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# Modeling Service Quality, Customer Satisfaction and Behavioral Intentions in Airline Industry: A SEM Approach

Hava Yolu Endüstrisinde Hizmet Kalitesi, Müşteri Memnuniyeti ve Davranışsal Niyetlerin Modellenmesi: Yapısal Eşitlik Modellemesi Yaklaşımı

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#### **Abstract**

Recently, the customer structure and their expectations are changed in the airline industry same as the other service industries with changed conditions by technology, quality of living etc. Due to changing expectations for service quality and new market structure, airline companies will be able to provide a competitive advantage through meeting customers' expectations with high satisfaction and understanding the changing market. In this context, the aim of this study is identifying the determinants of airline service quality perceived by customers; reveal the effects of perceived service quality on customer satisfaction, and effects of customer satisfaction on behavioral intentions of customers, simultaneously by using a conceptual model. Perceived service quality dimensions used in this research are developed on the basis of the AIRQUAL and SERVPERF models. Unlike existing studies, the study also posits perceived service quality, customer satisfaction and behavioral intentions in a single model. The sample of this research comprises the passengers who had flown on any of the national airlines of Turkey in the recent year and they are selected using non-probability judgmental sampling technique. Structural equation modeling is performed to confirm reliability and validity of the measures and examine the structural relationships between constructs. According to obtained results, image that is one of the dimensions of perceived service quality is the strongest significant determinant of customer satisfaction. Also, word-of-mouth and repurchase intention are significantly and positively influenced by customer satisfaction. However, the relationship between customer satisfaction and negative feedbacks of the customers is found positive contrary to proposed hypothesis. As well as the supportive findings of previous research, this study raises a critical question regarding the relationship between customer satisfaction and negative feedbacks for further research to focus on.

Keywords: Airline Industry, Behavioral Intentions, Customer Satisfaction, Service Quality.

#### Ö۶

Son yıllarda hava yolu endüstrisinde teknoloji ve yaşam kalitesindeki değişen koşullar dolayısıyla müşteri yapısı ve beklentileri, diğer hizmet endüstrilerinde olduğu gibi değişikliğe uğramıştır. Hizmet kalitesi ve yeni piyasa yapısına yönelik beklentiler değiştikçe havayolu şirketleri de müşterilerin beklentilerini yüksek memnuniyetle karşılayarak ve değişen piyasa koşullarını anlayarak rekabet avantajı sağlayabileceklerdir. Bu bağlamda, bu çalışmanın amacı, müşteriler tarafından algılanan havayolu hizmet kalitesinin boyutlarını belirlemek; algılanan hizmet kalitesinin müşteri memnuniyeti üzerindeki etkilerini ve müşteri memnuniyetinin müşterilerin davranışsal niyetlerine olan etkilerini kavramsal bir model kullanarak eşzamanlı olarak ortaya koymaktadır. Bu araştırmada kullanılan algılanan hizmet kalitesi boyutları AIRQUAL ve SERVPERF modelleri temel alınarak geliştirilmiştir. Mevcut çalışmalardan farklı olarak, bu çalışma, algılanan hizmet kalitesini, müşteri memnuniyetini ve davranışsal niyetleri tek bir modelde saptamaktadır. Bu araştırmanın örneklemi, son bir yıldır Türkiye'nin ulusal hava yollarından herhangi biriyle uçmuş olan yolcuları içermekte olup, örneklem seçimi yargısal örnekleme yöntemi ile yapılmıştır. Yapısal eşitlik modellemesi, ölçütlerin güvenilirliğini ve geçerliğini doğrulamak ve yapılar arasındaki ilişkileri incelemek için uygulanmaktadır. Çalışmadan elde edilen sonuçlara göre, algılanan hizmet kalitesinin boyutlarından biri olan imaj, müşteri memnuniyetinin en önemli belirleyicisidir. Ayrıca, müşteri memnuniyeti; kulaktan kulağa yayma ve tekrar satın alma davranışını önemli ölçüde olumlu etkilemektedir. Bununla birlikte, müşteri memnuniyeti ve müşterilerin olumsuz geri bildirimleri arasındaki ilişki önerilen hipoteze zıt olarak bulunmuştur. Bu araştırma, daha önceki araştırmalara destekleyici bulgular sağlamanın yanı sıra, daha ileri araştırmalar için müşteri memnuniyeti ve olumsuz geri bildirimler arasındaki ilişki konusunda kritik bir soruyu gündeme getirmektedir.

