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Chinese Tourists' Images and Constraints towards Cruising

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INTRODUCTION

The global cruise industry has witnessed a dramatic boom in China. Approximately 530,000 Chinese tourists took cruises beyond the mainland in 2013, more than double the previous year (Shao, 2014). In addition, with cruise vacations becoming more favored by the Chinese, it has been estimated that China will be the second largest cruise market after the U.S. by the year of 2017 (Euromonitor International, 2013). Seeing China as a potential profitable market, some international cruise operators are investing in Chinese cruise tourism. For instance, the 4,200-passenger *Quantum of the Sea* – one of Royal Caribbean International's newest vessels and also one of the ten largest cruise ships in the world – will permanently reposition to Shanghai, China in 2015 (Royal Caribbean Blog, 2014).

Yet, even with these major cruise lines' vastly expanded offerings, little is known about Chinese potential cruisers, especially their images and constraints towards cruising. A considerable amount of research has identified destination image (Baloglu, 2000; Um & Crompton, 1990) and travel constraints (Hung & Petrick, 2012; Woodside & Lysonski, 1989) as important predictors of travel intention. Thus, unveiling potential cruisers' images and constraints toward cruising is likely vital for cruise lines wishing to entice Chinese residents to become cruisers.

Based on the above, the current study is guided by the following research questions:
1) What are Chinese tourists' images of cruising and perceived constraints to cruising?
2) Are travel desires and intentions influenced by perceived images and constraints?

LITERATURE REVIEW

The concept of image was introduced to tourism studies and termed as destination image in the 1970s (Hunt, 1975). Since then, destination image has become one of the most prevalent topics in the tourism field (Pan & Li, 2011). The majority of tourism scholars have argued that destination image has a critical influence on travel decision making processes (Beerli & Martín, 2004). During a decision-making process, tourists usually rely on their perceptions of a destination's image, especially for places they have never visited before. As most potential tourists have only limited knowledge about preferred destinations before actually visiting, destinations often compete only via images (Pike & Ryan, 2004).

The concept of travel constraints has its root in leisure constraints studies and applying the concept of leisure constraints in tourism settings is a relatively recent phenomenon (Hung & Petrick, 2010). Based on the leisure constraints literature, travel constraints have been defined as factors which inhabit continued traveling, cause inability to start traveling, result in the inability to maintain or increase frequency of travel, and/or lead to negative impacts on the quality of a travel experience (Hung & Petrick, 2010).

Unlike leisure constraints, travel constraints have been argued to not be homogeneous across different types of tourists and travel activities (Pennington-Gray & Kerstetter, 2002). For instance, in a cruise tourism context, both Hung and Petrick (2010) and Kerstetter *et al.* (2005) found a fourth dimension besides intrapersonal constraint, interpersonal constraint and structural constraint (Crawford *et al.*, 1991) – Not an Option, which represents an overall lack of interest in cruising as a travel option. In addition, Li *et al.* (2011) reported four constraint factors – structural, cultural, information and knowledge constraints – in the context of Chinese outbound tourism. These findings imply that travel constraints studies should not be directed to the general population or general travel contexts, and should be context-specific.

MODEL AND HYPOTHESES

Based on a thorough review of the literature, a conceptual framework was proposed to test the hypothesized relationships among constructs. Destination images were proposed to have a role in arousing desires, which was further posited to positively influence travel intention. Additionally, it was hypothesized that travel constraints and image significantly influence travel intentions. The updated model includes 19 hypotheses and is included in Figure 1.

METHODS

The research design of the current study consisted of two phases which started with a qualitative inquiry followed by quantitative methods based on the qualitative findings. In phase 1, semi-structured interviews were conducted with a convenience sample of the Chinese population in College Station, TX. A total of 15 participants were recruited in this phase. The main purpose of phase 1 was to determine if additional constraint and image items, beyond those found in the literature, needed to be added. Results of this phase led to an additional 6 items being added to previous cognitive image of cruising measurement scales, 1 item to affective image and 8 items to cruising constraints. A pretest was conducted online and a convenience sample was collected by sending out a Qualtrics link on Chinese social media (i.e. Wechat and Weibo). A total sample of 87 was collected.

