Modifying and Validating A Servicer Quality of Marine Sports and Tourism Scale in Vietnam

(การพัฒนาและตรวจสอบแบบสอบถามการวัดคุณภาพในการบริการด้านการท่องเที่ยวและกีฬาทางน้ำ ในสาธารณรัฐสังคมนิยมเวียดนาม)

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Abstract

The objective of this study was to modify and validate a service quality of marine sport and tourism (SQMST) scale for measuring tourists' expectations and perception in Vietnam. Firstly, this present study was revealed that 49 items of this scale had a high degree of content validity index (CVI). Secondly, the coefficient alpha values were .74 to .94 for five dimensions. However, 3 items were eliminated from the questionnaire because they were not met the criteria value of .40. Therefore, 46 items met specifications for the coefficient of content validity. Thirdly, the exploratory factor analysis (EFA) results identified 2 items were deleted from SQMST questionnaire. The decision to remove these two scale items because they were lower than .50. Finally, a principal components analysis with oblique rotation resulted in a 44-item, five dimensions were named: 1) Assess quality, 2) Program quality, 3) Interaction quality, 4) Environment quality, 5) Outcome quality.

Conclusion showed that the present study has reported preliminary evidence for the reliability and validity of the obtained scores from the 44-item SQMST scale. Hence, we recommended for applications in this study that the SQMST scale with 5 dimensions will be useful to service quality delivery systems in Binh Thuan Department of Culture, Sport and Tourism.

Keywords : service quality scale, marine sports and tourism, validity, reliability, exploratory factor analysis.

บทคัดย่อ

การศึกษาในครั้งนี้มีวัตถุประสงค์เพื่อปรับปรุงและตรวจสอบแบบสอบถามการวัดคุณภาพในการบริการด้านการท่องเที่ยวและกีฬาทางน้ำ (Service Quality of Marine Sport and Tourism: SQMST) ที่ใช้ในการวัดความคาดหวังและการรับรู้ของนักท่องเที่ยวในสาธารณรัฐสังคมนิยมเวียดนาม จากการศึกษาพบว่า ความเที่ยงตรงเชิงเนื้อหาของระบบนี้ จำนวน 49 ข้อคำถาม อยู่ในระดับสูง และได้ค่าสัมประสิทธิ์แอลฟาอยู่ระหว่าง .74 ถึง .94 ใน 5 ด้าน อย่างไรก็ตาม มีจำนวน 3 ข้อคำถาม ที่ตัดออกจากแบบสอบถามเนื่องจากไม่ตรงกับเกณฑ์ คือ .40 ดังนั้น จึงเหลือจำนวน 46 ข้อคำถาม ที่สอดคล้องกับความเที่ยงตรงเชิงเนื้อหา อย่างไรก็ตามผลการวิเคราะห์องค์ประกอบเชิงสำรวจพบว่ามีคำถามอีก 2 ข้อคำถามที่ตัดออกจากแบบสอบถาม SQMST เนื่องจากได้ค่าต่ำกว่า .50 ซึ่งการวิเคราะห์องค์ประกอบหลักด้วยการหมุนแกน (Oblique Rotation) ทำให้เหลือองค์ประกอบของแบบสอบถามนี้ มีจำนวน 44 ข้อคำถาม ใน 5 ด้าน คือ 1. คุณภาพด้านการประเมิน (Assess Quality) 2. คุณภาพด้านแผนงาน (Program Quality) 3. คุณภาพด้านปฏิสัมพันธ์ (Interaction Quality) 4. คุณภาพด้านสิ่งแวดล้อม (Environment Quality) และ 5. คุณภาพด้านผลลัพธ์ (Outcome Quality)

ผลสรุปของการศึกษานี้แสดงให้เห็นถึงความเชื่อถือและความเที่ยงตรงเบื้องต้นของแบบสอบถาม จากระดับคะแนนที่ได้จากระบบการวัด SQMST จำนวน 44 ข้อคำถาม ดังนั้นแบบสอบถาม SQMST ประกอบ ด้วยข้อคำถาม 44 ข้อ ใน 5 ด้าน ที่มีคุณภาพที่สามารถนำไปใช้ในการศึกษาที่ Binh Thuan ภาควิชาวัฒนธรรม กีฬาและการท่องเที่ยว

คำสำคัญ : ระบบการวัดคุณภาพในการบริการ, การท่องเที่ยวและกีฬาทางน้ำ, ความเที่ยงตรง, ความเชื่อมั่น, การวิเคราะห์องค์ประกอบหลัก

