

IMPACTS OF EXTERNAL DRIVING FORCES ON TRAVEL MOTIVATIONS: A CASE STUDY OF CHINESE TOURISTS TO HAWAII

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ABSTRACT

This study applies the theory of pull factors as a basic theoretical framework to explore the motivational factors that drive and attract Chinese outbound tourists to travel to Hawaii. Primarily, questionnaire survey has been conducted to collect the primary data, and analytical methods including descriptive analysis, factor analysis and t test are utilized to understand factors related to push theory that have had significant influences on Chinese travelers to Hawaii. This study has identified five principal pull factor components representing: “destination core infrastructure functions”, “easily accessible travel information”, “leisure and outdoor activities” “destination shopping facilities” and “cultural and historical attractions”. Such identifications have diversified the pull pool of travel motivations and more importantly, enabled an in-depth understanding of the major driving forces behind Chinese tourist’s choice of Hawaii as a travel destination. Among these important pull factors, three top important pull motivational items are “safety and security of the destination” “natural scenery of the destination” and “environment and weather of the destination”. Traveling far away from home, Chinese tourists seem to place an extremely high concern on their personal safety and security. When designing and introducing facilities and travel activities, local marketing organizations are advised to take consideration into and prioritize safety issues. In addition, out-of-date infrastructures that do not function and operate efficiently must be improved or even replaced to enhance easy accessibility and safety. Finally, this study summarizes the important findings and discusses the practical implications of these findings for the tourism industry in Hawaii. Limitations to the study are also presented and future studies recommended in the end of this paper.

Keywords: Travel motivation, pull factors, Chinese outbound tourism, Hawaii

1. INTRODUCTION

Global tourism experienced a tremendous development over the past decades. From 1950 to 2005, international tourist arrivals increased by 781 million, corresponding to an average annual growth rate of 6.5% (UNWTO, 2013). During this period, Asia and Pacific had maintained the fastest growth rate of 13% on average in a comparison to 10% from the Middle East, 5% from the Americas and 6% from Europe. The Americas and Europe grew under the international average percentage points and saw less dynamic growth due to the economic recessions and declines suffered in the past. However, according to the UNWTO (2013), both regions were still the main tourist-receiving regions in the world and jointly accounted for 76% of market share for global tourism in 2000. Overall, the dramatic growth of international tourist arrivals had brought about a significant rise in international tourism receipts.

Chinese outbound tourism has experienced tremendous growth in recent decades due to the government relaxed policies and economic prosperity (Zhang et al., 1999). Chinese Tourism Industry Statistics Report (2009) had pointed out that the total number of Chinese outbound tourists in 2009 was approximately 47.6 million, a 4% increase over that in the year of 2008. Outbound travel from China is expected to reach an approximate 100 million individuals by 2020, making China the fourth largest source of outbound travel in the world (UNWTO, 2000). The rapid development of Chinese outbound tourism has attracted much attention from the academic field. Studies of travel motivation have been conducted to reveal the demographic characteristics and travel motives of Chinese outbound tourists and to explore the destination attributes that Chinese outbound tourists rate as important.

A literature review on tourist motivation has indicated that travelers with different social demographic characteristics may be driven by different push factors. Therefore, it might also be interesting to look into the relationship between motivational forces and social demographic characteristics demonstrated among Chinese travelers who are about or intended to travel to Hawaii. It is critical for tourism marketers to acquire the knowledge of travel motivations that stimulate and accord with certain demographic groups. Equipped with this set of knowledge, tourism practitioners are thus able to design and create differentiated travel products which meet specific needs of travelers from individual market segment in order to gain competitive advantage in global tourism industry.

The main purpose of this study is to explore and identify the motivational factors that affect Chinese outbound tourists' decision making process regarding their tours to Hawaii. Factors are sought from the pull perspectives, indicating what external forces drive Chinese tourists to travel to Hawaii. Specifically, this study provides an overview of demographic characteristics of

Chinese tourists who are about or intended to travel to Hawaii. Further, differences and similarities in the motivational factor components that have been identified through factor analysis are compared among the classified demographic groups according to gender, marital status, age and education level.

By exploring these unique travel motivations, this study can then be significant in serving as an initial attempt before conducting a comparative study in tourist motivation between Chinese people traveling to Hawaii and to other resort destinations. Next, this study is among a few studies which have adopted quantitative research method to understand travel behaviors of Chinese tourists in the context of their traveling to Hawaii. It is worth noting that factor analysis along with other statistical techniques was applied to identify principal motivational components for Chinese travelers to Hawaii and analyze their relationship with the classified demographic groups. The findings of this study would be very helpful for tourism industry to proceed to next stage of strategic marketing: the clustering of Hawaii Chinese visitors and the segmentation of Chinese market in Hawaii.

