

TOURISM-RELATED FACTORS AFFECTING CROSS-BORDER TRAVEL AMONG THAI AND MALAYSIAN TOURISTS

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ABSTRACT

The study of tourist attraction as a system involves the investigation of three elements: an empirical relationship between tourist or human elements, a sight or central elements and a marker or informative element in considering either external factors (environment conditions) or internal factors (personality conditions). These factors do influence the travel decision-making of tourists from the Thai provinces of Satun, Songkhla, Yala, Narathiwat, Pattani and the Malaysian states of Perlis, Kedah, Perak, and Kelantan. The data collection was conducted at seven immigration checkpoints of Satun, Wangprachan, Betong, Takbai, Sungai-Kolok, Padang Besar and Sadao. By means of the stratified cluster sampling method, the dates of interviews for December and April were randomly set for each immigration border checkpoint and the number of the samples was calculated based on the ratios of country (Thailand-Malaysia) clusters and on the immigration border checkpoints clusters. The actual numbers of respondents approached for this study were more than 600 but responses from only 574 could be used. Of these, 204 were Thai tourists and 370 were

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Malaysian ones. The results of this study were about the comparisons of factors of tourist attraction system between Thai and Malaysian cross-border tourists, what influenced them to do on cross border travel, and the attractions they sought when crossing over. This study found that the correlation analysis of Thai tourists' total attractions and factor scores revealed that the 37 tourism-related variables were grouped into 12 factor scores. However, only seven factors were found to be significantly and positively correlated with tourist attractions, i.e., curiosity motivation, recreational activity, accommodation, entertainment service, food service, safety satisfaction, and travel service, with the standard beta values of 0.277-0.137. The correlation analysis of Malaysian tourists' total attractions and factor scores revealed that the 37 tourism-related variables were grouped into nine factor scores. However, only six factors were found to be significantly and positively correlated with tourist attractions, i.e., shopping services, facility services, travel services, curiosity motivation, food activities, and night entertainment with, the standard beta values of 0.306-0.089.

Background of the Study

Tourism has been considered an activity of global importance. It has grown rapidly to become a major social and economic force in the world. World's international tourist arrivals in 2006 was 842 million tourists and worldwide receipts were US\$735 billion (586 billion euros) an increase of 40 million tourists and US\$ 57 billion (41 billion euros) compared to 2005. This increase in receipts is bigger than the combined tourism receipts of Middle East and Africa (UNWTO, 2007). Tourism demand depends strongly above all, on the economic conditions in major generating markets. When economies grow, levels of disposable income would, also rise usually. A relatively large



part of discretionary income would typically be spent on tourism, in particular, in the case of emerging economies. A tightening of the economic situation, on the other hand, would often result in a decrease of tourism spending (UNWTO, 2007). Examples of countries which earn a large sum of national revenues from tourist arrivals are France, which maintained its leading position as the world's most visited destination in 2006 with 79.1 million tourist arrivals (75.9 million in 2005); Spain, where tourist arrivals grew by 4.5 percent and ranks second with 58.5 million arrivals (55.9 million in 2005); followed by USA with 51.1 million in 2006 (49.2 million in 2005), and within the Asian region, China is ranked top with 49.6 million arrivals in 2006 (46.8 million in 2005 an increase of 6.0%) (UNWTO, 2007). It is interesting to note that the number of tourist arrivals exceeds the number of the population of these countries, with an exception of USA. The population of France and Spain is 60 million and 40 million respectively (World Tourism Organization, 2005a). Tourism also grows fast in least developed countries. Tourism's potential for contributing to poverty reduction in developing countries was highlighted in the UNTWO report presented to the Third United Nations Conference on Least Developed Countries. Although these countries still accounted for only 1.2% of international tourist arrivals and 0.8% of receipts in 2005, the growth rate in these countries has been outpacing the world average since the turn of the century. Tourist arrivals between 2000 and 2005 were up 48 percent compared with 17 percent for the world as whole. (Tourism growing faster in poorest countries, 2006).

Research Objectives

To examine the relationship between tourism-related variables with differences between Thai and Malaysian tourists



Research Methodology

The study was conducted among the cross-border Malaysian and Thai tourists at Satun, Wangprachan, Betong, Takbai, Sungai-Kolok, Padang Besar, and Sadao immigration border checkpoints. An interview questionnaire was designed for the purpose of this study. Interviews were conducted on 574 tourists in December and April 2004. A sample size is calculated from the total number of tourists. According to Sekaran (2000), the number of respondents considered adequate for the study ranges from 30 to 500 samples. Since this population of the tourists from both Thailand and Malaysia totalled 1,900,586, it is appropriate to use the largest number of samples possible. Using the stratified cluster sampling method, the dates of interviews for December and April were randomly set for each immigration border checkpoint and the number of the samples was calculated based on the ratios of country (Thailand-Malaysia) cluster and on the immigration border checkpoint clusters. The number of samples for each of the seven immigration border checkpoints was designated according to the percentage of the number of tourists crossing at each respective immigration border checkpoint. The statistical analysis was carried out by Pearson's correlations, factor analysis and multiple regressions.





Figure 1 Touristic Site Cross – Border Tourist between Thailand and Malaysia



Figure 2 Location of Immigration Check Point between Thailand and Malaysia Border



Analysis of data and Interpretation

The findings regarding the relationship among factors related to the tourist attraction model and the comparisons of tourism-related factors affecting cross-border travel between tourists of the two countries.

1. Factors Analysis of Satisfaction of Thai and Malaysian Tourists with Tourist Attractions

Tourism-related variables are analyzed by factor analysis and classified by country, which are described in section 1.1 and 1.2

1.1 Factor Analysis of Thai Tourists

All 37 tourism-related variables that significantly contribute to the tourism factors of Thai tourists were classified to 12 factors:

Factor 1 utilized the rotated component analysis resulting in the Z score of 0.787 - 0.489, and this cluster is called "travel service". It consist of the following tourism-related services variables: local transport service, communication with locals, hospitality and culture, immigration and traffic conditions.