Introduction

Sport and tourism are believed to be the most popular leisure experiences in the world (Ritchie & Adair, 2004). Besides, sport is now regarded to be the biggest social phenomenon in the world (Kurtzman & Zauhar, 1998) and tourism is the largest industry which is indicated by the number of people who travel overseas (Goeldner & Ritchie, 2006). Additionally, in the global, tourism had an impact of more than 6 trillion dollars in 2005 (Poling, 2006). According to Gibson (1998a, 1998b), three categories of sport tourism have been proposed in the literature. The first category included tourists who visit and attend in sport events, such as World and European championships, and the Olympic Games, etc. The second category included tourists who visit

to famous sport facilities, stadiums and museums. Finally, the last category included tourists who travel and do physical activities in their holidays or participate in recreational sports; for example, outdoors sports, indoor sports, marine sports, golf, etc. Besides, Turco, Riley, & Awart (2002) also described sport tourism is leisure-based travel that takes individuals temporarily outside of their home communities to participate in physical activities.

Having a geographical location next to the coast with the length of over 3,200 km as well as a lot of beautiful attractions, Vietnam has a lot of advantages for developing travelling products, especially marine tourism with main attractions from the North to the South. So, Mui Ne Beach which located from Hochiminh City 220 km is one of the most areas which have potentials, facilities and favorable conditions to develop marine sports and tourism well. Additionally, there also has a wonderful position and favorable wind direction to play marine sports, and especially it has been recognized as one of the well-known destinations for windsurfing and kite-surfing so this was a reason that marine sport events at the international level were also been organized here.

Following this decision of the Government, many resorts in Mui Ne Beach have been quickly invested in equipments, trainers and additional services for marine sports (An, 2008) but they haven't had any evaluation process in what do the tourists expect in the service quality before they participate in marine sports and what do they perceive in service quality after they participate in marine sports. Furthermore, Government unit have no policies also to support the businesses private sector to invest in the development of marine sports. So, there is a significant importance that this present study was modified and validated items for measuring tourists' expectation and their perception in SQMST at Mui Ne Beach. Especially, this scale was based on 32 items found in the service quality of the ocean sports clubs (Lin, 2008) and 64 items focus on tourists' perception in the service quality of sports event (David, 2006). They suggested that the validity and reliability of the scale proposed in the research is dependent upon further research and replication of the scale and sub-scales. Further, additional sub-dimensions should be generated and tested. The scale should be tested in a number of different destinations. For some events, it may be necessary to omit items or to make modifications of the scale. As new types of sport tourism are identified, it may also be necessary to modify the

present structure of the scale to ensure its validity.

As a consequence, the SQMST scale is really meaningful because it can help the businesses private sector knows what the tourists need and provide suitable services on marine sports. Besides, this study will be made available to Vietnamese Government applies this scale for measuring the tourists' expectations and perception at the other beaches throughout Vietnam. Additionally, it can be applied to other beaches in the other countries which can develop marine sports.

Methods

The objective of this study was to modify and validate a SQMST scale for measuring tourists' expectations and perception in Vietnam. Then, this scale was developed utilizing five steps which included (a) item generation, (b) item purification via back translation method, (c) testing qualify of scale through a CVI method, (d) testing the reliability of the survey instrument through a pilot test, and (e) testing the validity of the survey instrument through EFA.

Item Generation

The instrument was developed base on 32 items found in the service quality of the ocean sports clubs (Lin, 2008) and 64 items focus on tourists' perception in the service quality of sports event (David, 2006). Then, a researcher decided to use 55 items in combination of Lin's and David's questionnaire version. They were generated and related to access quality, program quality, interactions quality, environment quality, and outcome quality.

Item Purification

Scale of the SQMST for measuring tourists' expectations and perception was proposed by the origin of English version. Therefore, most of subjects in the collecting data were Vietnamese so it was necessary to be translated into Vietnamese by using a back translation method with the help of four bilingual experts (US Census Bureau, 2007).

In this procedure, researcher checked wording of the questions. After that, four bilingual experts fluent in both English and Vietnamese translated questionnaire and reviewed the questionnaire which has been translated. This translation procedure was repeated until the Vietnamese version was adequately translated.

