

CHAPTER V

CONCLUSIONS

This chapter presents the conclusion and discussion of this study. Besides, the recommendation, limitation of the study and suggestion for future research are also included.

Findings

The purpose of the study was to examine the airlines passengers' perception and attitudes relevant to airlines' impact on global warming by focusing on Lufthansa Airlines' passengers. The data were collected using questionnaires with the subjects selected using convenience sampling. The 400 samples were Lufthansa Airline passengers who were outbound passengers at Suvarnabhumi International Airport in Thailand in February 2010. These data were analyzed using Multivariate Analysis of Variance (MANOVA) and Pearson's Product Moment Correlation Coefficient.

In terms of demographics, it was found that the majority of respondents were females' ages between 20 and 35 years old, with bachelor's degree and working in private companies. As for the monthly income, two major groups of the respondents had income ranging between \$1,500 and \$ 3,000 for the first group, second group between \$3,001 and \$4,500. Respondents interviewed were mostly from Europe and Scandinavia.

The passenger's top three reasons of choosing Lufthansa Airlines were service quality, reasonable price, and safety. The respondents flew with the airlines between two and five times, some only once, respectively.

The hypothesis testing revealed that the passengers with different demographic factors had different levels of perception and attitudes towards global warming in relation to choosing the airline service. Pearson's Product Moment Correlation Coefficient was applied to find out the relationship between perception and attitudes towards global warming in relation to the airline service. A strong and positive relationship was found between perception and attitudes towards airline's effort to alleviate their impact on global warming.

Discussion

This research was conducted to study airlines passengers' perception and attitudes relevant to airlines' impact on global warming. The research and theories were used as a basis to discuss the results of the research.

This study found that males and females shared similar level of perception and attitudes relevant to airlines' impact on global warming. However, females have a higher environmental consciousness compared to males. Female participants in Andereck's study (2009) appeared to show more interest in promoting "green" activity than their male counterparts, and Stern and Dietz (1994) found that women, more than men, exhibit anxiety due to worries of environmental degradation.

The previous research also reported that younger people emphasized on protecting the environment more than the other groups, which agreed with the findings of this research. Mohai (1992) reports that younger tourists derive more sense of fulfillment from engaging in environmentally- friendly activities. Most of the younger group in Shim's study (1995), for example, demonstrated concern for environment and community by donating clothes to charity. The research however indicated that all younger, middle age and older international tourists shared their concerns towards environmental protection. This may be due to the fact that they all were willing to open their minds in participating to environmental-friendly programs to help decrease emissions of carbon dioxide and other greenhouse gases from human activities including from airline industry (Becken, 2004; Becken, 2007; Goessling and Peeter, 2007; Peeter, 2003).

Socio-economic status plays a major role in influencing attitudes and commitments towards environmental concerns, with those from lower socio-economic backgrounds showing less consciousness of environmental issues, while those from middle and upper socio-economic backgrounds demonstrate more commitment to behaviors that minimize harm to the environment. Indeed, the study showed that the highest levels of commitment to environmental conservatism are to be found among people of the highest socio-economic backgrounds, suggesting a direct relationship between class and environmental consciousness (Carlsson-Kanyama and Linden, 1999; Rovira, 2000).

According to Becken (2007), an external factor, government climate change policies, influence tourist's awareness in some countries and they also expressed their responsibility to global society in environmental concerns. But in some countries in Goessling, et al. (2006), most of respondents appeared to show low consciousness in environmental impact in terms of air travel and climate change.

However, demographic profiles were not the only factors used to evaluate the passengers' perception and attitude towards global warming. The correlation between passengers' perception and attitudes of passengers towards global warming has become another essential factor revealed by this research. The positive and strong correlation between both variables signifies that the positive perception of an individual may lead to the high levels of exposure, awareness, learning and concern about greenhouses gases emissions especially carbon dioxide from airline industry (O'Connor, et al., 1999; Lee, et al., 2009).

As the body of knowledge about the environment grows, people likewise grow in understanding of the importance of adapting their habits and lifestyles to protect the environment (Ottman, 1999; Spaargaren, 2003). Klapper (1967) points out that people in general unconsciously fall victim to "confirmation bias", a tendency to filter information and retain only that which conforms to their pre-existing beliefs, attitudes, experiences, and worldview. Yet, exposure to new information can give people the impetus to adapt their lifestyles and make them more aware of their own contribution to environmental change (Bergin-Seers and Mair, 2008; Goudie, 2006).

The results also revealed the positive correlation between the passengers' positive perception and attitudes about global warming. Turner (1997) proposed that a positive perception of economic, health, and welfare benefits of environmental conservation can fuel an increase in environmentally-friendly practices.

The positive relationship between perception and attitude towards global warming in relation to the airline service, exposure to green knowledge and information and participation in environmental programs may indicate that the passengers are becoming more concerned on the environmental effects of civil aviation development and other human activities.

Recommendation for the airline industry

The demographics profiles have a strong influence over the levels of participation among passengers. Airlines' managers and employees must pay attention to the levels of participation. Information about the passengers can help Lufthansa airlines understand the perception and attitudes of passengers and influence them to willingly participate in their environmental-friendly programs (D'Souza, et al., 2007; Olson, 2008).

Referring to the mission of the environmentally-friendly program, airlines should concentrate on getting more participation from the passengers. The results of this study showed that the influential sources that communicate environmental knowledge, with the aim to stimulate the passengers to contribute in environmentally-friendly program are websites, airlines magazine, newspaper, and leaflet (Swarbrooke and Horner, 2007). Therefore, the airline management team should develop those sources and reach their passengers in a broader range effectively and efficiently.

Furthermore, the environmentally-friendly messages from various sources that are used to communicate with passengers may have potential effect to motivate them for helping the world decrease the greenhouse effect that leads to global warming issues (Spence, 2005). Moreover, airlines should continue to develop their environmentally-friendly programs (D'Souza, et al., 2006). Besides, Lufthansa airlines management teams may provide support to develop more potential green information sources to attract passengers to participate in their green program and to help them in choosing the airlines that are truly concerned in global warming issues and willing to contribute to the decrease of carbon dioxide emissions in this industry.

Limitation of the study

There are some limitations that should be considered in this research as follows:

1. Sampling Method: This study used the purposive sampling in collecting data only on outbound passengers of Lufthansa flights numbers LH773 and LH783. Thus, there was no data collection on inbound passengers. Furthermore, the distribution of the questionnaires by convenience sampling had a weakness that will not give every unit in the population an equal chance to be selected.

2. Time: The survey was conducted only for one month. Therefore, the respondents' perspectives would only be of those particular set of passengers within that period of time and not the representatives of a bigger group of respondents for a longer time.

3. Questionnaire: Using English questionnaire was considered as a barrier to effective communication with some passengers from Scandinavia, Europe and Asia who do not speak or have low proficiency in English language.

Future Research

1. Future research should study perception, attitude and behavior of Lufthansa German Airlines' employees towards airlines' impact on global warming in order to understand their viewpoint and actions which can effectively and efficiently communicate with the passengers and help the national airlines to reach its goal in achieving environmental sustainability.

2. Future research should replicate this study by conducting the research with other airlines and airports in order to compare the passengers' perception and attitudes towards airlines' impact on global warming.

3. Future research should use the qualitative research to investigate the managers' viewpoint and attitude on environmental protection from different environmentally-friendly airlines.