Factor 2 utilized the rotated component analysis resulting in the Z score of 0.725 - 0.581, and this cluster is called "communication facilities". It consist of the following tourism-related facilities variables: tourist information center (TIC), telecommunications, communication with locals, signage and directions and local transport service.

Factor 3 utilized the rotated component analysis resulting in the Z score of 0.756 - 0.415, and this cluster is called "recreation activities". It consist of the following tourism-related activities variables: to visit museum, recreation/camping, festivals, shopping.

Factor 4 utilized the rotated component analysis resulting in the Z score of 0.783 - 0.407, and this cluster is called "safety satisfaction". It consist of the following tourism-related variables: safety at destination, safety and security, other facilities and road/rail/airports.



Factor 5 utilized the rotated component analysis resulting in the Z score of 0.768 - 0.393, and this cluster is called "curiosity motivation". It consist of the following tourism-related variables: curiosity, to gain new experience and other activities

Factor 6 utilized the rotated component analysis resulting in the Z score of 0.762 - 0.574, and this cluster is called "price satisfaction". It consist of the following tourism-related variables: good value for money.

Factor 7 utilized the rotated component analysis resulting in the Z score of 0.730 - 0.558, and this cluster is called "accommodation services". It consist of the following tourism-related variables: accommodations and infrastructure.

Factor 8 utilized the rotated component analysis resulting in the Z score of 0.706 - 0.699, and this cluster is called "entertainment services". It consist of the following tourism-related variables: nightlife and entertainment and casino/gamble.

Factor 9 utilized the rotated component analysis resulting in the Z score of 0.742 - 0.68, and this cluster is called "VFR". It consist of the following tourism-related variables: to visit countryside and VFR.

Factor 10 utilized the rotated component analysis resulting in the Z score of 0.763 - 0.539, and this cluster is called "information". It consist of the following tourism-related variables: information and shopping malls.

Factor 11 utilized the rotated component analysis resulting in the Z score of 0.588 - 0.446, and this cluster is called "food services". It consist of the following tourism-related variables: to rest and relax, F&B service and to taste local food.

Factor 12 utilized the rotated component analysis resulting in the Z score of 0.666 - 0.622, and this cluster is called "health motivation". It consist of the following tourism-related variables: friendliness of locals and to seek medical/health/beauty treatment.



The result of the factor analysis of Thai tourists is shown in Table 1; all the thirty seven variables are classified in 12 factors. For Thai tourists, twelve factors extracted are related to the three components of tourism model formulated by the researcher, i.e. tourist needs (motivation, activities, attractions), information about places (knowledge), and attributes of places (facilities, services). Factor 5 and factor 12 signify the 'motivation' of the tourists to travel across the border. Factor 3 represents the 'activities' engaged by the tourists. Factor 4 and factor 6 signify the 'satisfaction' of tourists with the tourist attractions. Factor 10 signifies the 'information' about the places, whereas factor 2 signifies the 'facilities' for tourists. Factor 1, factor 7, factor 8 and factor 11 represent the 'service' for the tourists. All these factors are the components of the tourist model formulated.

Table 1 Thai Tourists: Factor Analysis on Attractions

Variables	Factors											
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12
Transport service	0.787	0.073	0.008	0.029	0.214	0.063	0.088	-0.056	0.056	0.074	-0.039	-0.042
Communicating with local	0.767	0.059	-0.059	-0.014	-0.006	-0.037	-0.070	-0.006	0.023	0.181	0.205	0.053
Hospitality	0.693	-0.028	0.142	0.199	-0.174	-0.155	0.113	0.049	0.133	0.033	-0.003	0.272
Immigration	0.879	0.018	-0.020	0.102	0.240	0.270	0.091	0.041	-0.097	0.069	0.001	-0.135
Traffic condition	0.489	0.066	0.098	-0.102	0.092	0.362	0.337	0.029	0.026	-0.238	-0.014	-0.033
TIC	-0.028	0.725	0.148	-0.095	0.239	-0.094	0.120	0.111	0.053	0.093	-0.249	0.141
Telecommunication	0.209	0.704	0.034	0.080	-0.001	0.067	-0.165	0.160	0.034	0.134	0.218	-0.099
Communication	0.064	0.672	-0.207	0.280	-0.120	-0.104	-0.205	-0.050	0.189	0.072	0.039	0.000
Signage	-0.044	0.672	0.112	0.049	0.280	0.050	0.235	-0.245	-0.047	-0.113	-0.103	0.121
Local transport	0.018	0.581	0.109	-0.081	-0.069	0.367	0.009	0.114	-0.105	0.198	0.208	0.086
Museum	0.018	0.092	0.756	-0.077	0.089	-0.045	-0.127	-0.046	0.143	-0.095	0.158	-0.067
Recreation	0.063	0.033	0.689	0.034	-0.038	0.225	0.027	-0.003	0.013	0.065	-0.034	0.195
Festival	-0.025	-0.060	0.821	-0.116	0.147	-0.034	0.066	0.319	0.117	0.076	-0.275	-0.012
Shopping	-0.186	0.145	0.415	0.041	-0.073	0.061	0.390	0.252	-0.098	0.338	0.155	-0.235
Safety	-0.016	-0.135	-0.038	0.783	0.102	0.012	0.046	-0.097	0.038	0.135	0.118	0.026
Security	0.138	0.266	-0.064	0.697	-0.020	0.040	0.070	-0.102	0.073	-0.097	0.020	0.009
Other (facility)	-0.123	0.071	-0.268	-0.432	0.268	-0.080	0.113	-0.245	0.347	-0.009	0.247	-0.210
Road and rails	0.119	0.193	-0.075	0.407	0.229	0.183	0.194	-0.050	0.065	-0.092	-0.316	-0.101
Curiosity	0.128	0.093	0.063	0.031	0.768	0.105	0.049	0.078	-0.024	-0.019	0.018	0.010
New experience	0.117	0.060	0.114	0.099	0.688	-0.058	0.061	-0.236	-0.085	0.046	0.075	0.151
Other (activity)	0.017	-0.098	-0.156	-0.078	0.393	0.140	-0.314	0.038	0.373	0.225	0.081	0.037



