Identification of Attributes on Selection of a Departure Airport in Sri Lanka

Osanda Daluwatta[1] and Dimantha De Silva[2]

Abstract

The world has become a smaller place through the expansion of the aviation industry. Commercial airports enable millions of people to travel for business, go home for the holidays, take vacations around the globe, or travel to other important events. Most contemporary airport management studies and research focus on airport efficiency, effectiveness, processing speed, and ranks on international league tables. These policies appear to favour airports that can efficiently transport most travellers and their luggage. Identification of passenger airport choice determinants may be of great value to airport managers as it can assist with determining passengers' demand at the Airport. These studies include different airports and different segmentations of passengers. Air passengers usually choose airports after considering multiple factors such as airfare, frequency of flights or flight schedule, access time, airport delay, and modes of the Airport. The choice may be influenced by the socio-economic characteristics of the individuals and the purpose of the travel. However, there is no general approach to model how air passengers will choose their origin airport in response to attributes of the air travel, attributes of inside and outside the terminal based on their travel purpose. It is important to identify the attributes that will influence a departure passenger to select a departure airport because it is a crucial component when planning passenger redistribution policies. This paper adds to the body of knowledge by providing a deeper understanding of the variables affecting air traveller's experience as expressed by travellers depending on their trip purpose, whether it is business, leisure, pilgrimage or migrant worker trip. The objective of this paper is to identify the influential factors for selecting a departure airport by air travellers based on their travel purpose, which is fulfilled based on the data collected from air travellers who visited Bandaranaike and Mattala International Airports. For this purpose, 350 individuals were sampled using a special questionnaire through internet-based and direct personal interviews. The analysis presented in this paper has shown the important role of Air Ticket Price, The Access Time to the Airport, The Number of Transfers to the Destination and The Number of Flights per Day to the Destination were found to have a consistently significant effect on Business, Leisure and Migrant travellers while Air Ticket Price, The Cost of Getting to the Airport, The Number of Flights per Day to the Destination and Availability of multiple transport modes to the Airport were significant for Pilgrimage travellers in airport selection. As a further study, the selected attributes will be used on the SP survey to estimate a logit choice model for the selection of a departure airport. The findings of the research can be used by the airport authority and various transport operators for evaluating the changes in the service attributes in international airports improving the discounted airfares, ground access mode services, airport facilities, and airport efficiency for increasing the competitiveness of the Airport.

Keywords: *Airport Choice, Multinomial Logit Model, Discrete Choice Model, Stated Preference Method*

Authors Details;

1. Postgraduate Student, Department of Civil Engineering, Faculty of Engineering, University of Moratuwa. daluwatta.osanda@gmail.com

2. Senior Lecturer, Department of Civil Engineering, Faculty of Engineering, University of Moratuwa. dimanthads@uom.lk