In Phase 2, quantitative data was collected to test the proposed hypotheses based on the results of Phase 1 as well as the review of literature. The target population for this study was Chinese tourists who were over 18 and had oversea travel experience. Questionnaires were distributed at two travel agencies in Guangzhou, China and the international departure hall of Guangzhou Baiyun International Airport. Data collection took place between May 13th, 2014 and May 20th, 2014. Questionnaires were distributed on a convenience basis, and thus, the sample for the current study was deemed a convenience sample.

A total of 321 questionnaires were returned with 76 gathered at the travel agencies and 245 collected in the airport. Among the 321 responses, 12 questionnaires were incomplete. Therefore, a total sample of 309 was used for analysis. Since 124 potential respondents rejected to participate, the response rate for this study was 72.13%.

The Statistical Package for Social Sciences (SPSS) was used for descriptive statistics and frequency analysis, Cronbach's reliability and exploratory factor analysis (EFA). Confirmatory factor analysis (CFA) and structural equation modeling (SEM) using LISREL were conducted to test the hypothesized structural relationships in the model.

RESULTS

An EFA was employed on the pretest data to determine the dimensionality of cognitive images as well as the factors that new items loaded. The EFA revealed a 2-dimension (positive and negative) cognitive image scale and also revealed which factors that new items generated in phase 1 loaded. Items with factor loadings lower than 0.5 or cross-loading were excluded from the scales. Based on the literature and the results of EFA, a CFA was performed on the main data and the results demonstrated good model fit (Table 1). All scales were acceptable with good reliability as all composite reliability and most Cronbach's alphas were found to be larger than 0.7 (Table 2).

The proposed 19 hypotheses were tested with SEM. Twelve paths were found to be statistically significant (p < .05) and were supported by the SEM model (Table 3). In particular, positive paths from affective images and positive cognitive images to cruising desires/intentions

were found. Only one dimension of cruising constraints, Not an Option constraints, was found to have negative influence on intentions. In addition, negative cognitive images were found to be an antecedent of cruising constraints.

DISCUSSION AND IMPLICATIONS

For academics, a number of theoretical implications and discussions can be drawn from the results. First, the study has reaffirmed images as important antecedents of travel desire and intention (Chen & Tsai, 2007; Lee *et al.*, 2005), and desire was found to be a strong predictor of travel intention (Park, 2006; Perugini & Bagozzi, 2001). Both findings are consistent with previous studies. Second, significant relationships between negative cognitive images and all four dimensions of travel constraints were found in this study. Few previous travel constraints studies had examined the reasons why people have travel constraints. This finding suggests that constraints may partly come from negative images. Given that few past studies had situated destination image in travel constraints research, this finding suggests that image was an influencer of travel constraints, and therefore it is believed the current findings broaden the spectrum of understanding travel constraints. Third, it was revealed that cruising images were a better predictor of desires/intentions than cruising constraints. Specifically, constraints were found to have no influence on desires, and only one dimension (i.e., not an option constraints) was found to be a significant predictor of travel intentions. This is partly because currently few Chinese tourists have cruise experience (in this study 80.26% respondents were non-cruisers), and it has been found that non-participants are less likely to be aware of potentially encountered constraints than participants (Aas, 1995). For instance, within a cruise context, Hung and Petrick (2012) found a significant path between travel constraints and intention, but compared to cruisers, non-cruisers' travel constraints had relatively less predicting power on travel intention. This finding suggests that the relationship between travel constraints and travel intentions was complex, and more future efforts were needed to further explore the relationship.

For practitioners, these findings have direct implications to marketing strategies. Given that Chinese perceptions of cruising mostly came from the movie *Titanic*, it is implied that *Titanic* is likely to be a powerful medium to elicit intention to participate in a cruise, as long as positive images are used in relation to the movie. For instance, romantic elements should be taken into consideration when designing activities to meet Chinese tourists' expectations of *Titanic*-style vacation. Meanwhile, the study further revealed that both Chinese tourists' cruising desires and intentions were influenced by affective images. These findings suggest that advertisements and promotional materials should try to arouse potential customers' subjective feelings or emotional responses towards cruising. Specifically, advertisements should reflect that people on a cruise enjoy themselves, feel pleasant and feel relaxed (top affective images reported in this study). Moreover, the finding that negative cognitive images were a significant predictor of constraints implies that marketers should address these negative images to decrease constraints, especially the perception of cruising being unsafe and shopping-oriented. These can be addressed by highlighting information pertaining to the safety of cruising as well as the wide range of activities available on a cruise. Last, "not an option" constraints – which represents an overall lack of interest in cruising as a travel option – were found to be the most influential barriers impeding actual purchasing. Based on the measurement items, not an option constraints were mainly associated with prices and family. This implies the importance of offering family-friendly experience at a good price, or a transparent price by listing every item cost in order to provoke interests in cruising that lead to purchase intentions

