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# Consumer Attitudes and Purchase Intentions of Cruises in China

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CONSUMER ATTITUDES AND PURCHASE INTENTIONS  
OF CRUISES IN CHINA

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A thesis submitted in partial fulfillment  
of the requirements for the

Master of Science - Hotel Administration

Department of Hospitality Management  
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## **Thesis Approval**

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## **ABSTRACT**

This study examined the impact of consumers' attitudes towards cruises on their purchase intention of cruises. A sample of 229 past outbound travelers in China were surveyed via an online self-administered survey sent by a Chinese online survey platform named 'So Jump'. The survey used a two-part statement evaluation format to measure cruise purchase intentions and the factors that impact the intentions. Respondents were asked to rate their level of agreement, the important of the sub-factors, and the likelihood to participate in certain activities on a seven point Likert scale. Use the theory of planned behavior as the base, the three factors of cruise purchase intentions proposed prior to conducting the study were; attitude, subjective norm, and perceived behavioral control.

Factor analysis revealed that one of the factors was not in the proposed construct. The new factor was named 'personal concern'. It was found that both attitude and perceived behavioral control have marginally or significant effect on the willingness and the likelihood of cruise taking. Significant differences on attitudes and cruise purchase intentions were found among different age, marital status, employment status, education level and residence groups.

Keywords: Consumer Attitude, Cruise Purchase Intention, Subjective Norms, Perceived Behavioral Control, Personal Concern.

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# CHAPTER 1

## INTRODUCTION

### Background

Cruise tourism is a fast growing sector of the worldwide tourism industry (Ptaszycka, 2012). While Europe and North America have concentrated 85% of cruise ships in the world cruise market, the Asian cruise market is underdeveloped but experiencing rapid growth (Ptaszycka, 2012). Among all the segmented regions in Asia, China contributed the greatest number of passengers in the past 3 years. According to the Cruise Lines International Association (Cruise Lines International Association [CLIA], 2016), China was confirmed as the world's fastest growing major source of cruise line passengers with a 65.7% average yearly growth rate between 2012 and 2015. In 2015, with nearly 1 million passengers, the Chinese account for 47% of all the Asian cruise passengers.

Following Japan, China was reported to be the second largest cruise destination in Asia (CLIA, 2016a). China has welcomed 850 port calls in 2016, compared to 300 port calls in 2015. Shanghai, Tianjin, Hainan and Xiamen were the top ports for 2016, and were projected to experience increasing port calls in the future (CLIA, 2016a).

The Chinese cruise market has a history of only 10 years. In July 2006, Costa cruise line Allegra's first voyage in Shanghai represented the start of cruise business in mainland China (Yang & Wu, 2011). Within the past decade, top international cruise companies have expanded their businesses to the Chinese market. The latest data indicates that over 95% of the Chinese cruise market was occupied by foreign companies including Carnival Cruises, Royal Caribbean International and Star Cruises (Xu, 2016).

With the rapid development of China's economy, Chinese people are changing their consumption habits. They would like to spend their extra money, rather than save it, on entertainment and recreations. The Chinese, especially millennials and retired seniors, are paying more attention to the quality of life and would like to spend time enjoying their life. According to China National Tourism Administration (CNTA), the Chinese travelers took 4.12 billion trips in 2015, either within the country or out of the country, which means on average, each person travels nearly three times a year. Cruises accounted for 2.48 million of these trips, a market penetration rate of 0.06%. Compared to the 3.5% market penetration rate of cruise tourism in America, China has a huge market potential.

The prospect of the China cruise market heavily depends on consumers' consumption habits and attitudes toward cruise tours. Unlike North Americans, most Chinese tourists do not consider cruise as a regular means of leisure travel. Even now, the majority of Chinese do not understand the concept of the cruise (Sun, Feng & Gauri, 2014). Due to an unbalanced regional economy and geographical reasons, inland citizens have an extremely low awareness of cruises. Simply put, people in impoverished areas have little or no awareness of the cruise industry. Although cruises are more accessible to coastal residents, they have not accepted the idea of setting a cruise as a travel destination. Thus, most Chinese tourists are not willing to spend much time and money on cruise travels. In the Chinese cruise market, the most popular cruise lines are middle-to-low-end, and charge approximately \$500 per person. Eighty percent of tourists select short sailings and prefer to sail within Asia (CLIA, 2016a).

Under these circumstances, the marginal profit of the Chinese cruise market is low, and some small operators even reported losses. Although the passenger volume is increasing over the years, the rate of passenger growth is declining (CLIA, 2016a). The growth slowdown suggests a

guarded optimism about the future of the China cruise market. If the marginal profit of cruise operations remains low while the quantity of customers gradually stabilizes, potential profit will be limited. At the end of the year 2015, China's Ministry of Transport published its 5-year goal for China cruise market and forecasted a 33% annual increase in the number of cruise passengers. However, cruise operators doubt that goal will be reached and whether the industry will be able to increase its profits.

As such, cruise operators need to appeal to Chinese consumers to maintain or increase profits. By researching Chinese consumers' attitudes and purchase intentions toward cruises, this thesis investigates the influence of attitudes on cruise purchase intentions. This thesis will look further into the difference in attitudes hold by consumers from different demographic groups. The findings of this study should enlighten cruise operators on developing strategies for expanding the Chinese cruise market.

### **Statement of Problems**

Until now, there are three native companies operating cruise business in China. The first company, HNA Tourism Holding, began to conduct cruise business in 2012. The other two companies, Skysea Holdings and Bohai Ferry, started to operate cruise lines in 2014. Unfortunately, none of the cruise lines is profitable. The reason behind this situation is intricate. On the one hand, China currently is not able to design and build cruise ships due to technical reasons. On the other hand, domestic investors have no advantage in competing with international cruise companies. Given that mainstream cruise tours in China are middle-to-low end, international companies send in-use ships to operate in China to lower costs and generate greater profits. By comparison, native Chinese investors purchase old ships and invite foreign companies to manage cruise operations. Using old ships makes it hard to elevate ticket price,

which leads to a low profit margin and a long wait on investment return. Introducing foreign management companies makes the native cruise operators in difficulty to develop. Several years after the launch of cruise business, domestic cruise operators are still not able to gain profits. Therefore, encouraging consumer purchase is one of the keys to turn the situation around for the better. Since strong intentions lead to actual purchase behaviors (Ajzen, 1991), investigating consumer purchase intentions should shed light on the opportunity for domestic cruise operators to capture the market share in China.

Due to cultural differences and consuming habits, the Chinese hold a unique perspective on cruises different from westerners. Thus, it is crucial for cruise operators to understand their customer base. In the hospitality industry where demand constantly fluctuates, understanding customer behavior is crucial to company profitability, marketing positioning, product design and long-term development planning. Since attitude is one of the factors that form behavioral intentions (Ajzen, 1991), understanding the attitudes of Chinese consumers can be beneficial for cruise operators to lift their profits. To date, no research has focused on how Chinese consumers' attitudes affect cruise purchase intentions. This thesis attempts to fill this gap. By doing so, it should help cruise operators expand their business in the Chinese market.

This thesis attempts to answer the following questions.

1. What factors have major influence on Chinese consumers' cruise purchase intentions?
2. How do Chinese consumers' attitudes toward cruises affect their purchase intentions?
3. What is the difference of cruise attitudes and cruise purchase intentions among demographic groups?

### **Definitions**

The following concepts have specific operational definitions in this paper.

*The Chinese cruise market:* In China, the development of any industry relies heavily on government policies. Since China carried out the “one country, two systems” policy in 1997, Hong Kong Special Administrative Region (SAR) and Macau SAR have been implementing political and economic policies that are created by their own city governments. As a result of differing policies, Hong Kong began to welcome cruise lines much earlier than mainland China. Today, the Hong Kong cruise market is near its mature stage. This thesis will focus on the cruise market in mainland China. Throughout the paper, the China cruise market will refer to cruises that operate solely in mainland China. Cruises whose home ports located in Hong Kong, Macau or Taiwan will not be considered.

*Consumer:* In this paper, “consumer” refers to current and potential cruise customers in China. These subjects are ethnic Chinese who live in mainland China at an economic level adequate to afford a cruise.

*Consumer attitudes:* In the field of marketing, attitude refers to the overall evaluation of a certain object (Solomon, 2009). Consumer attitude, which is a concept in consumer behavior theory, is a composite of consumer’s beliefs, feelings and behavioral intentions toward a certain object (Perner, 2010). In this thesis, beliefs refer to consumers’ perceptions of and thoughts about cruise tours. Feelings are defined as consumers’ subjective feelings or emotions linked to cruise tours. Behavioral intentions, refer to the intention of cruise-related behaviors, which means consumers’ perceived likelihood of conducting cruise-related behaviors.

### **Purpose**

The purpose of this study is to investigate the influence of consumer attitudes on cruise purchase intentions in the Chinese market.

## **Objectives**

By measuring the factors that influence Chinese consumers' cruise purchase intentions, this study identified the pattern behind the decision of cruise purchase. As such, the paper will help cruise operators better understand Chinese consumers. By highlighting the influence of attitudes and looking further into the difference of attitudes among different demographic groups, this paper identified consumer segments with huge market potentials. By combining research results with current situation analysis, vital information and advices will be available to cruise operators.

## **Limitations**

Consumer attitudes are not the only factors influencing the tourism industry. Government policies, investment, technology and professionals affect the market. Therefore, the study will be applicable only to the current cruise market in China.

The proposed research is primarily quantitative in nature with data gathered mainly through online survey tools. While Chinese seniors are an indispensable group of subjects, they rarely use the internet. Since certain type of respondents were hard to reach, the data collected might be biased.

## **Conclusion**

China is the world's fastest growing major source of passengers, but the market penetration rate of cruise tourism in China is low. To expand the Chinese market, cruise operators need to attract general consumers. Since attitudes significantly affect consumers' purchase intentions and consumer attitudes can be converted by education, investigating attitudes contributes to the expansion of cruise tourism in China. An in-depth review of literature was presented in chapter two to specify the research related to this study.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **Introduction**

This chapter reviews the literature regarding cruise tourism and consumer behavior. The first part gives an overview of the global cruise tourism industry, and then focuses on stating the current situation of the Chinese cruise market. By analyzing studies about tourist behaviors and behavior determines, the latter part finds out the research gaps that are filled by this study and specifies the basis of the theoretical framework that is adopted in chapter three.

#### **Cruise Tourism Industry**

##### **Definition of the Cruise**

The cruise sector is a component of the leisure tourism industry (Dowling, 2006). As a traveling destination and a mode of transportation, the cruise ship is used for pleasure voyages. The cruise is viewed as a floating resort on the sea, as it offers travelers both accommodation and resort-style recreations (Ahmed, Johnson, Ling, Fang & Hui, 2002; Sun & Feng, 2012). Most modern cruises feature on-board facilities including restaurants, bars, clubs, fitness center, sports facilities, shopping centers and entertainment venues. Passengers can go on onshore excursions at the ports of call (Dowling, 2006).