Variables	Factors											
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12
Value for money	0.004	0.036	0.067	0.090	0.138	0.762	-0.035	0.103	-0.027	0.017	0.065	0.065
Good value for money	0.265	0.014	0.137	0.088	-0.096	0.574	0.222	0.021	0.040	0.067	0.069	0.130
Accommodation	0.163	-0.112	-0.057	0.066	0.069	0.033	0.730	-0.067	0.126	0.064	0.150	0.193
Infrastructure	0.456	0.084	-0.091	0.218	0.109	0.087	0.558	-0.002	-0.110	-0.005	-0.191	-0.115
Nightlife	-0.060	-0.042	0.154	-0.009	-0.091	-0.002	-0.013	0.706	-0.163	0.084	0.142	0.115
Casino	0.081	0.151	-0.028	-0.211	0.009	0.194	0.053	0.699	0.128	-0.215	-0.116	0.147
countryside	0.168	0.023	0.230	0.053	-0.088	0.167	0.052	-0.150	0.742	-0.026	-0.167	0.023
VFR	-0.057	0.157	0.089	0.138	-0.037	-0.354	0.231	0.139	0.687	-0.112	0.148	-0.046
Information	0.134	0.156	-0.047	0.057	0.025	0.114	0.065	-0.155	-0.064	0.763	-0.032	0.068
Shopping malls	0.342	0.142	0.145	-0.086	0.110	0.044	0.239	0.263	0.048	0.539	0.083	0.064
Rest and relax	0.061	0.135	-0.116	0.370	0.322	0.158	0.059	0.109	0.033	-0.038	0.588	0.014
F&B service	0.334	-0.068	0.080	-0.131	-0.068	0.108	0.235	-0.062	0.056	0.292	0.474	0.326
Local food	0.154	0.072	0.412	-0.045	0.228	0.188	0.077	0.079	-0.329	-0.083	0.446	0.178
Friendliness	0.140	0.081	-0.105	0.099	0.306	0.000	0.189	0.235	0.027	0.095	0.094	0.666
Medical	-0.151	0.154	0.303	-0.040	-0.017	0.285	-0.063	0.128	-0.095	0.037	0.066	0.622
Eigenvalues	5.07	2.98	2.49	1.90	1.77	1.70	1.50	1.37	1.32	1.14	1.05	1.02
Percent variance (%)	14.10	8.28	6.91	5.28	4.92	4.73	4.16	3.81	3.68	3.15	2.93	2.83
Cumulative percent variance (%)	14.10	22.38	29.28	34.57	39.49	44.22	48.39	52.20	55.88	59.03	61.95	64.78

1.2 Factor Analysis of Malaysian Tourists

There are 37 variables that significantly contribute to the tourism factors of Malaysian tourists, which were classified into nine factors:

Factor 1 utilized the rotated component analysis resulting in the Z score of 0.806 - 0.415, and this cluster is called "travel service". It consist of the following tourism-related variables: local transport services, immigration, communication with local, infrastructure, good value for money, signpost and directions and hospitality and culture.

Factor 2 utilized the rotated component analysis resulting in the Z score of 0.753 - 0.553, and this cluster is called "curiosity motivation". It consist of the following tourism-related variables: to gain new experience, safety and security, curiosity, friendliness of locals, to rest and relex and good value for money.

Factor 3 utilized the rotated component analysis resulting in the Z score of 0.739 - 0.411, and this cluster is called "facilities at destination".

It consist of the following tourism-related facilities variables: TIC, road /rails/ airports, local transport service, signage and directions and information.

Factor 4 utilized the rotated component analysis resulting in the Z score of 0.797 - 0.437, and this cluster is called "activities at destination". It consist of the following tourism-related activities variables: to visit museum, recreation/camping, to visit countryside, to seek medical/ health/beauty treatment, festivals, infrastructure and casino/gramble.

Factor 5 utilized the rotated component analysis resulting in the Z score of 0.738 - 0.599, and this cluster is called "shopping servies". It consist of the following tourism-related services variables: accommodation, F & B services and shopping mall.

Factor 6 utilized the rotated component analysis resulting in the Z score of 0.709 - 0.441, and this cluster is called "curiosity motivation". It consist of the following tourism-facilities related variables: communication with local, telecommunications and safety and security.

Factor 7 utilized the rotated component analysis resulting in the Z score of 0.781 - 0.533, and this cluster is called "food activities". It consist of the following tourism-related variables: shopping and to taste local food.

Factor 8 utilized the rotated component analysis resulting in the Z score of 0.817 - 0.719, and this cluster is called "other activities". It consist of the following tourism-related variables: other activities and other facilities.

Factor 9 utilized the rotated component analysis resulting in the Z score of 0.746, and this cluster is called "curiosity motivation". It consist of the following tourism-related variables: nightlife and entertainment.

The result of factor analysis of Malaysian tourists is show in Table 2, where all the thirty seven variables are classified in nine factors. As for

Malaysian tourists, the nine factors extracted are related to the three components of tourism model formulated by the researcher, i.e. tourist needs (motivation, activities, attractions), information about places (knowledge), and attributes of places (facilities, services). Factor 2 signifies the 'motivation' of the tourists to travel across the border. Factor 4, factor 7, factor 8 and factor 9 represent the 'activities' engaged by the tourists. Factor 5 signifies the 'satisfaction' of tourists with the tourist attractions. Factor 3 and factor 6 signify the 'facilities' for tourists. Factor 1 represents the 'service' for the tourists. All these factors are the components of the tourist model formulated.