In a practical point of view, as the number of Chinese outbound tourists grows, understanding Chinese tourists' decision making process of destination choice becomes a critical part of the overall strategic marketing management for destination strategists and planners across the world. Motivation for Chinese tourists to travel plays a significant role in formulating such a process. This study, which sets out to explore and identify pull motivational factors in light of Chinese tourists' travel to Hawaii, hence provides great insights for Hawaii local decision makers and practitioners on tourism and hospitality services to thoroughly comprehend travel motivations that underlie Chinese travelers' choice of Hawaii and to better formulate marketing strategies and policies that help to increase Chinese visitor arrivals in Hawaii.

2. LITERATURE REVIEW

2.1 Pull Factors

Pull factors are more associated with the destination characteristics, and they are forces that attract tourists to specific destinations in a sense that products and services provided by tourism destinations can somehow fulfill certain aroused needs and wants of tourists. In Crompton's (1979) study in the motives of pleasure vacationers, two pull motives of novelty and education are sought and noted to be at least partially aroused by the particular qualities that a destination offered. As Crompton (1979) emphasized, a destination should be treated as a medium through which the socio-psychological motives of travelers are satisfied. Furthermore, Witt and Mountinho (1989) suggested that there are three important components of destinations which act as pull forces to visitors. The first component refers to static factors, which include climate,

distance to travel facilities, historic and cultural features, and natural landscapes. The second component represents dynamic factors such as accommodation and catering services, personal attention, entertainment and sports, political atmosphere, and trends in tourism. The third component contains current decision factors such as marketing strategies and prices in both the destination region and the tourist's area of origin. The characteristics of a destination varying from the first to the third component of pull forces help to cater for the different levels of tourists' preferences, and thus determine in a large part whether or not the tourists choose that destination to travel to.

According to McGehee et al. (1996), the destination attributes can stimulate and consolidate inherent push motivations. Conversely, it implies that pull motivations or destination attributes can be more effective in pulling travelers when they work in a significant effort to meet the travelers' socio-psychological needs and wants. Nevertheless, subsequent studies of travel motivation executed in different settings further enrich the variety of pull factors as people's travel activities became more complex and multifaceted. Yuan and McDonald (1990) identified seven pull factors from 53 attraction items: culture and history, facilities, budget, wilderness, ease of travel, cosmopolitan environment, and hunting. Moreover, Beerli and Martin (2004) established nine dimensions of destination attributes encompassing natural attractions, general infrastructure, tourist infrastructure, leisure and recreation, art, history and culture, politics and economics, the environment, social issues, and atmospherics. Each group then contains a number of specific destination attributes which in combination contribute to forming the perceived destination image that in turn assists in tourists' choice of travel resort. Having reviewed the existing literature of travel motivation, Jang and Wu (2006, p.307) summarized that "common pull factors include natural and historic environment, cost facilities, safety, and easy-to-access". In their study, they have found that cleanliness and safety were the most important pull factor that account for the travel motivations of Taiwanese seniors (Jang & Wu, 2006). Due to numerous pull factors in the literature review, this study aims to assess the generability of previously identified pull factors in the case of Chinese outbound tourists visiting Hawaii. It is to evaluate how well that Hawaii performed on a selected set of attributes and how importantly these attributes were rated by Chinese tourists when they decided on Hawaii as their travel destination. In addition, the relationship between the socio-demographic variables and the primary pull factor components is to be examined.

3. METHODOLOGY AND RESEARCH DESIGN

3.1 Data Collection

The main purpose of this study is to explore and identify the motivational factors that affect Chinese outbound tourists' choice of Hawaii as their travel destination. The pull factor theory of tourist motivation is adopted as a theoretical framework, and specific research questions include what demographic characteristics Chinese outbound tourists intended to Hawaii display, what pull motivational items influence Chinese tourists' decision making process of destination choice, and how differently the principal motivational factor components weigh among the classified demographic groups. Under the guidance of the main study purpose, this section is dedicated to the detailed description and justification of research methodology applied in this study. Four areas of concerns, including data collection and sampling, instrumentation, data collection techniques, and data analysis methods, are addressed respectively as follows.

Data collection was conducted through the administrated questionnaire survey at four main geographic locations in Mainland China, including Guangdong, Zhejiang, Hunan and Hubei. The sample population was Chinese citizens who were about or intended to travel to Hawaii. This group of people was targeted because their opinion was more likely to reflect the real motivation for Chinese outbound tourists to travel to Hawaii prior to their departure. Their thoughts on travel motivations were not influenced by other elements related to the post-travel experiences such as satisfaction with the destination activities and services or the follow-up marketing campaigns executed by the destination marketing organizations.

There was an upward trend that an increasingly large number of Chinese people from the nation's second tier cities, Changsha in Hunan, Wuhan in Hubei, started traveling abroad. In addition, according to Zhang (2010), a large majority of Chinese mainland travelers to Hawaii came from China's provinces and large municipals of Guangdong, Zhejiang, Beijing and Shanghai. Therefore, choosing Guangdong, Zhejiang, Hunan and Hubei as main data collection locations had greatly enlarged chances and probability of gathering more reliable data representative of the opinion of people who are willing to engage in a tour to Hawaii.