##### **Global Cruise Industry**

Cruises date back to the year 1840, in which 63 passengers took a steamship across the Atlantic Ocean (Gulliksen, 2008). Although cruise ships were recognized mainly as a transportation tool during the first century of development, they have been considered a form of travel since the 1950s (Gulliksen, 2008). At that time, cruise tours were designed for the rich and elderly. With Carnival Cruise Lines' attempt of appealing to the public, the cruise industry



underwent rapid growth in the 1970s. Over the past four decades, the global cruise market has expanded aggressively. According to the Cruise Line International Association (CLIA), the cruise industry has been identified as one of the fastest growing sectors within the global tourism industry. From around 0.5 million in 1970, the number of cruise tourists increased to 23.2 million in 2015 (CLIA, 2015). Meanwhile, inter-generational cruise tours, such as family trips and group trips, are increasing in popularity (CLIA, 2016a). Nowadays, cruise ships are expanding in both size and amenities to satisfy market demand.

There were 448 cruise ships operating globally in 2016, and 26 new ships are scheduled to debut in 2017 (CLIA, 2016b). Carnival Group, Royal Caribbean International, and Norwegian Cruise Lines dominate the global cruise industry, controlling 76.7% of the total market share (Statista, 2015). North America, generating 54.6% of the worldwide cruise passengers in 2014, is the largest passenger source around the world (CLIA, 2014).

Since European and North American cruise markets have entered a maturing phase, large cruise companies are exploring Oceanian and Asian markets as an avenue of expansion (Dowling, 2011). As the largest market in Asia, as well as the fifth-ranking cruise passenger source country worldwide, China is getting more attention in the global cruise industry.

In the tourism industry, previous studies have examined the history of the cruise (Gulliksen, 2008), and the economic effect of cruise tourism (Brida & Zapata, 2010; Dwyer & Forsyth, 1998; Mescon & Vozikis 1985). Recent researchers paid more attention to the environmental impacts and sustainability of cruise tourism (Carić & Mackelworth, 2014; Jones, R. J., 2011; Klein, 2011). The influences of cruise tourism from the perspective of port cities' residents have been studied (Brida, Del Chiappa, Meleddu, & Pulina, 2012; Del Chiappa & Abbate, 2016; Stewart, Dawson, & Draper, 2011). In addition, scholars have investigated cruise

customers regarding their perception, motivation, satisfaction and loyalty (Huang & Hsu, 2010; Jones, R.V., 2011; Hyun & Han, 2015; Zhang, Ye, Song & Liu, 2015). Meanwhile, the effect of new technology and social media on cruise tourism marketing has become a hot issue (Brejla & Gilbert, 2014; Polat, 2015; Park, Ok & Chae, 2016).

Previous studies adopted either the North American or the European market as the subject. Little research has focused on the Chinese market.

## **Chinese Cruise Market**

### **The Cruise Industry in China**

Although the Chinese cruise industry is still in its infancy, it is nonetheless experiencing strong growth (Sun, Feng & Gauri., 2014). According to the China National Tourism Administration (CNTA), Chinese travelers took 4.12 billion trips in 2015, among which cruises accounted for 2.48 million trips. Compared to the 3.5% market penetration rate of cruise tourism in America, the market penetration rate in China is only 0.06%. China has huge growth potential in terms of cruise tourism. With the world's largest population, and a 65.7% annual cruise passenger growth rate, China is expected to be the second largest cruise market by 2017 (Shao, 2014).

China is a fertile market for cruise tourism. While industrial giants have developed major interests toward China, Chinese scholars are paying more attention to the domestic cruise industry. An in-depth review of Chinese literature concludes that research on cruise tourism focus mainly on its positive economic impact (Li, 2007), the industrial supply chain (Hu & Chen, 2004; Xu & Gao, 2010), the development of cruise ports (Liu, 2011; Yang, 2009) and the business strategies utilized by large international cruise companies (Jia, 2010; Wang, 2009).

However, little effort has been paid to studying consumer behavior in the context of the Chinese cruise market.

The Chinese cruise market is dominated by three international cruise giants: Costa Cruise, Royal Caribbean International, and Star Cruises (Sun et al., 2014). These ‘big three’ occupy over 95% of the market share in China (Xu, 2016). To date, there are three Chinese cruise companies: HNA Group, SkySea Holding International, and Bohai Ferry Co. The information of the major cruise lines operating in China are given in Table 1 (China Cruise & Yacht Industry Association [CCYIA], 2015).

Table 1

*Major Cruise Companies and Cruise Lines in China*

Company	Cruise Line	Tonnage	Number of Cabins	Passenger Capacity
Costa Cruise	Victoria	75,166	964	2,394
	Atlantica	85,619	1,057	2,680
	Serena	114,000	1,500	3,780
Royal Caribbean	Voyager of the Seas	137,276	1,557	3,114
	Legends of the Seas	70,000	900	2,074
	Mariner of the Seas	137,276	1,557	3,114
	Quantum of the Seas	167,800	2,101	4,180
	Ovation of the Seas	167,800	2,101	4,180
Princess Cruises	Sapphire Princess	11,600	1,337	2,670
Star Cruises	Super Aquarius	51,039	756	1,529
	Superstar Gemini	19,000	356	716
HNA Cruises	Henna (Stop operation in November 2015)	47,000	739	1,965
Bohai Ferry Co.	Chinese Taishan	24,391	385	927
Skysea Holdings	Golden Era	71,545	907	2,114

The popular sightseeing routes used by Chinese cruises are to Southeast Asia, Japan and South Korea. Few cruise lines operate routes to the Indian Ocean, Europe and the Americas (Zhang, Ma & Liu, 2010). With a target market of family travelers and business travelers, Costa

Cruise mainly offers routes to East Asian countries such as Japan, South Korea and Taiwan. The featured itineraries offered by Royal Caribbean are to destinations within East Asia and Southeast Asia. The routes offered by Star Cruises are to Southeast Asian countries, as well as to Hong Kong, Macao and Taiwan. To attract consumers in every age group, Royal Caribbean and Star Cruises have introduced luxury and premium ships into the market (Jia, 2010). It costs a single passenger more than ¥3,000 to travel on cruises offered by these companies.

The Golden Era and the Chinese Taishan are both luxury cruise ships sailing to Japan and Korea. The former is managed by one of the shareholders—Royal Caribbean, and the latter is domestically-owned and managed. The ticket price for a single passenger on either of these two cruise ships starts around ¥2,000 (\$285.70).

It is worth mentioning that Royal Caribbean introduced the Ovation of the Seas into the Chinese market in 2016, which was the only new ship to operate in China. Soon, more cruise ships are to join the Chinese market. Carnival Cruises will introduce two cruise ships into the Chinese market in 2017 and 2018. HNA Cruise, Bohai Ferry Co. and Skysea Holdings also plan to operate more ships in the Chinese market (Zuoyu Capital, 2015).

Chinese coastal cities' governments have been trying to attract foreign cruise ships by building seaports (Sun et al., 2014). China has approximately 9,000 miles of coastline in the east, along which four cities have built home ports to welcome international cruises (Sun & Feng, 2012). Cruise ports are built mainly to welcome cruise lines traveling to one of the following three regions—Northeast Asia, West Taiwan Strait, and Southeast Asia. Shanghai is at the center of the Northeast Asia economic circle. With two international cruise terminals, Shanghai is the core of the Chinese cruise industry (Xu, 2016). With four berths, Tianjin is regarded as the most important homeport in Northern China, and is the homeport for Royal Caribbean, Costa Cruise,

and HNA Cruise (Xu, 2016). Xiamen is at the center of the West Taiwan Strait economic circle, and Sanya is at the center of the Southeast Asia economic circle.

The Chinese government is supporting the cruise tourism industry. On April 22, 2015, the Chinese Ministry of Transport issued The National Deployment Plan of Coastal Cruise Ports (NDPCCP), which suggests that 12 cruise ports will be well-developed before 2030. Meanwhile, the government is controlling the market with strong regulations (Nyiri, 2009). For example, casinos are not allowed to operate on any cruise registered in China. Therefore, Chinese cruise companies must buy ships from foreign cruise lines and have the ships registered in flag states other than China. Foreign companies are not allowed to operate cruise businesses independently in China. Instead, they are required to sell cruise tickets through Chinese travel agencies (Xu, 2016). Although this policy helps protect domestic companies, the disadvantages are obvious. On one hand, the policy makes it hard for cruise lines to build direct relationships with Chinese customers. On the other hand, it creates difficulties for customers wanting to contact foreign cruise lines directly when they have complaints, possibly driving down customer perceived service quality.

In conclusion, the Chinese cruise market is promising. It is dominated by foreign business operators, with native Chinese companies trying to seize market share. Most itineraries operating in China are to Northeast Asia and Southeast Asia, as Chinese tourists prefer to cruise to these two regions. Compared to foreign cruises, Chinese cruise lines offer consumers fewer routes, but lower price. Meanwhile Chinese governments are facilitating the development of the cruise industry by investing in cruise port construction, and cruise companies are introducing more ships into the Chinese market.

### **Profile of Chinese Cruisers (Compared to North American Cruisers)**

Mainland China accounts for 4.29% of the global cruise passenger resource with 968 thousand passengers in 2015 (CLIA, 2016a). In terms of a demographic profile, 96.9% of Chinese cruisers age 23 or above, 65.5% have a bachelor's degree or higher, and 75% had a monthly disposable income over ¥14,000 (\$2000) (Sun et al., 2014). By comparison, 75% of North American cruisers were between the ages of 30 and 74; 69% have a college degree or above, with an average monthly household income of approximately ¥66,500 (\$ 9500) (CLIA, 2014).

Young people were the main customers of the Chinese cruise market, different from that of the foreign cruise markets (Ren & Li, 2014). According to the Royal Caribbean International, the average age of Chinese cruisers is 38, younger compared with North American cruisers, whose average age is 49 (CLIA, 2014). Unlike developed countries, where elderly people and retirees are wealthier, the rapid economic development of China enables the younger generations to afford cruise vacations. Regarding employment status, the majority of Chinese and North American cruisers were company employees while the minority were self-employed (CLIA, 2014; Mondou & Taunay, 2011). Most North American cruisers belonged to the middle class while most Chinese cruisers belonged to the middle and upper-middle classes (Fry & Kochhar, 2016; Wee, 2016). In addition, 50% of Chinese cruise travelers came from the two largest metropolitan areas, Beijing and Shanghai (Xu, 2016).

In conclusion, cruising in China is a pastime enjoyed by the younger and more affluent demographics. To develop the cruise business in China, companies must understand Chinese tourists and their behaviors.

## **Tourist Behavior**

Value, attitude, perception and motivation are key factors that influence tourist behavior (Cohen Prayag, & Moital, 2014). In leading mainstream academic journals, value, satisfaction, loyalty and motivation are the key concepts researchers studied the most, in terms of tourist behavior (Cohen et al., 2014). Few studies have focused on self-concept or attitudes.

### **Cruisers' Perceived Value**

Cruise tourists perceived value refers to passengers' overall assessment of the cruise vacation based on their perception of service received (Zeithaml, 1988). Customer perceived value is generally driven by product price and perceived quality (Petrick & Li, 2006). Past studies have concluded the function of perceived value in the service industry (Patterson & Spreng, 1997), the factors that influence perceived value (Keith, Lee, & Leem, 2004) and the measurement of perceived value (Bolton & Drew, 1991; Petrick, 2002). It has been found that there were positive relationships between perceived value and customer satisfaction (Keith et al, 2004; Oh, 1999) as well as behavioral intentions (Cronin, Brady & Hultet, 2000). The facility, food & beverage options, entertainment activities and staff are significant factors that influence Chinese cruise passengers' perceived value (Yi, Day & Cai, 2014). The above research focused on existing customers as the object of study. Studies that encompass potential customers are rare.

