Exploring Asian Cruise Travelers' Travel Experience and Perception

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ABSTRACT

This study aims to explore Asian cruise travelers' cruise experience and its multidimensional perception of cruising as well as the effect of travelers' perception on satisfaction and behavioral intention. In order to measure Asian travelers' multidimensional perceptions, survey items were adapted from SERVQUAL and SERV-PERVAL. Exploratory factor analysis was performed first to identify travelers' multidimensional perceptions on travel experience. Subsequently, a multiple regression was conducted so that researchers examine how the tourist' perceptions affect travelers' satisfaction and behavioral intention. Statistical results showed that Asian cruise travelers have two dimensional perceptions and each perception can be named as "perceived quality" and "perceived value". The perceived quality has four components. They are "Facility", "F&B", "Entertainment", and "Staff", and the perceived value consists of three components including "Emotional response", "Perceived price", and "Behavioral price and reputation". According to the statistical results, travelers' perceptions on cruise experiencing affect travel satisfaction and travelers' behavioral intention.

Keywords: Asian cruise tourists, Cruising experience, Perception dimensionality,
Perceived quality, Perceived value

INTRODUCTION

The cruise industry has been experiencing dramatic growth in the international tourism sector. According to the Cruise Line International Association (CLIA), its average growth rate is over 8% a year and the number of cruise passengers was 14 million in 2005, which was ten times more than that in 1980 (Dwyer & Forsyth, 1998; Kwag & Lee, 2009). With dramatic growth of the cruise industry, the market environment is getting competitive and appears to be saturated because of overcapacity (De la Vina & Ford, 2001; Kwortnik, 2006). This is because most of the cruise market is based upon North America and the regional market share accounts for 85% of the total cruise market. A strategic effort to occupy the competitive cruise market can be represented in the number of newly launched cruise ships because a quality stateroom, upscale cruise facilities, and stable room supply are essential for successful business in the cruise travel market, and these success factors can be achieved by launching new cruise vessel. For instance, major cruise liners have launched about 100 new cruise ships from 1996 to 2004, trying to attract potential customers, occupying a growing market share and developing new market segments (Lobo, 2008).

Recently, the Asian cruise market has been highlighted as a new emerging market in the cruise industry. Currently, the Asian cruise market has 5% of total cruise market share, but the Asian cruise market has great potential as a new locomotive to sustain the cruise industry because a rise in national income in Asian countries can cause a dramatic increase of Asian cruise travelers. In East Asia, Hong Kong is a major hub for an international flight and international cruise liners. The city is attracting a number of western cruise travelers to Asia cruise travel, and Hong Kong is also a base for mainland Chinese cruise travelers. The number of the cruise travelers from Hong Kong alone 459,000 in 2007, which is more than double than from 201,000 in 2005 (Stanley, 2008). However, the Asian market has been still underdeveloped, and the market needs more investment and marketing research on the Asian market (Kwag & Lee, 2009).

In order to take the bigger chunk of emerging market share, it is necessary to understand consumer's preference and their perception on consumption experience because they can represents a key marketing variable in market segmentation, market targeting, and establishment of marketing actions including product, distribution, pricing, and promotion decisions. Therefore, to measure consumer's mindset can be the first step to conduct a marketing research and program. With respect to measure customers' perception, many research efforts have been done in service industry. Similar attempts also have been tried in the cruise industry (Lobo, 2008; Petrick, 2003, 2004; Qu & Ping, 1999; Teye & Leclerc, 2003). However, there is still limited information about Asian cruise travelers' preference and perceptions in spite of the Asian market potential. Therefore, the purpose of this research is twofold. The first is to identify Asian cruise travelers' multidimensional perception on cruise travel, and the second is to examine hypothetical relationship between key constructs such as sub-components of perception on cruise travel (e.g. perceived quality and perceived value), travelers' satisfaction, and behavioral intention.

LITERATURE REVIEW

The tourism industry is service based industry, and the cruise travel and cruise ship itself can be viewed as a floating resort and tourism destination. Therefore, service quality issue is one of most important topics for cruise marketers because a good service quality and consumer's satisfaction can guarantee business survival at least in the service industry. Consequently, the hospitality and tourism industry have focused on service quality improvement and customers' satisfaction.