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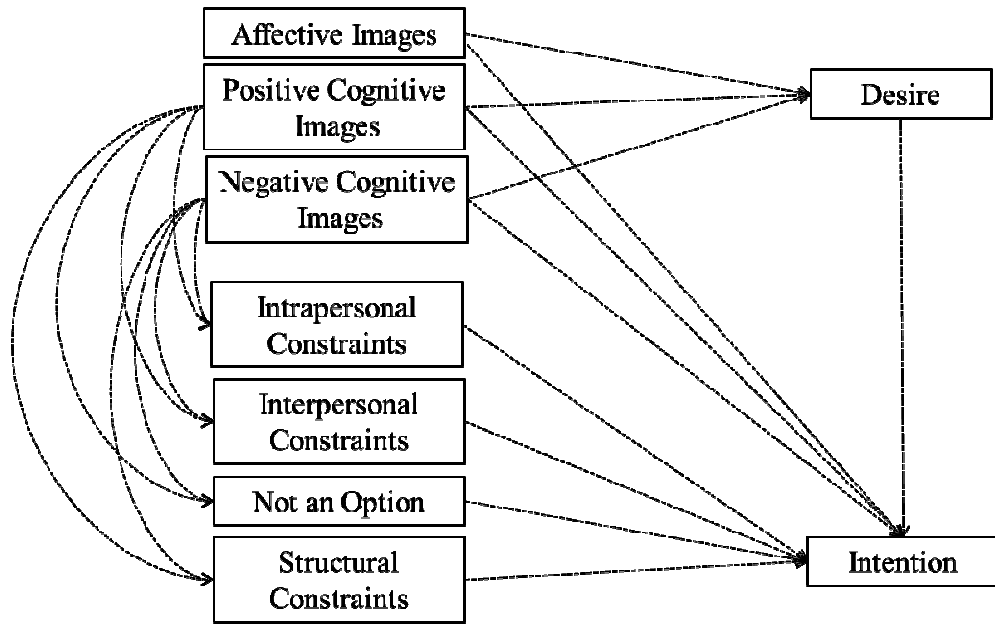
Figure 1. Proposed model of images' and constraints' influence on desire and intention toward cruising

Table 1. CFA of Complete Measurement Model

	Factor Loading	S.E.	Mean	S.D.	t-value
Affective Images					
• Uncomforting – Comforting	.820	.062	5.32	1.33	17.316***
• Unpleasant – Pleasant	.818	.059	5.54	1.25	17.227***
• Sleepy – Arousing	.793	.068	5.14	1.45	16.469***
• Distressing – Relaxing	.773	.066	5.56	1.38	15.828***
• Gloomy – Exciting	.737	.058	5.51	1.19	14.784***
• Not Enjoyable – Enjoyable	.769	.065	5.62	1.34	15.724***
• Boring – Fun	.688	.068	5.39	1.34	13.471***
• Annoying – Calming	.650	.069	5.13	1.36	12.501***
Positive Cognitive Images					
• Cruising has a variety of activities	.658	.045	3.52	.81	11.698***
• Cruising has good entertainment	.655	.044	3.52	.79	11.628***
• Cruise staff will care for my needs	.567	.049	3.58	.85	9.763***
• Cruising provides an opportunity to eat good food	.557	.049	3.42	.85	9.560***
• I can eat a lot of food on a cruise	.530	.053	3.31	.91	9.024***
• Cruise ships provide excellent service	.530	.046	3.82	.80	9.008***
• I can be calm and relaxed on a cruise	.524	.047	3.80	.81	8.9***
Negative Cognitive Images					
• Cruising is boring	.676	.048	2.75	.88	12.029***
• Cruising is unsafe	.657	.053	2.92	.95	11.629***
• I don't feel comfortable being on a ship filled with strangers	.648	.054	2.81	.96	11.425***
• Cruising focuses on shopping too much	.511	.050	2.93	.86	8.607***
• Cruising is superficial	.503	.054	2.61	.91	8.469***
Intrapersonal Constraints					
• I don't cruise because I have claustrophobia	.640	.054	2.35	1.00	11.518***
• I can't cruise because I have poor health	.638	.051	2.64	.94	11.599***
• I have a fear of water/ocean	.604	.059	2.70	1.07	10.747***
• I have sea-sickness/motion-sickness	.588	.062	2.89	1.13	10.421***
• I need a special diet that is not available on a cruise	.528	.047	2.71	.83	9.162***
Interpersonal Constraints					
• I don't cruise because my spouse/partner has poor health	.665	.054	2.57	.89	10.661***
• I might not like my dinner companion	.567	.047	2.68	.88	9.863***
• I might feel lonely on a cruise	.493	.049	2.79	.87	8.472***
Not an Option					
• Cruising is not my family lifestyle	.654	.053	2.91	.99	11.843***
• Cruising is not a good value-for-money	.644	.048	2.95	.86	11.608***
• My family/friends do not cruise	.634	.046	2.87	.86	11.387***
• Cruising never occurs to me as a travel option	.591	.053	2.66	.97	10.439***
• Cruising belongs to upper class	.533	.058	2.76	1.04	9.225***
Structural Constraints					
• I don't cruise due to my work responsibilities	.819	.061	3.06	1.02	13.383***
• It's difficult for me to fine time to cruise	.775	.060	3.16	1.01	12.752***