Ren and Li (2015) studied cruise consumers' awareness of cruise culture, and it is the only cruise study that took potential customers into consideration. It has been recognized that awareness of cruise culture is highly related to cruise tourists' behaviors such as product selection, actual consumption, and post-purchase evaluation (Ren & Li, 2015). Cruise culture refers to the commonly accepted values and popular behaviors of consumers in cruise tours (Ren & Li, 2015). For example, in North America, about 80% of cruisers view cruises as an affordable

form of leisure travel and can be taken frequently (CLIA, 2014). These commonly accepted concepts in the world's largest cruise market, North America, are regarded as cruise cultures. In China, most people see cruises as a transportation tool for the sea or an expensive tourism product, which is not consistent with cruise culture (Zeng, Guo, Huo & Wang, 2016). Cruise culture dictates that the ship itself is the travel destination. The cruise ship is a platform for passengers to access resort-style services including accommodations, endless buffets, fitness centers, recreational facilities, leisure areas, shopping centers and planned events.

To expand the Chinese market, cruise operators need to implant cruise culture into the minds of Chinese consumers. It is necessary to let these consumers accept the concept that cruise vacations are a common way of spending leisure time, and can be a frequent behavior rather than a once or twice in a lifetime event.

### **Motivations**

Research has identified the three most influential motivations for westerners to cruise. Escape or relaxation, family relationships or friendship enhancement, and the convenience of travel were strongly associated with cruising intentions. Among those factors, escape or relaxation played the strongest role in motivating tourists to cruise (Hung & Petrick, 2011). Other studies found that cruise customers in North America were generally motivated by the comfort and accommodation provided onboard the cruise ship (Jones, R. V., 2011). Visiting several destinations within one trip, and the ease of the arrangement of cruise vacations also motivated cruise travelers (CLIA, 2014).

Due to different perceptions of cruise culture, Chinese tourists have different motivations for taking cruises. About 60% of the passengers were motivated by the sightseeing cruises offered, while the other 40% took cruise vacations to have their first cruise experience (Zeng et al.,



2016). Chinese researchers have sought to explain why Chinese cruise tourists have different motivations than westerners. In China, the cruise industry is at an early stage. There is a lack of awareness of cruise travel among the public. According to the report on consumer awareness of cruise tourism in China, over 75% of tourists know little about cruises, and an additional 11% have no idea what a cruise tour is (Tongcheng, 2016). As such, many people take a cruise for the first time to get a feeling of novelty.

### **Cultural Bias and Product Preferences**

China, with over 1.38 billion people, accounts for 18.72% of the world's population (Worldometer, 2016). This large group of people has its own living and eating habits. Chinese people are collectivistic and put little emphasis on individuals (Hofstede & Bond, 1984). Chinese tourists have a custom of purchasing gifts for family and friends while traveling (Park, 2000). This custom is the reason why the most popular onboard activity for Chinese cruisers is shopping (Xu, 2016). In China, there are laws and strong regulations against any form of gambling. Thus, except for shopping, casinos are the primary attraction to Chinese tourists on board the cruise ship (CLIA, 2016a). For working people, the maximum length of one paid holiday in China is seven days, and some companies do not offer employees annual vacations. Hence, Chinese cruisers prefer short cruise trips, with the average time spent on a cruise being 4.5 nights (CLIA, 2016a).

In the hospitality industry, customers may be disappointed with services due to cultural bias (Harrison, 2011). It is crucial to understand customers' expectations prior to designing products. The majority of Chinese outbound travelers reported negative assessments of the food they were served during the trip (Project team, 2003). Long-haul Chinese travelers would like to try western food but were not willing to eat it often. By comparison, traditional Chinese food is

preferred for daily cuisine (Li et al., 2011). Regarding accommodations, Chinese tourists hope that personal cleaning amenities and hot drinks will be offered free of charge (Li et al., 2011). Additionally, about 20% of Chinese cruisers were not satisfied with the automatic service charges added to their onboard bills (Guan & Wu, 2014). On some of the big brand cruise lines, service charges are used to replace voluntary tipping (Lynn & Kwortnik, 2015), which is not a tradition in the Chinese service industry. Chinese consumers are accustomed to paying products' listed prices, and additional service charges on the cruise ships can potentially harm the satisfaction of Chinese customers.

### **Mainland Chinese Outbound Travelers' Behavior**

There are some studies on cruise travelers' behavior in general (Juan & Chen, 2012; Lekakou, Pallis & Vaggelas, 2009; Neri, Cramer, Vaughan, Vinjé & Mainzer, 2008). CLIA studies North American cruisers so they may learn more about the world largest cruise market. Huan and Chen (2012) researched Taiwanese cruisers' behaviors to understand the emerging Asian cruise market. However, limited research has been undertaken regarding Chinese cruisers' behaviors. Because China is expected to be the second largest segment of the cruise industry, there is a need for cruise operators to understand the behavioral pattern of the mainland Chinese.

The majority of cruisers in China are outbound travelers, with inbound travelers making up a small proportion of customers (Zuo, 2016). First-tier cities including Beijing, Shanghai, Guangzhou and coastal provinces such as Liaoning, Zhejiang and Tianjin generate the largest number of outbound tourists in China (World Tourism Cities Federation [WTCF], 2015). Japan, Korea and Southern Asia are the most popular destinations for mainland Chinese outbound travelers (WTCF, 2015). Since the geographic information of outbound travelers is overlap with

that of cruise travelers, research regarding Chinese outbound travelers sets a base for studying cruisers.

Most Chinese tourists, especially the elderly, travel abroad with family or friends (WTCTF, 2015). When making decisions, ‘word of mouth’ has a significant influence on Chinese tourists’ choices of outbound travel destinations (WTCTF, 2015). Due to the cultural and language barriers, Chinese outbound travelers tend to travel in groups and have high expectations of their tour guides when it comes to knowledge and language skills (Li, Lai, Harrill, Kline & Wang, 2011). In terms of consumption, over half of mainland Chinese outbound tourists spend the largest amount of their travel expenditure on shopping (Project Team, 2003). Owing to the lower price and higher quality, they prefer to buy products from famous brands (Guo, Kim & Timothy, 2007).

In summary, knowing the preferences and behavioral patterns of Chinese outbound travelers is critical to studying the behaviors of Chinese cruise tourists. Behavioral research targeting Chinese cruise tourists should be developed further.

## **Behavior Determinants**

### **Theories Regarding Behaviors**

Human behavior can be predicted by measuring behavioral intentions, which is defined as the indications of how much people are willing to make effort to perform certain behavior (Ajzen, 1991) According to the theory of reasoned action (TRA), behavioral intentions lead to the performance of certain behaviors while attitudes together with subjective norms determine behavioral intentions (Ajzen & Fishbein, 2000). An attitude is a person’s favorable or unfavorable disposition regarding a given behavior. A subjective norm is an individual’s perceived social pressure when performing or not performing a given behavior (Ajzen &

Fishbein, 2000). Although TRA has been widely used to predict human behaviors (Han, Hsu, & Sheu, 2010), consumer behavior studies in hospitality industry used the theory of planned behavior (TPB) as a more appropriate model to predict purchase behavior (Han et al, 2010; Hsu, 2013; Lam & Hsu, 2006; March & Woodside, 2005).

TPB is an extension of TRA. In terms of behavioral intention measurement, TPB incorporates perceived behavioral control as a determinant. In other words, TPB concludes that individual behavioral intention is a function of attitude, subjective norm, and perceived behavioral control (Ajzen, 1998). Perceived behavioral control refers to the ease of obtaining or consuming a certain product (Vermeir & Verbeke, 2006). It is necessary to take perceived behavioral controls into consideration when studying purchase intentions. For instance, although consumers' attitudes toward cruising and subjective norms are positive, the actual consumption intention can be low due to the inaccessibility of the cruise line. Therefore, TPB forms the basic conceptual framework of this study. Since subjective norm is found have no significant influence on tourists' intention of participating in sports tourism (Hsu, 2013), the applicability of TPB needs to be tested further in the context of cruise tourism.

In TPB, attitude is the function of the salient belief strength and the evaluation of that belief's attribute. Subjective norm is the function of the strength of a respondent's normative belief about whether important referents think he or she should perform a given behavior and the respondent's likelihood to comply with that referent. Perceived behavioral control is represented as the function of the accessibility for opportunities required to perform a given behavior and the perceived power of that control factor.

## **Consumer Attitude and Its Components**

Attitude, subjective norm, and perceived behavioral control are unlikely to be weighted equally when forming behavioral intention. In consumer behavior theories, consumer attitude is the core of consumer decision-making (Newholm & Shaw, 2007). Ajzen and Driver (1992) found that attitude is the most influential factor in leisure sports travel intentions.

As a term in consumer behavior theories, attitude is defined as “a general evaluation of a product or service formed over time” (Solomon, 2009). It is a function of consumers’ perception and evaluation of the key attributes towards an object (Schiffman & Kanuk, 1997). In the field of tourism studies; satisfaction, loyalty, and consumer personal involvement are found to be key measurements of consumer attitudes (Cohen et al., 2014). ‘Word of mouth’ (Ahmed et al., 2002) and individual attribute beliefs (Han, 1989), as components of attitudes, influence overall consumer attitudes by affecting brand attitudes.

Ragheb and Beard (1982) developed the Leisure Attitude Scale (LAS) to measure leisure or recreation attitude. LAS has been widely used in leisure sports tourism research (Hsu, 2013; Kaya, Isidori & Sarol, 2015; Teixeira & Freire, 2013). In LAS, attitude is measured through cognitive factors, affective factors, and behavioral factors, as all the components of attitude may be classified into these three categories. The cognitive component of attitudes includes the knowledge about, the perceived qualities of, the perceived value, and the benefits of the behavior. The affective component of attitudes is viewed as the liking of, the evaluation of, and the feelings toward the behavior. The behavioral component refers to the past, present and intended actions regarding the behavior (Ragheb & Beard, 1982).

## **Attitudes toward Cruises**

Past studies regarding cruise tourism identified the influence of several factors on consumers' attitude. For example, cruise customers with different extent of cruise cultural awareness hold different attitudes toward their cruise experiences. It has been found that high education level and high family income are associated with high cruise culture awareness (Ren & Li, 2014). Customers with high cruise cultural awareness expressed higher satisfaction and were more likely to recommend the cruise they took to family, friends, and co-workers (CLIA, 2014). In addition, country of origin and brand effect have positive relationships with cruise consumer attitudes (Ahmed et al, 2002).

## **Cruise Purchase Intentions**

Customers' consumption directly contributes to company profit, especially in the tourism industry where the cost of service is relatively fixed. March and Woodside (2005) suggested that tourist realized consumptions were generally more than planned, and a positive correlation existed between realized and planned tourism behavior. Therefore, marketers can predict consumer realized cruise behaviors by testing behavioral intentions.

