



# Activity-Based Segmentation among European Tourists Visiting Phuket Province, Thailand

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## ABSTRACT

European tourist markets have continuously played a significant role in generating revenue for the Thai economy. However, the penetration of this tourism market segment is not so easy because Thailand has faced both direct and indirect rivals and neighboring and overseas rivals. Tourism market segmentation is considered an effective and important marketing tool to promote marketing strategies to meet the more specific needs of tourists. The objectives of this study were to segment European tourists visiting Phuket Province, and to compare these segments according to demographic variables and the level of destination satisfaction and loyalty. The hierarchical cluster analysis was utilized to segment tourists based on activities and clusters/segments and was compared in terms of demographic characteristics using Chi-Square statistic and destination satisfaction and loyalty using one-way ANOVA. The findings revealed that five segments of tourists were identified: 'recreational tourist', 'fuzzy tourist', 'sports tourist', 'cultural tourist' and 'leisure tourist'. According to the Chi-Square statistic, no significant differences in terms of demographic variables were found across the five segments. In addition, the result of ANOVA revealed that no statistical differences were found among segments across all items of destination satisfaction except for worthwhile experiences. For destination loyalty, significant differences in the intention and willingness to pay to revisit Phuket were found among these segments.

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## I. INTRODUCTION

It is recognised that businessmen and policymakers in the tourism industry have encountered the question of who the potential tourists who play an important role in the development of the local and national economy are. Such a question is still relevant for today and the derived possible questions include how to reach them and which strategies should be implemented to reach the particular groups and what strategies should be carried out to make them loyal tourists [1]. To answer these questions, tourism market segmentation is considered an effective marketing tool which brings tourists' identities into focus regarding their more specific desires [2]. On the other hand, the key objective of marketing segmentation is intended to cluster the tourists in order to bring forth benefits and values to the management and competitive advantages [3]. However, even though market segmentation is an important tool for tourism marketing success, the appropriate market segmentation criteria has been found to play an important role in decision making and market success [2][3]. The previous empirical studies indicated that 'activity-based variables' are one of the potential variables used as criteria for tourism market segmentation [4][5][6].

In the country of Thailand, Phuket is one of the most popular tourist destinations for foreign tourists because Phuket is Thailand's largest island with a wealth of various tourism resources, including famous marine and beach destinations; it is also known as the 'Pearl of the Andama', a city of famous attractions across the world for its beautiful

scenery, sandy beaches, and crystal blue waters, as well as the availability of services and well-equipped facilities for travelers [7]. As a result, Phuket has become the center of world-class marine tourism in the Andaman Sea.

When Thailand's major tourism market for foreign visitors is examined by region, the proportion of East Asian tourists is the highest, followed by Europe, South Asia, America, Oceania, the Middle East and African tourists respectively. Nonetheless, despite the fact that the number of European tourists is much smaller than that of East Asian tourists, the tourism revenue from European tourists was found to be indifferent to that of East Asian tourists. Therefore, it can be said that the group of European tourists is one of the main markets that are of a high potential and play a significant role in the Thai tourism economy.

However, the study of Acon Marketing and Research Consultant Company [8] indicated that the competition for European tourists in the tourism market is not so easy because rival countries have endeavored to study and understand tourists, provide information to stimulate and motivate them to travel more to their country. The rival countries consist of direct and indirect competitors. Direct competitors include countries that are distant from Europe, such as the United States, South Africa, Australia, New Zealand, China, Singapore, Malaysia, etc. The major indirect rivals include, for example, Western Europe, Eastern Europe, North Africa, the Caribbean, etc. The indirect rival countries have an advantage in terms of proximity to Europe, infrastructural availability, and universal standard tourism service.

However, direct rival countries such as China, Singapore, and Malaysia have tried to draw the attention of the tourists to visit their country. The competition in the international tourism market is intense, and to penetrate the European tourist market, Thailand's tourism industry needs to find a way to create a unique selling point and attractive identity that meet the diverse needs of the European tourists. Therefore, establishing and offering of attractive uniqueness of Thailand's tourism to meet the specific needs of European tourists is one of the most important approaches that Thailand's tourism industry can take to increase its advantages in competing with other countries.

As stated above, the purpose of this study was to investigate the market segment to identify activities that tourists participated in during visits to Phuket Province and to compare the levels of destination satisfaction and loyalty among these segments. The results of this study will be used as key information for planning and business management and understanding of the target customers and European tourists; it will also further present tourism activities that meet the specific needs of tourists in each group, leading to increased customer satisfaction and destination loyalty among European tourists.