Table 2 Malaysian Tourists: Factor Analysis on Attractions

Variables	Factors								
	F1	F2	F3	F4	F5	F6	F7	F8	F9
Transport service	0.806	0.025	0.087	-0.050	0.121	0.088	0.058	0.025	0.009
Immigration	0.769	0.023	0.120	-0.047	0.227	-0.034	0.028	-0.090	0.189
Comm with locals	0.742	0.092	0.053	0.118	0.076	0.151	0.013	-0.071	-0.116
Infrastructure	0.513	0.041	0.262	0.092	0.246	0.062	0.320	-0.042	-0.254
Good value for money	0.497	-0.050	0.214	0.057	0.407	-0.093	0.020	-0.028	0.252
Traffic condition	0.432	0.118	0.288	-0.029	0.345	-0.300	0.125	0.065	-0.005
Hospitality	0.415	-0.040	0.373	0.196	0.372	0.071	0.050	0.131	-0.201
New experience	0.022	0.753	0.052	0.071	-0.048	-0.050	0.045	0.027	0.023
Safety	0.186	0.730	0.028	-0.030	-0.047	0.242	0.033	-0.040	-0.005
Curiosity	0.082	0.709	0.056	0.150	0.069	-0.134	0.021	0.037	-0.060
Friendliness	-0.010	0.653	0.027	0.022	0.262	0.232	0.125	0.068	-0.074
Rest and relax	-0.153	0.604	0.160	-0.080	0.259	-0.010	0.048	-0.068	0.247
Value for money	-0.052	0.553	0.337	0.057	0.122	-0.141	0.135	-0.174	0.175
TIC	0.100	0.074	0.739	0.043	-0.075	0.183	-0.005	0.154	0.015
Road and rails	0.078	0.106	0.661	-0.004	0.175	0.175	0.267	0.000	0.007
Local transport	0.125	0.041	0.637	0.084	0.244	0.177	0.124	-0.086	0.105
Signage	0.112	0.361	0.572	0.127	-0.047	-0.045	0.067	-0.067	0.030
Information	0.224	0.061	0.411	0.156	0.122	0.027	-0.137	-0.028	0.094
Museum	-0.002	0.047	0.110	0.797	-0.018	-0.022	0.030	0.067	-0.085
Recreation	-0.121	0.029	0.143	0.740	0.297	-0.038	-0.046	-0.051	0.021
Countryside	0.102	0.043	0.165	0.638	-0.069	-0.027	0.352	0.033	-0.116
Medical	0.052	0.147	-0.007	0.556	-0.049	0.170	-0.304	0.132	0.317
Festival	0.091	0.021	0.034	0.536	-0.142	0.131	0.257	-0.004	0.190
VFR	0.037	0.033	-0.105	0.524	0.116	0.398	0.166	0.101	0.166
Casino	0.033	0.010	0.022	0.437	-0.091	-0.012	-0.058	0.386	0.365
Accommodation	0.285	0.176	0.142	-0.004	0.738	0.036	0.053	-0.025	-0.036

Variables	Factors								
	F1	F2	F3	F4	F5	F6	F7	F8	F9
F&B service	0.244	0.148	-0.018	0.028	0.725	0.184	0.132	0.040	-0.073
ShoppingMall	0.422	0.102	0.173	-0.055	0.599	0.073	-0.021	-0.062	0.185
Communication	0.005	-0.024	0.338	0.155	0.178	0.709	-0.033	0.065	-0.040
Telecommunication	0.153	-0.052	0.440	0.037	0.024	0.614	0.215	0.050	0.044
Security	0.203	-0.041	0.366	-0.020	0.093	0.444	0.001	-0.004	0.013
Shopping	0.109	0.163	0.154	0.153	0.056	0.046	0.781	0.023	0.072
Local food	0.081	0.259	0.071	0.178	0.277	0.122	0.533	-0.188	0.252
Other 1 (activity)	0.046	-35.000	-0.108	0.140	0.061	0.004	-0.015	0.817	0.008
Other (facility)	-0.129	-0.076	0.127	-0.005	-0.041	0.078	-0.015	0.719	0.090
Nightlife	0.025	0.070	0.133	0.129	0.025	0.017	0.150	0.121	0.746
Eigenvalues	7.24	3.21	2.71	1.91	1.50	1.27	1.22	1.11	1.06
Percent variance (%)	20.10	8.92	7.52	5.29	4.17	3.53	3.39	3.07	2.96
Cumulative percent variance (%)	20.10	29.02	36.54	41.83	45.99	49.53	52.91	55.99	58.94

2. Using the Findings of Factor Analysis for Stepwise Regression of Satisfaction of Thai and Malaysian Tourist with Tourist Attractions

This section first presents the statistical correlations between factor scores and satisfaction with tourist attractions (natural, entertainment, event, recreation, cultural and total tourist attractions). A stepwise regression is then operated to determine each attraction and total tourist attractions for the predicted factor that could significantly contribute to the R square value, which are described in section 2.1 and 2.2.

2.1 Stepwise Regression of the 12 Factor scores of Satisfaction of Thai Tourists with Tourist Attractions

Multivariate analysis is concerned with the aggregate effect of five attraction-related variables. The results of correlations between the factor score and the satisfaction of Thai tourists with tourist attractions are shown in Table 3.

