sport Management Review*, vol. 5, no. 2, pp. 129-148, 2002.
- [11] D. A. Baker and J. L. Crompton, "Quality, satisfaction and behavioral intentions," *Annals of Tourism Research*, vol. 27, no. 3, pp. 785-804, 2000.
- [12] B. Ozdemir, B. Cizeland, and R. B. Cizel, "Satisfaction with all-inclusive tourism resorts: The effects of satisfaction with destination and destination loyalty," *International Journal of Hospitality and Tourism Administration*, vol. 13, no. 20, pp. 109-130, 2012.
- [13] P. Fallon and P. Schofield, "Just trying to keep the customer satisfied," *Journal of Quality Assurance in Hospitality and Tourism*, vol. 4, no. 3-4, pp. 77-96, 2004.
- [14] S. Wang and H. Qu, "A study of tourists' satisfaction determinants in the context of the Pearl River Delta sub-regional destinations," *Journal of Hospitality and Leisure Marketing*, vol. 14, no. 3, pp. 49-63, 2006.
- [15] A. Pizam and A. Milman, "Predicting satisfaction among first time visitors to a destination by using the expectancy disconfirmation theory," *International Journal of Hospitality Management*, vol. 12, no. 2, pp. 197-209, 1993.
- [16] J. F. Petrick, "The roles of quality, value and satisfaction in predicting cruise passengers' behavioral intentions," *Journal of Travel Research*, vol. 42, no. 4, pp. 397-407, 2004.
- [17] T. Truong and D. Foster, "Using HOLSTAT to evaluate tourist satisfaction at destinations: The case of Australian holidaymakers in Vietnam," *Tourism Management*, vol. 27, no. 5, pp. 842-855, 2006.
- [18] M. Kozak and M. Rimmington, "Tourist satisfaction with Mallorca Spain, as an off-season holiday destination," *Journal of Travel Research*, vol. 38, no. 1, pp. 260-269, 2000.
- [19] M. Kozak, "Measuring tourist satisfaction with multiple destination attributes," *Tourism Analysis*, vol. 7, pp. 229-240, 2003.