## II. RESEARCH QUESTIONS

This paper addressed two main research questions:

1. Can European tourists be segmented based on tourism activities they participated?
2. Do the segments differ in terms of demographic characteristics, destination satisfaction and loyalty?

## III. DATA COLLECTION

The data used in the study are based on a research paper entitled 'A structural equation model of destination loyalty among European tourists visiting Phuket Province, Thailand' [9]. In data collection, the accidental sampling was adopted. The sample included European tourists who traveled to Phuket and stayed there for at least a day, but not more than 90 days to undertake non-salary compensation activities. The sample included tourists from Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the UK. Of 550 questionnaires collected, 527, accounting for 95.72%, completely filled out questionnaires were analyzed. Data collection was conducted between July and August 2015 in various places in Phuket Provincesuch as the beach, shopping malls, food outlets, restaurants, Phuket International Airport, and local tour bus stations in Phuket.

## IV. QUESTIONNAIRE DESIGN

The research instrument included the questionnaire in three different versions: English, French, and German. The items on tourist activities which the tourists had been participating during their trip to Phuket derived from the tourism project developed by the National Statistical Office, Thailand; it consisted of a checklist covering activities the tourists had been participating during their trip, including general activities (e.g. shopping, eating local food), nightlife activities, religious activities, cultural activities, agricultural activities, adventure/ecological activities, health and beauty activities, water/marine sport activities, recreation activities, do nothing/relax in the accommodation, and so on. The validity of the research instrument was assessed; the content analysis using index of item-objective congruence (IOC) was examined by three experts in the tourism marketing field. Based on the research instrument evaluation, the items shown in the questionnaire were clarified and their appropriateness was confirmed.

## V. RESULTS

### 1. Can European tourists be segmented based on tourism activities they participated?

Cluster analysis was used to identify the segments of the European tourists visiting Phuket based on trip activities on the basis of within-group linkage using squared Euclidean distance by means of a hierarchical clustering procedure. The results showed that five segments were identified with respect to the cluster size corresponding to the market segmentation in the measurable, substantial, accessible, differential and actionable manner [10]. The Chi-Square analysis revealed that the segments are dissimilar by the participating all trip activities *except for* agricultural and adventure activities. Thus, this showed that the activity-based variable is appropriate to be used to segment European tourists in this study (see Figure 1 and Table 1). The characteristics of tourists in each segment are differentiated as follows.

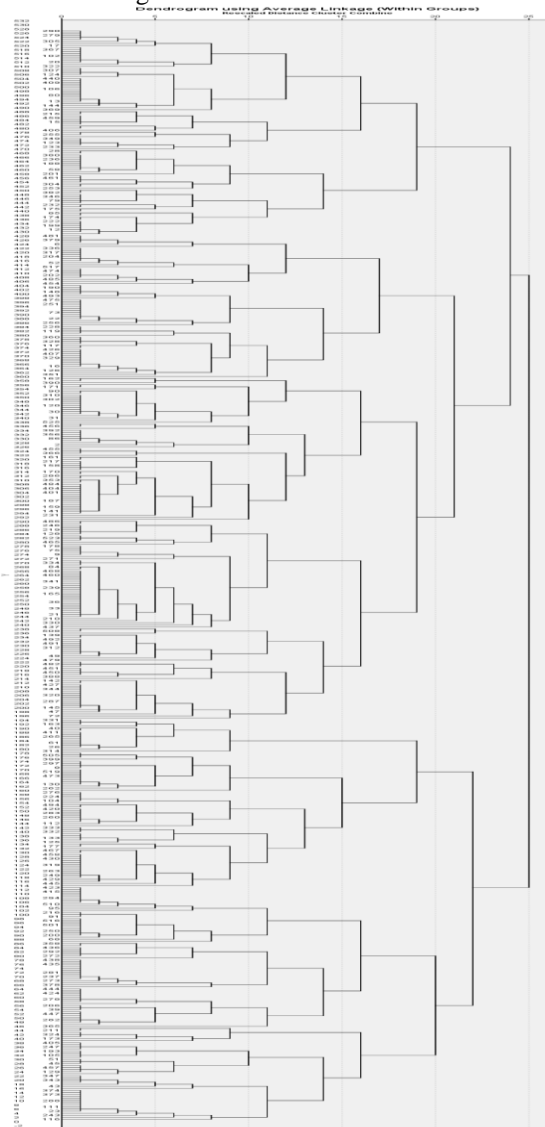


Figure 1. Dendrogram.