Survey participants were selected on a convenience sampling basis. The convenience sampling method is normally used in large survey projects, and it is an efficient way to collect substantial and sufficient data justifiable for statistical analysis (Hair et al., 2010). In order to get access to the targeted sample population, contacts were first made by email to the local tourism agencies in each capital city of the aforementioned data collection locations. On this initial stage, research purpose and objectives as well as relevant confidential policies were carefully introduced and communicated to the agency managers. It should be noted that all the agencies having been contacted were those that had attained the permission from Chinese tourism authorities to operate outbound travel businesses, and thus were more likely to be accessible to the respondents who had traveled or would travel to Hawaii. One travel agency at each capital city, i.e.

Hangzhou, Guangzhou, Changsha and Wuhan had eventually agreed to participate and assist in the questionnaire survey. For the agreed confidentiality reasons, the name of the tourism agency was not revealed here. Subsequently, copies of questionnaire in both Chinese and English were forwarded to the managers at each tourism agency, and a video conferencing was held to explain the survey procedures and instructions so that all the managers know how to properly conduct the questionnaire survey on site.

The questionnaire was completed under the guidance and instruction of site managers at each travel agency. Respondents were generally those tourists from the travel agencies who were about or intended to travel to Hawaii. The detailed profile and characteristics of respondents are informed in the section of description of the respondents' demographic profile. The completed questionnaires were sent back through email, the responses of which were then sorted, recorded and input into the SPSS analytical software program. The questionnaires that had been received were totaled 262. However, there were 243 useable while the rest were disregarded due to the incomplete and vague responses. In general, response rate of around 93% is regarded as being extremely high thanks to the assistance and tremendous efforts made by the four local participatory travel agencies.

3.2 Data Analysis

IBM Statistical Package for Social Science (SPSS) 20 was used to analyze the data, and specific data analytical methods adopted for the purpose of this study included descriptive statistics, factor analysis and t test. Explanations on each of these methods are given as below. First, a descriptive analysis was used to calculate basis summary statistic, such as means and standard deviations (Norusis, 2008). This procedure in general helps to analyze, summarize, and present the descriptive information as to what push or pull motivational items are important to Chinese travelers to Hawaii and what are unimportant. What's more, by computing standard deviations, it is straightforward to see that how widely responses deviate from central means. The large standard deviation, the wider the responses from survey participants span on the 7-point likert scale measuring each variable.

Second, factor analysis was applied to identify a relatively small number of factors that explain observed correlations among variables (Norusis, 2008). It contributes to uncovering and validating the underlying structure of a set of variables. Statistically, factor analysis can be used for many different purposes. This study, however, uses it to reduce a large number of correlated push and pull variables to a more manageable number of independent factors which are then utilized in the subsequent t test. Between two main types of factor analysis – exploratory factor analysis (EFA) and confirmatory factor analysis (CFA), CFA was adopted because this study is

to confirm the validities of those motivational factors that have been used in previous studies. In addition, a principal component method with varimax rotation was used and a default eigenvalue of one was applied to control the number of factor being extracted.

Third, with reference to t test, two different types of t test are used: independent-samples t test and one-way ANOVA. Independent-samples t test was to test the hypothesis that two independent population means are equal (Norusis, 2008). For instance, as in the case of this study, the null hypothesis was tested that the male and female have the same average mean values for each of the principle push and pull factors identified through previous factor analysis. In addition, one-way ANOVA was applied to test that two or more groups come from population with the same mean (Norusis, 2008). This procedure was useful in this study to compares means of some different demographic groups among various identified principal factors. It is attempted to find out, for example, what principal factors are important to what age and educational group(s) and what factors make no difference across all age and educational groups.

4. FINDINGS

4.1 Demographic Information

The total respondents that had been surveyed were 262. However, there were 243 valid and complete responses, and the rest 19 responses were not used because some sections of the questionnaire were left totally uncompleted or some questions were answered in an unclear and confusing manner. The summary of the demographic profile on the 243 respondents is presented as follows in terms of gender, marital status, age, the original residential location, household income, occupation, and educational level.

Among the 243 respondents being surveyed, 159 were female, accounting 65.4% of the total, while only 84 were male, representing the remaining 34.6%. Apparently, female respondents were far more than their male counterparts, almost doubling the number of male respondents. The marital status variable was measured in terms of only single and married options. There were no other options such as divorced and widows. The number of married and single respondents was not largely differentiated. The number of 136 single respondents constituted 56% of the entire sample, which was a little higher than the rest 107 respondents who responded being married.

The age variable of the respondents was assessed in five demographic groups consisting of those born between 1925 and 1945, 1946-1964, 1965-1981, 1982-2000, and after 2000. Of the 243 people who had been surveyed, a large majority of them fell into the group between the year of 1982 and 2000. This number accounted for 173 respondents, as high as about 71% of the total.

