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Conference Paper

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55th Congress of the European Regional Science Association: "World Renaissance: Changing roles for people and places", 25-28 August 2015, Lisbon, Portugal

Provided in Cooperation with:

European Regional Science Association (ERSA)

Suggested Citation: Chen, Jamie (2015) : Demand Determinants of Cruise Tourism in Competitive Markets: Motivation, Preference, and Intention, 55th Congress of the European Regional Science Association: "World Renaissance: Changing roles for people and places", 25-28 August 2015, Lisbon, Portugal, European Regional Science Association (ERSA), Louvain-la-Neuve

This Version is available at:

<https://hdl.handle.net/10419/124764>

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Demand Determinants of Cruise Tourists in Competitive Markets: Motivation, Preference, and Intention

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Authors' Acknowledgements: We thank Ana Maria Bonomi Barufi, Jesper de Groot, Hengky Kurniawan, and Mark G. Lijesen for comments. We acknowledge financial support from CSC No. 201406310043.

Abstract: The purpose of this study is to develop and estimate an integrated structural path model of the determinants of cruise demand based on the nexus of motivation, preference, and intention of cruise tourists. The paper aims to identify the drivers of this demand in competitive markets. Our model results show that different cruise motives have a significant effect (positive or negative) on specific cruise preferences and intentions, while some significant relationships between specific cruise preferences and intentions could also be found. Based on this structural path model, an ANOVA approach is applied to compare the differences of cruise motivations and cruise preferences in Asian markets, in order to trace the instrumental determinants of cruise passengers, leading to a new understanding of the commonalities and differences of cruise competitiveness in different regional markets.

Keywords: cruise, motivation, preference, intention, competitiveness.

Introduction

Tourism has become one of the fastest growing economic sectors in the world. Its significance is still on a rising edge, and may be expected to grow with increasing globalization and economic growth. It is a multifaceted sector, with many groups of stakeholders involved (Goeldner and Ritchie, 2011). The most prominent categories of stakeholders are: (i) the demand side (customers, clients, tourists, etc.); (ii) the supply side (providers of tourist services, travel agencies, carriers, etc.); (iii) tourist destinations (local communities, landscapes, restaurants, etc.); (iv) regulatory systems (government, tourist organizations, etc.). An increasingly important segment on the supply side is formed by cruise tourism. This used to be a leisure activity for the ‘happy few’, but in the past decade we have witnessed the flourishing of the cruise sector. Cruises are becoming more and more a regular part of the international tourist market.

The origin of the cruise line can be traced back to the 19th century, when ocean liners were first used as a mode of long-distance transportation between different countries and continents. After the Second World War, however, with the development of commercial airlines and global tourism, international tourists were increasingly opting to travel by air, and, as a consequence, the cruise industry suffered badly. In the late 1960s, the rise of the modern cruise industry first began to develop in North America; it started to boom with the introduction of the ‘fun ship’ in the Carnival Cruise Group. Since the 1980s, cruising has become the fastest growing sector in the tourism and leisure industry worldwide, with an average annual growth rate of 7.2%. According to a report of Florida-Caribbean Cruise Association (FCCA, 2014), the global growth of the cruise industry continued in 2014, with 21.7 million cruise passengers, 11.9 million sourced from North America, and 9.8 million from elsewhere; and Asia had a share of 4.4%, similar to that of Alaska of 4.5%. A cruise ship can carry 2550 passengers and 480 crew members, who have, respectively, an average expenditure across all destinations of \$95.92 and \$96.98 on each port visit (day visits or overnight stays), conservatively generating \$225,596 and 45,225 cruise-related jobs for the port city during a single cruise visit¹ (FCCA, 2012). As a report of Cruise Line International Association (CLIA, 2013), most prominent cruise companies (eg. Princess, Royal Caribbean International, Costa, Star Cruise, etc.) will develop their Asian markets in 2015, with 52 cruise ships offering a total of 1,065 separate cruise products, and 9 of the 52 ships operating all-year round in Asia; and the Asian cruise capacity will reach 2.17 million passengers, with 2.05 million passengers on ‘Asia-Asia cruises’ and 115,360 on ‘Voyages sailing through Asia’, which means that 94.47% of these cruise passengers are primarily from Asia. There has been a big development of the Asian cruise markets, and cruise

¹ This average expenditure is based on a port visit by 85% of the cruise passengers and 38% of the crew members.

companies are becoming increasingly aware of the potential importance of Asian cruise tourists and their specific needs.

This research is based on conceptual frameworks related to behaviour motivation (Berkman and Gilson, 1978); travel motivation (Crompton, 1979); attributes of tourist destinations (Goodrich, 1978); cruise tourists' preferences (Xie et al., 2012); and cruise intentions in relation to loyalty, familiarity, satisfaction, and value perception (Petrick, 2004, 2005; Petrick and Sirakaya, 2004; Petrick et al., 2007). Thereby, our study attempts to clarify the relationship between motivation, preference, and intention in cruise tourism consumption, which all increase the core competitiveness of cruise tourism in growing regional markets. The aim of this paper is to extend the previous elements of a consumption motivation model to consumption preference and intention, switching the focus of cruise research from the mature markets (i.e. North America, Europe) to the Asian competitive markets. This study reviews the literature on cruise motivation, preference, intention, and competitiveness. After the literature review, the different dimensions of cruise motivation and preference are uncovered by means of exploratory factor analysis and confirmed via confirmatory factor analysis, which ensures the reliability of the constructs and factors. Then a structural path model is run to test three groups of hypotheses (in total 39 sub-hypotheses) concerning the regression relationships between cruise motivation, preference and intention. Furthermore, this empirical study refers mainly to the competitive Asian market, in order to compare the differences of cruise motivation and preference in the markets of Mainland China, Hong Kong, Taiwan, Japan, and the rest of the global regions, in order to elucidate the cruise core competitiveness in growing Asian markets.

Although the global cruise industry has increased continuously in recent decades, there are doubts about the homogeneity of cruise markets. Some cruise companies are aiming to develop

new markets with universal cruise products and services, but are suffering from the problem of a low occupancy rate or non-benign low-price competition. Therefore, we raised two questions: (i) What is the core competitiveness of cruise tourism?; and (ii) In exploring the core competitiveness from the perspective of cruise tourists' demand, how can it be maintained in increasingly competitive markets? Our study contributes to the existing literature on international tourism by zooming in on the complex mechanism of the emerging cruise markets. It expands the previous research of independent cruise consumption to build an integral model of cruise motivation, performance, and intention. In addition, the heterogeneity of cruise markets is identified through employing ANOVA to compare the commonalities and differences of the five markets to draw out some universal standards of cruise competitiveness, which would help cruise companies to develop their cruise products in Asian markets.

Literature Review

The literature analysis of cruise tourists' demand is presented in terms of three determinants: motivation, preference, and intention, with a further review of competitiveness and the interaction among the demand determinants. There is rich and varied research on tourists' motivation, preference, intention, and competitiveness, but comparatively few academic studies focus specifically on cruise tourism.