Unlike airlines or hotels, cruises sell big-ticket packages that require a longer period to consume. Once a cruise journey begins, passengers must put up with any dissatisfactory service until debarkation. Thus, cruise consumers take the decision-making process seriously. They would like to spend time comparing different product packages rather than make quick purchase decisions (Ahmed et al, 2002). Past studies suggest that various factors affect consumers' cruising intentions. Satisfaction, perceived value (Duman & Mattila, 2005), brand perception (Ahmed et al, 2002), loyalty (Li & Petrick, 2008), and perceived image of cruise travel (Petrick, 2006) directly influence consumers' cruise purchase intention. Quality, value, and satisfaction

largely affect re-purchase behavior (Petrick, 2004). Other factors, including price sensitivity (Petrick, 2005), critical incidents (Petrick & Li, 2006), and familiarity (Petrick, Li & Park, 2007) influence cruise consumers' decision-making processes. Additionally, hedonism or pleasure is strongly linked to cruise tourists' behavioral intentions (Duman & Mattila, 2005).

Studies have identified several factors influencing the purchase decisions made by Chinese cruise passengers. Chinese cruisers are price-sensitive and prefer discounted packages (Xu, 2016). When selecting a cruise trip, spouses or travel companions are the most influential information sources for consumers (Jones, R. V., 2011; Teye & Leclerc, 2003). As nearly all Chinese cruisers took onshore excursions, onshore travel agents significantly influenced Chinese customers' choice of cruises (Royal Caribbean International, 2013).

Fan and Hsu (2014) explored the influence of expectation and motivations on Chinese consumer's intention of taking cruises. However, studies regarding the influence of consumer attitudes toward cruises on cruise purchase intentions are lacking. Attitudes have been found to have a functional relationship with behavioral intention (Hsu, 2013; Ahmed et al, 2002; March & Woodside, 2005; Hung & Petrick, 2011, Petrick et al, 2007). In general, a positive overall attitude leads to strong behavioral intentions. However, limited research has been undertaken in the context of cruise lines. Current attitude studies in cruise tourism focus on the attitudes of residents who live in cruise destination cities (Brida et al., 2012; Del Chiappa & Abbate, 2012; Litvin, Luce & Smith, 2013; Shone, Wilson, Simmons & Stewart, 2014; Stewart et al., 2011). Existing and potential customers' attitudes should be of concern to cruise operators.

In summary, China is experiencing rapid market growth in terms of cruise tourism. To develop the Chinese market, cruise operators should understand the factors that drive Chinese consumers' cruise intentions. Attitude has been identified as a crucial factor that influences

tourists' cruise intentions, but little effort has been made to study the attitude-behavior relationships in the field of cruise tourism.

To conduct research in this area, TPB is an appropriate model to test the formation of cruise purchase intention, and LAS can be applied to measure the components of attitude.

### **Conclusion and Hypotheses**

Previous research about cruise consumer behavior mainly focus on customer motivation and satisfaction. However, research investigating consumer attitudes toward cruises is rare. In the field of cruise tourism, no study explores the relationship between attitudes and purchase intentions. This study fills the gap by investigating the influence of consumer attitudes on cruise purchase intentions in the context of the Chinese market.

Since the study employs TPB model, each factor of behavioral intentions is hypothesized to have an influence on cruise purchase intentions. Specifically, the intentions of cruise purchase are measured by the willingness and the likelihood of cruise in this study.

Chinese cruisers are over 10 years younger than North American cruisers (Ren & Li, 2014). Therefore, it is hypothesized that the younger generation in China has a stronger intention of taking cruises. As cruises in China are enjoyed by affluent demographics (Wee, 2016; Fry & Kochhar, 2016), it is expected that those who have higher income have stronger intentions of purchasing cruises. Since half of the Chinese cruisers are from first-tier cities (Xu, 2016), it is hypothesized that consumers from developed cities have stronger cruise purchase intentions.

Based on the literatures discussed above, the following nine hypotheses are proposed:

H1 Consumer attitude produces a positive effect on the willingness of taking cruises.

H2 Subjective norm produces a positive effect on the willingness of taking cruises.

H3 Perceived behavioral control produces a positive effect on the willingness of taking cruises.



H4 Consumer attitude produces a positive effect on the likelihood of taking cruises.

H5 Subjective norm produces a positive effect on the likelihood of taking cruises.

H6 Perceived behavioral control produces a positive effect on the likelihood of taking cruises.

H7 Young adults hold more positive attitude than middle-aged adults toward taking cruises.

H8 Consumers with higher income hold more positive attitude toward taking cruises.

H9 Consumers from first-tier cities hold more positive attitude toward taking cruises.

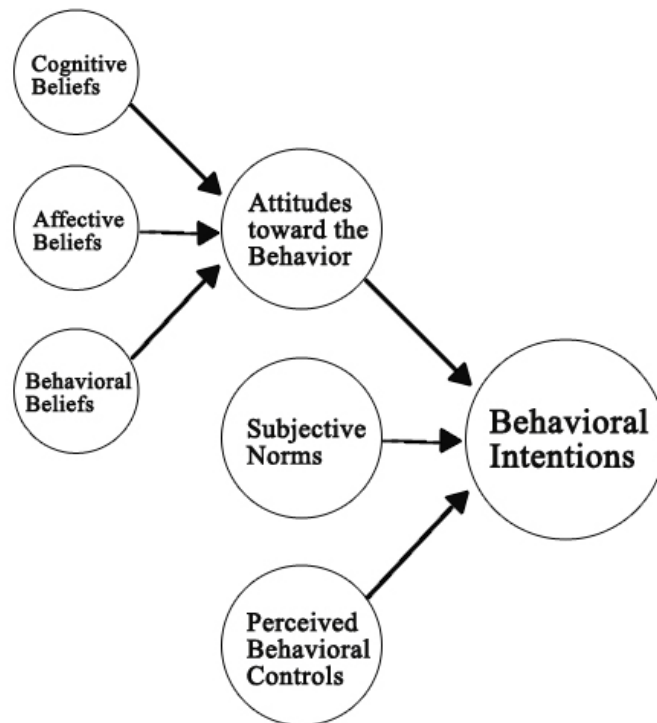
**CHAPTER 3**  
**METHODOLOGY**

**Introduction**

This chapter describes the methodology employed by this study. The theoretical framework is presented first, followed by the design of the research. The methods of data collection and analysis are explained at the end of this chapter.

**Theoretical Framework**

This study uses the modified model of the theory of planned behavior (TPB) to test consumer's purchase intention of cruises. Purchase intention is predicted by measuring attitudes (A), subjective norms (SN), and perceived behavioral controls (PBC). Figure 1 is an illustration of all the factors influencing behavioral intention, and this model was applied in this study.



*Figure 1.* Theoretical Framework of Behavioral Intention Assessment.

The attitude towards certain behavior refers to the degree of favor that a consumer has toward performing the given behavior. The measurements of attitude consist of cognitive beliefs, affective beliefs, and behavioral beliefs. The cognitive component of attitude includes the knowledge about, the perceived qualities of, the perceived value, and the benefits of the behavior. The affective component of attitude is viewed as the likings of, the evaluations of, and the feelings toward the behavior. The behavioral component refers to the past actions regarding the behavior and the intentions to recommend the behavior to others.

The subjective norm indicates the social norms that are important to consumers when performing a given behavior. The influence of SN is associated with the extent of approval presented by the 'important others' regarding performing the behavior.

The perceived behavior control refers to the resources and opportunities to perform a given behavior. The influence of PBC is concerned with the ability and the accessibility to perform the behavior. Behavioral intention, which is a function of attitude, SN and PBC, can lead to the actual behavior.

### **Research Methodology**

The research of this study was non-experimental, as it studied the relationship between consumers' attitudes and purchase intentions. The independent variables in this study were: Chinese consumers' attitudes toward taking cruises, which ranged from extremely positive to extremely negative, subjective norms about taking cruises, which ranged from extremely strong to extremely weak, and consumers perceived behavioral controls of cruises, which ranged from extremely positive to extremely negative. The dependent variables were the consumers' willingness of taking cruises and likelihood of taking cruises. This study utilized a questionnaire survey as the research tool. SPSS and Amos were used to analyze the collected data.

## **Subjects**

This research investigated cruise attitudes and purchase intention of consuming decision makers, so the subject of this survey study was Chinese outbound travelers whose age were 23 or above. The population included females and males, inland city citizens and coastal city citizens. The subjects were at various ages and came from various cities of China. Bryant and Yarnold (1995) stated that the subjects-to-variables ratio should be no lower than 5:1. Since there were 41 variables in the questionnaire, this study obtained more than 205 useable responses as the sample. The survey questionnaire was set up on So jump, which was the most popular online survey tool in China. The questionnaires were distributed to registrants of So jump through email, and the respondents were volunteers. Respondents had the opportunity to get rewards offered by So jump in return for their participation.

## **Ethical Considerations**

Using humans as the research subjects, this research has gotten approval from the Institutional Review Board (IRB). The research project application was submitted to the IRB and the research was conducted after approved by the IRB.

## **Design**

Initially, an elicitation survey was administered to selected respondents to develop the belief-based measures in the questionnaire for the main study (Ajzen, 1991). After the first draft of the questionnaire had been created, a pilot study was performed to test all presented items. The questionnaire was then revised according to the responses obtained from the pilot study.

### **Elicitation Study**

The elicitation study was conducted through individual interviews. During the interview, the participants were invited to answer four open-ended questions regarding cognitive belief,

affective belief, subjective norm, and perceived behavior control. They were asked to answer (a) the advantages and disadvantages of taking cruises, (b) their like and dislike about taking cruises, (c) the individuals or groups who might affect their decisions of taking cruises, (d) the factors or circumstances that might facilitate or inhibit them from taking cruises.

### **Subject**

The subjects of the elicitation study were the Chinese who had taken a cruise in the past. 20 individuals were invited to elicit salient beliefs including behavioral outcomes, normative referents, and control factors. To be qualified as the subject of the elicitation study, participants should have taken a cruise in the past. The subjects were a convenience sample, consisting of the friends of the researcher.

### **Design**

The items in the elicitation study were created under the construction of typical TPB questionnaire (Fishbein & Ajzen, 2010).

### **Introduction**

Hello, I am a graduate student at the University of Nevada, Las Vegas, and I am conducting a study of attitudes toward cruises. I am curious to find out your perceptions of taking a cruise and the possibility you may take a cruise. There are no right or wrong responses, I am merely interested in your personal opinions. I would greatly appreciate your responses to the following questions.

### **Interview Questions**

1. In your opinion, what are the advantages of taking cruises?
2. In your opinion, what are the disadvantages of taking cruises?
3. What are your views on taking cruises?

4. In your opinion, what do you like about taking cruises?
5. In your opinion, what do you dislike about taking cruises?
6. What are your feelings about taking cruises?
7. Please list individuals or groups who would approve of you taking cruises.
8. Please list individuals or groups who would disapprove of you taking cruises.
9. Is there anything else you associate with other people's views about taking cruises?
10. In your opinion, what factors or circumstances would enable you to take cruises?
11. In your opinion, what factors or circumstance would make it difficult for you to take cruises?
12. Are there any other issues that come to mind when you think about taking cruises?

### **Procedure**

The study was conducted by performing face-to-face interviews, where each took less than 15 minutes. The responses were expected to be collected within one week. When analyzing the data, the responses were first combined by similarity, and then used as the basis to generate salient beliefs.

### **Instrument**

The elicitation study was instrumental in the design of the attitude survey. As an elicitation method in tourism research, personal interviews were employed (Reilly, 1990).

