Determining important attributes for assessing the attractiveness of airlines

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ABSTRACT

The attractiveness of airlines is a topic of great interest to researchers and professionals wishing to understand the ability of airlines to attract and satisfy air passengers. However, there is a lack of consensus on which attributes of the airline are important for attracting and satisfying passengers. In general, previous studies have mostly focused on a limited number of attributes affecting a passenger's choice of airline, satisfaction, behaviour and loyalty. This study aims to develop a model to measure the importance of airline attributes, a model which could be adopted by future research on airline attractiveness. Besides a review of previous empirical research on the topic, an empirical study was conducted among air passengers at a major international airport in Spain. Results revealed the existence of eight categories of attributes that are important for airline passengers. The most important categories were: 'safety and punctuality', 'ticket price', and 'attention and service during the customer journey'. In addition, air travel frequency and socio-demographic characteristics affected the perceived importance of the categories of attributes. For instance, air travel frequency had a positive influence on the importance passengers attach to 'safety and punctuality', 'flight schedule and connections', and 'in-flight space'.

1. Introduction

The attractiveness of organisations has been largely defined as the perceived ability of the organisations to attract and satisfy potential stakeholders such as customers, suppliers, employees and investors (Andreassen and Olsen, 2008; Chen and Chang, 2005; So et al., 2017; Story et al., 2016). In line with that definition, the attractiveness of airlines for potential customers could be defined as the airlines' perceived ability to attract and satisfy potential air passengers. Introduced by Martilla and James (1977), importance-performance analysis (IPA) has been adopted to assess the attractiveness of firms in general and, in paticular, airlines (Chen and Chang, 2005). IPA aims to compare the relative importance of the attributes related to a particular product or service with a firm's performance on those attributes (i.e., customer satisfaction with the firm's attributes). As a result, determining which attributes are important for attracting and satisfying passengers is central to the appropriate management and marketing of airlines.

The importance of an airline's attributes or 'pull factors' has received much attention from tourism and transport researchers in a variety of fields of study. Firstly, research on the choice of airline/flight (e.g., Chang and Sun, 2012; Chen and Chao, 2015; Fleischer et al., 2012; Kim and Park, 2017) and market segmentation (e.g., Bruning et al., 2009; Mason and Gray, 1995) suggests attributes that are important for attracting potential passengers. Secondly, literature on service quality (e.g., Gilbert and Wong, 2003; Park et al., 2004, 2009),

satisfaction (e.g., Forgas et al., 2010; Umashankar et al., 2016) and air passengers' behavioral intentions and loyalty to airlines (e.g., Dolnicar et al., 2011; Park et al., 2004, 2009), pays special attention to the attributes that are important for satisfying and retaining passengers. A novelty of this study is the analysis of previous empirical research with the purpose of identifying airline attributes that have been evaluated in terms of their importance for the attraction and/or the satisfaction of air passengers. An empirical study will then be carried out in order to report evidence regarding the relative importance of the selected attributes, as well as to group them into categories of important attributes.

Since the relative importance of an airline's attributes may differ depending on the socio-demographic characteristics of potential passengers (e.g., place of residence, gender, age, education, marital status, job position) (e.g., Chen and Chao, 2015; Gilbert and Wong, 2003; Kim and Park, 2017), it would therefore be interesting to undertake empirical studies that could identify significant differences across passengers with different profiles. In the same way, the relative importance of an airline's attributes is expected to be different based on passengers' travel characteristics such as frequency of air travel (e.g., Chen and Chao, 2015; Dolnicar et al., 2011). Consequently, an additional aspect is looked at in this research: the influence of socio-demographic characteristics and air travel frequency on the importance that passengers attach to each category of important attributes.

Taking all the above into account, the purpose of this article is

three-fold. Firstly, it aims to identify and categorise the attributes that have been suggested by previous empirical research as important for air passengers when choosing and evaluating an airline or flight. Secondly, this study aims to identify and categorise the airline's attributes that are important for air passengers at a major international airport in Spain. In so doing, the results of the literature review will be considered. Thirdly, this study will examine the influence that socio-demographic characteristics and air travel frequency has on the importance that is placed on each category of airline attributes.

2. Literature review

Within the abundant literature on airline management and marketing, there is no generally accepted set of airline attributes that are important for passengers when selecting an airline or flight (Chen and Chao, 2015; Kim and Park, 2017), or evaluating an airline in terms of service quality and passenger satisfaction (Han, 2013; Gupta, 2017). Nevertheless, for assessing service quality, the Servqual scale has been the most frequently adopted method in the research on air transport management (Gupta, 2017; Liou et al., 2011). As suggested above, in the 'introduction' section, there is also a need to develop a set of attributes that can simultaneously be used to assess the importance passengers attach to each attribute when choosing an airline, as well as passengers' satisfaction level with the performance of a particular airline as regards each important attribute. In order to be attractive, the airline is expected to satisfy passengers in each important attribute. In the literature on air transport management, Chao et al. (2013) developed a list of 36 air cargo transport service attributes to conduct an importance-satisfaction analysis of the opinions of managers working for air freight forwarders. Further research is needed to generate a set of attributes that could be used to examine the attractiveness of airlines based on the opinions of passengers (i.e., their perceived ability to attract and satisfy potential passengers).

