Introduction

The first engine flight in the world was by Orville Wright in 1903 in North Carolina. Approximately 16 years after this first flight of 47 seconds by Orville Wright (Franklin, 1980) the first scheduled airline flight in the world was between England and France in Europe in 1919 (Wright, 1985). In the following years, due to the increase in travel trends and increasing diversity in purposes of travel, a rapid increase in the number of airlines serving national and international markets was observed. With the increase in the number of airline companies, number of destinations and flights increased as well and the airline companies had to improve their service quality to preserve and/or increase their market shares. The services provided by airline companies could be classified as pre-flight, in-flight and post-flight services. Operations such as reservation, ticketing, check-in, baggage check-in are considered as pre-flight services, while seat comfort, cleanliness of the cabin, food and beverage presentation, in-flight technological entertainment facilities are in-flight (in-cabin) services, and services such as luggage delivery, monitor of passenger requests and complaints are examples of post-flight services. Improving passenger satisfaction is directly related to the quality of above mentioned services. Service quality increases the competitiveness of airline companies and help increase the market share and (Morash and Ozment, 1994; Chen et al., 2011). Thus, to make a difference in aviation industry, the deficiencies in quality should be identified and quality of service should be measured in order to produce solutions for these issues (Hatipoğlu and Işık, 2015). On the other hand, as Gilbert and Wong (2003) mentioned, one of the most significant problems in aviation industry is the comprehension of passenger requests and expectations accurately. General perception of service was analyzed in several national (Kazançoğlu, 2011; Çelikkol et al., 2012; Okumuş and Asil, 2007; Pakdil and Aydın, 2007; Aksoy et al., 2003; Pekkaya and Akıllı, 2013; Altunkurt et al. 2015) and international (Gourdin, 1988; Ostrowski 1993; Truitt and Haynes, 1994; Sultan and Simpson 2000; Tsaur et al., 2002; Park et al., 2004; Chen and Chang 2005; Park et al., 2006; Lioua and Tzeng 2007;
Bruecknera and Girvin 2008; Gürsoy et al., 2005; Wahab et al. 2015) studies conducted on quality of airline companies and passenger satisfaction. The present study, similar to the works of An and Noh (2009) and Chen et al. (2011), aims to analyze in-cabin service perceptions of the passengers. The objective of the study is to test whether the assessments of in-cabin service dimensions provided by Turkish Airlines (THY) differed based on the origin of passengers and to determine the relationship between passengers’ perceptions about the in-cabin services and their price-value perceptions.

**Method**

Study data were obtained from the web site of Skytrax (http://www.airlinequality.com), which is a passenger satisfaction research firm on airlines and airport services. Study data included evaluations of passengers with American, European and Asia-Pacific origins that rated in-cabin service dimensions (seat comfort, staff-service, food-beverage and in-cabin entertainment) of their flight with THY between September 15, 2014 and December 15, 2015 on skytrax.com web site. In this context, 501 passenger evaluations were considered as suitable for analysis and the data were analyzed using correlation, regression and analysis of variance (ANOVA).

Skytrax conducts online surveys about the services provided by international airports and airlines as passenger assessments. As a result of the analysis of these assessments conducted using a score range between 1 and 5 stars by the passengers, Skytrax awards are presented, which are dubbed as “Aviation Oscars.” It could be argued that top-ranked airline companies would gain competitive advantage over their competitors. Also, Park (2007) emphasized that ratings on Skytrax (http://www.airlinequality.com) about different service dimensions such as in-cabin services, cabin staff and airport services of airline companies affect directly or indirectly the consumer buying behavior. Thus, the objective of the present study is to analyze in-cabin service perceptions of consumers who travel with THY based on the passenger origins and to test the relationship between in-cabin service perception and price-value perception.

Research hypotheses to be tested in relation to the study objective and sub-objectives are presented below:

**H1.** There is a significant difference between the passenger assessments about in-cabin service dimensions.

**H2.** There is a significant difference between the price-value perception about in-cabin service dimensions based on the origins of the participants.

**H3.** There is a significant difference between the in-cabin service assessments based on the origins of the participants.

**H3A.** There is a significant difference between the seat comfort assessments based on the origins of the participants.

**H3B.** There is a significant difference between staff service assessments based on the origins of the participants.

**H3C.** There is a significant difference between food and beverage services assessments based on the origins of the participants.

**H3D.** There is a significant difference between in-cabin entertainment assessments based on the origins of the participants.
H₄. There is a significant difference between in-cabin assessments and price-value perception.

H₄A. There is a significant difference between seat comfort assessments and price-value perception.

H₄B. There is a significant difference between staff services assessments and price-value perception.

H₄C. There is a significant difference between food and beverage service assessments and price-value perception.

H₄D. There is a significant difference between in-cabin entertainment facilities assessments and price-value perception.

Findings

Assessments of the participants related to in-cabin services are given in Table 1. Food and beverage services received the highest score from the participants with a mean score of 3.72, seat comfort came second with a mean score of 3.30, staff-service was third with 3.27 and in-flight entertainment was fourth with a mean score of 3.22. These findings demonstrated that Turkish Airline passengers were more content with in-flight food and beverage services among the four in-cabin service dimensions. Based on the results of associated sampling one-way analysis of variance, it was determined that the difference between in-cabin service dimensions was significant at p<0.00 significance level and the difference was originated at the food and beverage services dimension. In the light of this findings, H1 hypothesis was accepted.

Table 1: Assessments about In-Cabin Service Dimensions

<table>
<thead>
<tr>
<th>In-Cabin Service Dimensions</th>
<th>n</th>
<th>Mean</th>
<th>sd.</th>
<th>q.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seat Comfort</td>
<td>501</td>
<td>3.30 (a)</td>
<td>1.272</td>
<td></td>
</tr>
<tr>
<td>Staff-Service</td>
<td>501</td>
<td>3.27 (a)</td>
<td>1.486</td>
<td></td>
</tr>
<tr>
<td>Food-Beverage</td>
<td>501</td>
<td>3.72 (b)</td>
<td>1.294</td>
<td>.000</td>
</tr>
<tr>
<td>In-Flight Entertainment</td>
<td>501</td>
<td>3.22 (a)</td>
<td>1.388</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>501</td>
<td>3.38</td>
<td>1.116</td>
<td></td>
</tr>
</tbody>
</table>

There is a significant difference between the mean values depicted with different letters (p>0.05).

Result

Increasing competition in the airline industry makes it necessary for the airline companies to be sensitive about their service quality and consumer perception on these services. Thus, the objective of the present study was to determine the consumer assessments on in-cabin services provided by Turkish Airlines. For this purpose, in-cabin services were considered in four dimensions of “seat comfort,” “staff-service,” “food and beverage,” and “in-flight entertainment.” The foci of the study were whether assessments on service dimensions differed based on participant origins and the analyses on the direction and strength of the relationship between in-cabin service assessments and price-value assessment.
Findings and results of the present study demonstrated that Turkish Airlines should improve in-flight entertainment facilities and seat comfort factors in flights to all destinations and especially in Asia-Pacific flights. The staff should be provided periodical in-service training to improve staff-service quality and it was considered important that staff flight schedules and frequencies should be maintained at an optimum level.

Future studies could investigate whether participant assessments demonstrated differences based on the age, gender, education and income levels of the participants. The differences between different airlines could also be analyzed in future studies by comparing in-cabin services to identify the factors that could influence the competitiveness of the airline.