### **Analysis**

A content analysis was used to combine and screen the data. The responses were first categorized by similarity. Responses, in accordance with the theme under which the questions

were created, were screened for usable responses. Qualified responses were used as the basis to create salient beliefs.

### **Validity**

The sample of the elicitation study consisted of Chinese people that had taken the cruise in the past. They were from various cities, as well as at various income and education levels. Since the sample profile was similar to the population of interest, it might be considered as an accurate representation.

To increase the content validity, the questions in the elicitation study were created using the recommended constructs presented by Fishbein and Ajzen (2010).

### **Pilot study**

To pre-test the items in the questionnaire, the participants of the elicitation study were invited to complete the first-draft questionnaire and comment on the items in the following aspects.

1. Are there any statements ambiguous or hard to understand?
2. Are there any items difficult to answer?
3. Are there any unpleasant features of the wording or formatting?

### **Main Study**

#### **Questionnaire design**

The questionnaire was designed with three parts and six categories of items measuring past travel behaviors, attitudes, subjective norms, perceived behavioral controls, purchase intentions and demographics. Questions measured attitudes by inquiring cognitive beliefs, affective beliefs and behavioral beliefs. All items were constructed in accordance with the application of TPB in measuring leisure behavior (Ajzen & Driver, 1992). In the opening

instructions of the questionnaire, a thorough description of the cruise was given. At the beginning of the questionnaire, a screening question was proposed to screen qualified respondents. Next, respondents' travel experiences were asked in the first part of the questionnaire. The second part of the questionnaire explored purchase intentions and their factors.

Following the measurement methods in TPB, each belief in attitudes, subjective norms and perceived behavioral controls was measured by a pair of questions inquiring the evaluation of the belief and the strength of that belief. For statements regarding evaluation of the beliefs, the responses were measured by the degree of agreement. For statements regarding the power of the beliefs, the responses were measured either by importance or likelihood.

A 7-point Likert scale was used to measure each item in part two. After the survey respondents indicated the extent to which they endorse the statements, each response was assigned a value. In this step, each item was assigned a numerical score from a unipolar scoring system (1 to 7).

## **Procedure**

The survey questionnaire was created based on TPB and LAS (See Appendix A). After set up in So jump, emails were distributed by So jump to respondents registered in its database. So jump collected the data from at least 205 qualified responses in a two-week period.

## **Instrument**

A brief introduction of cruise is given in the questionnaire instructions, followed by a screening question. If qualified as a past outbound traveler, the respondent was able to continue with the survey; if not, the respondent was terminated and unable to answer the following questions.



There were three parts in the questionnaire. Part one asked about past travel experiences. Part two used three charts to measure attitude, subjective norm, perceived behavioral control, and cruise purchase intentions.

Attitude (A) was in direct proportion to the summative belief index  $b_i e_i$ , where  $b_i$  was the belief that certain behavior would result in consequence  $i$  and  $e_i$  was the evaluation of consequence  $i$ . In the questionnaire, question 1 to 12 in chart 1 measured  $b_i$  while question 1 to 12 in chart 2 measured  $e_i$ . In chart 1 specifically, question 1 to 4 measured cognitive beliefs, question 5 to 8 measured affective beliefs and question 9 to 12 measured behavioral beliefs.

Subjective norms (SN) was directly proportional to the sum of the influence index  $n_j m_j$  across the  $n$  referents, where  $n_j$  was the normative belief that important referent  $j$  think the respondent should conduct certain behavior and  $m_j$  was the respondent's motivation to comply with the referent  $j$ . In the questionnaire, question 13 to 15 in chart 1 measured  $n_j$  and question 1 to 3 in chart 3 measured  $m_j$ .

Perceived behavioral control (PCB) was directly proportional to the sum of each control index  $c_k p_k$ , where  $c_k$  was the accessibilities for resource or opportunity  $k$  required to engage in certain behavior and  $p_k$  was the perceived power of the control factor  $k$ . In the questionnaire, question 16 to 19 in chart 1 measured  $c_k$  and question 4 to 7 in chart 3 measured  $p_k$ .

The intentions of taking cruises are evaluated through question 20 and 21 in chart 1.

Questions in part two were measured by 7-point Likert scale, while each answer was assigned a value from a 1 to 7.

The third part of the questionnaire recorded the demographic information of respondents. The questionnaire was attached as appendix A.

## **Data Analysis**

Collected data was processed in four phases. In phase one, the first step was to provide a profile of the survey sample by analyzing demographic data in SPSS. The frequency of each subgroup under every demographic category was presented. The second step intended to provide an overview of the data using descriptive statistics. Statistical data description was generated in SPSS. Statistics of frequency, mean, median, standard deviation, and skewness were presented.

The second phase was to perform confirmatory factor analysis (CFA) in Amos to test the construct validity and reliability prior to test the measurement model. In practice, the CFA used each the product of each belief and its evaluation as a parcel to form a latent variable. When the reliability was not strong enough, the outliers were eliminated to increase the reliability. In terms of the analysis results, items violating the assumptions of the general linear regression model were eliminated.

Aiming to explore the formation of cruise purchase intention, the third phase used SPSS to run multiple linear regression analysis. Multiple regression analysis is a powerful technique that predict the dependent variable from two or more independent variables. Therefore, this technique was adopted to explore the relationship between variables and test hypotheses one through six.

The last phase was to perform one-way ANOVA in SPSS to test hypotheses seven through nine by examining the difference of attitudes and intentions among different demographic groups.

## **Validity and Reliability**

To increase the content validity, the salient beliefs in the questionnaire were developed from the elicitation study and the literature review (Ragheb & Beard, 1982). The questionnaire

was originally designed in the English language and then translated into Chinese by native Chinese speakers. A back-translation process was applied to address any miscommunication caused by language differences.

## **CHAPTER 4**

### **RESULTS**

#### **Introduction**

This chapter briefly analyzed the results of the elicitation study before presenting the results of the main study. Using the data collected from the main study, a confirmatory factor analysis was performed (CFA) to test the construct validity of the proposed model; however, the proposed construct was found to be invalid. An exploratory factor analysis (EFA) was then performed to uncover the underlying model. A model comprised attitudes, personal concerns and perceived behavioral control was discovered. The data analysis for the main study was based on the modified model.

#### **Elicitation Study**

The frequently mentioned items were classified and converted into statements in the questionnaire. Fishbein and Ajzen (2010) suggested that items mentioned by at least 20% of the respondents in the elicitation study be reserved and 75% of reserved items be used to generate salient beliefs. As there were 20 respondents that participated in the personal interviews, elements mentioned by at least 4 interviewees were reserved. The frequency of each element shows that under the category of attitudes (A), the elements in Table 2 were reserved and the first four elements under each belief were extracted to generate statements.

Since at least 3 items were needed to measure one attribute, under the category of affective attitudes belief, subjective norms (SN) and perceived behavioral controls (PBC), all the items mentioned by at least 20 percent of the respondents were extracted (See Tables 2 and 3). Based on the extracted elements, the items presented in the questionnaire were created (See Appendix A).

Table 2

*Extracted Attitudes Elements*

Belief	Elements	f	%
Cognitive			
	Convenience	15	75
	Relationship enhancement	15	75
	Safety	9	45
	Fixed itinerary	6	30
	Room space	5	25
	Telecommunication	4	20
Affective			
	Fun	18	90
	Pleasant	10	50
	Relax	8	40
	Novelty	5	25
Behavioral			
	Enjoy the sea and the beach	17	85
	Enjoy the food	17	85
	Visit many places through one journey	12	60
	Experience language barrier	7	35
	Enjoy activities on board	5	25
	Eat unhealthily	4	20

Table 3

*Extracted SN Elements and PBC Elements*

Category	Element	f	%
Subjective Norm	Self	13	65
	Family members	10	50
	Travel agency	7	35
	Friends	5	25
Perceived Behavioral Control	Cost	7	35
	Transportation	14	70
	Time available	7	35
	Companions	10	50

**Main Study****Data Processing**

Collected data were processed in SPSS 24.0. The questionnaire employed a screening question asking whether the respondent had traveled outside of China in the past five years. Respondents that failed to pass the screening question were removed from the data set. In addition, responses contain outliers and straight-line answers were removed. Out of 259 responses, 229 responses were retained as usable data.

Answers to all the questions were coded to numbers. Answers regarding demographic information were coded to natural numbers. Measured by 7-point Likert scales, statements under each construct components were coded from one through seven in numbers. Since two questions were used to measure one belief, the value of each belief was measured by a parcel which was

the product the two coded answers. To make the data reader-friendly, the parcels were coded to the square root of the calculated value. Furthermore, answers regarding purchase intentions were coded from one through seven in numbers.

For questions asking the belief of language barrier and the importance of unfixed itinerary in travel, answers were reverse coded. When analyzing those answers, high values indicated less impact of language barrier or less dislike of fixed itinerary.

## **Data Description**

### **Demographic Description of the Sample**

Table 4 presents the demographic backgrounds of the respondents. Demographic groups with frequencies less than 10 were merged. The sample represented more females (56.8%) than males (43.2%). The majority (62%) of the respondents were between 23 and 34 years old. More than half of them were married (54.6%). Respondents were well educated, with 95.2% of them holding a college degree or higher. Company employee (50.7%) represented the most popular occupation. Most of the respondents (86.5%) had household incomes higher than 5,000 Chinese Yuan (RMB) monthly and more than half of them (58.1%) had incomes ranging from 5,000 RMB (714 USD) to 19,999 RMB (2,857 USD). With respondents living in 49 different cities, nearly one-third lived in first-tier cities including Beijing, Shanghai and Guangzhou. Concerning cruise experiences, 40.6% of the respondents indicated that they had previously taken a cruise and 11.3% had taken more than once.

Table 4

*Demographic Profile of Sample (n = 229)*

Variable	Value	f	%
Gender	Male	99	43.2
	Female	130	56.8
Age (years)	23-34	142	62.0
	35-44	21	9.2
	45-54	36	15.7
	55-64	20	8.7
	65 and above	10	4.4
Marital status	Never been married	104	45.4
	Married	108	47.2
	Separated/Divorced/Widowed	17	7.4
Occupation	Company employed	116	50.7
	Self employed	32	14.2
	Retired	27	11.8
	Student	43	18.8
	Homemaker	11	4.8
Household monthly income (RMB)	Less than 5,000	31	13.5
	5,000-9,999	65	28.4
	10,000-19,999	68	29.7
	20,000-29,999	30	13.1
	30,000 and above	35	15.3
Education level	High school and below	11	4.8
	Associate degree	33	14.4
	Bachelor degree	122	53.3
	Master degree and above	63	27.5
Residency	First-tier city	68	29.7
	Other cities	161	70.3
Have ever taken a cruise before?	No	136	59.4
	Once	67	29.3
	Twice	14	6.1
	More than twice	12	5.2

*Note:* 1 U.S. dollar = approximately 6.9 RMB.

### **Factor Analysis and Model Modification**

A confirmatory factor analysis was conducted in SPSS Amos to test the construct validity. The Goodness-of-fit indicators suggested that the construct of the research failed to fit



the theory of planned behavior (see Table 5). The model had poor goodness of fit and no discriminant validity (factor cross loading>0.3). This outcome is reasonable as this study applied TPB on a new research subject, which is cruise tourism. Since the items in the questionnaire were adapted for cruise tourism under the Chinese culture, the model fit could be poor.