On the contrary, a wide variety of attributes has been adopted by researchers in different fields of study: airline/flight choice, service quality, passenger satisfaction and loyalty, IPA, market segmentation. Empirical research articles on all these fields of study were searched in the academic journals listed in the electronic databases Elsevier's Scopus and Thomson Reuters's Web of Science, which are considered the world's largest abstract and citation databases of peer-reviewed literature and quality web sources, with more than 21,900 titles from 5000 publishers worldwide. The words used in the first meta-search of research articles were 'airline' and 'attribute', and they were required to be in the title, abstract or keywords. Additional meta-searches were conducted by keeping 'airline' and replacing 'attribute' with the following terms: 'attractiveness', 'choice', 'satisfaction', 'service quality', 'loyalty', 'importance' and 'segment'. There was no restriction regarding the year of publication of the research articles.

As shown in Table 1, a total of 21 research articles with empirical evidence related to the importance air passengers or experts attach to airline attributes were finally chosen for further analysis. Each manuscript was firstly examined with a view to identifying and comparing the field of study (i.e., airline choice, flight choice, service quality, antecedents of satisfaction and loyalty, IPA, market segmentation) and the research context (i.e., types of airline/flight, geographical scope, source of information). Secondly, the attributes thought to be important were identified and grouped into several categories of attributes. Thirdly, major findings regarding the influence of passengers' socio-demographic characteristics and air travel frequency on the importance they attached to the attributes of an airline were taken into consideration when proposing hypotheses. The results of the analyses are as follows.

2.1. Fields of study and the research context

Out of the 21 selected empirical studies, a total of nine focused on

airline choice, four placed emphasis on flight choice, and four aimed at analysing antecedents of passenger satisfaction and loyalty (see Table 1). As a result of the increasing rivalry that characterises the airline industry, airlines are looking at customer satisfaction and retention. In so doing, passengers' preferences and criteria for selecting an airline should be considered (Dolnicar et al., 2011). As shown in Table 1, the remaining four studies referred to price sensitivity, market segmentation, IPA and airline perceived value. Park et al. (2004, 2009) authored two of the selected manuscripts. Since they adopted 'Servqual' to measure service quality, additional empirical research articles on service quality were not selected for further analysis. The reason is that these studies also covered the importance attached to each of the service quality attributes included in 'Servqual' or a similar scale (Gupta, 2017).

Europe and Asia are the leading continents in the empirical research on the airline attributes that are important for air passengers. As shown in Table 1, nine of the 21 studies made reference to the European aviation market: Europe in general, Spain, United Kingdom, Austria, Greece. Seven studies showed empirical evidence from the Asian aviation market: South Korea, Taiwan, China. The remaining five studies referred to the following geographical areas: United States of America –USA-, Canada, Mexico, Israel, Australia, South Korea. Consequently, the selected studies are representative of a wide variety of aviation markets. As illustrated in Table 1, a variety of types of airline and flight was covered by the selected studies when analysing important attributes: carriers in general, low cost carriers –LCC-, full service carriers –FSC-, cargo carrier, international carriers, national carriers, carriers operating on national routes, carriers operating on short-haul routes.

Besides the characteristics of passengers, the different aviation environment in terms of types of airline, route and airport, might affect the importance passengers attach to an airline's attributes. For instance, Merkert and Beck (2017) focused on the value of travel time savings and the willingness to pay for regional air services, as compared with the use of car and coach. As discussed by Merkert and Beck (2017) and Merkert and O'Fee (2013), regional air services are often considered merit goods and are supported by public initiatives. In the case of Spain, the Government applies a subsidy to air fares for residents in remote areas, such as the archipelago where the empirical research for this study was conducted. This subsidy represents a 75% discount on the cost of inter-island flights and a 50% discount on the remaining domestic flights. Consequently, local inhabitants, as compared with non-residents, might attach less importance to the ticket price of domestic flights.

2.2. Categories of airline attributes and specific attributes

As shown in Table 2, the selected empirical research studies assessed the importance respondents attached to 50 specific attributes that can be grouped into the following categories: 1) ticket price and promotional prices, 2) additional charges, 3) service/price ratio, 4) reservation channels and payment methods, 5) flight conditions (schedule, frequency, connections), 6) in-flight service, 7) cabin facilities, 8) ground services, 9) airline operation, 10) professionalism of personnel, 11) a passenger's feeling regarding a particular airline, 12) airline marketing and strategy.

The importance of ticket price was examined by almost all the selected studies, except that of Han (2013), who focused on the importance of space/function and ambient conditions when choosing a LCC. In general, price is considered an antecedent of passenger satisfaction and loyalty, as well as a major competitive method in the airline industry (e.g., Park et al., 2004, 2009; Umashankar et al., 2016). As discussed by Hess et al. (2007), Park et al. (2009) and Fleischer et al. (2012), ticket price is also an important factor affecting air passengers' choice of airline and flight. In that respect, Hess et al. (2007) found that ticket price, as compared with punctuality, schedule and connections,