Note: Measure of model fit: chi-square (787) =1671.79; RMSEA=.06; NNFI=.94; CFI=.94; S.E.= standard error; S.D.= standard deviation.
*** p<.001

Table 2. Reliability of Measurement Model

	Composite Reliability	Cronbach's Alpha
Affective Images	.917	.911
Cognitive Images		
Positive Cognitive Images	.776	.779
Negative Cognitive Images	.738	.739
Constraints		
Intrapersonal Constraints	.738	.755
Interpersonal Constraints	.599	.598
Structural Constraints	.777	.778
Not an Option	.749	.744
Desire	.842	.834
Intention	.838	.837

Table 3. Regression Paths from SEM

Paths	B	S.E.	β	t-value
Affective Images → Desire	**.54**	**.091**	**.715**	**7.876***
Positive Cognitive Images → Desire	**.295**	**.106**	**.391**	**3.691***
Negative Cognitive Images → Desire	-.192	.483	-.254	-.527
Intrapersonal Constraints → Desire	.184	.106	.156	1.466
Interpersonal Constraints → Desire	-.197	.147	-.131	-.895
Structural Constraints → Desire	-.083	.081	-.094	-1.161
Not an Option → Desire	.145	.125	.099	.796
Affective Images → Intention	**.188**	**.103**	**.265**	**2.565***
Positive Cognitive Images → Intention	**.222**	**.121**	**.313**	**2.583****
Negative Cognitive Images → Intention	.12	.532	.169	.317
Intrapersonal Constraints → Intention	-.128	.116	-.115	-.998
Interpersonal Constraints → Intention	.309	.163	.219	1.34
Structural Constraints → Intention	.025	.087	.031	.353
Not an Option → Intention	**-.427**	**.142**	**-.31**	**-2.187***
Desire → Intention	**.459**	**.104**	**.488**	**4.703***
Positive Cognitive Images → Intrapersonal Constraints	**-.147**	**.1**	**-.230**	**-2.312***
Positive Cognitive Images → Interpersonal Constraints	**-.146**	**.147**	**-.289**	**-1.961***
Positive Cognitive Images → Structural Constraints	-.009	.077	-.011	-.14
Positive Cognitive Images → Not an Option	-.047	.113	-.091	-.803
Negative Cognitive Images → Intrapersonal Constraints	**.754**	**.155**	**1.179**	**7.588***
Negative Cognitive Images → Interpersonal Constraints	**.852**	**.364**	**1.692**	**4.647***
Negative Cognitive Images → Structural Constraints	**.505**	**.089**	**.585**	**6.599***
Negative Cognitive Images → Not an Option	**.856**	**.254**	**1.661**	**6.538***

r^2: Intrapersonal=.592; Interpersonal =.747; Structural"=.255; Not an Option =.734;
   Desire =.430; Intention =.496.

Note: Measure of model fit: chi-square (796) =1862.62; RMSEA=.07; NNFI=.92; CFI=.93; S.E.= standard error; r^2=squared multiple correlation.
*p<.05, **p<.01, ***p<.001