Table 5

*Confirmatory Factor Analysis for Cruise Purchase Intentions (n = 229)*

$\chi^2$	df	$\chi^2/df$	CFI	RMSEA
1302.218	152	8.567	0.451	0.182

Therefore, an exploratory factor analysis was performed to uncover the underlying structure of the variables. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is 0.918 and the Bartlett’s test of sphericity is significant (sig=0.000), which implied that the data passed the standard of conducting a factor analysis. The scree plot indicated that the variables constituted three correlated factors. The factor loadings (See Table 6) showed the results of the principal component analysis which was carried out with oblique rotation.

Three variables, namely convenience, family approval and friends’ recommendation, were suggested to be dropped as their factor loadings were below 0.5. Treating the variables under each component as one factor, the three factors were discriminated from one another. Component 1 could be concluded as “attitudes,” as all the items in this category were in the proposed model. Component 2 could be concluded as “personal concerns,” since language, food, itinerary and travel agency suggestions were concerns for individuals before they make cruise purchase decisions. Component 3, whose contents were same with that in the proposed model, was “perceived behavioral controls. “

Table 6

*Exploratory Factor Analysis -- Factor Loadings of the Independent Variables<sup>a</sup>*

Independent Variables	Component		
	1	2	3
Fun	0.94		
Pleasant	0.88		
Relax	0.76		
Novelty	0.70		
Safety	0.64		
Relationship enhancement	0.59		
Visit sea and beach	0.57		
Visit many places within one trip	0.50		
Convenience			
Language barrier		0.77	
Food		0.72	
Fixed itinerary		0.62	
Agency suggestion		0.60	
Family approval			
Friends recommendation			
Cost			0.52
Transportation			0.75
Time available			0.83
Travel companion			0.63

*Note:* Extraction Method: Principal Component Analysis; Rotation Method: Oblimin with Kaiser Normalization; <sup>a</sup>Rotation converged in 10 iterations.

The reliability of the underlying construct was measured with the help of Cronbach's alpha test. Cronbach's alpha was calculated to measure the internal consistency and reliability of the instrument. The Cronbach's alpha values came as above 0.7 as shown in table 7, thus the construct was considered reliable for the study.

Table 7

*Reliability Statistics*

Components	Cronbach's Alpha	n
Attitudes	0.906	8
Concerns	0.779	4
Perceived behavioral control	0.738	4

In conclusion, the research tool in this study failed to fit the TPB model as the component of subjective norm was missed. Using EFA, the underlying construct of the research instrument was found and would be used for further investigation.

### **Description of Attitudes, Personal Concerns and Perceived Behavioral Control**

Respondents were asked about opinions related to taking cruises. Table 8 shows the means and standard deviations of the responses concerning the components of the construct. In general, respondents had positive attitudes towards cruise taking. Attitudes and perceived behavioral controls favored respondents in taking cruises. Pleasant was scored the highest (mean=5.90), followed by relax (mean=5.75) and safety (mean=5.73). Among all the concerns, language barrier had an obvious lower mean of 4.56 compared to the others. Results indicate that cruises were perceived as pleasant and relax. Respondents saw cruises as a safe way of travel, while language barrier as a major concern. The food on the cruise and the fixed itinerary of the cruise were found to be minor concerns. The means of all the PBC items are above 5, representing that the external conditions facilitated cruises taking. The mean of cruise purchase intention was 5.22, and the means of its components shows that the likelihood of taking a cruise during a recent timeframe (mean=5.10) was lower than the will of taking a cruise (mean=5.33).

Table 8

*Description of Constructs Components*

Components	Items	M	SD
Attitudes		5.64	0.81
	Safety	5.73	0.95
	Relationship enhancement	5.70	1.06
	Relax	5.75	1.08
	Novelty	5.42	1.04
	Fun	5.62	1.04
	Pleasant	5.90	0.97
	Visit many places within one trip	5.45	1.10
	Visit sea and beach	5.57	1.08
Concerns		4.76	1.01
	Fixed itinerary	4.92	1.27
	Food	4.94	1.37
	Language barrier	4.56	1.42
	Agency suggestion	4.62	1.14
PBC		5.30	0.82
	Cost	5.49	0.91
	Transportation	5.18	1.14
	Time available	5.20	1.14
	Travel companion	5.35	1.19
Purchase Intention		5.22	1.36
	Want to take a cruise	5.33	1.32
	Likelihood of taking a cruise in the next 3 years	5.10	1.60

Concerning the intention of taking a cruise, 77.3% of respondents indicated they would like to take a cruise, while 65.9% indicated they would probably take a cruise in the upcoming three years. Only 9.2% expressed that they would not like to take a cruise and 14.4% were unlikely to take a cruise in the next three years. The results indicate that the cruise market in China has a huge potential and most people are likely to take a cruise in the short future. The results further confirmed the significant potential of the Chinese cruise market (Dowling, 2006; Xu, 2016).

The rated importance of attitude items represents the significance of each attitude belief

hold by respondents (See Table 9). Results show that travelers lay emphasis on the safety (mean=6.52) and the pleasant (mean=6.26) of the travel. The importance rating of the concern items indicates that the respondents did not favor fixed travel itinerary (mean=4.55) and barely consider the suggestion from the travel agency (mean=4.56).

Exploring the external factors, table 9 shows the importance of each PBC items. Time was considered as the most important factor when making cruise purchase decisions. Transportation was the least important factor comparing to cost, time and the availability of travel companions.

Table 9

*Importance of Constructs' Components*

Component	Item	M	SD
Attitudes	Safety	6.52	0.92
	Relationship enhancement	5.61	1.22
	Relax	5.93	1.21
	Novelty	5.40	1.21
	Fun	5.79	1.10
	Pleasant	6.26	0.94
	Visit many places within one trip	5.25	1.45
	Visit sea and beach	5.37	1.33
Concerns	Fixed itinerary	4.55	1.52
	Food	4.80	1.68
	Language barrier	5.04	1.65
	Travel agency's suggestion	4.56	1.39
PBC	Cost	5.68	1.11
	Transportation	5.55	1.14
	Time available	5.96	1.10
	Travel companions	5.79	1.32

**Multiple Linear Regression Analysis**

To investigate the effect of influence factors on cruise purchase intentions, two multiple linear regression analysis were conducted between independent variables and dependent

variables. In both analysis, the means of attitude beliefs, concerns and PBCs were input as factors. The will of taking the cruise and the likelihood of taking the cruise in three years were input as the dependent variable respectively. Table 10 shows the coefficients of the regression model concerning attitude, concern, PBC and the will of taking the cruise. The model ( $R^2=0.366$ ) could predict one-third of the variability of the response data. With a F value of 43.344, the result was statistically significance ( $P=0.000$ ), which indicated that the result had not happen by chance. PBCs had a higher coefficient ( $B=0.631$ ) than attitudes ( $B=0.369$ ) and concerns ( $B=0.115$ ), indicating PBC had stronger influence than attitudes and concerns on the willingness of taking the cruise.

Table 10

*Multiple Linear Regression Analysis for the Willingness of Taking the Cruise*

	Unstandardized coefficients		Standardized coefficients	
	B	Std. Error	Beta	Sig.
Constant	- 0.65	0.547		0.236
Attitudes	0.369	0.115	0.226	0.002**
Concerns	0.115	0.092	0.088	0.210
PBCs	0.631	0.103	0.395	0.000***

*Note:* \*\* $p<0.01$ . \*\*\* $p<0.001$ .

By testing the assumption of the regression models for purposes of inference, this model was found to be acceptable. The four major assumptions of liner regression model lie in sample size, multicollinearity and singularity, outlier and normality. The sample size of the subjects should be no less than 205, as the questionnaire has 41 variables and each variable should have at

least 5 participants. This study has a sample size of 229, which met the requirement of the research sample size.

The collinearity statistics (See Table 11) show that none of the independent variable were correlated with a tolerance value greater than 0.9, which met the assumption that the independent variables were not highly correlated. The VIF values were between 1 and 5, indicate some correlation between the factors, but not enough to be overly concerned about. The results indicate that the assumption of multicollinearity and singularity has been met.

Table 11

*Collinearity Statistics*

	Tolerance	VIF
Attitudes	0.566	1.766
Concerns	0.574	1.743
PBCs	0.676	1.480

There was no outlier in the data set since the Cook’s distance was lower than 1 (See Table 12). Besides, the residual was normally distributed. The assumption of linearity and homoscedasticity were met.

Table 12

*Residual Statistics*

	Minimum	Maximum	M	SD	N
Std. Residual	-3.090	2.808	0.000	0.993	229
Cook’s Distance	0.000	0.118	0.006	0.013	229

Table 13 shows the coefficients of the regression model concerning attitude, concern, PBC and the likelihood of taking the cruise in the next three years. The model ( $R^2=0.541$ ) could predict over half of the variability of the response data. With a F value of 88.342, the result was statistically significance ( $P=0.000$ ), which indicated that the result had not happen by chance. The coefficient value of PBC was 1.242, while that of attitude was 0.195 and that of personal concern was 0.112). The result suggests that PBC had the strongest influence among the three factors on the likelihood of taking the cruise in the next three years.

Table 13

*Multiple Linear Regression Analysis for the Likelihood of Taking the Cruise*

	Unstandardized coefficients		Standardized coefficients	
	B	Std. Error	Beta	Sig.
Constant	-3.12	0.566		0.000***
Attitudes	0.195	0.119	0.098	0.103
Concerns	0.112	0.095	0.070	0.239
PBCs	1.242	0.107	0.638	0.000***

Note: \*\*\* $p<0.001$ .

This model was acceptable as it met the assumptions of regression models.

In conclusion, PBC has the strongest influence on the willingness and the likelihood of taking the cruise, while it plays a more significant role in the latter. Attitudes become less important when predicting the likelihood of taking the cruise. On cruise purchase intentions, the possibility to realize the intention has more influence than attitudes.

### **One-way Analysis of Variance**

In order to determine if differences exist in attitudes, concerns, perceived behavioral



controls and cruise purchase intentions among demographic groups, one-way analysis of variance (ANOVA) were used. The 0.05 level was chosen for the significance criterion. Bonferroni post hoc comparison was performed to explore where the significant differences lie. No significant difference in any of the items was found among groups featuring different gender (See Table 14) or family income (See Table 15).

Table 14

*One-way ANOVA for Gender Groups*

Component	Male (n=99)	Female (n=130)	df	F value	P value
Attitude	5.66	5.67	1	0.12	0.726
Concerns	4.80	4.73	1	0.25	0.615
PBC	5.30	5.30	1	0.00	0.999
Intention	5.19	5.23	1	0.06	0.815

Table 15

*One-way ANOVA for Income Groups*

Component	Under 5,000 (n=31)	5,000-9,999 (n=65)	10,000-19,999 (n=68)	20,000-29,999 (n=30)	30,000 and above (n=35)	df	F value	P value
Attitude	5.57	5.68	5.68	5.61	5.59	4	0.18	0.947
Concerns	4.70	4.64	4.92	5.05	4.49	4	1.93	0.106
PBC	5.21	5.22	5.32	5.41	5.43	4	0.62	0.647
Intention	5.24	5.01	5.29	5.32	5.36	4	0.56	0.693

Table 16 shows the difference among age groups. Middle age groups (age between 45 and 64) had more positive attitude towards cruise taking than those in their young adulthood (age between 23 and 44) ( $F=5.17$ ,  $P=0.001$ ). With a low concern evaluation score (mean=4.42), respondents age between 23 and 34 had significant more concerns about taking cruises than those in other age groups ( $F=12.92$ ,  $P=0.000$ ). They also perceived less positive behavioral control (mean=5.14) toward taking cruise than respondents age between 45 and 54 (mean=5.63) ( $F=4.36$ ,  $P=0.002$ ). Besides, respondents age between 45 and 54 had higher intention of cruise purchase (mean=5.89) than those between 23 and 34 (mean=4.95) ( $F=4.77$ ,  $P=0.001$ ).