As far as psychological or biological needs and wants are concerned, motivation is the driving force behind a person's direct behaviour and activity (Dann, 1981; Uysal and Hagan, 1993). Mayo and Jarvis (1981) pointed out that people may take a trip to fulfill both their physiological (food, climate, health) and psychological (adventure, relaxation) needs. And then Iso-Ahola (1982) developed a seeking-escape tourism motivation model. Beard and Ragheb (1980, 1983) adopted Maslow's (1970) motivation theory to identify a Leisure Motivation Measurement Scale,

with four motives leading to leisure travel satisfaction: intellectual, social, competence-mastery, and stimulus avoidance. As a complicated concept, motivation varies from one person to another, from one market segment to another, from one destination to another, and from one decision making process to the next (Uysal and Hagan, 1993). Generally, motivations are divided into 'push' and 'pull' factors: push factors refer to the intangible and intrinsic personal preferences of tourists (Crompton, 1979), and pull factors are related to the tangible and external attributes of destinations (Kozak, 2002; Bansal and Eiselt, 2004; Neuts et al., 2013). Qu and Ping (1999) investigated Hong Kong cruise tourists' motivations, and found their major motivation factors to be: escape from normal life, social gathering, beautiful environment, and scenery. Lu (2001) studied Taiwanese cruise tourists, identifying that push factors were: lifelong learning, escape and relaxation, adventure, belonging, and status seeking; and pull factors were national environment and safety, entertainment and sports recreation, nature and wilderness, learning opportunity, modernity, and facilities. In another study of Chinese cruise tourists' motivations from a cultural-historical perspective, Fu et al. (2010) proposed a conceptual model of Chinese cruise tourists' motivation, with the push factors being: spiritual purification, moral enlightenment, relaxation and refreshment, escaping, social gathering, family happiness, and cultural discovery; and the pull factors being: openness, freedom, beautiful scenery, cultural attributes, and entertainment. This model was tested empirically and it was found that it was affected specifically by Chinese associations with water in leisure travel, such as life, flow and energy, purity, freshness, and a natural state of being.

According to Jacoby and Chestnut (1978), consumer knowledge has two components: familiarity and expertise. Familiarity refers to the number of product-related experiences that have been accumulated by the consumer, while expertise refers to the consumers' ability to

perform product-related tasks successfully (Jacoby and Chestnut, 1978). Cruise tourists and potential cruise tourists differ from each other in product-related knowledge and motivations (Gitelson and Crompton, 1984), which in turn may result in their perceiving on-board attributes differently. For instance, cruise tourists and potential cruise tourists may differ from each other in terms of their knowledge about on-board attributes. Based on the Attribute Knowledge Theory of Alba and Hutchinson (1987), increased familiarity leads to increased expertise and novice consumers with very limited product-related experience usually have little understanding of the importance of product attributes, while experienced consumers usually have ample and confident knowledge about product attributes. Therefore, they are more likely to focus their attention on the most relevant and important attributes and to ignore unimportant ones during their decision-making process (Brucks, 1985; Johnson and Russo, 1984; Kerstetter and Cho, 2004). Such differences between novice and expert consumers may be particularly relevant in a cruise-decision context, because cruises are intangible and experiential products.

Concerning the cruise intention, this is the necessary prerequisite to the consumption process, i.e. the decision (to go on a cruise) taken prior to the occurrence of that behaviour and concerns the probability of individual people will exhibit a particular type of behaviour (Ajzen and Fishbein, 1977). Swan and Frederick (1981) defined 'intention' as an individual's anticipated or planned future behaviour. Engel et al. (1995) pointed out that behavioural intention stems from attitudes, which means that a cruise consumers' possible inclination to purchase or repurchase a cruise relies on their attitudes to cruising. In the context of cruise tourism, quality and perceived value are the antecedents of satisfaction, leading to behavioural intention (Petrick, 2004).

With regard to competitiveness, this has become an attractive concept during the past two decades, especially in the disciplines of economics, management, and politics. Michael Porter

(1979, 1980, 1985, 1986) developed a series of measurement frameworks to analyse competitiveness. After that, many scholars carried out theoretical and empirical research in different competitive fields (Dunning, 1991; Dwyer and Kim, 2003; Lijesen et al., 2002), and their research mainly focussed on product price, market and service competitiveness (respectively, Boone, 2000; Woodruff, 1997; Starkie, 2001), etc. Basically, tourism relies on the movement of tourists, from their permanent residence to the chosen destination, and the competitiveness of tourism mainly focusses on the service provided by tourism destinations. Pearce (1997) stated that the development, strength and weakness of competing destinations are crucial; Crouch and Ritchie (1999, 2005) pointed out that destination competitiveness relies greatly on practitioners and policy makers; and Enright and Newton (2004, 2005) indicated that destination competitiveness depends on tourism attraction factors and tourism service. Obviously, cruise tourism is different from traditional tourism aimed at a specific destination, because it is the cruise ship itself that is the destination, with cruise ports as sub-destinations. In this research, we regard competitiveness as the advantages of cruise tourism in competitive markets, including the attractions of push factors (cruise motivation) and pull factors (cruise on-board products and port facilities). And it is clear that competitiveness means to exploit the benefits of being different, based on a professional branding strategy.

In general, motivation, preference, and intention are closely correlated and important to the passengers' cruise decision. Li et al. (2010) studied American tourists going to the countryside, and found that the only motivational factor which indirectly affected the revisit intention via the tourists' affective perception of a destination was 'escaping'. Hung and Petrick (2011) surveyed American cruise tourists, and found that escaping contributes the most to the intention to cruise, followed by learning, self-esteem recognition, and bonding. In fact, not only cruise motivation

and intention, but also preference, are all three affected by each other to some degree. Based on the analysis above, the present research proposes three groups of hypotheses incorporated in a conceptual model of cruise tourism (see Figure 1), as follows:

H1: Tourists' cruise motivation has a significant effect (positive or negative) on their cruise preference;

H2: Tourists' cruise motivation has a significant positive effect on their intention to cruise;

H3: Tourists' cruise preference has a significant effect (positive or negative) on their intention to cruise.

Figure 1. Conceptual Model of Cruise Tourists' Demand Determinants in Competitive Markets

Research Design

The research design followed a strict, logical, and systematic approach. In April and May 2014, we interviewed several cruise experts, in particular the guest service manager of COSCO Star in Mainland China, the sales manager of Princess in Taiwan, the cruise director of Royal Caribbean in Hong Kong, the guest relationship manager of COSTA in Japan, and some related managers from tour agents in charge of cruise tickets distribution. On the basis of these interviews and some previous studies (Hung and Patrick, 2011; Xie et al., 2012), we designed a trial questionnaire and collected 123 answers to test the items from 1-3 May 2014, in Xiamen, in Mainland China. The questionnaire was then revised and the final face-to-face cross-section surveys were conducted from 8-22 May 2014, in four international cruise ports of Taiwan: Keelung, Taichung, Kaohsiung, and Hualien. 800 questionnaires in four different languages (English, Japanese, Simplified Chinese, and Traditional Chinese) were distributed (i.e. 200 in

each language). 641 questionnaires were collected (a response rate of 80.13%), and 575 were fully completed (a valid response rate of 71.88%).

