

CHAPTER III

RESEARCH METHODOLOGY

The main objective of this study is to investigate the perceptions and attitudes of Lufthansa Airlines' passengers on global warming. To meet this objective, the quantitative methodology was conducted employing a survey to provide information about the perceptions and attitudes of passengers at Suvarnabhumi International Airport. In this chapter, the research method is discussed as follows:

1. Population of the study
2. Sampling method and sampling size
3. Variables
4. Research instrument
5. Validity and reliability
6. Data collection techniques
7. Analysis of data

Population of the study

The target respondents of the present study were outbound passengers of Lufthansa German Airlines flight numbers LH 773 and LH 783 that would depart from Suvarnabhumi International Airport in Thailand during the month of February 2010. The total number of population of this study was 26,466 persons (Deutsche Lufthansa, AG., 2009).

Sampling method and sampling size

The convenience sampling method was used to select 400 passengers aged 18 years old and above from different nationalities and social backgrounds to create a wide range of people from the total population of Lufthansa's passengers. However, this research does not aim to differentiate any specific group in terms of their demographic characteristics. The researcher calculated the sample size by Taro Yamane's formula (see Appendix A).

Variables

The independent variables in this study are demographic characteristics and the dependent variables are passengers' perception and attitudes.

Research instrument

The research instrument in this study is a questionnaire with close-ended format (see Appendix C). The questionnaire was prepared in English to communicate with outbound passengers. The questionnaire consists of four sections as follows:

In section 1, there were 8 questions in the pattern of checklist, asking about Lufthansa passenger's profile including gender, age, educational level, occupation, income, nationality, frequency of traveling, and reason of choosing Lufthansa Airline. The first section of questionnaire measures the demographic profile which increase the validity and reliability of destinations' image measurement (Ticehurt and Veal, 2005).

In section 2, there were 5 questions asking about the passenger's general perception about global warming that may increase awareness and ultimately encourage pro-environmental behaviour. Five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree) was used.

In section 3, there were 6 questions asking about the passenger's perception towards impact of airlines on global warming. Thus, this section lets the researcher know about the passengers' perception on this issue. Five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree) was used.

In section 4, there were 12 questions asking about the attitude of passenger towards airline's attempt to alleviate impacts on global warming. This section lets the researcher know about passengers' attitudes on this issue and how they are satisfied with the service performed during their trip. Thus, this section also helps the researcher find out the decision making and behavioural intention of passengers. Five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree) was used.

Validity and reliability

After the literature was reviewed, the researcher developed all possible questions which were adapted from the questionnaire samples from previous researches (Becken, 2004, p. 334; Brouwer, et al., 2008, pp. 311-312) and environmental program of Lufthansa Airline (Lufthansa, 2009). The researcher gave the questionnaire to the advisor and research experts to check the content validity of the instrument. Before the real data collection, pilot-test was given to 40 outbound passengers of Lufthansa Airline on flight numbers LH 773 and LH 783 at Suvarnabhumi International Airport during the last week of January 2010. This procedure was to confirm question clarity and identify response options. After that, the researcher used Cronbach's Alpha Coefficient to assess the reliability of pilot-test. The alpha value of the instrument was 0.813, indicating the high reliability of the instrument (see Appendix B).

Data Collection Techniques

The researcher collected the data using questionnaire prepared in English language. The questionnaire was provided to ground staffs at the Lufthansa Airlines check-in counter area Row G, at Suvarnabhumi International Airport, to give to passengers during check-in period to conduct the survey. An official permission letter was sent to Managing Director of Lufthansa Airline for research approval. Total of 400 respondents were outbound passengers on flight number LH783 on Monday, Wednesday, and Thursday and Saturday. Flight number LH773 on Tuesday, Friday and Sunday during the month of February 2010 from 18:30-22:00 hrs.

Data analysis

Descriptive statistics were used to develop a profile for the respondents and to summarize the variables. The data were analyzed by using a statistical computer program. The general information including demographic profiles and traveling characteristics were analyzed in percentages (%). The data were interpreted in different meanings as follows:

Perception and attitudes were analyzed based on five ranges as follows:

The score among 1.00–1.80 mean strongly disagree

The score among 1.81- 2.61 mean disagree

The score among 2.62- 3.41 mean neither agree nor disagree

The score among 3.42-4.20 mean agree

The score among 4.21-5.00 mean strongly agree

The hypotheses testing were conducted using Multivariate Analysis of Variance (MANOVA), and Pearson's Product Moment Correlation Coefficient. The level to reject or accept each hypothesis is .05.