Table 16

*One-way ANOVA for Age Groups*

Component	23-34 (n=142)	35-44 (n=21)	45-54 (n=36)	55-64 (n=20)	65 and above (n=10)	df	F value	P value
Attitude	5.48 <sub>a</sub>	5.69 <sub>a</sub>	5.98 <sub>b</sub>	6.13 <sub>b</sub>	5.67 <sub>ab</sub>	4	5.17	0.001**
Concerns	4.42 <sub>a</sub>	5.07 <sub>b</sub>	5.37 <sub>b</sub>	5.50 <sub>b</sub>	5.19 <sub>ab</sub>	4	12.92	0.000***
PBC	5.14 <sub>a</sub>	5.50 <sub>ab</sub>	5.63 <sub>b</sub>	5.67 <sub>ab</sub>	5.38 <sub>ab</sub>	4	4.36	0.002**
Intention	4.95 <sub>a</sub>	5.38 <sub>ab</sub>	5.89 <sub>b</sub>	5.78 <sub>ab</sub>	5.10 <sub>ab</sub>	4	4.77	0.001**

*Note:* \*\* $p<0.01$ . \*\*\* $p<0.001$ .

Table 17 presents the differences among marital status groups. Respondents who had never married reported significant lower attitudes score ( $F=11.64$ ,  $P=0.000$ ) and cruise purchase intention ( $F=6.14$ ,  $P=0.003$ ) than those who married. They also had more concerns ( $F=43.99$ ,  $P=0.000$ ) and less positive perceived behavioral controls ( $F=5.66$ ,  $P=0.004$ ) than respondents from other groups.

Table 17

*One-way ANOVA for Marital Status Groups*

Component	Never Married (n=104)	Married (n=108)	Separated/ Divorced/ Widowed (n=17)	df	F value	P value
Attitude	5.37 <sub>a</sub>	5.88 <sub>b</sub>	5.77 <sub>ab</sub>	2	11.64	0.000***
Concerns	4.19 <sub>a</sub>	5.18 <sub>b</sub>	5.61 <sub>b</sub>	2	43.99	0.000***
PBC	5.12 <sub>a</sub>	5.43 <sub>b</sub>	5.67 <sub>b</sub>	2	5.66	0.004**
Intention	4.88 <sub>a</sub>	5.48 <sub>b</sub>	5.62 <sub>ab</sub>	2	6.14	0.003**

*Note:* \*\*p<0.01. \*\*\*p<0.001.

Table 18 describes the one-way ANOVA results for employment groups. Retired people had the more positive attitude towards cruise taking than students (F=3.08, P=0.017). Students and company employees had more concerns than people who did not worked for others (F=10.32, P=0.000). In addition, these two groups of people perceived stronger behavioral controls than self-employees (F=3.37, P=0.011). Regarding cruise purchase, self-employees had stronger intentions than students (F=3.04, P=0.018). In general, self-employees and retired people are more time flexible than company employees and have more spare money than students. Therefore, they had stronger cruise purchase intentions.

Table 18

*One-way ANOVA for Employment Groups*

Component	Company employed (n=116)	Self- employed (n=32)	Retired (n=27)	Student (n=43)	Home maker (n=11)	df	F value	P value
Attitude	5.61 <sub>ab</sub>	5.87 <sub>ab</sub>	5.97 <sub>a</sub>	5.38 <sub>b</sub>	5.50 <sub>ab</sub>	4	3.08	0.017*
Concerns	4.65 <sub>a</sub>	5.23 <sub>b</sub>	5.39 <sub>b</sub>	4.18 <sub>a</sub>	5.24 <sub>b</sub>	4	10.32	0.000***
PBC	5.23 <sub>a</sub>	5.72 <sub>b</sub>	5.49 <sub>ab</sub>	5.12 <sub>a</sub>	5.11 <sub>ab</sub>	4	3.37	0.011*
Intention	5.17 <sub>ab</sub>	5.70 <sub>a</sub>	5.65 <sub>ab</sub>	4.78 <sub>b</sub>	4.95 <sub>ab</sub>	4	3.04	0.018*

*Note:* \* $p < 0.05$ . \*\*\* $p < 0.001$ .

Table 19 presents the difference among groups that at different education level. Respondents with an associate degree or below scored higher than those with master's degrees or above in the attitude towards cruise (F value=4.73, P=0.003) and the concerns regarding cruise taking (F=6.97, P=0.000). But no significant difference was found among groups in perceived behavioral controls and cruise purchase intentions.

Table 19

*One-way ANOVA for Education Groups*

Component	High school and below (n=11)	Associate degree (n=33)	Bachelor degree (n=122)	Master degree and above (n=63)	df	F value	P value
Attitude	6.18 <sub>a</sub>	5.84 <sub>a</sub>	5.68 <sub>ab</sub>	5.38 <sub>b</sub>	3	4.73	0.003**
Concerns	5.44 <sub>a</sub>	5.20 <sub>a</sub>	4.77 <sub>ab</sub>	4.40 <sub>b</sub>	3	6.97	0.000***
PBC	5.34	5.40	5.33	5.20	3	0.52	0.666
Intention	5.50	5.18	5.31	5.00	3	0.89	0.447

Note: \*\*p<0.01. \*\*\*p<0.001.

Comparing between different residency groups (See Table 20), residents of first-tier cities including Beijing, Shanghai and Guangzhou had more concerns about cruise taking than residents of other cities (F value=7.65, P=0.006).

Table 20

*One-way ANOVA for Residency Groups*

Component	First-tier cities (n=68)	Other cities (n=161)	df	F value	P value
Attitude	5.51	5.70	1	2.57	0.111
Concerns	4.48 <sub>a</sub>	4.88 <sub>b</sub>	1	7.65	0.006**
PBC	5.21	5.35	1	1.35	0.246
Intention	5.04	5.29	1	1.68	0.196

Note: \*\*p<0.01.

Concerning cruise experience (See Table 21), respondents with more than twice previous cruise experience perceived more favorable behavioral control than those who had never taken a

cruise or those who only had taken once ( $F=2.93$ ,  $P=0.035$ ). Frequent cruise tourists, who had taken cruise twice or more, had stronger cruise purchase intention than tourists without cruise experience ( $F$  value= $5.65$ ,  $P=0.001$ ).

Table 21

*One-way ANOVA for Cruise Experience Groups*

Component	None (n=136)	Once (n=67)	Twice (n=14)	More than twice (n=12)	df	F value	P value
Attitude	5.56	5.72	5.61	6.15	3	2.27	0.082
Concerns	4.61	4.87	5.24	5.27	3	3.40	0.019
PBC	5.17 <sub>a</sub>	5.38 <sub>a</sub>	5.58 <sub>ab</sub>	6.07 <sub>b</sub>	3	2.93	0.035*
Intention	5.03 <sub>a</sub>	5.42 <sub>ab</sub>	5.36 <sub>ab</sub>	6.04 <sub>b</sub>	3	5.65	0.001**

*Note:* \* $p<0.05$ . \*\* $p<0.01$ .

### Conclusion

Attitudes, concerns, perceived behavioral controls and purchase intentions towards cruise were not affected by consumers' gender or family income. Significant difference in attitudes, perceived behavioral controls and purchase intentions towards cruise were found among different age, marital status, education, occupation, residence and experience groups.

## **CHAPTER 5**

### **DISCUSSION**

#### **Summary**

The research tools proposed in this study were built base on the theory of planned behavior. However, subjective norm was found with no significant influence on cruise purchase intentions. Although this outcome is different from the findings of Han and Kim (2010) on customers' decision of choosing green hotel as well as that of Lam and Hsu (2006) on travelers' intention of choosing travel destinations, it is similar to the result in the study of Hsu (2013) on sports tourism. This result is probably because of the uncommonness of cruise travels in China. Since Chinese people rarely have knowledge about cruises, most of the decision makers would rather consult the information on the Internet than ask their families or friends for advices. Another possible reason could be that the sample was young. Young people care less about other people's opinion when making purchase decisions, especially for those who have not married. Subjective norm may still apply to sub-sample groups in this study, such as middle-aged married people. As 'personal concern' emerged rather than subjective norm, the valid factors of cruise purchase intentions in this study are: attitude, personal concern and perceived behavioral control.

These three factors were related to the willingness and the likelihood of consumers' participation in cruise tourism. Attitudes, personal concerns and perceived behavioral controls had significant positive effects on both the willingness and the likelihood of cruise taking. Among the three determining factors, perceived behavioral control played the most important role while personal concerns played the least. The influence of attitude was weaker on the likelihood of cruise taking than on the willingness of cruise taking. In addition, the relationship between attitudes and cruise taking became less significant when predicting the likelihood rather

than the willingness. On the contrary, the effect of perceived behavioral controls was stronger on the likelihood of cruise taking than the willingness.

The results indicate that when an individual makes cruise purchase decisions, the accessibility of cruise is a more important consideration than consumer attitude and personal concerns for cruise taking. Cruise operators have a better chance of success when expanding the business to regions with seaports and higher income residents. To develop the untapped market, cruise operators can benefit from creating opportunity and resources for consumers.

Hypotheses one through six stated the expectation was that the three factors of behavioral intention produce positive effects on cruise purchase intentions. According to the findings of this study, subjective norms failed to constitute a factor of cruise purchase intentions. Instead, attitudes, personal concerns and perceived behavioral controls were found to have positive effect on cruise purchase intentions. Hypotheses seven through nine stated the expectation was that the difference of attitude and purchase intention existed among age groups, income groups and residence groups. The findings of the study suggest that there is no significant difference among different income or residence groups in attitude and purchase intention towards cruise.

Hypothesis seven was rejected in that the results suggest that young people have less positive attitude and cruise purchase intention than middle-aged people. Although the average age of cruisers in China was 38 (Royal Caribbean International, 2013), people between age 45 and 64 are more likely to take cruises in the future. Having more experience, they have less concerns about cruise taking than people in their thirties. More importantly, consumers in these ages generally have more disposable income than younger adults. Perceiving the least behavioral controls than any other groups, middle-aged groups have the largest possibility of taking cruises. Hypotheses eight and nine were rejected as there were no significant differences



among income groups and residence groups on attitude. Table 22 illustrates the test results of the hypotheses.