Since Taiwan is a strategic geographical destination for Asian cruise lines connecting the four main cruise tourists source countries, viz. Mainland China, Hong Kong, Taiwan and Japan, we chose the four Taiwan ports in which to conduct our surveys. In general, most of the respondents were cruise tourists getting on-board COSCO Star (a Chinese state-owned cruise ship), Voyager of the Seas (belonging to Royal Caribbean, the 2nd biggest cruise group in the world), Diamond Princess (belonging to Carnival, the No.1 cruise group in the world), and Superstar Virgo (belonging to Genting Hong Kong, the 3rd biggest cruise group in the world). Table 1 shows the demographic characteristics of the samples: there are almost equal numbers of males and females; nearly half of the cruise tourists are aged 18-39 (48.53%); more than half are single, or married without children (52.35%); under the category 'occupation', there are more company staff and retired cruise tourists than any other group, at 20.17% and 17.04%, respectively; more than half the cruise tourists (61.22%) have a monthly income of less than US\$2000; 60.35% of the cruise tourists have a college education or above; cruise tourists from Mainland China, Taiwan, and Japan each have a similar percentage share (over 20%); and the shares of Hong Kong and other regional cruise tourists are both less than 20%.

There are some main characteristics of cruise tourists in the new regional markets, Mainland China, Taiwan, Japan, and Hong Kong: nearly half (48.53%) of cruise tourists are less than 40 years old; more than half (61.22%) of the cruise tourists have a comparatively low income of less than US\$1,000/month; over half the cruise tourists (60.35%) have a high level of education, and also more than half the people (58.96%) are first-time, or have never been, cruise tourists (see Table 1).

Table 1 Cruise Tourists' Demographic Characteristics

Table 1 also interprets the details of the cruise tourists' intentions: there are 82.26% cruise tourists who prefer to take a cruise with families/friends; the two most popular cruising time options, 3-5 days and 6-9 days, are chosen by, respectively, 32.35% and 33.22% of the respondents; 34.96% cruise tourists are willing to pay the price range US\$501-US\$1000; more than half (58.60%) of the cruise tourists are (strongly) willing to repeat cruising within 3 years, while only 13.39% are (strongly) unwilling to do this.

Measurement

The hypothesized theoretical model of the relationship between cruise motivation, preference, and intention was tested using a combination of SPSS 21.0, AMOS 21.0, and STATA 13.0 in a four-step approach. In Step 1, exploratory factor analysis was used on a 30% subsample of observations in order to divide items into different latent constructs, with some low-loading and cross-loading items being removed. In Step 2, a confirmatory factor analysis was used to test the reliability and validity of the factors on the remaining 70% of observations, resulting in some unreliable items being dropped. In this step, the measurement model was confirmed, and all remaining factors were tested and found to be reliable to run the structural path model in AMOS 21.0. In Step 3, a structural path model was designed to test the hypothesized relationships between the latent variables, while in the final Step 4, an ANOVA approach was applied to find commonalities and differences in competitive regional markets.

Exploratory factor analysis

In order to determine the constructs of cruise motivation and preference, an exploratory factor analysis (EFA) in the form of a principal component analysis was carried out on the two scales. To this effect, the sample was stratified by markets, after which 30% of observations were randomly selected. In order to make sure the random selection did not interfere with the findings, chi-square tests were performed to ensure that the subsample did not significantly differ from the total sample on gender, age, family, education, or income. P-values were all far above the 0.05 significance level, indicating comparability between both samples. EFA was performed with both an orthogonal method (Varimax rotation) and an oblique method (Promax rotation), the latter allowing for correlation between factors. Since the factor correlation matrix in Promax showed values above 0.32, being indicative of an overlap of more than 10% in variance among factors, oblique rotation was preferred, following Tabachnick and Fidell (2001).

With significant KMO-values (significant at between 0.8 and 0.9) of both cruise motivation (0.800) and cruise preference (0.840), and a significant Bartlett's test of sphericity ($p=0.000$), the use of EFA was deemed appropriate (Field, 2009). The results show a four-factor division of cruise motivation (% of variance explained = 67.265), and eight constructs of cruise preferences (% of variance explained = 64.467). Promax rotation provides both a pattern matrix with factor loadings of items and a structure matrix with correlations between variables and factors. Both matrices led to a similar interpretation, and therefore in Tables 2 and 3 the results are limited to the pattern matrix.

Table 2 Promax Rotated Pattern Matrix of Cruise Motivation Items

Table 3 Promax Rotated Pattern Matrix of Cruise Preference Items

A factor loading of above 0.5 indicates sufficient explanation of these items (Hair, 2006). Furthermore, a cross-factor loading of over 0.350 in different constructs can be a cause for concern. In the scale of cruise motivation, the item, 'I cruise to photograph exotic places to show friends', had a significant cross-factor loading, and was dropped. However, as noticed in previous theoretical studies (Hung and Patrick, 2011), the other two items with cross-factor loadings, 'I cruise to do something to impress others' and 'I cruise to help me feel a better person', were placed under the 'self-esteem' dimension, and awaited confirmation in Step 2. In the scale of cruise preference, 'laundry' and 'internet' were dropped because of significant cross-loadings, and consequently the 'supplement' dimension was removed; but 'natural landscapes' and 'cultural landscapes' with cross-loadings were significant under the 'ports' dimension, and they were kept to test in the confirmatory analysis. In addition, six more items were dropped for having a low loading (<0.5), 'amusing games', 'educational classes', 'conference activities', 'library', 'ball activities', and 'duty-free shops'. Finally, four dimensions with 12 items in the scale of cruise motivation and seven dimensions with 30 items in the scale of cruise preference were retained for further confirmatory analysis.

Confirmatory factor analysis

For testing the construct reliability of cruise motivation and preference, a confirmatory factor analysis (CFA) was carried out on the two scales, using the remaining 70% of the sample after, again, confirming subsample representativeness by employing chi-square analyses. Such a CFA takes the form of a measurement model in structural equation modelling and precedes the evaluation of the structural relationships between latent factors. Cronbach's α is often used to assess the latent constructs' internal consistency; Cronbach's α values should be higher than 0.6. Convergent validity is achieved when the t-statistics for the factor loadings are statistically

significant, while the parameter estimates should be higher than 0.4 without serious cross-loadings. Although composite reliability (CR) should be a minimum of 0.7 to indicate adequate convergence or internal consistency, a value of 0.6 can be sufficient if other reliability indicators score sufficiently (Hair, 2006). In order to test the discriminant validity of the different constructs, it is assessed whether the square root of the average variance extracted (AVE) of each latent construct is larger than the correlation between different latent constructs. When comparing the AVE with the correlation coefficient, the value of the AVE for each construct should be at least 0.5 (Fornell and Larcker, 1981), indicating that the items of the construct explain more variance than items of the other constructs.

Based on the analysis of the measurement model, a number of items were subsequently deleted in order to improve composite reliability and discriminant validity. For the cruise motivation, the item of 'I cruise to help me feel a better person' was deleted from the construct of 'self-esteem'. In the scale of cruise preference, five items were dropped, viz. 'crew service' and 'cruise directors' under the 'basic' construct, 'bars' and 'shows' from the 'entertainment' construct, and 'mahjong/poker' from the 'Asian' construct. It is worth mentioning that the item 'teahouse' under the 'Asian' construct was retained as a singular indicator, since this is a quite unique characteristic, sufficiently different from all other preference factors.