**Segment 1:** This segment of tourists is the smallest, with 69 tourists accounting for 13.1%. It mainly consists of tourists who participated in recreational activities. One hundred percent of these tourists reported their participation in recreational activities during their trip. They were also interested in general activities and religious activities, but showed less interest in nightlife activities and water/marine activities compared to other segments. This group of tourists is called 'Recreational Tourist'.

**Segment 2:** This segment of tourists is the largest, numbering only 165 tourists or 31.3%. The results did not expressly indicate any distinctive characteristics of this tourist group. The number of tourists participating in activities was low compared to other segments. However, it found that nearly 20 percent of these tourists had a higher participation in other activities than other segments. This group of tourists is called 'Fuzzy Tourist'.

**Segment 3:** This segment of tourists is the third largest group, numbering 99 tourists or 18.8%. This group of tourists is interested in water/sea activities. One hundred percent of these tourists stated that they primarily participated in water/marine activities and health activities. This group of tourists is called 'Sports Tourist'.

**Segment 4:** This segment numbered 113 tourists, accounting for 21.4%. This group of tourists was primarily interested in cultural activities. Nearly 100% of them reported their participation in cultural activities. This group of tourists is called 'Cultural Tourist'.

**Segment 5:** This segment numbered 81 tourists, accounting for 15.4%. Almost 90 percent of these tourists reported relaxation/relief activities during their trip. This group of tourists is called 'Leisure Tourist'.

**Table 1. Number of clusters or segments.**

Cluster/segment	Number of tourists	Percent
I	69	13.1
II	165	31.3
III	99	18.8
IV	113	21.4
V	81	15.4
Total	527	100.0

## 2. Do the segments differ in terms of demographic characteristics, destination satisfaction and loyalty?

In terms of demographic profiles, the findings based on the Chi-Square statistic showed that no statistical differences were found among segments regarding gender, age, highest education, family status and employment status (see Table 2).

**Table 2. Profile of demographic characteristics.**

Variables	I (13.1%)	II (31.3%)	III (18.8%)	IV (21.4%)	V (15.4%)
Gender					
-Male	37.7	40.0	38.4	39.8	44.4
-Female	62.3	60.0	61.6	60.2	55.6
$\chi^2=0.93$ ; p-value=.920					
Age					
-Under 30	74.6	80.4	75.3	73.5	74.0
-30-49	7.5	10.5	10.1	14.7	11.7
-50 and above	17.9	9.2	14.6	11.8	14.3
$\chi^2=6.11$ ; p-value=.035					
Highest education					
-Secondary and lower	20.3	31.9	32.3	27.0	13.8
-Undergraduate degree	42.0	31.3	26.3	34.2	42.5
-Master's degree and above	37.7	36.8	41.4	38.7	43.8
$\chi^2=14.86$ ; p-value=.002					
Family status					
-Single/Separated/ widowed	60.9	67.3	62.6	64.6	63.0
-Married (married with no child/ young family/ middle family/ mature family)	39.1	32.7	37.4	35.4	37.0
$\chi^2=1.178$ ; p-value=.882					
Employment status					
-Student	27.5	30.3	29.3	23.0	27.2
-Employed/self-employed	69.6	60.6	60.6	71.7	65.4
-Unemployed/ retired	2.9	9.1	10.1	5.3	7.4
$\chi^2=7.36$ ; p-value=.499					

Table 2 presents the mean comparison of destination satisfaction among five segments using one-way ANOVA. The findings revealed no statistical differences in the level of satisfaction in terms of expectations, worthwhile time and effort, worthwhile money spent in the trip, and overall satisfaction in Phuket trip among all segments. However, there was at least one segment that rated the different level of worthwhile experience from any other segment.