Service quality

A great deal of service-quality studies have been done in last three decades, and most of topics have been center around efficient and accurate measurement of service quality (Ladhari, 2008; Martínez Caro & Martínez García, 2008). This is because measuring a service quality is a starting point to research consumers and consumers' perception on service experience. In the service industry context, service quality can be viewed as perceived service quality and it can be defined as " the consumer's judgment about an entity's overall excellence or superiority" (Parasuraman, Zeithaml, & Berry, 1988). Developed measurement instruments are mainly based on identified consumers' perception on consumption experience. For example, Parasuraman et al. (1988) conducted the most influential studies on service quality, which was developing the SERVQUAL instrument. The SERVQUAL instrument had had ten perceived dimension, but Parasuraman et al. refined SERVQUAL measurement items, achieving five dimensions of perceived survey quality. The dimensions were labeled as "Tangibles", "Reliability", "Responsiveness", "Assurance", and "Empathy". The instrument has become a foundation of service quality measurement instruments in various industry setting. One of distinct features is that the instrument compares between consumers' expectation and realized performance of specific service. However, this approach has been challenged by some alternative measurement approaches.

SERVPERF is a service quality measurement instrument. It has some similarities with the SERVQUAL instrument in terms of measurement dimension, but the SERVPERF is performance-based measurement. It was reported that the SERVPERF showed better performance in explaining the variance of service quality measurement than SERVQUAL (Martínez Caro & Martínez García, 2008). One of reasons to explore service quality is to understand consumers' mindset and to lead preferred marketing outcome (i.e. satisfaction, repurchase intention, and willingness to recommend to others). With respect to the marketing outcome, a new marketing construct, which is related with service quality construct, has been highlighted. The marketing construct is perceived value. Zeithaml (1988) argued that "consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given." The research emphasized that what consumers can gain from consumption experience and how much consumers should pay for it. That is, consumers feel

their satisfaction by comparing balance sheet in consumers' mindset. In the balance sheet, three sub-dimensions were considered as key components such as perceived quality, price, and value. Perceived value is a composite term of perceived quality and price, and it is known that perceived value is an antecedent of consumers' satisfaction. Some efforts have been made in order to measure perceived value, and standardized measurement instruments (e.g. PERVAL and SERVPERVAL) were proposed as a tool for measuring perceived value. The instruments are to measure consumers' multidimensional perception on consumption or service experience.

Service quality in the hospitality and tourism industry

In the hospitality and tourism industry, the perception of service quality has been widely researched and focused because it is imperative for marketers to know how consumers feel about service level in the hospitality and tourism industry. In order to measure consumers' satisfaction and a perceived service quality, the SERVQUAL instrument has been introduced and modified in specific industry setting (Badri, Abdulla, & Al-Madani, 2005; Engelland, Workman, & Singh, 2000; Frochot & Hughes, 2000; Khan, 2003; Knutson, Stevens, Wullaert, Patton, & Yokoyama, 1991; Raajpoot, 2002; Stevens, Knutson, & Patton, 1995; Tkaczynski & Stokes, 2010). For example, Knuston et al. (1991) tailored the SERVQUAL into the lodging industry and generated LODGSERV instrument in order to measure consumers' expectation for service quality in the lodging industry. Khan (2003) examined ecotourists' the service quality expectation by using modified the SERVQUAL instrument, named as ECOSERV. It was found that tourists have unique a dimension in service quality expectation at each tourism industry setting. Stevens et al. (1995) and Raajpoot (2002) tried to measure consumers' service quality in the lodging industry setting by modifying the SERVQUAL instrument. They generated modified versions of the instrument. DINESERV, which was generated by Stevens et al., was general version of the SERVQUAL in restaurants industry, and TANGSERV, which was proposed by Raajpoot, was focused on specific the SERVQUAL dimension, tangible quality.