The second largest demographic group of people who had participated in the survey was those born between 1965 and 1981. Very few respondents were baby boomers, and none of them was in the silent generation born between 1925 and 1945.

The household income of the respondents was widely scattered. 30 respondents reported that their household income was under RMB 5,000 while 28 claimed at RMB 30,001 and over. By contrast, the number of the respondents whose household income was between RMB 5,001 and 10,000 was the greatest, 86 respondents standing for about 35% of the overall sample. The respondents with the reported household income between RMB 10,001 AND 20,000 was the second largest, where 64 respondents represented approximately 27% of all the survey participants. Overall, the average household income for all the respondents was RMB 14,280. It can be concluded from the presented Table 7 that almost 98% of respondents had completed the higher education, with 163 respondents having received a bachelor degree and 74 having had a master or even PhD degrees. There were quite a small number of respondents who reported as either a high school or technical/professional school diploma holder. Overall, approximately 98% respondents have had higher education from colleges and universities.

Table 1: Respondents’ Descriptive Statistics of Pull Factor Items

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Safety and security of the destination	243	1	7	6.43	1.090
Natural scenery of the destination	243	1	7	6.35	1.082
Environment and weather of the destination	243	1	7	5.98	1.230
Availability of beautiful ocean beaches at the destination	243	1	7	5.84	1.481
Unique culture or customs of the destination	243	1	7	5.81	1.204
Cleanliness of the destination	243	1	7	5.76	1.155
Convenience of obtaining visa to destination	243	1	7	5.74	1.279
Comfort and convenience of the destination transportation	243	1	7	5.74	1.277

Friendliness and politeness of the destination locals	243	1	7	5.67	1.282
Festival or recreation activities of the destination	243	1	7	5.30	1.254
Easiness of accessing tourist information at the destination	243	1	7	5.20	1.483
Consumption level of the destination	243	1	7	5.19	1.263
Historical sightseeing of the destination	243	1	7	5.06	1.466
Abundance and variety of nightlife at the destination	243	1	7	4.57	1.663
Closeness of the destination to other destinations	243	1	7	4.53	1.514
	N	Minimum	Maximum	Mean	Std. Deviation
Chinese speaking work staff available at the destination	243	1	7	4.46	2.017
Shopping facilities of the destination	243	1	7	4.45	1.511
Available direction signs in Chinese at the destination	243	1	7	4.17	2.003
Availability of good cafes or western restaurants	243	1	7	3.99	1.836
Availability of luxury resort and good service of the destination	243	1	7	3.94	1.751
Availability of good Chinese restaurants	243	1	7	3.84	1.833
Adventurous activities at the destination	243	1	7	3.74	1.868
Valid N (listwise)	243				

4.2 Descriptive Analysis

This section examines various factors that motivate Chinese outbound tourists to travel to Hawaii from pull factor perspectives. As introduced in previous sections, pull factors are associated with the destination characteristics which attract tourists to travel to the destination. A descriptive

analysis is conducted at this point in time to show the relative mean value and standard deviation of each factor and understand to what degree of importance each pull factor is rated by the respondents. By doing so, a general picture of important and unimportant travel motivation factors in terms of Chinese traveling to Hawaii is created. The results of the descriptive analysis are shown and discussed in the following sub-sections.

The mean value and standard deviation of 22 pull factors are summarized in Table 1. It is not difficult to see that mean values are varied across all the pull factors, which means that the respondents value these destination features at different weightings. The top three highly rated destination features that the respondents look for involve “safety and security of the destination” “natural scenery of the destination” and “environment and weather of the destination”, the mean values of which are 6.43, 6.35 and 5.98 accordingly. Some other pull factors, though not so important as the top three in the eyes of Chinese tourists, have attracted much attention, such as “beautiful ocean beaches”, “unique culture and customs” and “cleanliness of destination”. It is worthwhile mentioning that “obtaining visa to destination” is also an inevitably critical factor for Chinese travelers to consider because of their restricted mobility to overseas destination countries. According to the survey, there are some destination features which are not so attractive to Chinese tourists. Chinese tourists seem to not pay much attention to destination adventurous activities, Chinese and western restaurants, and luxury resorts and the corresponding services provided.

4.3 Factor Analysis

As with the factor analysis of push motivational items, the Kaiser-Meyer-Olkin (KOM) measure of sampling adequacy is calculated as the first step to test the adequacy of 22 pull motivational items for the factor analysis at this point in time. Applying the same criterion proposed by Kaiser (1974), it is found that 0.864 KOM score is an adequate indicator for going ahead data with the factor analysis (Table 2). This aside, the Bartlett’s test produces a significant p value which is almost close to 0, and this is equal to say that sample size is valid and reliable.