Table 22

*Research Hypotheses Supporting/Rejecting*

Hypotheses	Supported
1. Attitude produces a positive effect on the willingness of taking cruises.	✓
2. Subjective norm produces a positive effect on the willingness of taking cruises.	×
3. Perceived behavioral control produces a positive effect on the willingness of taking cruises.	✓
4. Attitude produces a positive effect on the likelihood of taking cruises.	✓
5. Subjective norm produces a positive effect on the likelihood of taking cruises.	×
6. Perceived behavioral control produces a positive effect on the likelihood of taking cruises.	✓
7. Young adults hold more positive attitude toward cruise taking.	×
8. Consumer with higher income hold more positive attitude toward cruise taking.	×
9. Consumer from first-tier cities hold more positive attitude toward cruise taking.	×

However, the study found differences among other demographic groups. Compared to married people, unmarried people hold less positive attitudes toward cruise taking and have weaker cruise purchase intentions. They have more concerns and perceived more constraints on cruise taking. In China, unmarried groups are generally young. Some of them are full-time students while some of them are focusing on their careers. For a certain, they either have less money or less time for cruise travel.

Consumers at lower educational level hold more positive attitudes and less personal concerns toward cruise taking. However, there was no significant difference in cruise purchase intentions. Furthermore, students have less intentions of cruise taking than self-employees.

People work in organizations perceived more behavioral controls than freelancers.

An interesting finding was that the target consumers for cruises tourism in China generally would not like to consult travel agencies before making travel decisions. For cruise operators, directly communicating with potential customers is the best way to reduce their concerns about cruise taking. Travel agency may provide inaccurate information about each cruise line. Cruise operators are the ones who would try their best to promote their packages and answer consumers' questions in detail.

### **Recommendations**

The information presented in this study is a potential start for other studies in the area of cruise tourism, especially the area of cruise marketing. The more advanced our understanding of consumer purchase is, the better our ability to develop effective cruise marketing strategies. The ultimate goal of studying consumer attitude and cruise purchase intention in this study is to develop the Chinese cruise market efficiently.

The study shows that even when attitudes do have a positive effect on consumers' cruise purchase intentions, perceived constraints affect the intentions more strongly. The Chinese government has controls over the accessibility of cruise lines and the length of legal holidays. It is extremely good news for cruise operators that Chinese government is working on building more seaports to welcome cruise ships. Additionally, cruise business will benefit from government arranging some legal holidays next to weekends. Companies offering employees longer paid annual vacation will also benefit cruise industry in China.

The findings imply that the cruise business will boost rapidly in China if foreign operators are allowed to connect with consumers directly without involving travel agencies. Unfortunately, the direct connections between foreign cruise operators and consumers are illegal

in China until now. This alignment of political and business interests has prevented large foreign companies from defeating domestic companies.

Although government policies generate much influence on cruise business, they are not under the control of cruise operators. To increase purchase, cruise operators should focus on improving consumer attitudes toward cruise and reducing consumer concerns about cruise. Marketing is what business do to achieve these goals. Evidence from this study identify the potential consumer groups for cruise operator to focus on. Consumers with different demographic backgrounds act differently when making cruise purchase decisions. The most potential consumers are middle-aged, married, self-employed people or retired employees. Aiming to this group of consumers, cruise marketing campaigns can receive maximized effectiveness. Statistic (Royal Caribbean International, 2013) implied that Chinese cruisers were mainly young adults. This study provides evidence that middle-aged people may be the most potential consumer group for cruise lines.

Highly educated consumers are the second promising market. They have relatively less constraints regarding taking cruises, but they hold less positive attitudes and have more concerns of cruises. By implementing promotional marketing strategies, cruise operators enable highly educated consumers get throughout understandings of cruise through experience, and possibly improve their positive attitudes toward cruise.

First-tier city residents have more concerns about cruise. By conducting informative marketing campaigns, cruise industry gains the opportunity to strengthen their cognition and perceived value of the cruise, which may reduce their concerns.

In addition, evidence from this study showed that fixed travel itinerary is unpopular among the target Chinese cruise customers. Extensive cruise marketing communication should

highlight the unfixed activities through the whole tour.

### **Theoretical Implications**

This study proposes a new construct regarding the formation of Chinese consumers' cruise purchase intentions that have not been previously examined. Previous studies in behavioral intentions are inconclusive about the effects of attitudes, subjective norms and perceived behavioral controls. The construct underlying this study comprise of attitudes, personal concerns and perceived behavioral controls.

Although the research did not obtain support for hypothesis two, the finding of this study indicated that personal concerns produce a slightly positive effect on cruise purchase intentions. Cruise operators can implement marketing strategies to reduce those concerns and consequently stimulate consumer purchase intentions.

### **Limitations and Future Study**

There are several limitations for this study. The first is that the sample for this study consisted entirely of online respondents who have travel abroad. Less educated or older consumers account for only a small part of the sample population. Therefore, the sample may not accurately reflect the business target population. The second is that this study did not take all the elements mentioned by past cruise passengers into consideration. Unconsidered factors may have strong effect on overall attitudes, personal concerns or perceived behavioral controls. Another limitation is that the theory of planned behavior may not be the best-fit theory base on which to build the research tool. The underlying construct of the study failed to comply with that of the theory of planned behavior.

Since China is still a developing country, objective conditions play a more significant role than subjective attitude in predicting consumer cruise intentions. The first implication for

future study would be a follow-up research that examined how attitudes relate to actual cruise purchase behavior. Just as attitudes affect the likelihood of cruise less than the willingness of cruise, the effect of attitude may be weaker on actual purchase behavior. Knowing the influence of the exterior conditions, business operators need to plan as thoroughly as the objective conditions permit.

Another follow-up study would be an investigation of the most promising consumer group – middle-aged, married, self-employed or retired people. Specifically, it would be a study investigating their media habits. This study helps identify potential target markets, while a follow-up study can provide data base for cruise operators to create effective marketing campaigns. With the information from the follow up study, a guide could be created for cruise operators showing the media channels to target their efforts.

A future study that would complement this study would be to investigate how product preference affect attitudes toward cruises. If it is true that the product preference affect consumer attitudes, cruise lines could modify their product to improve consumer attitudes and satisfaction.

### **Conclusion**

Tourism has been, and continues to be, one of the most studied issues in the hospitality industry. Under such applied discipline, academic study always has an impact on business strategies. Cruise industry is at its growth stage in China, it is only through careful understanding of the contributing factors that affect consumers' purchase decision that the industry operators will be able to effectively expand their market. Due to the special situation in China, cruise operators need to rely heavily on certain marketing tools, such as promotions or public relations, to achieve their marketing goals. Targeting the potential consumer groups, marketing campaigns will be effective in stimulating cruise purchase.

## **APPENDIX A**

### **Survey of Consumer Attitudes and Purchase Intention toward Cruises**

I appreciate your participation in completing this questionnaire. It will take you no more than 15 minutes to complete. The data collected from this survey will be used for the purposes of academic research related to cruise tourism.

A cruise is an all-inclusive voyage for pleasure on a cruise ship that usually calls at several places. A cruise ship is like a large floating resort on the sea. On board you can enjoy star-hotel-level accommodation and various leisure activities. Most cruise ships are equipped with guest rooms, restaurants, bars, casinos, swimming pools, spas, gyms, shops, theaters, cinemas, etc. You may also participate in onshore excursions while the ship is calling at the berth. The length of a cruise vacation generally ranges from 2 days to 2 weeks. Generally, the longer the cruise, the more destinations passengers will visit. Depending on the destinations and the length of travel, the fare of a cruise generally ranges from ¥2000 per person to over ¥100,000 per person.

#### **Screening Question**

Have you ever travel outside of China within the past 5 years?

Yes\_\_\_ (Continue) No\_\_\_ (Terminate)

#### **Part I Past Travel Experience**

Have you ever taken a cruise before?

None\_\_\_ Once\_\_\_ Twice\_\_\_ More than twice\_\_\_

## Part II Statement Evaluation

Chart 1: Please indicate your level of agreement with the following statements related to your

### beliefs of cruise.

No.	Statement	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Some what Agree	Agree	Strongly Agree
1	Cruise is a convenient way of travel.							
2	Cruise is a safe way of travel.							
3	The itinerary of a cruise is fixed.							
4	Family relationship or friendship can be enhanced when taking cruise together.							
5	Taking cruise helps people relax.							
6	Taking cruise is a novelty.							
7	I feel that taking cruise is fun.							
8	I feel that taking a cruise is pleasant.							
9	I can visit many places on one cruise.							
10	I can enjoy the sea and the beach by taking a cruise.							
11	I can enjoy delicious food on the cruise.							
12	I will experience language barrier on the cruise.							
13	My family would approve my taking a cruise.							
14	Travel agency would suggest me taking a cruise for vacation.							
15	Some of my friends take cruises.							
16	I can afford a cruise vacation.							
17	Go to a sea port is easy for me.							
18	The length of my vacation is enough to take a cruise.							
19	I can find companions to take a cruise together.							
20	I want to take a cruise.							
21	I intend to take a cruise vacation in the next 3 years.							

Chart 2: Please indicate the *importance* of the following factors to you related to travel.

No.	Statement	Not at all Important	Low Importance	Slightly Important	Neutral	Moderate Important	Very Important	Extremely Important
1	The convenience of travel							
2	The safety of travel							
3	Travel itinerary is not fixed							
4	Enhance family relationship or friendship							
5	Relax and escape from work or daily life							
6	Novelty of the travel							
7	Fun journey							
8	Pleasant travel experience							
9	Visit many places within in one trip							
10	Visit the sea and the beach							
11	Delicious food during the travel							
12	Language barrier during the travel							



Chart 3: Please indicate the ***likelihood*** of the following statements for you related to selecting the way of travel.

No.	Statement	Very Unlikely	Unlikely	Somewhat Unlikely	Undecided	Somewhat Likely	Likely	Very Likely
1	Doing what my family suggest me to do							
2	Doing what travel agency suggest me to do							
3	Doing what my friends do							
4	I would not take a cruise if it is not easy for me to afford a cruise vacation.							
5	I would not take a cruise if it is difficult for me to arrive at a sea port.							
6	I would not take a cruise if I do not have a long enough vacation.							
7	I would not take a cruise if I do not have travel companions.							

### Part III Personal Information

1. What is your gender?

Male\_\_\_\_ Female\_\_\_\_

2. What is your age?

23-34\_\_\_\_ 35-44\_\_\_\_ 45-54\_\_\_\_ 55-64\_\_\_\_ 65 and above\_\_\_\_

3. What is your marital status?

Single, never married\_\_\_\_ Married\_\_\_\_ Separated\_\_\_\_ Widowed\_\_\_\_ Divorced\_\_\_\_

4. What is your employment status?

Company employed\_\_\_\_ Self-employed\_\_\_\_ Retired\_\_\_\_ Student\_\_\_\_ Homemaker\_\_\_\_

5. What was your monthly household income?

Less than ¥5000 \_\_\_\_\_ ¥5000-¥9999 \_\_\_\_\_ ¥10,000-¥19,999 \_\_\_\_\_ ¥20,000-¥29,999 \_\_\_\_\_  
¥30,000 or more \_\_\_\_\_

6. What is your education level?

Lower than high school \_\_\_\_\_ High School \_\_\_\_\_ Associate degree \_\_\_\_\_ Bachelor's  
degree \_\_\_\_\_ Master's degree and above \_\_\_\_\_

7. Which city do you live?

Beijing/ Shanghai/ Guangzhou \_\_\_\_\_ Other cities \_\_\_\_\_

THANK YOU FOR YOUR PARTICIPATION

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