In the cruise industry, extant literature has examined cruise passengers' trip related behavior, economic effects on the local economy, perception on destination image, cruise brand image, and cruise service satisfaction. Especially, service quality issue is a significant research topic. Lobo (2008) examined the relationship model of service quality, customer satisfaction and customer loyalty in luxury cruise market by using modified SERVQUAL items empirically, showing how service quality influences cruise travelers' behavioral intention. Prior to Lobo's work, Qu (1999) investigated the relationship between motivation factors and the satisfaction of Hong Kong cruise travelers. His research was based on cruise travel attribute items and cruise travelers' satisfaction level. This research provided exploratory results of cruise travelers' perception on cruise experience and service quality. Teye and Leclerc (2003) explored motivational factors in the North America cruise market, providing a clue how ethnic variable influence cruise trip motivation and expectation of cruise travel. With regard to the relationship among perceived service quality, perceived value, and cruise tourists' satisfaction, Petrick (2003, 2004) developed a multidimensional measuring tool for the perceived value of cruise travel, and tested the hypothetical relationship among perceived value, tourists' satisfaction and intention to revisit. He viewed perceived service quality as a part of perceived value construct.

Research hypotheses were constructed based on previous research and a theory with respect to the relationship among service quality, satisfaction, and behavioral intention. Research hypotheses were as follows:

H1: Perceived value positively affects cruise travelers' satisfaction.

H2: Perceived quality positively affects cruise travelers' satisfaction.

H3: Perceived value positively affects cruise travelers' behavioral intention.

H4: Perceived quality positively affects cruise travelers' behavioral intention.

METHODOLOGY

A questionnaire was developed based on previous empirical studies and SERV-PERVAL perceived value measurement instrument. The survey instrument consists of mainly four parts, which are perceived quality, perceived value, satisfaction level and behavioral intention, and demographic variables. This research extended the SERV-PERVAL instrument because the instrument has just four perceived quality items and they are too general to measure cruise travelers' perception on cruise experience. Qu (1999) provided cruise travel attribute items, which consists of four dimensions such as "Accommodation", "Food and Beverage", "Entertainment", "Other facility", and "Staff". Because the attribute items have uniqueness and similarity with SERVQUAL instrument at the same time, the attribute items were merged into SERV-PERVAL instrument.

The sample was collected from cruise travelers of a Korean cruise liner. The convenience sampling was chosen because of time and cost limitations. Two trained interviewers visited a medium sized cruise ship, the Penstar Honey, and distributed questionnaires. Questionnaires were placed in 200 cruise ship cabins. After respondents completed the survey voluntarily, the questionnaire were gathered at the reception desk of the cruise ship. A total of 140 questionnaires were collected between May and June in 2008. Participants were sampled on eight separate 3-day and 4-day voyages with various destinations such as the Korean national marine park, Osaka in Japan and Bebu, which is a famous Japanese spa destination. The samples yielded 117 usable observations.

An exploratory factor analysis was first performed so that underlying dimensions of each construct were revealed. Based results of exploratory factor analysis on each construct like perceived quality and perceived value, four perceived quality dimension were identified and three perceived value dimensions were obtained. These sub-dimensions of perceived quality and value composed overall perceived quality and value construct for cruise travel. SPSS version 18 and STATA 10 were used to conduct exploratory factor analysis and regression analysis to examine the relationship between hypothetical relationships between constructs.

RESULTS

According to the factor analysis results in Table 1, perceived quality has four dimensions including cruise ship facilities, food and beverage service, entertainment, and crew's service. Perceived value consists of three dimensions such as emotional response, perceived price, and behavioral price and reputation. Each construct has sub dimensions, which means that cruise tourists recognize their cruising experience based on four dimensions like facilities, food and beverage, entertainment, and staff as well as the tourists value their experience by two constructs perceived quality and perceived value.

Table 1

Exploratory Factor Analysis Results for Perceived Quality of the Cruise Experience