While Cronbach's α and CR both reach satisfactory values in all factors, we do note the comparatively low AVE scores of 'escaping' (0.436) and 'learning' (0.434) in the scale of cruise motivation. However, the measures could not be sufficiently improved by deleting any response item and the factors are conceptually different from other motivations. Since this was theoretically validated in a previous study (Hung and Patrick, 2011), we decided to retain these two constructs in the 'motivation' scale. The measurement model also showed acceptable model

fit criteria, with acceptable model fit indices (CMIN/DF= 2.150, CFI=0.903, NFI=0.834, RMSEA=0.053). Ultimately, there are 4 constructs present with 11 factors in the scale of cruise motivation and 7 dimensions of 25 factors under cruise preference for further analysis in our structural path model. The related estimates are shown in Tables 4 and 5.

Table 4 Standardized and Unstandardized Estimates of Cruise Motivation Measurement Factors

Table 5 Standardized and Unstandardized Estimates of Cruise Preference Measurement Factors

Structural path model

The full model was tested on both deleted and specified paths, whereby non-significant paths were trimmed down and the model was respecified in every iteration. The chi-square difference between the original full model and the model in the last iteration of trimming was 9.21 with 6 degrees of freedom, and remained below the chi-square threshold value of 12.59 (for $\alpha = 0.05$). Table 6 gives an overview of the regression paths that were found in this final iteration. A total of 32 structural relationships were found between the latent factors of ‘motivation’, ‘preference’, and the possibility of future cruises in the next 3 years (as a measure of loyalty). However, three of the hypotheses proved to have a reversed sign, viz. the preferences for ‘recreation’, ‘children’, and ‘ports’, which showed a negative regression on cruise intention.

Table 6 Significant Regression Paths in Structural Equation Model

Generally, the model fit indices of our final model did reach satisfactory levels, with a CMIN/DF of 2.439, a CFI of 0.912, an NFI of 0.861, and a RMSEA of 0.050 indicating a

satisfactory model fit for the final model, so that the final parameter estimates can also be considered sufficiently stable.

Results for Asian markets in particular

On the basis of the structural path model of cruise motivation, preference, and intention, our research then continued by comparing growing regional markets of Mainland China, Hong Kong, Taiwan, Japan, and other global regions via a one-way Analysis of Variance (ANOVA). The aim of this analysis was to identify core competitive advantages of cruise tourism in Asian markets. Levene's test of homogeneity of variance was used in order to identify the requirements for ANOVA. If there was significant deviation of variances, Welch ANOVA and Tamhane's T2 post hoc test were applied. In other cases where homogeneity of variance held, Bonferroni's post hoc test was preferred. The ANOVA was based on factor scores as constructed from the previous confirmatory factor model.

Table 7 incorporates the results of the comparison of means analysis in the five markets. For cruise motivation, a comparison of means shows that the Taiwanese market is distinguished by attaching higher importance to the 'escaping' and 'bonding' motives, as compared with tourists from Mainland China, Hong Kong, Japan, and other global markets. Similarly, 'escaping' is considered to be the most important motive for Mainland Chinese, Japanese, and people from Hong Kong. While Japanese cruise tourists are considerably more motivated by 'self-esteem', they are least motivated by 'bonding' than visitors from other markets. In addition, 'learning' is a comparatively less strong motivation in four Asian markets than in other global ones. In the mean comparison of cruise preference, all five markets show the highest preference for 'basic' and 'recreation', with the lowest value being placed on 'sports' facilities.

Table 7 Mean and Standard Deviation of Cruise Motivation and Preference in Different Markets

Based on a one-way ANOVA, there is no significant difference in ‘self-esteem’ between the five regional markets. However, this analysis shows considerable differences in the other three motives and all the seven dimensions of preference in Table 8. In cruise motivation, The Taiwanese are significantly more strongly motivated by ‘escaping’, ‘learning’, and ‘bonding’ than tourists from all the other four markets. In the Japanese market, tourists are significantly less motivated by ‘learning’ than in the other markets, and also place lower value on ‘bonding’ than those in the markets of Hong Kong and other regions. In cruise preference, Mainland Chinese tourists attach significantly lower value to ‘basic’, ‘entertainment’, ‘sports’, and ‘recreation’ than the Taiwanese, but place higher value on ‘children’ and ‘ports’ than tourists from other markets. It is a similar situation for the markets of Hong Kong and Japan in that they both show significantly less preference than the Taiwanese market for ‘entertainment’, ‘sports’, ‘recreation’, ‘children’, and ‘ports’. But tourists from Japan exhibit a significantly higher preference for ‘teahouse’ than those in the other markets except for the Taiwanese, who also demand comparatively more ‘teahouse’.

Table 8 Results of Independent Samples’ ANOVA in Different Regional Markets

Generally, it is worth noting that Taiwanese tourists appear to be among the most demanding customers, showing significantly higher preferences for all the ‘basic’, ‘entertainment’, ‘sports’, ‘recreation’, ‘children’, and ‘ports’ facilities than tourists from other markets. In contrast to the markets of Japan and other regions, tourists from Mainland China exhibit a higher preference for

‘children’ and ‘ports’. The Japanese tourists give the highest value to ‘teahouse’, followed by tourists from Taiwan, Mainland China, and Hong Kong, but tourists in other global markets have much less preference for this facility.

Discussion and Limitations

Our research is based on three conceptual hypotheses concerning cruise motivation, preference, and intention. The statistical test of the structural path model supported all the three groups of hypotheses with 32 significant regressions, although some signs were not according to our expectations. It was found that those cruise passengers who are motivated by increasing ‘self-esteem’ and ‘learning’ have significantly lower preferences for nearly all the cruise facilities in our analysis. In contrast to the other motives, ‘escaping’ and ‘bonding’ both significantly positively influence cruise tourists’ demand for cruise facilities. These tourist types fall into the highest categories of the travel career ladder (Pearce, 1993). Being motivated by self-esteem and self-development, they are therefore distinct from the tourists who, by comparison, are travelling primarily for purposes of relaxation and stimulation. The latter categories are considered to have a more dependable travel personality, and are looking for familiar surroundings (Chen et al., 2011). It is therefore not surprising that the preferences for cruise facilities are lower for tourists with intrinsic motives, viz. self-esteem and learning, than for tourists with the external motivations of relaxation and bonding. The tourists who take a cruise to increase their ‘self-esteem’ or ‘learning’ are less interested in the existing cruise facilities, and need to be offered some kinds of different experience.

Cruise tourists whose main motive is to escape from the routine of daily life thus clearly fall into the relaxation and stimulation dimensions of Pearce (1993). To satisfy these tourists, the ‘basic’, ‘recreation’, and ‘ports’ facilities, need to be up to the standard. In addition, tourists from

Asian markets also show significant interest in 'children' and 'teahouse'. For them, other preferences are comparatively less important, because their primary motive is to get away from their home environment. This group of tourists is an interesting segment, since they are more likely to book another cruise in the next 3 years. These results correlate with the findings of Hung and Petrick (2011) and relate to their tourist profile as being more comfortable in familiar environments instead of seeking novelty when travelling (Chen et al., 2011). As such, satisfying the needs of this segment offers opportunities to increase cruise loyalty and return visits.