Table 3 Thai Tourists: Correlations between Factor Scores and Attractiveness on Tourist Attractions

Attraction/ Factor	Natural A1	Entertainment A2	Event A3	Recreation A4	Cultural A5	Attract A6	F1-F12
Natural A1	1.000						
Entertainment A2	0.319**	1.000					
Event A3	0.062	0.347**	1.000				
Recreation A4	0.305**	0.260**	0.091	1.000			
Cultural A5	0.225**	0.113	0.121	0.292**	1.000		
Total Attractions A6	0.621**	0.691**	.548**	0.627**	0.554**	1.000	
F1	0.146	0.125	0.031	0.128	-0.018	0.137	1.000
F2	0.154	0.053	0.039	0.093	0.046	0.125	0.000
F3	0.336**	0.058	0.003	0.241**	0.068	0.226**	0.000
F4	0.202**	0.081	-0.054	0.104	0.138	0.150	0.000
F5	0.244**	0.175	0.208**	0.193	0.016	0.277**	0.000
F6	0.065	0.130	0.068	-0.092	0.014	0.064	0.000
F7	0.020	0.148	0.104	0.129	0.113	0.177	0.000
F8	0.046	0.273**	0.097	0.051	0.054	0.177	0.000
F9	0.058	-0.044	-0.001	0.076	0.015	0.032	0.000
F10	-0.162	0.360	0.091	-0.086	0.045	-0.022	0.000
F11	0.127	0.231**	-0.020	0.036	0.119	0.163	0.000
F12	0.069	0.093	0.084	0.005	0.037	0.096	0.000

* Indicates significance at 5 percent

** Indicates significance at 1 percent

1. Natural attractions were used in the prediction of the model with 6 factor scores: F3, F5, F4, F10, F2, and F1. The factor score F3 (Beta = 0.336) is the best predicting factor consisting of such variables as museum activities, recreation activities, festival activities, and shopping activities.



2. Recreation attractions were used in the prediction of the model with two factor scores: F3 and F5. The factor score F3 (Beta = 0.241) is the best predicting factor consisting of such variables as museum activities, recreation activities, festival activities, and shopping activities.

3. Entertainment attractions were used in the prediction of the model with 4 factor scores: F8, F11, F5, and F7. The factor score F8 (Beta = 0.273) is the best predicting factor consisting of such variables as night entertainment activities, and casino activities.

4. Event attractions were used in the prediction of the model with 1 factor score: F5 (Beta = 0.208), which is the best predicting factor consisting of such variables as curiosity motivation, new experience motivation, and price motivation.

5. Cultural attractions were not significant in the prediction of the model, but F4 had the highest value of correlation of 0.138. F4 consists of such variables as safety motivation, safety facilities, and road facilities.

The results of the five attraction factor scores of Thai tourists by stepwise multiple regression analysis are given in Table 4. First, it shows that the activities at the destination (F3) have the highest multiple correlation (R) value (0.533) and contribute 28% (R^2 change = 0.284) to the variance in natural attractions and is the best predicting factor for purpose of travel.

Second, the multiple R value is 0.424 and contributes 18% (R^2 change = 0.018) to the variance in entertainment attractions and F8 is the highest predicting factor for entertainment services.

Third, the multiple R value is 0.309 and contributes 9% (R^2 change = 0.095) to the variance in recreation attractions and the best predicting factor is factor three (F3) for the purpose of travel.

Fourth, the multiple R value is 0.208 and contributed 4% (R^2 change = 0.043) to the variance in event attractions and factor five (F5) is the best predicting factor for shopping services.



Fifth, the multiple R value is 0.255 and contributes 6% (R^2 change = 0.065) to the variance in cultural attractions but the correlation coefficients between factor score and cultural attractions are not significant at 5 percent level as a 95% of confidence level is desired. Therefore, there is no predictor for cultural attractions.

Table 4 Thai Tourists: Stepwise Regression on Attraction Scores

	Factor	B	Beta	t-test	R	R ²	Adjusted R ²
Natural	Constant	3.644			0.533	0.284	0.259
	F3	0.274	0.336	5.17**			
	F5	0.202	0.244	3.75**			
	F4	0.167	0.202	3.11**			
	F10	-0.134	-0.162	-2.50**			
	F28	0.128	0.154	2.38**			
	F1	0.121	0.146	2.24*			
Recreation	Constant	3.401			0.309	0.095	0.085
	F3	0.206	0.241	3.34**			
	F5	0.165	0.193	2.68**			
Entertainment	Constant	3.345			0.424	0.18	0.161
	F8	0.253	0.273	3.95**			
	F11	0.214	0.231	3.34**			
	F5	0.162	0.175	2.53**			
	F7	0.137	0.148	2.14*			
Event	Constant	3.243			0.208	0.043	0.038
	F5	0.186	0.208	2.84**			
Cultural	Constant	3.689			0.255	0.065	-0.004

* Indicates significance at 5 percent

** Indicates significance at 1 percent





Total attractions used predictions in the model consist of 7 factor scores: F5, F3, F7, F8, F11, F4, and F1. The factor score F5 is the best predicting factor for the prediction of curiosity motivations, new experience motivations, and price motivations.

The square of the multiple R is 0.508 indicating that 50% of variance in total attraction is explained by the 7 factors and the influence of each related factor is shown in Table 5. The t-values of the factors are significant at 5 and 1 percent level, indicating the influence of each of the independent variables of the factors on the dependent variables of the total attractions. The results of the stepwise multiple regression analysis indicated the extent of contribution of each related factor to the total power of the regression model having altogether seven predicting factors.