Content Validity Index

To testing quality of SQMST scale, 3 experts were asked to validate the scale of SQMST by using the CVI which was developed by Waltz & Bausell (1983). They were asked to rate each item based on relevance, clarity, simplicity and ambiguity on the two point scale, (2 point means *"agree"* = 1 and *"disagree"* = -1). Then we computed a CVI for individual item. CVI was calculated as follows:

$$CVI = \frac{\text{(Number of agreed in dividual item)}}{\text{(Total number of experts)}} \times 100\%$$

Following Lynn (1986), she recommended that with a panel of five or fewer experts, all must agree on the content validity for their rating to be considered a reasonable representation of the universe of possible ratings. In other words, the CVI should be 100% when there are five or fewer judges. Furthermore, the adequacy of the final content of the test instrument would be based on the collective opinion of these experts based on their professional assurance (Kelly, 1999).

Pilot test

A pilot test was conducted after receiving feedback from the panel to evaluate the reliability of the instrument by using a Cronbach' s alpha and corrected item-total correlations. According to Nunnally & BernStein (1994), the researcher used .70 as the criteria for acceptable reliability, then corrected item-total correlation over .40 (De Vellis, 2003). Therefore, 30 tourists of the Resorts/ Hotels at Mui Ne beach were participated.

Exploratory factor analysis

According to Borjesson, Aarons, & Dunn (2003), exploratory factor analysis (EFA) with an oblique rotations (e.g., promax) was performed to determine which items should be included in the end instrument and to investigate the best factor structure represented the SQMST scale. This rotation method was chosen because it was assumed that 5 dimensions of SQSMT scale describing the structure might be inter-correlated. Furthermore, for factor extraction, a decision about the number of factors to retain was based initially on eigenvalues, keeping

any factor with an eigenvalue of 1.0 or higher. Later, the rotated factor loadings for each item were examined. Items were eliminated if they didn't have a loading of at least 0.50.

Measures

Likert scale is often used when developing an instrument which measures opinions, beliefs and attitude (DeVellis, 2003). Since this study examined the tourists' expectations and perception in service quality of marine sports so questions were consisted a 5-Likert scale which includes 5 items: "strongly disagree," "disagree," "neutral," "agree," and "strongly agree ". Five response choices were given (strongly disagree, coded 1; disagree, coded 2; neutral, coded 3; agree, coded 4; strongly agree, coded 5). High mean scores represented strongly agree in SQMST scale.

Statistical Data Analysis

Both Cronbach's alpha and EFA statistical techniques were calculated by using the software of computer statistical program (SPSS 16.0).

Results

The obtained results were presented in three phases: (1) an examination of scale's quality, (2) reliability testing, (3) results of EFA for constructing validity testing and the completed scale of SQMST for measuring tourists' expectations and perception.

Phase one: Following the calculation of the formula of CVI, 6 items *(It is difficult for me to get to Mui Ne; Finding ways to get to destination is a difficult process; It is difficult for me to get to marine sports location in Mui Ne; Getting to marine sports location is a roundabout and slow process; It is difficult for me to get to my resort / hotel; Marine sports offer a wide range of classes / programs)* were eliminated because they were 66% or below. Then, 49 items were tested for reliability by using a Cronbach's alpha and corrected item-total correlations.

Phase two: The 49 items of the SQMST scale were above the minimum level of .70 recommended by Nunnally & Bernstein (1994). They were presented in good internal consistency, reliability for the study with the coefficient alpha values in the interval of .7434 to .9467 in five dimensions. Afterward, 3 items

(Other participants have a positive impact on my expectation of marine sports' service; You can rely on these being a pleasant atmosphere in marine sports; I am impressed with the design of marine sports) were eliminated from the questionnaire because their corrected item-total correlation varied lower than. 40 although their Cronbach's alpha were above .70. They were included in "Marine sports environment sub-dimension" of "Environment quality dimension".

Phase three: There were 46 items of five dimensions met the requirement for testing the EFA, and results were presented in tables below. Furthermore, the sample size was estimated based on Hinkin's (1995) recommendations regarding item-to-response ratio (ratio of scale items to the number of subjects). The item-to-response ratio ranges from 1:4 to 1:10, indicating four subjects per item is the minimum for factor analysis. Therefore, 258 tourists were surveyed with 5 Likert scale response.