Cruise tourists with a motivation for 'bonding' with their travel companions exhibit the most positive preferences and intention. They fall into the middle category of the travel career ladder, holding the middle between pure relaxation purposes and self-actualization motivations. Having a mid-centric travel personality, these tourist types want to exchange novel experiences for basic comfort and relaxation (Chen et al., 2011; Pearce, 1993). This is noticeable from the structural path model where these customers are the most demanding, since all the facilities on offer on the cruise ship are important for them. Since the positive relationship between 'bonding' and 'cruise intention', similar to Hung and Petrick (2011), showing the economic potential of this group, the cruise company may pay attention to the satisfaction of this segment, even if it might be difficult to fully meet their expectations.

Lastly, five preferences were found to be related to cruise intentions. When 'basic' and 'sports' facilities were preferred, the chance of a return cruise was significantly higher. Tourists who prefer 'basic' and 'sports' facilities are most likely to be accompanied by families or friends on their current trip. As such, a positive cruise experience may increase the chance of them returning as leisure tourists with their partners for 'escaping' or 'bonding' at a later time, coinciding with the behavioural intention of meeting tourists (Susyarini et al., 2014). Conversely,

a preference for 'recreation' or 'ports' facilities, actually decreased the chance of a new cruise booking within 3 years. This does not mean that providing these services is not important for cruise lines, rather that this type of wellness tourism is not exclusively linked to cruising and it therefore does not necessarily generate a competitive advantage. The tourists' preferences regarding facilities for 'children' exhibited this negative relationship with cruise intention as well. People with these preferences are obviously families with small children, and, as such, may find their family situation to be an important inhibitor to cruise regularly (Yarnal et al., 2005).

Our structural path model offered some interesting insights into the general structure of cruise motivation, preference, and intentions, while the ANOVA-results shed much light on the commonalities and differences in Asian markets. This can aid cruise companies to understand the various demands in different growing markets. As shown in Table 7, in general, the primary motives for all markets are 'escaping' and 'learning'. However, there are still important regional differences to notice: what core cruise competitive advantages in growing regional markets are not universal. Cruise companies have to be aware that for the Taiwanese 'escaping' is, on average, a more important motive to undertake a cruise than it is for tourists from other markets. Marketing aimed at Taiwanese customers should thus take this into account and focus on the preferences that were associated with this motive. In addition, the motives of 'learning' and 'bonding' are less important in the Japanese market than in the other ones. From these results it can be concluded that the motive of 'escaping' is best used as a marketing factor in Taiwan, where tourists seem especially interested in escaping from the routine of daily life. Conversely, learning-experiences should not be highlighted in Japan. Considering the importance of 'bonding' in all markets, it is of the utmost importance to not only advertise the possibility for social group interaction, but also to provide the necessary amenities, and possibly offer group discounts to

further attract Asian groups with a primary interest in social interaction, since it was shown by Yarnal (2004) that cruising in social groups can positively affect repeat cruising.

Moving the focus now to cruise preferences, on average, 'basic' and 'recreation' facilities were found most important, although the latter do not by themselves lead to a higher instance of return visit as discussed earlier. It is noticeable that 'ports' facilities are not among the most important aspects of a cruise, holding only sixth place for Taiwan, fifth for Hong Kong, and fourth for Mainland China, Japan, and other markets. This coincides with the findings indicating an increased importance of the ship itself as the destination of interest (Weeden et al., 2011). Furthermore, 'sports' facilities are least preferred throughout all markets, similar to the results of Xie et al. (2012). But, here too, important regional differences can be noticed.

Compared with other regions, cruise tourists from Hong Kong show significantly less interest in 'ports' facilities while the Taiwanese, and to a lesser extent the Mainland Chinese, have a bigger interest in cruise ports. Apart from ship-based cruise facilities, the markets of Taiwan and Mainland China should therefore be approached by promoting the attractions of cruise ports. Taiwan is a market noticeable for a significantly higher preference for both on-board 'recreation' and 'entertainment'. In terms of cultural differences, it should be noted that Taiwan has a higher value on Hofstede's indulgence-dimension than Mainland China, Hong Kong, and Japan, indicating that the Taiwanese society is more likely to focus on gratification, fun, and enjoyment of life than the other regions (Hofstede et al., 2010). Our analysis showed that Japan is the most valuable country when cruise companies consider offering the teahouse facility, followed by other Asian markets, Taiwan, Mainland China, and Hong Kong. In addition, children's facilities are comparatively more important for the markets of Mainland China and Taiwan than for the

markets of Japan and Hong Kong. As a result, cruising for extended families with children can best be aimed at the markets of Mainland China and Taiwan.

Some limitations of the study should also be noted. Although the quantitative analysis is solid and the results of the structural path model are generally consistent with our hypotheses, there are a small number of exceptions, especially in the cruise preference scale, such as the removed items 'crew service', 'cruise directors', 'bars', 'shows', etc. , which might play a role in the cruising decision, but did not show sufficient validity to be included in our factorial model. It would be worthwhile to perform additional analyses in order to better comprehend such anomalies. Also of interest is the link between motivation, preference, satisfaction, and loyalty (Yuksel et al., 2010). Loyalty is generally considered to relate to the satisfaction of expectations, and therefore knowledge is needed on whether cruise preferences were in fact satisfied during the trip. This is likely to be related to the difference between novice and repeat cruise tourists, with the latter having more realistic expectations through experience. Adding cruise experience to the model might offer further insight into the motivations and preferences of first-time versus repeat cruise tourists.

Conclusions and Implications

The results of our study offer two main contributions to cruise research, first, regarding cruise theory, it has creatively connected the theories of motivation, preference, and intention, employing the cruise 'motivation-preference-intention' structural path model to test the validity of the regression relationships between them, finding significant effects (positive or negative) between cruise motivation and preference, significant positive effects between cruise motivation and intention, and significant effects (positive or negative) between cruise preference and intention. This paper has extended the previous research of cruise motivation (Hung and Petrick,

2011) and cruise preference (Xie et al., 2012), by refining their scales in a comprehensive structural path model. Second, this research has combined respondents who were repeat cruise tourists and those who were potential novice cruise tourists, from all around the world, though mainly from four Asian markets: Mainland China, Hong Kong, Taiwan, and Japan. The comparison of the four Asian markets shows the characteristics of cruise tourists' demand determinants in terms of motivation, preference, and intention, which will help other researchers and cruise companies to understand growing cruise markets in Asia. This study has advanced the research into those attributes of on-board facilities, which influence the decision making of both seasoned and potential cruise tourists (Xie et al., 2012), employing ANOVA to compare the commonalities and differences of the five markets to draw out some universal standards of cruise competitiveness. All that will give the cruise companies valuable guidelines to develop these competitive regional markets. Cruise companies can get some idea of the marketing implications of common features among Asian markets, in which the tourists are all highly motivated by 'learning' and 'bonding', especially in the Taiwanese market. From this awareness of cruise preference, cruise companies could adapt their products and services to match cruise tourists' demands in the Asian markets, such as strengthening 'recreation' facilities and reducing 'sports' provision, focussing particularly on the high demand market of Taiwanese tourists.