The results the stepwise regression analysis can be formulated into the attraction equation based on constant value supported by the predictor variables of 7 attraction factors such as F5 (curiosity), F3 (recreation), F7 (accommodation), F8 (entertainment), F11 (food), F4 (safety), F1 (travel). The equation can be presented as the following:

$$\begin{aligned} \text{Attraction} = & 3.464 + 0.146 F5 + 0.119 F3 + 0.093 F7 + 0.093 F8 \\ & + 0.086 F11 + 0.079 F4 + 0.072 F1 \end{aligned}$$

The equation shows the satisfaction of each tourist with the tourist attraction. It is calculated by using the value of tourism-related variables relevant to particular factors multiplied by the factor weight and added with the attraction constant (in Table 5). The outcome reflects the level of satisfaction of each tourist with the tourist attraction. The results of the stepwise regression analysis can be formulated into the attraction equation based on the value of standard coefficient (beta) and supported by 7 attraction

predicting factors such as F5, F3, F7, F8, F11, F4, F1. The equation can be presented as the following:

$$\begin{aligned} \text{Beta attraction} = & 0.277 F5 + 0.260 F3 + 0.177 F7 + 0.177 F8 \\ & + 0.163 F11 + 0.150 F4 + 0.137 F1 \end{aligned}$$

The equation also shows the satisfaction of each tourist with the tourist attraction. However, it is calculated differently using the standard score of each tourist multiplied by factor weights (Table 5). The outcome of the calculation can identify the predicting factors that have impact on the satisfaction of the tourist. It is found that Factor 5 is the best predictor for tourist's satisfaction with tourist attraction.

Table 5 Thai Tourists: Regression Factor Score by Stepwise Regression

Factor	B	Beta	t-test	R	R ²	Adjusted R ²
Attraction						
Constant	3.464					
F5	0.146	0.277	4.17**	0.508	0.258	0.227
F3	0.119	0.26	3.42**			
F7	0.093	0.177	2.67**			
F8	0.093	0.177	2.67**			
F11	0.086	0.163	2.46*			
F4	0.079	0.15	2.26*			
F1	0.072	0.137	2.08*			

* Indicates significance at 5 percent

** Indicates significance at 1 percent

2.2 Stepwise Regression of the 9 Factors Scores of Malaysian Tourist Attractions

Multivariate analysis is concerned with the aggregate effect of five attraction-related variables. The results of correlations between the factor score and Malaysian tourist attractions are shown in Table 6 .

Table 6 Malaysian Tourists: Correlations between Factor Scores and Tourists Attractions

Attraction/ Factors	Natural A1	Entertainment A2	Event A3	Recreation A4	Cultural A5	Attract A6	F1-F9
Natural A1	1.000						
Entertainment A2	0.436**	1.000					
Event A3	0.311**	0.416**	1.000				
Recreation A4	0.534**	0.400**	0.378**	1.000			
Cultural A5	0.473**	0.487**	0.470**	0.409**	1.000		
Total Attractions A6	0.723**	0.752**	0.720**	0.729**	0.778**	1.000	
F1	0.194**	0.142**	0.308**	0.152**	0.296**	0.296**	1.000
F2	0.138**	0.153**	0.075	0.131*	0.184**	0.182**	0.000
F3	0.210**	0.174**	0.161**	0.172**	0.170**	0.235**	0.000
F4	0.050	-0.049	-0.007	0.058	0.025	0.018	0.000
F5	0.282**	0.208**	0.170**	0.226**	0.268**	0.306**	0.000
F6	-0.046	-0.026	0.085	0.079	0.045	0.041	0.000
F7	0.128*	0.173**	0.099	0.119*	0.072	0.156*	0.000
F8	-0.107*	-0.037	-0.066	0.002	-0.097	-0.081	0.000
F9	-0.009	0.138**	0.115	0.085	-0.004	0.089	0.000

* Indicates significance at 5 percent

** Indicates significance at 1 percent

1. Natural attractions were used in the prediction of the model with six factor scores: F5, F3, F1, F2, F7, and F8. The factor score F5 (Beta = 0.282) is the best predicting factor consisting of variables such as accommodation services, food services and shopping services.

2. Recreation attractions were used in the prediction of the model with five factor scores: F5, F3, F1, F2, F7. The factor score F5 (Beta = 0.226) is the best predicting factor consisting of such variables as accommodation services, food services and shopping services.



3. Entertainment attractions were used in the prediction of the model with six factor scores: F5, F3, F7, F2, F1, F9. The factor score F5 (Beta = 0.208) is the best predicting factor consisting of such variables as accommodation services, food services and shopping services.

4. Event attractions were used in the prediction of the model with six factor scores: F1, F5, F3, F9, F7. The factor score F1 (Beta = 0.308) is the best predicting factor consisting of such variables as local transportation services, immigration check checkpoints services, communicating services, infrastructure services, price of good services, tourism signposts services and impression of hospitality services.

5. Cultural attractions were used in the prediction of the model with five factor scores: F1, F5, F2, F3, and F8. The factor score F1 (Beta = 0.296) is the best predicting factor consisting of such variables as local transportation services, immigration check checkpoints services, communicating services, infrastructure services, price of good services, tourism signposts services and impression of hospitality services.

The results of the five attraction factor scores of Malaysian tourists by stepwise multiple regression analysis are given in Table 7. First, it showed that the travel services (F1) had the highest multiple correlation (R) value (0.296) and contributed 23% (R^2 change = 0.232) to the variance in cultural attractions and F1 is the best predicting factor for travel service.

Second, the multiple R value is 0.456 and contributes 20% (R^2 change = 0.208) to the variance in natural attractions and F5 is the highest predicting factor for facilities.

Third, the multiple R value is 0.416 and contributes 17% (R^2 change = 0.173) to the variance in event attractions and the best predicting factor is factor three (F1) for the traveling services.



Fourth, the multiple R value is 0.408 and contributed 16% (R^2 change = 0.166) to the variance in entertainment attractions and factor five (F5) is the best predicting factor is for shopping services.

Fifth, the multiple R value is 0.368 and contributed 31% (R^2 change = 0.315) to the variance in recreation attractions and factor five (F5) is the best predicting factor is for shopping services.