**Table 3. Profile of destination satisfaction (Min=1; Max=5).**

Variables	Segment				
	I (13.1%)	II (31.3%)	III (18.8%)	IV (21.4%)	V (15.4%)
Satisfaction					
Rating Phuket compared to expectations	3.10 (0.83)	3.24 (0.90)	3.35 (0.88)	3.39 (0.71)	3.44 (0.73)
F=2.31; p-value=.057					
Worthwhile time and effort	3.62 (0.94)	3.76 (0.82)	3.87 (0.91)	3.82 (0.75)	3.86 (0.85)
F=1.14; p-value=.335					
Worthwhile money spent in the trip	3.52 (0.93)	3.65 (0.84)	3.85 (0.84)	3.66 (0.73)	3.64 (0.71)
F=1.82; p-value=.125					
Worthwhile experiences	3.51 (0.90)	3.52 (0.80)	3.85 (0.87)	3.60 (0.77)	3.69 (0.74)
F=3.06; p-value=.017					
Rating Phuket as a vacation compared to other similar destination	3.17 (1.11)	3.22 (0.89)	3.35 (1.01)	3.14 (1.00)	3.43 (0.99)
F=1.44; p-value=.218					
Overall satisfaction	3.80 (0.83)	3.81 (0.84)	3.90 (0.91)	3.87 (0.81)	3.88 (0.86)
F=0.29; p-value=.885					

( ) = Standard deviation

Table 3 shows the comparison of destination loyalty among five segments using one-way ANOVA. The findings indicated that there are no statistical differences in the level of destination loyalty in terms of recommending Phuket to friend/relatives among five segments. However, there was at least one segment that rated a different level of intention to revisit Phuket in the next three years and willingness to pay to revisit Phuket from any other segment.

**Table 4. Profile of destination loyalty (Min=1; Max=5).**

Variables	Segment				
	I (13.1%)	II (31.3%)	III (18.8%)	IV (21.4%)	V (15.4%)
Destination Loyalty					
Intention to revisit Phuket in the next three years	3.00 (1.25)	3.13 (1.13)	3.61 (1.13)	3.00 (1.27)	3.33 (1.03)
F=4.76; p-value=.001					
Recommending Phuket to friends and/or relatives	3.58 (1.08)	3.73 (0.98)	3.99 (0.99)	3.73 (0.97)	3.84 (1.01)
F=2.01; p-value=.091					
Willing to pay to revisit Phuket	3.29 (1.19)	3.38 (1.08)	3.74 (1.08)	3.31 (1.12)	3.54 (0.94)
F=2.90; p-value=.021					

( ) = Standard deviation

## CONCLUSION AND IMPLEMENTATION

The results of this study provide some important suggestions to the stakeholders involved in the tourism industry; both public and private sectors could apply the suggestions to planning tourism marketing development for the target European tourists to meet the tourists' more specific needs and to accommodate the various needs of the European tourists traveling to Phuket, Thailand. Particularly, it provides the guidelines to develop the specific trip-activities-related tourism product, leading to a more effective marketing strategy development for the specific tourist groups and finally to enhance the level of tourism satisfaction and destination loyalty. The findings suggested that the European tourists market can be categorised into five main homogeneous segments according to trip activities; that is, 'recreational tourist', 'fuzzy tourist', 'sports tourist', 'cultural tourist' and 'leisure tourist'.

As for the theoretical implications, the results clearly indicated that demographic variables play a feeble role in segmenting the tourists. They are consistent with the studies of Eusebio and Carneiro[4] and Mehmetoglu [6], who stated that the theoretical model development to understand activity-based segmentation in the tourism market may not apply or

depend on demographic variables alone. It can be said that the development of tourism marketing strategies using demographic variables may not produce effective marketing. However, the results showed that activity-based variables are powerful and effective for tourist segmentation. Thus, development of segmentation strategies with tourism-based activities will yield a positive effect in meeting the tourists' more specific needs. In addition, the results revealed that marketing segmentation is highly important to marketing strategies to attract European visitors and the tourists in all segments. For examples, leisure tourists (segment V) prefer to relax in a hotel or resort accommodation. Therefore, the marketer should highly focus on providing the leisure products and activities within the hotel or resort in order to response tourists' needs.

Regarding the practical implications, this study has not only highlighted the information on activity-based segments among European tourists but also covered the destination satisfaction assessment and tourist loyalty in each segment. The results of this study indicated that tourists from segments I and II were less satisfied with the worthwhile experience in Phuket trip than other segments. In addition, segments I, II and IV had less destination loyalty on the intention to revisit Phuket in the next three years and willing to pay less to revisit Phuket than other segments. To enhance the level of tourist satisfaction and loyalty, the development of recreational and cultural activities should be highly stressed for tourists in segments I and IV, respectively. However, the tourist activities in segment II, which represents the largest cluster of the tourists, remained ambiguous and vague in detail. Therefore, a more detailed investigation of tourism activities should be carried out to meet the needs of these tourists in future study.

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