Construct and items	Factor loading	Mean	Eigenvalue	Construct reliability
Facility			11.353	.931
1. The cabin is clean.	.654	5.85		
2. The cabin space is moderate.	.699	5.24		
3. The cabin facility is good.	.742	5.54		
4. The appearance of cruise ship is good	.795	5.68		
5. This cruise ship has a outstanding facility	.752	5.79		
6. This cruise ship is very reliable	.760	5.74		
F&B			2.399	.944
7. There are a variety of menu in dining.	.755	5.28		
8. The quality of F&B is good.	.803	5.41		
9. The quality of service delivery is good.	.779	5.62		
10. The dining room is spacious.	.685	5.41		
Entertainment			1.251	.938
11. There are a variety of entertainment programs.	.766	5.14		
12. The entertainment program is attractive.	.792	5.06		
13. The entertainment program is well organized.	.840	5.15		
14. The sport facility is good.	.843	4.65		
15. The shopping facility is good.	.866	4.24		
17. The entertainment facilities are good.	.744	4.79		
Staff			1.091	.924
18. The staff shows courtesy.	.822	6.05		
19. The staff is neat.	.848	6.08		
20. The staff has a good communication skill with guests.	.863	5.93		
21. The staff has a good problem solving skill.	.728	5.81		
Total % of variance explained			80.47%	

Sub-dimensions of two constructs are measured by multiple survey items. Exploratory factor analysis provides construct reliability for determining whether survey items are suitable for measuring the sub dimensions and constructs. Items with factors loading are less than .5 were eliminated to refine survey measurement items. Mean value of each survey items represent cruise tourism service quality index, and most of the means recorded higher than 5, indicating high quality of cruise service experience. Results can show that cruise tourists are more likely to have positive cognitive image on cruise experience and cruise ship brand.

In Table 2, it was showed that perceived value construct has three dimensions including emotional response, perceived price, and behavioral price and reputation. Petrick (2004) suggested that the perceived value construct has five dimenstions, which included perceived quality as a part of the construct. However, in this study, researchers specified perceived quality as independent part of the construct when the perceived quality was measured because a survey instrument was developed to measure service quality more specifically than original SERV-PERVAL instrument.

Table 2

Exploratory Factor Analysis Results for Perceived Value for Cruise Experience

Construct and items	Factor loading	Mean	Eigenvalue	Construct reliability
Emotional response			8.452	.952
1. This cruise trip makes me feel good.	.881	5.92		
2. This cruise trip gives me pleasure.	.791	5.75		
3. This cruise trip gives me a sense of joy.	.931	5.93		
4. This cruise trip makes me feel delighted.	.913	5.90		
5. This cruise trip gives me happiness.	.886	5.92		
Perceived price			2.937	.925
8. This trip's fare is fairly priced.	.795	5.54		
9. This trip's fare is reasonably priced.	.885	5.56		
10. It appears to be a good bargain.	.826	5.71		
11. It is easy to buy this program.	.667	5.54		
Behavioral price and reputation			1.074	.873
12. It required little energy to purchase.	.630	5.41		
13. It is easily bought.	.608	5.32		
14. This cruise travel has a good reputation.	.848	5.02		
15. This cruise travel is well known.	.804	4.32		
16. This cruise travel is reputable.	.830	4.97		
Total % of variance explained			79.49%	

Among perceived value's sub-dimensions, emotional response can be considered as the most important variable because the cognitive cruise experience can be interpreted by this dimension, and emotional response variable's standardized beta is greater than others in regression model as showed in Table 3 and Table 4. In table 3, satsfaction was utilized as the depedent variable, and perceived quality's sub-dimension, perceviced value's sub-dimension, and demographic variables were used as indepdent variables. Statistical results showed that "Facility", "Emotional response", and "Perceived price" were significant. Among them, "Emotional response" was recored as most influencial factor for determiing cruise travelers' satisfaction.

Table 3

Regression Analysis Results for the Effect of Perceive Quality and Perceived Value of Satisfaction

	Dependent variable				
Independent variables	Satisfaction				
	Coef.	Robust Std. Err.	Beta	t	Sig.
Facility	0.246*	0.107	.246	2.28	.025
F&B	0.032	0.061	.039	0.51	.608
Entertainment	-0.067	0.059	-.074	-1.14	.255
Staff	-0.003	0.090	-.003	-0.03	.976
Emotional response	0.633**	0.077	.619	8.27	.000
Perceived price	0.170*	0.079	.184	2.14	.035
Behavioral price and reputation	-0.020	0.068	-.021	-0.30	.767
Income	0.020	0.017	.047	1.18	.242
Age	-0.014	0.032	-.019	-0.43	.667
Gender	-0.006	0.086	-.002	-0.06	.949
(Constant)	0.085	0.364	.	0.23	.815
R^2	.852				
F (10, 95)	72.07				

*p < .05. **P<.01.