Table 7 Malaysian Tourists: Stepwise Regression on Attraction Scores

	Factor	B	Beta	t-test	R	R^2	Adjusted R^2
Natural	Constant	3.803			0.456	0.208	0.194
	F5	0.241	0.282	5.87**			
	F3	0.18	0.21	4.37**			
	F1	0.166	0.194	4.03**			
	F2	0.118	0.138	2.86**			
	F7	0.109	0.128	2.66**			
	F8	-0.092	-0.107	-2.23*			
Recreation	Constant	3.517			0.368	0.315	0.123
	F5	0.227	0.226	4.51**			
	F3	0.172	0.172	3.43**			
	F1	0.152	0.152	3.03**			
	F2	0.131	0.131	2.61**			
	F7	0.12	0.119	2.38**			
Entertainment	Constant	3.754			0.408	0.166	0.152
	F5	0.215	0.208	4.23**			
	F3	0.18	0.174	3.54**			
	F7	0.178	1.173	3.51**			
	F2	0.157	0.153	3.09**			
	F1	0.147	0.142	2.89**			
	F9	0.142	0.138	2.79**			
Event	Constant	3.54			0.416	0.173	0.161
	F1	0.335	0.308	6.28**			
	F5	0.185	0.17	3.47**			
	F3	0.176	0.161	3.29**			
	F9	0.125	0.115	2.35**			
	F7	0.107	0.099	2.01*			

Factor	B	Beta	t-test	R	R ²	Adjusted R ²
Cultural						
Constant	3.594			0.481	0.232	0.221
F1	0.33	0.296	6.26 ^{**}			
F5	0.299	0.268	5.67 ^{**}			
F2	0.206	0.184	3.90 ^{**}			
F3	0.19	0.17	3.60 ^{**}			
F8	-0.108	-0.097	-2.04 [*]			

^{*} Indicates significance at 5 percent

^{**} Indicates significance at 1 percent

Total attractions used predictions in the model consist of six factor scores: F5, F1, F3, F2, F7, and F9. The factor score F5 is the best predicting factor for the prediction of accommodation services, food, services, and shopping services.

The square of the multiple R is 0.55 indicating that 55% of variance in total attraction is explained by the 6 factors and the influence of each related factor is shown in Table 8. The t-values of the factors are significant at 5 and 1 percent level, indicating the influence of each of the independent variables of the factors on the dependent variables of the total attractions. The results of the stepwise multiple regression analysis indicated the extent of contribution of each related factor to the total power of the regression model having altogether six predicting factors.

The results the stepwise regression analysis can be formulated into the attraction equation based on constant value supported by the predictor variables of six attraction factors such as as F5 (shopping), F1 (travel), F3 (facility), F2 (curiosity), F7 (food), F9 (night entertainment). The equation can be presented as the following:

$$\text{Attraction} = 3.642 + 0.233 F5 + 0.18 F3 + 0.139 F2 + 0.119 F7 + 0.068 F9$$

The equation shows the satisfaction of each tourist with the tourist attraction. It is calculated by using the value of tourism-related variables relevant to particular factors multiplied by the factor weight and added with the attraction constant (in Table 8). The outcome reflects the level of satisfaction of each tourist with the tourist attraction.

The results the stepwise regression analysis can be formulated into the attraction equation based on the value of standard coefficient (beta) and supported by six attraction predicting factors such as F5 (shopping), F1 (travel), F3 (facility), F2 (curiosity), F7 (food), F9 (night entertainment) The equation can be presented as the following:

$$\text{Beta attraction} = 0.306 \text{ F5} + 0.296 \text{ F1} + 0.235 \text{ F3} \\ + 0.182 \text{ F2} + 0.156 \text{ F7} + 0.089 \text{ F9}$$

The equation also shows the satisfaction of each tourist with the tourist attraction. However, it is calculated differently using the standard score of each tourist multiplied by factor weights (Table 8). The outcome of the calculation can identify the predicting factors that have impact on the satisfaction of the tourist. It is found that Factor 5 is the best predictor for tourist's satisfaction with tourist attraction.

Table 8 Malaysian Tourists: Regression Factor Score by Stepwise Regression

Factor	B	Beta	t-test	R	R ²	Adjusted R ²
Attraction						
Constant	3.642			0.55	0.302	0.29
F5	0.233	0.306	6.79**			
F1	0.226	0.296	6.57**			
F3	0.18	0.235	5.22**			
F2	0.139	0.182	4.03**			
F7	0.119	0.156	3.46**			
F9	0.068	0.089	1.98*			

* Indicates significance at 5 percent

** Indicates significance at 1 percent



Summary of the Findings

It was found that there was a significant relationship between each tourism-related factor and the satisfaction of attractions of Thai and Malaysian tourists. For Thai tourists, of the 37 tourism-related variables, 19 of them were significantly correlated with the satisfaction of tourist attractions with the following three descending order of high values: "curiosity", "to rest and relax", and "visit friends and relatives". For Malaysian tourists entering Thailand, of the 37 tourism-related variables, 30 of them were significantly correlated with the satisfaction of Malaysian tourists in the following three descending order of high values: "shopping", "accommodation", and "immigration". For Thai tourists, the square value of the multiple R was 0.508, indicating that 50% of variances in tourist attractions was explained by the seven predictor variables consisting of "curiosity", "recreation/camping", "accommodation", "nightlife/entertainment", "to taste local food", "safety and security", and "local transport service", which could significantly contribute to the R-squared value. For Malaysian tourists, the square value of the multiple R was 0.55, indicating that 55% of variances in tourist attractions was explained by the six predictor variables consisting of "shopping", "local transport service", "facilities", "curiosity", "to taste local food", and "nightlife/entertainment", which could significantly contribute to the R squared value.

Discussion of the Findings

The reasons of Thai tourists for making the cross-border travel can be explained by the push or internal factors and pull or external factors. Thai tourists' were motivated mostly by pull factors. They made decision to visit Malaysia for these reasons: "to rest and relax" and "safety and security", "friendliness of locals". They were lured by natural and cultural attractions. Thai travelers felt secure when traveling in Malaysia. As for Malaysian tourists, they were motivated mostly by pull factors, visiting friendliness of locals.