Table 2: KMO and Bartlett’s Test for Pull Motivational Items

KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.864
Approx. Chi-Square	2247.440
Bartlett's Test of Sphericity	df
	231
	Sig.
	.000

Table 3: Factor Analysis of Pull Motivational Items (First Round)

Rotated Component Matrix

	Component				
	1	2	3	4	5
Safety and security of the destination	.783	-.006	.069	.179	.068
Natural scenery of the destination	.742	.065	-.078	.221	-.079
Comfort and convenience of the destination transportation	.693	.226	.167	.023	.227
Cleanliness of the destination	.668	.005	.113	.167	.288
Environment and weather of the destination	.638	-.043	-.081	.178	.053
Convenience of obtaining visa to destination	.635	.433	.143	.025	-.014
Consumption level of the destination	.597	.151	.238	-.110	.255
Friendliness and politeness of the destination locals	.569	.153	.351	.360	.008
Easiness of accessing tourist information at the destination	.463	.391	.040	.032	.383
Availability of beautiful ocean beaches at the destination	.420	.374	.366	.120	-.266
Available direction signs in Chinese at the destination	.067	.835	.084	.157	.226
Chinese speaking work staff available at the destination	.114	.788	.284	.089	.070
Availability of good Chinese restaurants	.108	.786	.083	.138	.267
Adventurous activities at the destination	.044	-.049	.762	.098	.069
Abundance and variety of nightlife at the destination	.173	.118	.727	.047	-.019
Availability of good cafes or western restaurants	.019	.281	.699	.078	.166
Availability of luxury resort and good service of the destination	.006	.294	.604	.069	.433
Unique culture or customs of the destination	.348	.067	.135	.763	-.013
Historical sightseeing of the destination	.050	.210	-.091	.741	.384
Festival or recreation activities of the destination	.215	.124	.279	.547	-.027
Shopping facilities of the destination	.275	.301	.155	-.062	.700
Closeness of the destination to other destinations	.140	.173	.136	.296	.643

In the first round of factor analysis, five principle factor components are derived (Table 3). These five factor components explain about 61% of total variance, and each of them has an eigenvalue greater than 1. All the pull motivational items under examination demonstrate significant loading factors well above 0.4, and there is no cross loadings because no items have been loaded with a factor coefficient above 0.5 across two or more components at the same time. Nonetheless, two pull motivational items, i.e. “environment and weather of the destination” and “festival or recreation activities of the destination” should be ruled out for further analysis because of their communalities being under the cutting point of 0.5. The communalities of these two variables are too small so they cannot be predicted by the common factors. Consequently, 20 pull motivational items are kept for the next round of factor analysis.

The second round of factor analysis generates five principle components where each factor has an eigenvalue above 1 and all the factors jointly explain almost 65% of total variance. That being said, every pull motivational item has a factor loading value greater than 0.4 and there are no cross loadings by the criterion that one item demonstrates a factor loading above 0.5 in more than one factor dimension. The communalities of all the observed variables are well above 0.5. Ultimately, five factor components are ultimately established and each component contains corresponding pull motivational items with significant loading factors as indicated in Table 4.

Table 4: Factor Analysis of Pull Motivational Items (Second Round)

Rotated Component Matrix

	Component				
	1	2	3	4	5
Safety and security of the destination	.781	-.029	.053	.077	.181
Natural scenery of the destination	.751	.041	-.095	-.077	.227
Comfort and convenience of the destination transportation	.695	.204	.137	.259	-.008
Convenience of obtaining visa to destination	.681	.396	.100	.021	-.017
Cleanliness of the destination	.664	-.012	.097	.301	.162
Consumption level of the destination	.621	.109	.198	.279	-.093
Friendliness and politeness of the destination locals	.614	.133	.337	.010	.316
Easiness of accessing tourist information at the destination	.467	.374	.019	.408	.021
Availability of beautiful ocean beaches at the destination	.453	.366	.359	-.269	.074

Available direction signs in Chinese at the destination	.087	.841	.093	.221	.134
Availability of good Chinese restaurants	.126	.789	.093	.258	.134
Chinese speaking work staff available at the destination	.159	.781	.282	.064	.065
Adventurous activities at the destination	.072	-.050	.773	.045	.088
Availability of good cafes or western restaurants	.037	.292	.717	.146	.055
Abundance and variety of nightlife at the destination	.221	.107	.707	.002	-.038
Availability of luxury resort and good service of the destination	.011	.305	.621	.417	.063
Shopping facilities of the destination	.262	.289	.147	.712	-.028
Closeness of the destination to other destinations	.149	.169	.142	.632	.316
Unique culture or customs of the destination	.376	.071	.178	-.082	.797
Historical sightseeing of the destination	.063	.225	-.042	.322	.786

By virtue of the characteristics of pull motivational items under each component, the five factor components that have been identified in the previous analysis are marked as “destination core infrastructure functions”, “easily accessible travel information”, “leisure and outdoor activities” “destination shopping facilities” and “cultural and historical attractions” respectively. It is worth pointing out that the factor of “destination core infrastructure functions” is actually defined as a broad concept which involves various destination features regarding safety, cleanliness, weather and transportation. Such a factor, as shown in the second row of Table 5, has a bearing of mean score as high as 4.089, explaining about 21% of total variance. The other four factors, whose statistics in relation to loading factor and total variance explained are not as remarkable as the “destination core infrastructure functions” factor, can not be underrated in terms of their importance in pulling the Chinese tourists’ travel intention to travel to Hawaii.