Anahtar Kelimeler: Hava yolu endüstrisi, Davranışsal niyet, müşteri memnuniyeti, hizmet kalitesi.

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#### Introduction

In the airline industry, where is one of the most competitive business environments, developing a better understanding needs of customers and delivering quality service is vital for the airline's survival, competitiveness, profitability and sustained growth (Suki, 2014). Therefore, airline companies make an effort to measure their service quality within the sector in order to achieve and maintain a competitive advantage by satisfying customers (Tsaur and others, 2002; Park and others, 2005; Basfirinci and Mitra, 2015) because of the fact that service quality is considered as the basis of customer satisfaction (Clemes and others, 2008; Yıldız, 2016). Companies, which strive for high customer satisfaction and offer quality service to their customers, may ensure that customers remain loyal to the company (Hu and others, 2009), and retaining existing customers is less costly than acquiring new customers (Nadir and others, 2008; Saha and Thengi, 2009). In addition, thanks to quality service delivery, companies may gain new customers through positive behavioral intentions of the satisfied customers (Saha and Thengi, 2009). On the other hand, a great majority of the previous studies focus on providing a conceptual model for service quality (Carman, 1990; Cronin and Taylor, 1992; Parasuraman and others, 1985, 1988, 1991; Ekiz and others, 2006; Ali and others, 2013; Amin and others, 2013) and do not consider the impact of service quality on behavioral intentions. However, it is indicated that service quality has a key impact on feelings and perceptions of the customers (Taylor and Baker, 1994) and feelings and perceptions of the customers, in turn, affect the behavioral intentions such as wordof-mouth recommendations (Nadiri and Hussain, 2005; Chiu and others, 2016). In this context, the aim of this study is threefold: (1) to identify the determinants of airline service quality perceived by customers; (2) to reveal the effects of perceived service quality on customer satisfaction, and (3) to reveal effects of customer satisfaction on behavioral intentions of customers, simultaneously by using a conceptual model. The study provides an example of the use of revised set of SERVPERF model. Unlike existing studies, the study also posits perceived service quality, customer satisfaction and behavioral intentions in a single model.

The plan of the study is as follows. Second section presents the review of the related literature. Third section develops research model and hypotheses and provides research methodology. Fourth section elaborates on data analysis and findings. Finally, fifth section concludes the study.

#### 1. Background of The Study

In this section, main constructs of the research –perceived service quality, customer satisfaction and behavioral intentions- are focused on in the light of the information gathered from the related literature and the relationships among these constructs are discussed in detail. Also, previous studies, which are similar to the present study, are presented.

## 1.1. Perceived Service Quality

Considering the fierce competition, only companies that can deliver quality service to their customers may stay competitive. On the other hand, quality, of which dimensions cannot be distinguished from each other easily, is a complex and nontrivial concept (Parasuraman and others, 1985). Because of the abstract nature of the quality, conceptualization and measurement of airline service quality is quite difficult (Korkmaz and others, 2015). Therefore, a great majority of the studies in the related literature focus on the conceptualization and measurement of service quality (Carman, 1990; Cronin and Taylor, 1992; Parasuraman and others, 1985, 1988, 1991; Ekiz and others, 2006; Ali and others, 2013; Amin and others, 2013; Yıldız and Yıldız, 2015). Previous research indicate that dimensions of perceived service quality varies with respect to sector, culture, geographic region et cetera (Pekkaya and Akilli, 2013; Korkmaz and others, 2015). Hence, all dimensions of perceived service quality in the airline sector are not revealed clearly.