They were engaged in food and shopping due to the cheaper prices of food and goods. Malaysian tourists traveled to Thailand to enjoy the entertainment that the host country provided. However, compared with Thai tourists, Malaysian tourists felt less secure when traveling in Thailand.

Other studies also point to the dominance of pull factors in determining the tourists' decision to travel. Internal factors (push factors) consist of demand variables as attitude, expectations and intrinsic rewards (Zalatan, 1994), while external factors (pull factors) are the supply variables such as accommodation, transportation and food. A similar case has been shown in the study on the comparisons between the push and pull motives in terms of the influences on destination choices and vacation activities of German pleasure travelers to the US, Canada, and Asia. As the results reveal, the motivation or factors exerted more explanatory power than socio-demographic variables such as age, education, income, and marital status (Leary, Lee & Morrison, 2002). Internal forces included attitude, values, perception, learning, personality, and motives, whereas external forces consisted of social and family roles, environmental conditions, and culture, all of which could influence the travelers in decision-making process (Fridgen, 1996). Also the findings confirmed that a number of factors which related to the consumers and to the external influences affected the travel decision-making of the tourists (Swarbrooke, & Horner, 2001).

The findings confirmed the argument of Leary, Lee and Morrison (2002) that pull factors such as recreational activities, accommodation, entertainment service, food service, and safety satisfaction exerted more influence on destination choices than push factors such as curiosity and motivation. The findings also are analogous with those of Gavcar and Gursoy (2002) which studied the behaviors of travelers from six countries who were vacationing in one of the six vacation destinations of Mugla, Turkey. The

outcomes of the study indicated that the pull factors that were likely to influence travelers' destination choices were the perception of the cost of accommodation and others such as "souvenirs", "type of accommodation offered", "quality of food", "environmental concerns at the lodging facilities", and "historical and cultural attractions". The findings also confirmed Leary, Lee and Morrison (2002)'s argument that pull factors such as shopping service, facility service, travel service, food activities and night entertainment exerted more influence on destination choice than push factors like curiosity motivation. The influence of push and pull factors upon destination choice has been reiterated by Zalatan (1994) and Gavcar and Gursoy (2002). Similarly, Richards (2002) found that there was a strong relationship among the geographical origin of tourists, their socio-demographic characteristics, modes of transportation, motivations, markers and attractions. The present research utilized the concept of attraction systems to investigate the relationships between tourism-related variables and attractions as based on Leiper's (1999) model. In short, the model starts from the pre-trip phase when a person receives information, responds to his/her needs and stimulates the motivation leading to a decision to travel. The tourists are pushed by their motivation and pulled by the nucleus (destination or tourist places), and all the information that they acquire and the prior experiences that they have encountered may cause them to travel or to make a revisit. In a similar phenomenon, the study of the structure of the tourist's experience by William (1998) showed that the main elements of structure consist of planning (media, experience, motives, costs), travel decision-making to destination, experience at destination (shopping, activities, sightseeing, accommodation), travel back home, recall (conversation, memories, souvenirs), and anticipation of next visit.



The present research was based on the fact that there was strong relationship between tourist attractions and the elements of the attraction system. As the outcomes of the study reveal, a certain number of elements were found to be a significant predictor of tourist attractions for Thai and Malaysian tourists, all of which involved the push and pull factors. The findings from the present study are analogous with those found by Goossens (2000) that tourism motivational models utilize both push factors, i.e. the tourists' emotional needs (consumer dispositions) and pull factors, i.e. facilities and services at destinations (marketing stimuli). The findings of the present study also echo Timothy's (1995) view that borderland tourist attractions can be promoted by low prices for goods and facilities, tax incentives scheme (duty-free shops), festivals and events.

REFERENCES

- Fridgen, J.D. (1996). Dimensions of tourism. Michigan : Education Institute of American Hotel & Motel Association.
- Gavcar, E., & Gursoy, D. (2002). An examination of destination-originated (pull) factors, Tourism Analysis, 7, 75 – 81.
- Goossens, C. (2000). Tourism information and pleasure motivation, Annals of Tourism Research, 27(1-2), 301-321.
- Lee, G. O., Leary, J.T., Lee, S.H., & Morrison, A. (2002). Comparison and contrast of push and pull motivational effect on trip behavior : An application of a multinomial logistic regression model, Tourist Analysis, 7, 89 – 104.
- Leiper, N. (1999). Visitor management, Annals of Tourism Research, 26, (3)731-733.
- Richards, G. (2002). Tourism attraction system : Exploring cultural behavior, Annals of Tourism Research, 29 (4), 1048-1064.

- Sekaran, U. (2000). Research methods for business. New York : John Wiley & Sons.
- Swarbrooke, J., & Horner, S. (2001). Consumer behavior in tourism. Oxford : Butterworth – Heinemann.
- Timothy, D. J. (1995). Political boundaries and tourism : Borders as tourist attractions, Tourism Management, 16 (7), 525-532.
- Tourism growing faster in poorest countries. (2006). Retrieved December 12, 2006, from http://www.world-tourism.org/frame/frame_sustainable.html
- UNWTO. (2007). World tourism barometer. Retrieved April 12, 2006, from <http://www.unwto.org>.
- William, S. (1998). Tourism geography. London : Routledge.
- World Tourism Organization (WTO) (2005a). Tourism in France and Spain. Retrieved March 12, 2006, from <http://www.unwto.org/newsroom/Releases/2005/May/asian.htm>
- Yamane, T. (1973). Statistics : An introductory analysis. Tokyo : Harper International.
- Zalatan, A. (1994). Tourist satisfaction : A predetermined model, The Tourist Review, (1-4), 9-13.