Table 5: Summary of Factor Analysis Results for Pull Motivational Items

Factors	Loading	Eigenvalue (%)	Variance Explained (Mean)
Factor 1: Destination core infrastructure functions (including destination safety, cleanliness, weather, etc.)	6.671	33.355	4.089
Factor 2: Easily accessible travel information	2.248	11.240	2.804
Factor 3:Leisure and outdoor activities	1.619	8.095	2.501
Factor 4:Destination shopping facilities	1.240	6.201	1.821
Factor 5:Cultural and historical attractions	1.070	5.351	1.634

Table 6: Comparison of Pull Factors between Gender Groups

		t-test for equality of means			
		t	df	Sig. (2-tailed)	Mean Difference
Factor 1	Equal variances	.086	241	.931	.01168393
Factor 2	Equal variances	-2.114	241	.036	-.28307837
Factor 3	Equal variances	.845	241	.399	.11398702
Factor 4	Equal variances	-1.372	241	.171	-.18474852
Factor 5	Equal variances	.167	241	.867	.02261494

4.4 ANOVA & T Test

In this section, two different forms of t test, i.e. independent-samples t test and one-way ANOVA, are applied to justify the significant differences of the five factor components, as established in the previous factor analysis, among different demographic groups classified on the basis of gender, marital status, age and education level. Through such exercises, it is to test whether or not these factor components weigh differently among the classified demographic groups.

First, the independent-samples t test is performed to calculate the relative t values of each factor over the gender variable. As Table 6 shows, there is no significant difference between male and female in viewing the importance of the factor of “destination core infrastructure functions”. This is to say that destination features such as destination cleanliness, weather, safety and

transportation on average are equally rated by both male and female respondents. Besides, t scores on the factors of “leisure and outdoor activities” “destination shopping facilities” and “cultural and historical attractions” are statistically insignificant, which leads to a conclusion that no difference exists between men and women on the importance of these factors. However, it is found that the absolute t value of 0.28 for the factor of “easily accessible travel information” is significant at 95% confidence interval. Such a finding has the implication that the female are more likely to be attracted by destinations with easily accessible travel information than the male.

Second, the independent-samples t test is executed to find out the differences of mean value in the five factors between different marital status groups. Results in Table 7 demonstrates that the mean differences are statistically significant, at the 95% confidence interval, in the factors of “easily accessible travel information” (factor 2), “leisure and outdoor activities” (factor 3) and “destination shopping facilities” (factor 4) between married and unmarried respondents. A negative mean difference for factor 4 states that single respondents attach less importance to the “destination shopping facilities” factor than married respondents do. A negative mean difference for factor 2 then means that the married are more likely to be pulled to travel to Hawaii than the unmarried by the destination providing easily accessible travel information. However, the single respondents generally rate the factor of “leisure and outdoor activities” as more important than do the married ones given a positive 0.51 mean difference. The t scores for the factors of “cultural and historical attractions” and “destination core infrastructure functions” are not statistically significant at 95% confidence level, and therefore it can be concluded that the married and unmarried respondents are on average the same in assessing the importance of both factors.

Third, the one-way ANOVA test is applied to compare the mean difference of five established pull factor components among four different educational groups labeled as “high school or less”, “technical/professional school” “college/university” and “post graduate school or above”. F value, as demonstrated in Table 8, is statistically significant for the factors of “easily accessible travel information” and “leisure and outdoor activities” while it is insignificant for the other three factor dimensions at 5% level of significance. As such, it can be concluded that that respondents with different educational level are attracted to the destination of Hawaii by the factors of “easily accessible travel information” and “leisure and outdoor activities” to different degrees. According to the subsequent computations of mean value and standard deviation (Table 9), respondents who have had technical/professional schooling rate the “easily accessible travel information” factor the most important, followed by those with high school diploma and college/university degrees. Respondents with postgraduate degree attach this factor with the least importance. In addition, as for the factor of “leisure and outdoor activities”, respondents with

college/university degrees obviously place more importance on it than do any other educational groups. Unlike with the “easily accessible travel information” factor, respondents with technical/professional school education associate the “leisure and outdoor activities” factor with the lowest level of importance.