Although our study shows that universal competitive advantages for all cruise markets are difficult to formulate, especially for growing cruise markets in Asia, nevertheless, some important shared commonalities are identified, notably the high importance attached to 'bonding' and 'recreation' facilities, while those provided for 'sports' are considered by far the least important. On the basis of the above analysis, we conclude that the core cruise competitive advantages in growing Asian markets relate to the possibility of offering group-specific activities

that satisfy the need to spend time together in dedicated social groups. The importance of ‘bonding’ is quite typical of the collectivist nature of Asian cultures, in contrast to the individualism prevalent in Western nations. Satisfying the bonding motive offers opportunities for cruise companies, since it is possibly related to return intentions. However, doing this also presents future challenges to the market in which the tourists are most motivated by bonding, because this segment of the Taiwanese market, in particular, had the highest demand for a diversity of cruise facilities. Considering that all segments further showed a relative preference for on-board facilities over port facilities, which were only of modest importance, the primary focus of cruise companies in conquering the Asian markets should be on ship-based facilities, with secondary attention to the quality of ports of cruise lines.

In the field of cruise consumption, there are many phenomena still waiting to be explained. With regard to the varied features of cruise tourists in different markets, it would be meaningful to research the development of competitive cruise markets in the same region, because cruise lines always combine different markets in a region. There is also a considerable need to design and analyse general theories on cruise economics, especially in the context of growing cruise markets.

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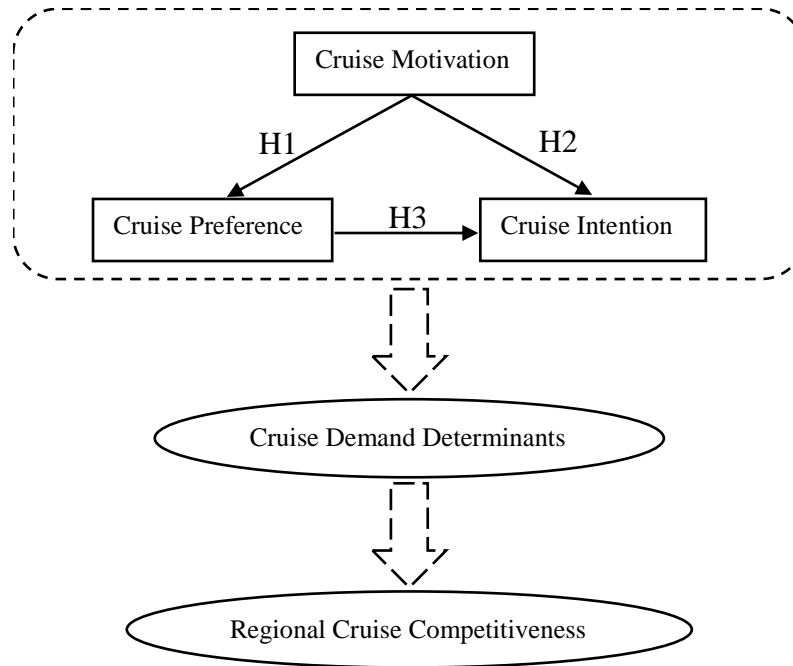


Figure 1 Conceptual Model of Cruise Tourists' Demand Determinants in Competitive Markets

Table 1 Cruise Tourists' Demographic Characteristics

	frequency	Percentage(%)		frequency	Percentage(%)
Gender			Nationality		
Male	291	50.61	Mainland China	128	22.26
Female	284	49.39	Hong Kong	69	12.00
Age			Taiwan	150	26.09
18-29	186	32.35	Japan	138	24.00
30-39	93	16.18	Other	90	15.65
40-49	75	13.04	Cruising experience		
50-59	82	14.26	Never	222	38.61
60-69	80	13.91	First time	117	20.35
≥70	59	10.26	2 times	80	13.91
Marital status			3 times and above	156	27.13
Single	224	38.96	Preferred companion		
Married, no child	77	13.39	Alone	33	5.74

Married, with underage children	90	15.65	With tour group	31	5.39
Married, with adult children	184	32.00	With families/ friends	473	82.26
Occupation			With colleagues	25	4.35
Student	94	16.35	With others	13	2.26
Company staff	116	20.17	Preferred time		
Business owner/manager	51	8.87	≤ 2 days	29	5.04
Liberal profession	63	10.96	3-5 days	186	32.35
Government employee	62	10.78	6-9 days	191	33.22
Retired	98	17.04	10-14 days	115	20.00
Others (housewife, crew)	91	15.83	≥ 15 days	54	9.39
Monthly income			Willing to pay		
≤ US\$1,000	209	36.35	≤ US\$500	89	15.48
US\$1,001-US\$2,000	143	24.87	US\$501-- US\$1000	201	34.96
US\$2,001-US\$4,000	122	21.22	US\$1001-- US\$1500	129	22.43
US\$4,001-US\$8,000	62	10.78	US\$1501-- US\$2000	90	15.65
≥ US\$8,001	39	6.78	≥ US\$2001	66	11.48
Education			Willing to cruise		
High school and below	126	21.91	Strongly unwilling	34	5.91
Vocational school	102	17.74	Unwilling	43	7.48
Bachelor's degree	213	37.04	Uncertain	162	28.00
Graduate and above	134	23.31	Willing	162	28.35
			Strongly willing	174	30.26

Table 2 Promax Rotated Pattern Matrix of Cruise Motivation Items

Cruise Motivation Items	Self-esteem	Escaping	Learning	Bonding
I cruise to do something to impress others	0.547	-0.065	-0.265	0.443
I cruise to help me feel a better person	0.695	0.407	-0.111	-0.217
I cruise to increase my feelings of self-worth.	0.900	-0.053	0.191	-0.170
I cruise to derive a sense of accomplishment	0.730	-0.143	0.180	0.152
I cruise to photograph exotic places to show friends	0.462	-0.021	-0.078	0.530
I cruise to be free to do whatever I want	0.125	0.634	0.194	-0.016
I cruise to escape from the routine of daily life	-0.036	0.760	-0.245	0.154
I cruise to give my mind a rest	-0.082	0.715	0.173	0.029
I cruise to gain knowledge	0.105	-0.092	0.858	-0.037
I cruise to enjoy activities that provide a thrill	0.133	0.025	0.778	0.069
I cruise to experience other cultures	-0.073	0.054	0.844	0.116
I cruise because my friends/families want to cruise	-0.107	0.044	0.052	0.853
I cruise to interact with friends/families	-0.091	0.137	0.210	0.753

Table 3 Promax Rotated Pattern Matrix of Cruise Preference Items

Cruise Preference Items	Basic	Entertainment	Supplement	Sports	Recreation	Children	Asian	Ports
Cabin facilities	0.727	-0.003	0.023	-0.172	0.154	0.208	-0.021	-0.011
Room service	0.753	0.228	-0.019	-0.356	0.027	0.077	-0.073	0.002
Restaurants	0.764	0.184	0.266	-0.020	-0.005	0.049	-0.043	-0.009
Food	0.690	0.020	0.194	0.151	0.094	-0.089	-0.072	0.006
Crew service	0.693	-0.139	-0.182	0.191	-0.077	0.099	0.249	0.043
Cruise directors	0.706	-0.072	-0.237	0.232	-0.149	0.017	0.197	0.076
Bars	0.195	0.825	0.282	-0.073	0.101	-0.228	0.065	-0.048
Casino	0.020	0.793	0.153	0.090	-0.212	0.021	0.222	-0.101
Shows	0.288	0.585	-0.146	0.204	0.038	-0.462	0.081	-0.011
Night club	0.017	0.900	0.075	-0.187	0.027	0.000	0.043	0.038