- [20] P. J. Danaher and N. Arweiler, "Customer satisfaction in the tourist industry: A case study of visitors to New Zealand," *Journal of Travel Research*, vol. 35, no. 1, pp. 89-93, 1996.
- [21] J. Y. Chung and J. F. Petrick, "Measuring attribute-specific and overall satisfaction with destination experience," *Asia Pacific Journal of Tourism Research*, vol. 18, no. 5, pp. 409-420, 2012.
- [22] J. Bloemer and K. Ruyter, "On the relationship between store image, store satisfaction and store loyalty," *European Journal of Marketing*, vol. 32, no. 5-6, pp. 499-513, 1998.
- [23] R. N. Bolton and K. N. Lemon, "A dynamic model of customers' usage of services: Using as an antecedent and consequence of satisfaction," *Journal of Marketing Research*, vol. 36, no. 2, pp. 171-186, 1999.
- [24] C. H. Hsu, "Determinants of mature travelers' motor-coach tour satisfaction and brand loyalty," *Journal of Hospitality and Tourism Research*, vol. 24, no. 2, pp. 223-238, 2000.
- [25] C. H. Hsu, "Mature motor-coach travelers' satisfaction: A preliminary step toward measurement development," *Journal of Hospitality and Tourism Research*, vol. 27, no. 3, pp. 291-309, 2003.
- [26] C. H. Hsu and S. K. Kang, "CHAID-based segmentation: International visitors' trip characteristics and perceptions," *Journal of Travel Research*, vol. 46, no. 2, pp. 207-216, 2007.
- [27] C. G. Q. Chi and H. Qu, "Examining the structural relationships of destination image, tourist satisfaction and destination loyalty: An integrated approach," *Tourism Management*, vol. 29, pp. 624-636, 2008.
- [28] G. Prayag, "Image, satisfaction and loyalty-The case of Cape Town," *International Journal of Tourism and Hospitality Research*, vol. 19, no. 2, pp. 205-224, 2008.
- [29] A. Beerli and J. D. Mart ñ, "Tourists' characteristics and the perceived image of tourist destination: a quantitative analysis - A case study of Lanzarote, Spain," *Tourism Management*, vol. 25, pp. 623-636, 2004.
- [30] E. Inskeep and P. Pelancongan, *Tourism Planning*, 1st ed., Kuala Lumpur, Malaysia: Norlida Halim, 1996, pp. 30-38.
- [31] S. Çoban, "The effects of the image of destination on tourist satisfaction and loyalty: The case of Cappadocia," *European Journal of Social Sciences*, vol. 29, no. 2, pp. 222-232, 2012.
- [32] *Oxford Advanced Learner's Dictionary*, 7th edition, 2005.
- [33] M. Uysal, L. W. Gahan, and B. Martin, "An examination of event motivations," *Festival Management & Event Tourism*, vol. 1, no. 1, pp. 5-10, 1993.
- [34] K. Mohr, K. F. Backman, L. W. Gahan, and S. J. Backman, "An investigation of festival motivations and event satisfaction by visitor type," *Festival Management and Event Tourism*, vol. 1, no. 3, pp. 89-97, 1993.
- [35] S. Formica and M. Uysal, "A market segmentation of festival visitors: Umbria jazz festival in Italy," *Festival Management & Event Tourism*, vol. 3, pp. 175-182, 1996.
- [36] J. Mazanec, *International City Tourism: Analysis and Strategy*, 1st ed., London, UK: Pinter, 1997, pp. 38-46.
- [37] W. Kent, P. Schock, and R. Snow, "Shopping: Tourism's unsung heroine," *Journal of Travel Research*, vol. 21, no. 4, pp. 2-4, 1983.
- [38] Y. Reisinger and L. W. Turner, "The determination of shopping satisfaction of Japanese tourists visiting Hawaii and the Gold Coast compared," *Journal of Travel Research*, vol. 41, no. 2, pp. 167-176, 2002.
- [39] J. D. Snepenger, L. Murphy, R. O'Connell, and E. Gregg, "Tourists and residents use of a shopping space," *Annals of Tourism Research*, vol. 30, no. 3, pp. 567-580, 2003.
- [40] E. Cohen, "Touristic craft ribbon development in Thailand," *Tourism Management*, vol. 16, no. 3, pp. 225-35, 1995.
- [41] Y. Reisinger and R. Waryszak, "Catering to Japanese tourists: What service do they expect from food and drinking establishments Australia?" *Journal of Restaurant and Foodservice Marketing*, vol. 1, no. 3-4, pp. 53-71, 1996.
- [42] S. Huang and C. H. C. Hsu, "Mainland Chinese residents' perceptions and motivations of visiting Hong Kong: Evidence from focus group interviews," *Asia Pacific Journal of Tourism Research*, vol. 10, no. 2, pp. 191-205, 2005.
- [43] V. C. S. Heung and H. Qu, "Tourism shopping and its contributions to Hong Kong," *Tourism Management*, vol. 19, no. 4, pp. 383-386, 1998.
- [44] A. Yuksel, "Shopping experience evaluation: A case of domestic and international visitors," *Tourism Management*, vol. 25, no. 6, pp. 751-759, 2004.
- [45] *Evaluating Accessibility for Transportation Planning: Measuring People's Ability to Reach Desired Good and Activities*, Victorial Transport Policy Institute, US, June 2014.
- [46] S. Tian-Cole and J. Crompton, "A conceptualization of the relationships between service quality and visitor satisfaction, and their links to destination selection," *Leisure Studies*, vol. 22, pp. 65-80, 2003.
- [47] S. Mc Dowall, "A comparison between thai residents and non-residents in their motivations, performance evaluations, and overall satisfaction with a domestic festival," *Journal of Vacation Marketing*, vol. 16, no. 3, pp. 217-233, 2010.
- [48] A. Parasuraman, V. A. Zeithaml, and L. L. Berry, "A conceptual model of service quality and its implications for future Research," *Journal of Marketing*, vol. 49, pp. 41-50, 1985.
- [49] D. Murray and G. Howat, "The relationships among service quality, value, satisfaction, and future intentions of customers at an australian sports and leisure centre," *Sport Management Review*, vol. 5, pp. 25-34, 2002.
- [50] D. M. Ruiz, D. D. Gremler, J. H. Washburn, and G. C. Carrion, "Service value revisited: Specifying a higher-order, formative measure," *Journal of Business Research*, vol. 61, no. 12, pp. 1278-1291, 2009.
- [51] V. Zabkar, M. Brenc, and T. Dmitrovic, "Modelling perceived quality, visitor satisfaction and behavioural intentions at the destination level," *Tourism Management*, vol. 31, pp. 537-546, 2010.
- [52] J. Bigné M. Sanchez, and J. Sanchez, "Tourism image, evaluation variables and after purchase behavior: Inter-relationships," *Tourism Management*, vol. 22, no. 6, pp. 607-616, 2001.
- [53] R. L. Gorsuch, *Factor Analysis*, 2nd ed., Hillsdale, NJ: Erlbaum, 1983, pp. 24-32.
- [54] G. Albaum, "The Likert scale revisited — An alternative version," *Journal of the Market Research Society*, vol. 39, no. 2, pp. 331-348, 1997.
- [55] J. K. Preacher and A. F. Hayes, "Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models," *Behavior Research Methods*, vol. 40, no. 3, pp. 879-891, 2008.
- [56] J. K. Preacher and A. F. Hayes, "SPSS and SAS procedures for estimating indirect effects in simple mediation models," *Behavior Research Methods, Instruments, & Computers*, vol. 36, no. 4, pp. 717-731, 2004.
- [57] D. De Vaus, *Surveys in Social Research*, 5th ed., Sedney, AU: Allen & Unwin, 2002.



Mai Ngoc Khuong is a lecturer and a researcher of School of Business, International University, VNU-HCM. He has his bachelor degree in tourism and hospitality management, the master of science degree in leisure, tourism and environment at Wageningen University, the Netherlands, and the PhD degree in development management at School of Public Administration of the National Institute of Development Administration (NIDA), Bangkok, Thailand.



Nguyen Thi Hong An is a lecturer with MBA and a researcher of School of Business Administration, International University, Vietnam National University, Ho Chi Minh.



Nguyen Thi Mai Uyen is a research assistant of School of Business Administration, International University, Vietnam National University, Ho Chi Minh.