Table 7: Comparison of Pull Factors between Marital Status Groups

		t-test for equality of means			
		t	df	Sig. (2-tailed)	Mean Difference
Factor 1	Equal variances	-1.510	241	.132	-.19456790
Factor 2	Equal variances	-4.560	241	.000	-.56658111
Factor 3	Equal variances	4.076	241	.000	.51052323
Factor 4	Equal variances	-4.454	241	.000	-.55436080
Factor 5	Equal variances	-1.726	241	.086	-.22217905

Table 8: Comparison of Pull Factors among Different Educational Groups

		ANOVA	
		F	Sig.
Factor 1	Between groups	.644	.588
Factor 2	Between groups	13.605	.000
Factor 3	Between groups	8.395	.000
Factor 4	Between groups	1.875	.134
Factor 5	Between groups	.256	.857

Table 9: Calculated Mean and Standard Deviation among Education Groups

Descriptives

		N	Mean	Std. Deviation
Factor 2: Easily accessible travel information	High school or less	4	1.0035887	.95275666
	College/University	163	.1814055	.90374931
	Technical/professional school	2	1.8792386	.16238428
	Post graduate school or above	74	-.5046207	.99060986
Factor 3: Leisure and outdoor activities	High school or less	4	-.9711837	1.36002110
	College/University	163	.1907697	.94731336
	Technical/professional school	2	-1.6861625	.48845209
	Post graduate school or above	74	-.3221405	.96346091

Table 10: Comparison of Pull Factors among Age Groups

		ANOVA	
		F	Sig.
Factor 1	Between groups	.204	.815
Factor 2	Between groups	10.621	.000
Factor 3	Between groups	7.929	.000
Factor 4	Between groups	1.175	.310
Factor 5	Between groups	.205	.815

Fourth, the one-way ANOVA test is used to calculate the relative mean values of each identified factor in the five classified age groups and determine their statistical significance. Results in Table 10 show that age groups display very significantly different mean values on factors 2 and 3, i.e. “easily accessible travel information” and “leisure and outdoor activities”. There is however no significant mean difference in factors 1, 4 and 5, meaning that different age groups are equally attracted by these factors. Further, according to the results presented in Table 11, respondents born between 1946 and 1964 rate the factor of “easily accessible travel information” as the most important, followed by those born 1965-1981 and 1982-2000. A conclusion may be drawn that the older the travelers, the more likely they are attracted by the destination offering easily accessible travel information. Besides, respondents in the 1982-2000 age group rate the “leisure and outdoor activities” factor as a more important factor than do their counterparts from other age groups. Respondents born 1946-1964, however, report this factor as the least important. Hence it might be seen that the importance of destination feature - “leisure and outdoor activities” - declines as the age of tourists increases.

In conclusion, this chapter has provided an overview of the respondents’ demographic profiles and traveling history. Apart from that, the importance order of both push and pull motivational items has been figured out by calculating the mean value and standards deviation in a descriptive analysis. More importantly, five factor components in the push and pull side have been identified through factor analysis and t test has been used to find out whether or not these identified factor components weigh differently among different demographic groups. Overall, research findings are presented in this chapter and in-depth discussion of these finding results and relevant business implications are then given in the next chapter.

Table 11: Calculated Mean and Standard Deviation among Age Groups

		Descriptives		
		N	Mean	Std. Deviation
Factor 2: Easily accessible travel information	Between 1946 and 1964	7	.8361510	.63825595
	Between 1965 and 1981	63	.3879044	1.05225985
	Between 1982 and 2000	173	-.1750927	.93767665
	Total	243	.0000000	1.00000000
Factor4: Leisure and outdoor activities	Between 1946 and 1964	7	-.5067041	1.04382844
	Between 1965 and 1981	63	-.3761178	.97955850
	Between 1982 and 2000	173	.1574702	.96741084
	Total	243	.0000000	1.00000000

5. DISCUSSION

Numerous research have explored and identified individuals’ travel motivation from socio-demographic and psychological perspectives (Crompton, 1979; Sangpikul, 2008; Zimmer *et al.*, 1995; Sirisukul, 1998; Cha & Jeong, 1998, Jang & Wu, 2006). Many studies have further sought to understand the motivational factors in term of push and pull motivations in Dann’s theory (You *et al.*, 2000; Yoon & Uysal, 2005). Nevertheless, having the knowledge of pull factors exerts tremendous influence on designing a destination management program because these motivational factors largely reflect what attract travelers to the destination. Based on Dann’s work of analyzing motivational factors, aims to identify travel motives for Chinese outbound tourists to Hawaii in terms of pull dimensions, and to explore and elaborate on the relationship between the identified travel motives and demographic variables. The business implications derived from this study will provide insightful information with Hawaii local tourism practitioners to formulate and execute effective destination management activities.

On the other hand, this study has identified five principal pull motivational components labeled as “destination core infrastructure functions”, “easily accessible travel information”, “leisure and outdoor activities” “destination shopping facilities” and “cultural and historical attractions”. “Destination core infrastructure functions”, incorporated with a wide range of destination attributes such as cleanliness, weather, safety, and transportation, is the most influential pulling force to Chinese tourists to Hawaii. Tourism marketing organizations in Hawaii should take

measures to improve their performance in these dimensions, thereby raising the competitiveness of the destination and bringing about higher levels of visitor arrivals. Further, message highlighting the outstanding characteristics of the destination in these dimensions should also be explicitly communicated to the targeted Chinese travelers and thus catch on their eyes during the destination promotion stage. Likely, the importance of other four identified pull motivational components coupled with relevant incorporated motives should never be underestimated by tourism practitioners because each of them is connected with certain demographic groups with strong motivation. The specific relationships with supporting evidence between the identified push and pull motivational components and demographic variables are explained and discussed in the following sub-section.

