CHAPTER 3
RESEARCH METHODOLOGY

This research is based upon gathering of primary and secondary data via the research instrument after a comprehensive literature review. This research aims to study the trip behaviors and demographic characters profile of international tourists who visited Phuket in 2004, to study the influence of their selected demographic characters on their selected trip behaviors, and to investigate the hierarchy effect of key determinant variables on the target variables of interest (e.g. Length of Stay and Daily spending) by using survey-based research. A structured-undisguised questionnaire was designed to collect the data. The sample population of this study was comprised of 400 international tourists who visited Phuket. Data collection was conducted from mid-April to May 2004. In this chapter, researcher presents the methodology as follows:

3.1 Population

The target populations of this study are international tourists who visited Phuket during year 2004. They all stayed in Phuket for at least one night. From Tourism Authority of Thailand, Phuket Branch, the international tourist arrivals in 2003 were 2,688,499.

3.2 Sample Size

According to the statistics compiled by Tourism Authority of Thailand, Phuket Branch in 2003, the numbers of international tourist arrivals were 2,688,499.

Using the formula of Yamane (1973) to find the number of sample is as follows:

\[ n = \frac{N}{1 + Ne^2} \]

Where

- \( n \) = Sample size
- \( N \) = The number of population (In this case, the population is international tourists who stayed in Phuket for at least one night)
\[ e = \text{Significant level (In this case the researcher use } 5\% \text{ for significant level)} \]

\[
n = \frac{2,688,499}{1 + (2,688,499 \times 0.05^2)} = 399.94 \approx 400
\]

The number of sample is 400

A non-random, convenient sampling method simply involves using the questionnaires and asked the international tourists who are most available or most conveniently selected. For practical reasons we used questionnaires because this is the easiest and cheapest method for collecting the sample and also due to the limited resources available.

To minimize possible sample bias, quota sampling procedures were used to select respondents and collect 200 persons (50\%) from Phuket International Airport, 100 persons (25\%) from Phuket bus terminal, and 100 persons (25\%) from Chalong Bay.

### 3.3 Tools of Research

This study uses questionnaire (designed to be filled-out by the respondent) as a tool to collect the data from sample group. The researcher set up the questionnaire from an approach of the objectives of the study. Variables and item statements in the questionnaire are developed according to the literature review. The questionnaire was designed in English language and it contained a combination of closed and open-ended questions. It was divided into 2 parts related as follows:

**Part 1  The Trip Behaviors of International Tourist.**

This part, indicates the trip behaviors of international tourists, 14 questions were asked: (1) Objective of visit, (2) Type of trip arrangement, (3) Type of group travel, (4) Type of transportation used, (5) Frequency of visit, (6) Information search, (7) Type of accommodation
used, (8) Place of stay, (9) Length of Stay, (10) Types and average of spending, (11) Tourist attraction, (12) Destination activity, (13) Intention to revisit Phuket, and (14) Intention to recommend Phuket to friends or relatives to visit.

### Part 2 The Personal Profile.

In this part, six questions were included to capture the respondents’ demographic profile: age, gender, education level, region of residence, occupation, and income per month. (See questionnaire in appendix)

### 3.4 Data Source

#### 3.4.1 Primary Data

The primary data was collected through surveys from international tourists who visited and stayed in Phuket for at least one night. (The questionnaire asked about general trip behaviors and personal data of tourist.)

#### 3.4.2 Secondary Data

Data collected about consumer behaviors and statistical data of tourism from Thailand more specifically in Phuket

Data collected from references which studies about related ideas and theory of tourism, and also gathered from Journals and website. (See reference)

Statistical data collected from international tourists who visited Thailand (Source: Tourism Authority of Thailand)

### 3.5 Data Collection

The data collected by using questionnaires asking the 400 international tourists who visited and stayed for at least one night in Phuket asked about general trip behaviors and personal data of tourist. The questionnaire was pre-tested on 30 tourists who visited Chalong temple on the 20th of March 2004 in order to identify confusing question and uncover any potential problems.
Based on the respondent’s result and comments, some revisions were made to improve the clarity of the items to obtain valid responses and high response rates.

The survey was conducted during 9am to 6pm between April 15 and May 25 2004. The questionnaire was handed out at points of arrival and departure in Phuket International Airport, Bus terminal, and Chalong Bay. The international tourists were approached by the researches and asked if he/she would like to participate in this research study as they waited before departure. The questionnaires were filled in by the tourist themselves. Each respondent spent an average of 5 minutes answering the surveying questionnaire.

3.6 Statistics Used in this Research

Descriptive statistics analysis was applied to collected data to explore the overall sample profile and the trip behaviors. Cross-tabulation and Pearson Chi-square was also applied to measure the influence of demographic characteristics on trip behaviors. Interpretation of the result was done at 5% level of significance; where the value of p<0.05 was considered as being significant, and p<0.01 was considered as being highly significant (Table 3.1).

Table 3.1 Summarizes the Statistical Analyses and their Purpose

<table>
<thead>
<tr>
<th>Statistical Methods</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptive analysis</td>
<td>To explore the overall profile of the samples and identify the trip behaviors of international tourists</td>
</tr>
<tr>
<td>Cross-tabulation</td>
<td>To show responses divided between trip behaviors and tourist’ demographic characters</td>
</tr>
<tr>
<td>Chi-square</td>
<td>To measure the influences of selected demographic characteristics (age, gender, region of residence, and monthly income) on trip behaviors.</td>
</tr>
<tr>
<td>T-test, One-way ANOVA</td>
<td>To measure the difference of tourists’ Length of Stay and Daily spending on selected demographic characters</td>
</tr>
<tr>
<td>Discriminant analysis</td>
<td>To determine which variables discriminate group of Length of Stay and Daily spending of international tourists</td>
</tr>
</tbody>
</table>
3.7 **Data Analysis**

The collected questionnaire was analyzed by using SPSS for Windows Program (Statistical Package for the Social Sciences) version 11.5 as follows;

3.7.1 **Simple Frequency**

The distribution of the data was used to measure Frequency Statistics to find out the trip behaviors of international tourists and their general profile.

3.7.2 **Joint Frequency Distribution (Cross Tabulation)**

To find out the trip behaviors of the international tourists who come from different areas, Joint Frequency Distribution or Cross Tabulation Method was used to study the influence of demographic characters on trip behaviors, and the difference of “Length of Stay” and “Daily spending” on demographic characters.

3.7.3 **Manual Tabulation**

To analyze the open-ended questions such as the question which ask about the tourists’ opinions or comments.

3.8 **Limitation of Data Collection**

3.8.1 The only willing respondents were requested to complete the survey questionnaire, to avoid future problem in representation.

3.8.2 A non-random sampling design was adopted, thus the findings are not generalized.

3.8.3 Limitation of time and budget that is not able to totally represent the whole.