Social gathering/party	-0.023	0.587	0.080	-0.110	0.333	0.020	-0.257	0.100
Amusing games	-0.102	0.361	-0.093	0.197	0.294	0.078	-0.133	0.180
Educational classes	0.121	0.263	-0.094	0.209	0.172	0.135	-0.081	0.130
Conference facilities	0.057	0.321	0.072	0.111	-0.038	0.486	-0.184	-0.030
Library	0.049	0.364	0.323	0.392	-0.146	0.102	-0.052	-0.024
Internet	0.095	0.144	0.510	0.380	-0.276	0.358	-0.188	0.079
Laundry	0.088	-0.117	0.588	0.646	0.135	0.148	-0.124	-0.133
Sports area	0.091	-0.214	0.260	0.823	0.167	-0.053	0.049	0.046
Running track	-0.002	-0.130	0.085	0.984	0.018	-0.162	0.155	-0.100
Climbing wall	-0.133	0.149	0.016	0.830	-0.119	0.077	0.088	-0.008
Miniature golf	-0.256	0.244	0.116	0.651	-0.022	0.192	0.129	-0.017
Ball activities	-0.169	0.061	-0.176	0.149	0.488	0.305	0.189	0.048
SPA	0.036	0.062	0.007	-0.109	0.839	0.118	0.169	-0.070
Beauty salon	0.059	0.180	0.005	-0.103	0.772	0.095	0.310	-0.188
Fitness	-0.008	0.002	-0.191	0.331	0.664	-0.298	-0.008	-0.013
Swimming pools/tubs	0.182	-0.296	-0.011	0.114	0.618	0.044	-0.201	0.161
Babysitting	0.165	-0.100	0.079	-0.052	-0.008	0.922	0.276	-0.085
Children	0.075	-0.164	0.047	0.002	0.129	0.880	0.202	-0.010
Duty free shops	0.470	0.208	-0.065	-0.091	0.105	0.085	0.392	-0.002
Mahjong/poker	-0.192	0.313	-0.072	-0.036	0.130	0.327	0.582	0.065
Teahouse	0.141	-0.094	0.057	0.267	0.116	0.144	0.653	0.153
Natural landscapes	-0.033	-0.075	0.496	-0.013	0.115	-0.009	0.229	0.685
Cultural landscapes	-0.099	0.061	0.401	0.013	0.017	-0.120	0.225	0.834
City landscapes	-0.110	0.146	0.255	-0.046	0.007	-0.066	0.133	0.877
Tour options	-0.110	0.159	-0.041	0.097	0.109	-0.112	0.043	0.703
Fundamental facilities	0.182	-0.132	-0.061	-0.109	-0.078	0.072	0.012	0.828
Friendly residents	0.118	-0.150	0.001	0.018	0.035	-0.077	-0.138	0.822
Consumption level	0.095	0.011	-0.138	-0.164	-0.296	0.136	-0.033	0.884

Table 4 Standardized and Unstandardized Estimates of Cruise Motivation Measurement Factors

Cruise Motivation	St. F.L.	Unst. F.L.	S.E.	P	Cronbach's α	AVE	CR
Self-esteem					0.733	0.527	0.760
I cruise to increase my feelings of self-worth	0.749	1.000					
I cruise to do something to impress others	0.486	0.704	0.078	***			
I cruise to derive a sense of accomplishment	0.886	1.215	0.098	***			
Escaping					0.687	0.436	0.698
I cruise to escape from the routine of daily life	0.643	1.000					
I cruise to be free to do whatever I want	0.633	0.851	0.093	***			
I cruise to give my mind a rest	0.702	0.868	0.091	***			
Learning					0.692	0.434	0.696
I cruise to gain knowledge	0.617	1.000					
I cruise to enjoy activities that provide a thrill	0.690	1.092	0.113	***			
I cruise to experience other cultures	0.667	0.958	0.101	***			
Bonding					0.652	0.514	0.674
I cruise because my friends/family want to cruise	0.594	1.000					
I cruise to interact with friends/family	0.822	1.217	0.113	***			

Notes: St. F.L.= standardized factor loading; Unst. F.L. = unstandardized factor loading; S.E.=standard error; AVE = average variance extracted; CR = composite reliability.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table 5 Standardized and Unstandardized Estimates of Cruise Preference Measurement Factors

Cruise preference	St. F.L.	Unst. F.L.	S.E.	P	Cronbach's α	AVE	CR
Basic					0.786	0.508	0.799
Restaurants	0.882	1.000					
Cabin facilities	0.631	0.784	0.062	***			
Room service	0.513	0.712	0.071	***			
Food	0.770	0.925	0.060	***			
Entertainment					0.719	0.512	0.752
Night club	0.876	1.000					

Casino	0.532	0.641	0.066	***			
Social gathering/party	0.697	0.743	0.062	***			
Sports					0.800	0.506	0.801
Running track	0.696	1.000					
Sports area	0.557	0.708	0.071	***			
Climbing wall	0.804	1.280	0.094	***			
Miniature golf	0.763	1.194	0.091	***			
Recreation					0.805	0.503	0.798
SPA	0.851	1.000					
Beauty salon	0.751	0.876	0.058	***			
Swimming pool/hot tubs	0.586	0.642	0.056	***			
Fitness	0.616	0.683	0.056	***			
Children					0.869	0.769	0.870
Babysitting service	0.894	1.000					
Children centre	0.860	0.946	0.065	***			
Ports					0.908	0.567	0.901
Consumption level	0.654	1.000					
Natural landscapes	0.783	1.251	0.095	***			
Cultural landscapes	0.832	1.208	0.087	***			
City landscapes	0.847	1.227	0.087	***			
Tour options	0.731	1.149	0.092	***			
Fundamental facilities	0.732	1.092	0.087	***			
Friendly residents	0.667	1.006	0.066	***			
Asian					NA	NA	NA
Teahouse	0.917	1.000					

Notes: St. F.L.= standardized factor loading; Unst. F.L. = unstandardized factor loading; S.E.=standard error; AVE = average variance extracted; CR = composite reliability

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table 6 Significant Regression Paths in Structural Equation Model