Among these important pull factors, three top important pull motivational items are “safety and security of the destination” “natural scenery of the destination” and “environment and weather of the destination”. Traveling far away from home, Chinese tourists seem to place an extremely high concern on their personal safety and security. When designing and introducing facilities and travel activities, local marketing organizations are advised to take consideration into and prioritize safety issues. In addition, out-of-date infrastructures that do not function and operate efficiently must be improved or even replaced to enhance easy accessibility and safety. Since obtaining a visa is also a highly concerned issue and top one constrain preventing Chinese to travel to Hawaii, it will largely increase Chinese visitor arrivals to Hawaii if Hawaii state government can successfully lobby the federal government to further simplify the visa application procedures for Chinese visitors and remove some unnecessary identity screening steps and paper work preparations. In short, tedious and over-strict visa application process becomes one of big obstacles for Chinese people to travel American territories, which have made many of them turn to other destinations across the world.

Regarding the relationship between motivational components and demographic variable, this study has disclosed that female married travelers are more likely to be attracted by destinations providing easily accessible travel information, and that single travelers prefer destinations with the offerings of leisure and outdoor activities. Additionally, travelers born between 1946 and 1964 regard the “easily accessible travel information” factor as more important than do those of any other age groups while travelers in 1982-2000 age group are more inclined to favor destinations which offer a large selection of leisure and outdoor activities. To interpret these study findings, each pull motivational component is connected with certain demographic groups that it works on. This set of information is very useful when it comes to cluster Chinese tourists to Hawaii and design the effective travel product and services fulfilling the motives and catering to the requirements from a certain demographic group of travelers. Tourism marketers and practitioners should get hold of this bunch of knowledge to well differentiate the needs of their

Chinese customers and treat them in a way that right meet their aroused needs. For instance, one of research findings by t tests reveals that “easily accessible travel information” and “leisure and outdoor activities” motivational components are statistically significant among different educational groups while the other three identified are not. Furthermore, it is found that the more advanced education one has received, the less he or she is reliant on the “easily accessible travel information”. Those research findings imply that Chinese tourists should be treated differently on the basis of their demographic differences.

6. CONCLUSION AND LIMITATION

This study has explored the travel motivations regarding Chinese tourist’s travel to Hawaii. The pull factors of travel motivation is applied as the theoretical foundation and in terms of research methodology, questionnaire survey is conducted to collect the primary data and data analysis methods including descriptive analysis, factor analysis and t test are used to analyze the data and generate the results of findings. One of key theoretical contributions that this study has made to the academia is that it has identified five principal pull factor components representing “destination core infrastructure functions”, “easily accessible travel information”, “leisure and outdoor activities” “destination shopping facilities” and “cultural and historical attractions”. Such identifications have diversified the pull pool of travel motivations and more importantly, enabled an in-depth understanding of the major driving forces behind Chinese tourist’s choice of Hawaii as a travel destination. Further, the study of Chinese outbound tourist’s travel motivation in light of their traveling to Hawaii has extended the studies of travel motivations for Chinese tourists into a new Western context, which previously have been primarily focused on China’s neighboring regions and courtiers such as Hong Kong, Vietnam, Singapore and Korea. Lastly, having explored the unique travel motivations pertaining Chinese tourists’ visit to Hawaii, this study can then be significant in serving as an initial attempt before conducting a comparative study in tourist motivation between Chinese people traveling to Hawaii and to other resort destinations.

There are some limitations involved with this study which should be acknowledged. First, the survey was conducted in some major provincial cities in Mainland China. However, according to the respondents’ demographic analysis, a large number of survey participants (59.3%) originally come from Hunan province, China while a very small percentage comes from each of the other reported locations of residence. As Zhang (2010) reported, outbound tourists from Beijing, Shanghai and Guangzhou accounted for 63.68% of total Chinese outbound tourists in 2008. Consequently, such an unbalanced demographic configuration of the sample may not be representative of the overall Chinese outbound tourists to Hawaii and the generalizability of study findings is likely limited. Future studies can be conducted to address this issue by

extending the sample population into the residents from Beijing and Shanghai. Cooperation with local travel agencies in these areas needs to be established in order to collect data from people of these two large metropolitans where tourists are more representative of Chinese outbound tourists nowadays.

Second, sample size of this study, which is 243 after the discarding of 19 unusable responses, is considered as not sufficient enough to justify the statistical analysis of data because there are 44 independent variables under investigation for this study. In the future, the sample size should be enlarged to generate more response and therefore improve this limitation. In addition, the adopted minimum reliability alpha coefficient of 0.5 might be less stringent and hence is questionable because of the controversial argument that the minimum value of Cronbach's alpha should be 0.7. Future studies should give more attention to this issue.

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