Table 1 indicated that Access quality dimension included 10 items and they were extracted 3 sub-dimensions which were labeled as "Destination", "Marine sports location" and "Resort/ hotel". Three factors with eigenvalues were greater than 1.0 indicating the convergent validity. Following that, two items loaded on the first factor, with numerical loading values ranging from 905 to .918. And, loading values on the second factor with 3 items ranged from .828 to .858. Likewise, factor three were contained 5 items loading ranging from .716 to .757. Furthermore, the accumulated percentage of variance was equal to 70.046% sufficient to represent the original data.

Table 2 showed that there were 7 items in Program quality dimension. The factors with eigenvalues were greater than 1.0 indicating convergent validity. Sequently, 7 items loaded on only one factor with numerical loading values ranging from .701 to .786. Moreover, the accumulated percentage of variance was equal to 55.575% sufficient to represent the original data.

Table 3 revealed that there were 12 items in Interaction quality dimension. The factors with eigenvalues were greater than 1.0 indicating convergent validity. Then, 12 items loaded on only one factor and there had 2 items lower than .50. Hence, item "I will enjoy interacting with front desk employees at my resort/ hotel" and item "Marine sports' employees recognize and deal effectively

with the special needs of each participant" were eliminated with numerical loading values ranged .494 and .471. Numerical loading values of other items lelf were from .597 to .800. Furthermore, the accumulated percentage of variance is equal to 47.498% not sufficient to represent the original data.

Table 4 indicated that the Environment dimension was included 9 items. They were extracted 2 sub-dimensions which were labeled as "Resort/ hotel environment" and "Marine sports environment". Then, two factors with eigenvalues were greater than 1.0 indicating convergent validity. Following that, 4 items loaded on the first factor with numerical loading values ranging from .771 to .807. And, loading values on the second factor with 5 items ranged from .622 to .759. Furthermore, the accumulated percentage of variance was equal to 56.338% sufficient to represent the original data.

Table 5 showed that there were 8 items in Outcome quality dimension. The factors with eigenvalues were greater than 1.0 indicating convergent validity. Then, 8 items loaded on the only one factor with numerical loading values ranging from .690 to .762. Moreover, the accumulated percentage of variance is equal to 52.181% sufficient to represent the original data.

Discussion

The objective of this study was to modify and validate a SQMST scale for measuring tourists' expectations and perception in Vietnam. Findings from three phase of this study indicated below:

Phase one: Testing quality of SQMST scale

The researcher employed a panel of experts to test quality of the initial of a SQMST scale. From this procedure, the researcher proposed the SQMST scale based on feedback received from the panel of experts with 49 items, they were selected as significant with 100% agreement (Lynn, 1986). Furthermore, the previous research also reported that an acceptable CVI is greater than or equal to 0.80 (Davis, 1992) and using Grant & Davis' methods (Grant & Davis, 1997), which require inclusion of all expert evaluations for each item, the overall CVI for representativeness of the survey was 0.90 and the overall CVI for clarity of the survey was 0.90. As a consequence, this

present study was revealed the high CVI of 49 items for both representativeness and clarity which provided evidence that 49 items of this scale had a high degree of content validity.

Phase two: Testing the reliability of the survey instrument

The pilot test was conducted to test the reliability of the instrument by using a Cronbach' s alpha and item - to - total correlations. So, the coefficient alpha values were .7434 to .9467 for five dimensions. Furthermore, they were above .70 which was considered acceptable when developing instruments (Nunnally & Bernstein, 1994). Hence, it showed that the SQMST scale had good internal consistency, reliability and appropriateness for the study with, indicating that this questionnaire was a reliable measure of SQMST for tourists participated in marine sports. However, 3 items were eliminated from the questionnaire because they were not met the criteria value of .40. Therefore, 46 items met specifications for the coefficient of content validity. According to Faul & Van Zyl (2004), the coefficient of content validity can also be viewed as an indication of convergent and discriminant construct validity at the item level of analysis.

Phase three: testing the validity of the survey instrument through EFA.

The EFA results identified 2 items were deleted from SQMST questionnaire. The numerical loading values were ranged .494 and .471 that consistently did not meet psychometric criteria. The decision to remove these two scale items because they were lower than .50. Overall, the loadings of 5 dimensions of SQMST scale included 44 items were statistically significant, factor loadings were equal or greater than 0.5 when using the 0.05 significance level, and the data suggested that the 44 items were psychometrically sound (appendix 2). They were labeled in 5 dimensions: 1) Assess quality, 2) Program quality, 3) Interaction quality, 4) Environment quality, 5) Outcome quality. Additionally, Assess quality included 3 sub-dimensions, they were named: 1) Destination, 2) Marine sports location, 3) Resort/ hotel; Environment quality also included 2 sub-dimensions, they were labeled: 1) Resort/ hotel environment, 2) Marine environment.