In table 4, it was presented which sub-dimension affects cruise travelers' behavioral intention. Among dimensions, "Facility", "Emotional response", and "Perceived price" were reported as significant dimension. Demographic variables were used as a control variable. In this model, age also was found as significant variable.

Table 4
Regression Analysis Results for the Effect of Perceive Quality and Perceived Value on Behavioral Intention

	Dependent variable				
Independent variables	Behavioral intention				
	Coef.	Robust Std. Err.	Beta	t	Sig.
Facility	0.303*	0.141	.274	2.15	.034
F&B	-0.006	0.135	-.007	-0.05	.963
Entertainment	-0.136	0.087	-.134	-1.56	.123
Staff	0.209	0.141	.180	1.48	.143
Emotional response	0.350*	0.150	.307	2.33	.022
Perceived price	0.231†	0.131	.225	1.76	.081
Behavioral price and reputation	0.056	0.098	.053	0.58	.566
Income	0.033	0.030	.068	1.11	.270
Age	0.081†	0.048	.103	1.67	.098
Gender	-0.002	0.141	-.001	-0.01	.989
(Constant)	-0.489	0.640	.	-0.76	.447
R^2	.674				
F (10, 95)	32.18				

† P<.10. *p < .05.

Based on regression results, research hypotheses were tested. All research hypotheses were partially supported. For example, H1: 'Perceived value positively affects cruise travelers' satisfaction' and H2: 'Perceived quality positively affects cruise travelers' satisfaction' were partially supported. It was found that "physical facilities", Asian cruise tourists' "Emotional response", and "Perceived price" were significant factors for determining the tourists' satisfaction. H3: 'Perceived value positively affects cruise travelers' behavioral intention.' and H4: 'Perceived quality positively affects cruise travelers' behavioral intention' were also partially supported. The same construct components (i.e. "Facility", "Emotional response", "Perceived price") were identified significant factor to affect behavioral intention.

CONCLUSION

This study aims to explore Asian cruise travelers' cruise experience and its multidimensional perceptions of cruising experience as well as the effect of travelers' perceptions on satisfaction and behavioral intention. In order to measure Asian travelers' multidimensional perceptions, survey items were adapted from previous empirical study, the SERVQUAL instruments and the SERV-PERVAL instrument item. An on-board survey was conducted on eight separate 4-days voyages of the Far East Asia in 2008. Exploratory factor analysis was performed first to identify travelers' multidimensional perceptions on travel experience and service quality in cruise travle. Subsequently, a regression analysis was conducted so that researchers examine how the travelers' perception of cruise travel experience affects tourists' satisfaction and behavioral intention.

Statistical results showed that Asian cruise travelers have four subcomponents on perceived service quality. The components are "Facility", "F&B", "Entertainment", and "Staff". Among them Facility was only one significant component to directly affect cruise travelers' satisfaction level and behavioral intention. It was revealed that Asian cruise travelers have three subcomponents on perceived value, and the components are "Emotional response", "Perceived price", and "Behavioral price and reputation". In terms of standardized beta coefficients, travelers' "Emotional response" is the most influential factor to affect travelers' satisfaction and behavioral intention, which means that travelers' emotional aspect significantly determines travel experience and its outcome. This finding suggests that cruise marketers should emphasize the emotional aspect of cruise travel in a cruise promotion because the cruise travel experience can be interested by traveler's emotion. Even good quality service and facility exists, unfavorable emotion can block successful marketing efforts when travelers have bad experience. Additionally, perceived price also is a crucial variable in travelers' decision making and travel outcome, which means that Asian cruise travelers are value sensitive and smart consumers. Appropriate price setting and marketing promotion can facilitate cruise travel and tourism. Finally, Asian cruise travelers are concerned with cruise ship itself and its facility because Asian cruise travelers have high expectation on cruise ship facilities. If a cruise liner invests in modern cruise ship in Asia voyage, the cruise liner will achieve a dominant position in the emerging cruise market.

No study can be free from research limitation. A survey was performed in an East Asia country. In order to generalize research findings, additional research should be conducted in different cultural and regional setting.

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