Regression Path	St. R.W.	Unst. R.W.	S.E.	C.R	P
H1: Motivation → Preference					
Self-esteem → Basic	-0.300	-0.233	0.057	-4.070	***
Self-esteem → Entertainment	-0.248	-0.273	0.103	-2.657	**
Self-esteem → Sports	-0.351	-0.286	0.084	-3.421	***
Self-esteem → Recreation	-0.420	-0.373	0.089	-4.197	***
Self-esteem → Children	-0.292	-0.361	0.113	-3.207	**
Self-esteem → Ports	-0.309	-0.203	0.047	-4.349	***
Escaping → Basic	0.408	0.444	0.110	4.040	***
Escaping → Recreation	0.400	0.498	0.114	4.353	***
Escaping → Children	0.214	0.370	0.151	2.456	*
Escaping → Ports	0.405	0.372	0.093	3.999	***
Escaping → Teahouse	0.312	0.543	0.158	3.435	***
Learning → Basic	-1.158	-1.171	0.492	-2.382	*
Learning → Entertainment	-1.772	-2.547	1.085	-2.348	*
Learning → Sports	-2.281	-2.423	1.016	-2.385	*
Learning → Recreation	-2.310	-2.669	1.086	-2.458	*
Learning → Children	-2.096	-3.371	1.322	-2.549	*
Learning → Ports	-1.115	-0.952	0.458	-2.079	*
Learning → Teahouse	-1.789	-2.890	1.099	-2.631	**
Bonding → Basic	1.273	2.176	0.842	2.583	**
Bonding → Entertainment	2.244	5.452	1.924	2.833	**
Bonding → Sports	2.795	5.018	1.797	2.793	**
Bonding → Recreation	2.743	5.357	1.904	2.814	**
Bonding → Children	2.351	6.391	2.302	2.776	**
Bonding → Ports	1.426	2.058	0.789	2.608	**
Bonding → Teahouse	1.788	4.882	1.876	2.603	**

H2: Motivation → Intention						
Escaping → Cruise Intention	0.207	0.376	0.150	2.500	*	
Bonding → Cruise Intention	0.283	0.806	0.237	3.402	***	
H3: Preference → Intention						
Basic → Cruise intention	0.125	0.209	0.081	2.587	**	
Sports → Cruise intention	0.149	0.236	0.108	2.185	*	
Recreation → Cruise intention	-0.163	-0.238	0.107	-2.225	*	
Children → Cruise intention	-0.143	-0.150	0.055	-2.704	**	
Ports → Cruise intention	-0.105	0.100	-2.075	0.038	*	

Notes: St. R.W.= standardized regression weight; Unst. R.W. = unstandardized regression weight; S.E.=standard error; C.R.=critical ratio.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table 7 Mean and Standard Deviation of Cruise Motivation and Preference in Different Markets

	Mainland China		Hong Kong		Taiwan		Japan		Others		P-value between groups
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	
Self-esteem	2.486	0.810	2.610	0.709	2.676	0.712	2.699	0.851	2.498	0.917	0.113 ^a
Escaping	3.244	0.537	3.234	0.509	3.473	0.506	3.264	0.628	3.234	0.668	0.002
Learning	3.206	0.545	3.198	0.508	3.393	0.522	3.098	0.715	3.396	0.617	0.000
Bonding	2.490	0.589	2.714	0.479	2.722	0.546	2.449	0.765	2.710	0.600	0.000
Basic	4.017	0.669	4.088	0.598	4.302	0.578	4.205	0.646	4.195	0.606	0.003
Entertainment	3.239	0.817	3.445	0.693	3.763	0.799	3.118	0.909	3.450	1.013	0.000
Sports	2.355	0.680	2.417	0.607	2.693	0.700	2.361	0.651	2.598	0.841	0.000
Recreation	3.827	0.801	3.906	0.637	4.348	0.747	3.816	0.921	4.026	0.917	0.000
Children	3.351	0.868	2.943	0.892	3.568	0.942	2.997	1.031	2.859	1.229	0.000
Ports	3.282	0.556	3.008	0.493	3.444	0.548	3.243	0.639	3.153	0.600	0.000
Asian(teahouse)	3.245	0.772	3.027	0.800	3.447	0.848	3.584	0.911	2.959	1.116	0.000

Notes: S.D.= standard deviation; ^a no significant difference between groups.

* $p < 0.05$.

Table 8 Results of Independent Samples' ANOVA in Different Regional Markets

	P-value of Levene's test	Mainland China		Hong Kong		Taiwan		Japan		
		M.D.	P-value	M.D.	P-value	M.D.	P-value	M.D.	P-value	
Escaping	0.008 ^a	0.010	1.000							Hong Kong
		-0.229*	0.003	-0.239*	0.015					Taiwan
		-0.021	1.000	-0.031	1.000	0.209*	0.022			Japan
		0.010	1.000	0.000	1.000	0.239*	0.038	0.031	1.000	Others
Learning	0.003 ^a	0.008	1.000							Hong Kong
		-0.188*	0.038	-0.195	0.094					Taiwan
		0.108	0.836	0.100	0.941	0.296*	0.001			Japan
		-0.191	0.180	-0.198	0.245	-0.003	1.000	-0.299*	0.009	Others
Bonding	0.000 ^a	-0.223*	0.044							Hong Kong
		-0.232*	0.008	-0.008	1.000					Taiwan
		0.041	1.000	0.264*	0.027	0.273*	0.006			Japan
		-0.220	0.076	0.003	1.000	0.012	1.000	-0.261*	0.044	Others
Basic	0.491 ^b	-0.072	1.000							Hong Kong
		-0.286*	0.002	-0.214	0.184					Taiwan
		-0.189	0.138	-0.117	1.000	0.097	1.000			Japan
		-0.178	0.376	-0.107	1.000	0.107	1.000	0.010	1.000	Others
Entertainment	0.003 ^a	-0.207	0.479							Hong Kong
		-0.525*	0.000	-0.318*	0.031					Taiwan
		0.120	0.949	0.327*	0.045	0.645*	0.000			Japan
		-0.211	0.662	-0.005	1.000	0.313	0.125	-0.332	0.121	Others
Sports	0.011 ^a	-0.062	0.999							Hong Kong
		-0.338*	0.001	-0.276*	0.034					Taiwan
		-0.006	1.000	0.055	1.000	0.331*	0.000			Japan
		-0.243	0.222	-0.181	0.712	0.095	0.990	-0.237	0.224	Others
		-0.079	0.998							Hong Kong
		-0.521*	0.000	-0.442*	0.000					Taiwan

Recreation	0.004 ^a	0.011	1.000	0.090	0.995	0.532*	0.000			Japan
		-0.199	0.646	-0.120	0.982	0.322	0.053	-0.210	0.622	Others
		0.408*	0.024							Hong Kong
		-0.217	0.382	-0.625*	0.000					Taiwan
Children	0.000 ^a	0.355*	0.025	-0.054	1.000	0.572*	0.000			Japan
		0.493*	0.013	0.084	1.000	0.710*	0.000	0.138	0.992	Others
		0.275*	0.005							Hong Kong
		-0.162	0.145	-0.437*	0.000					Taiwan
Ports	0.006 ^a	0.040	1.000	-0.235*	0.039	0.201*	0.045			Japan
		0.129	0.681	-0.145	0.634	0.291*	0.002	0.090	0.965	Others
		0.218	0.499							Hong Kong
Asian		-0.201	0.330	-0.420*	0.006					Taiwan
(teahouse)	0.000 ^a	-0.339*	0.012	-0.557*	0.000	-0.138	0.873			Japan
		0.286	0.315	0.068	1.000	0.487*	0.005	0.625*	0.000	Others

Notes: M.D.= mean difference (column mean-row mean); ^a based on *Welch ANOVA* and *Tamhane's T2* post hoc test;
^b based on *ANOVA* and *Bonferroni*;
^{*} $p < 0.05$.