Conclusion

Firstly, the CVI method in this study was useful in instrument development and its results provide a critical analysis of the theoretical framework that underlies the development of a questionnaire. Secondly, Cronbach Alpha is an important concept in the evaluation of assessments and questionnaires. It is mandatory that assessors and researchers should estimate this quantity to add validity and accuracy to the interpretation of their data. Thirdly, the findings of this study will provide direct guidance for researchers planning studies involving EFA of dichotomous data. In addition, these results may serve as conservative guidelines for those intending to factor analyze ordinal data. Finally, the present study has reported preliminary evidence for the reliability and validity of the obtained scores from the 44-items SQMST scale.

Recommendations for applications

It is hoped that the SQMST scale with 5 dimensions will be a useful tool for measuring tourists' expectations and perception at Mui Ne Beach. And, this scale is also basic of service quality delivery systems in Binh Thuan Department of Culture, Sport and Tourism. Furthermore, it can be applied to measure tourists' expectations and perception at other beaches throughout Vietnam or the beaches in the other countries which can develop marine sports.

Recommendations for future research

Oblique rotation method was used throughout this study. Though different results may have been obtained using other approaches, so further research could examine in other method approaches. Although many authors have argued that in most cases different methods of common factor analysis and rotation produce similar results (Johnson & Wichern, 2002; Tabachnik & Fidell, 2001).

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Appendix 1

Table 1 : Summary of EFA for access quality dimension

Items	Access quality dimension	Factor 1	Factor 2	Factor 3
1	There is no problem about transportation in getting to Mui Ne.	.918		
2	Coming to Mui is so easy.	.905		
3	Getting to marine sports location in Mui Ne is not difficult.		.835	
4	Marine sports location in Mui Ne is a convenient location.		.858	
5	Marine sports location is centrally located in Phan Thiet city.		.828	
6	My resort/ hotel is in convenient location			.721
7	There is no problem in getting to where I need to go from my resort/ hotel.			.545
8	The resort/ hotel in which I stay is close to everywhere I want to go.			.753
9	My resort/ hotel is great because of its proximity to the places I want to go.			.757
10	Parking at my resort/ hotel is convenient.			.716
	Eigenvalue	1.081	1.423	4.491
	Percent of variance criteria	10.812	14.324	44.910
	Accumulated percent of variance	10.812	14.324	44.910

Table 2 : Summary of EFA for program quality dimension

Items	Program quality dimension	Factor 1
11	There are various classes/ programs of marine sports for participants.	.701
12	The operating hours of marine sports classes/ programs are convenient for participants.	.774
13	The shower and locker rooms of marine sports are clean and sanitary.	.786
14	The equipments of marine sports are in good condition for use.	.742
15	The classes/ programs offered for marine sports are attractive to me.	.753
16	The instructors of marine sports are friendly.	.736
17	The facilities of marine sports are well designed.	.723
	Eigenvalue	3.890
	Percent of variance criteria	55.575
	Accumulated percent of variance	55.575

Table 3 : Summary of EFA for interaction quality dimension

Items	Interaction quality dimension	Factor 1
18	I will enjoy interacting with front desk employees at my resort/ hotel.	.494
19	My interactions with housekeeping employees are good.	.647
20	Food service employees at my resort/ hotel are courteous.	.667
21	It is not difficult for me to make a reservation at my resort/ hotel.	.784
22	Marine sports' employees are very knowledgeable about their jobs.	.708
23	Marine sports' employees are friendly.	.758
24	Marine sports' employees are willing to help me.	.597

Items	Interaction quality dimension	Factor 1
25	Marine sports' employees pay close attention to each class/ program participants.	.800
26	Marine sports' employees are able to answer my questions.	.783
27	The instructors are well educated.	.736
28	The instructions during participation are good to me.	.727
29	Marine sports' employees recognize and deal effectively with the special needs of each participant.	.471
	Eigenvalue	5.700
	Percent of variance criteria	47.498
	Accumulated percent of variance	47.498

Table 4 : Summary of EFA for environment quality dimension

Items	Environment quality dimension	Factor 1	Factor 2
30	The resort/ hotel is one of the best I have ever stayed in.	.771	
31	The design of my resort/ hotel is very great.	.807	
32	My resort/ hotel is very comfortable.	.807	
33	My resort/ hotel is very attractive.	.805	
34	The facilities are clean and well maintained.		.692
35	I am consistently impressed with the facility of marine sports atmosphere.		.622
36	The facilities are aesthetically attractive.		.710
37	The facilities are safe and comfortable.		.759
38	The facilities are convenient for participants.		.683
	Eigenvalue	3.216	1.854
	Percent of variance criteria	35.736	20.602
	Accumulated percent of variance	35.736	56.338

Table 5 : Summary of EFA for outcome quality dimension

Items	Outcome quality dimension	Factor 1
39	I feel good about what I will get from marine sports.	.697
40	Marine sports will provide me with a lot of opportunities for social interaction.	.690
41	Marine sports will help me to improve my physical abilities.	.762
42	I hope that my skill level will increase after participating in marine sports.	.704
43	Everyone will support me with the outcome that I get from marine sports.	.743
44	I will really enjoy social interaction in marine sports.	.717
45	I make a lot of friends through participating in marine sports.	.732
46	Marine sports will help me to reduce my stress.	.731
	Eigenvalue	4.171
	Percent of variance criteria	52.181
	Accumulated percent of variance	52.181

Appendix 1 : Questionnaire sample (44 items)

Questionnaire sample (44 items)	Tourists' *expectations* about service quality *before* participating in marine sports				
	1	2	3	4	5
Access quality					
a) Destination					
- There is no problem about means of transport to Mui Ne.					
- Going to Mui Ne is so easy.					
b) Marine sport location					
- Getting to marine sports location in Mui Ne is not difficult.					
- Marine sports location in Mui Ne is a convenient site.					

Appendix 1 : Questionnaire sample (44 items)

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	1	2	3	4	5
Access quality					
a) Destination					
- There is no problem about means of transport to Mui Ne.					
- Going to Mui Ne is so easy.					
b) Marine sport location					
- Getting to marine sports location in Mui Ne is not difficult.					
- Marine sports location in Mui Ne is a convenient site.					
- Marine sports location is located in the center of Mui Ne.					
c) Resort / hotel					
- My resort / hotel is in a convenient location.					
- There is no problem about getting to where I need to go from my resort / hotel.					
- The resort / hotel in which I stay is close to everywhere I want to go.					
- My resort / hotel is great because of its proximity to the places I want to go.					
- Parking at my resort / hotel is convenient.					
Program quality					
- There are various classes / programs of marine sports for participants.					
- The shower and locker rooms of marine sports are clean and sanitary.					
- The equipment of marine sports is in good condition for use.					
- The classes / program offered for marine sports are attractive to me.					

Questionnaire sample (44 items)	Tourists' *expectations* about service quality *before* participating in marine sports				
	1	2	3	4	5
- The instructors of marine sports are friendly.					
- The facilities of marine sports are well designed.					
Interaction quality					
- My interactions with housekeeping employees are good.					
- Food service employees at my resort/ hotel are - courteous.					
- It is not difficult for me to make a reservation at my resort / hotel.					
- Marine sports' employees are very knowledgeable about their jobs.					
- Marine sports' employees are friendly.					
- Marine sports' employees are willing to help me.					
- Marine sports' employees pay close attention to each class / program participant.					
- Marine sports' employees are able to answer my questions.					
- The instructors are well educated.					
- The instructions during participation are good to me.					
Environment quality					
a) Resort / Hotel environment					
- The resort / hotel is one of the best I have ever stayed in.					
- The design of my Resort/Hotel is very great.					
- My resort / hotel is very comfortable.					
- My resort / hotel is very attractive.					

Questionnaire sample (44 items)	Tourists' *expectations* about service quality *before* participating in marine sports				
	1	2	3	4	5
b) Marine sports environment					
- The facilities are clean and well maintained.					
- I am consistently impressed with the facilities of marine sports atmosphere.					
- The facilities are aesthetically attractive.					
- The facilities are convenient for participants.					
Outcome quality					
- I feel good about what I will get from marine sports.					
- Marine sports will provide me with a lot of opportunities for social interactions.					
- Marine sports will help me to improve my physical abilities.					
- I hope that my skill level will increase after participating in marine sports.					
- Everyone will support me with the outcome that I get from marine sports.					
- I will really enjoy social interaction in marine sports.					
- I make a lot of friends through participating in marine sports.					
- Marine sports will help me to reduce my stress.					