Service quality, which receives intense attention by researchers, refers to "a function of the difference between the service expected and the customer's perceptions of the actual service delivered" (Parasuraman and others, 1988; Yıldız and Kurtuldu, 2014). Tsoukatos and Mastrojianni (2010) suggest that perceived service quality is the relative quality of a service that is perceived by customers through making a comparison between actual service performance of the firm with their expectations that are shaped by experiences, word-of-mouth communication, and memories. Because of the fact that expectations of the customers serve as a major determinant of service quality evaluation (Parasuraman and others, 1985, Wilson and others, 2008), voice of the customer should be considered by service providers (Pakdil and Aydın, 2007).

According to SERVQUAL model that is presented by Parasuraman and others (1988), service quality is measured by the gaps between expectations of customers and their perceptions of actual performance of the service. SERVQUAL is based on five dimensions of service quality as depicted in the Figure 1 (Parasuraman and others, 1988; Demirbağ and Yozgat, 2016; Ataman and others, 2011):

- (1) Tangibles. The physical surroundings represented by objects (for example, interior design) and subjects (for example, the appearance of employees);
- (2) Reliability. The service provider's ability to provide accurate and dependable services;
- (3) Responsiveness. A firm's willingness to assist its customers by providing fast and efficient service performances;
- (4) Assurance. Features that provide confidence to customers (such as the firm's specific service knowledge, polite and trustworthy behavior of employees).
- (5) Empathy. The service firm's readiness and ability to provide each customer with personal service.

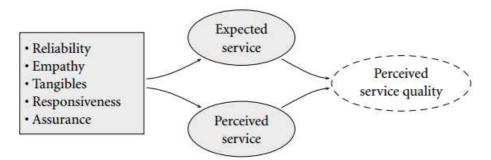


Figure 1: SERVQUAL Model (adapted from Parasuraman and others, 1988)

However, how many dimensions SERVQUAL model comprises is not commonly held by researchers. While Carman (1990) suggests a SERVQUAL model with ten dimensions, a unidimensional model by Babakus and Boller (1992) and a two-dimensional model by Nadiri and Hussain (2005) are suggested. On the other hand, Newman (2001) who identifies some weaknesses of SERVQUAL argues that SERVQUAL does not provide an assessment of the priorities of customers with different service dimensions and it is unclear in measuring perceived service quality. Moreover, Johns and others (2004) report that dimensions of SERVQUAL are not validating in measuring service quality. Therewith, Ekiz and others (2006) present AIRQUAL model adapted from SERVQUAL in order to assess airline service quality and AIRQUAL model, which successfully manages to measure the perceived service quality in North Cyprus, comprises five dimensions that are airline tangibles, terminal tangibles, personnel, empathy, and image.

On the other side, Cronin and Taylor (1994) argue that SERVPERF model is better than SERVQUAL in terms of explained variance in overall measure. In SERVPERF model, "expected service" component of SERVQUAL model is



discarded and instead "performance" component alone be used (Cronin and Taylor, 1992).

#### 1.2. Customer Satisfaction

Customer happiness, which is a sign of the customer satisfaction, should be essential for the firms because of the fact that achieving customer satisfaction is identified as the key to customer loyalty and positive behavioral intentions of the customer (Anderson and Sullivan, 1993). Customer satisfaction is defined as "a person's feeling of pleasure of disappointment resulting from comparing a product or service's perceived performance in relation to his or her expectation" (Kotler and Armstrong, 1996). According to Johan and others (2014), customer satisfaction is closely related to customers' experience and expectations and real customer satisfaction represents "the difference between what customers actually expect to get and the actual service performance exceeding such expectations".

In the literature, researchers mostly focus on the positive relationship between service quality and customer satisfaction (Kuo, 2003). However, there is limited number of studies that tests the service quality dimensions directly to understand whether they are related to customer satisfaction or not, and therefore there is a need for testing the direct relationship of each dimension of the service quality to customer satisfaction.

#### 1.3. Behavioral Intentions

Fishbein and Ajzen (1975) defines behavioral intention as the subjective possibility of the performing a certain behavioral act of customers and Saha and Tenghi (2009) associate three behaviors with profitability and the market share of a firm: (1) word of-mouth, (2) repurchase intention, and (3) feedback to the service provider.

According to Saha and Thengi (2009), word-of-mouth (WOM) refers to "a flow of information about products, services, or companies from one customer to another" and customer satisfaction leads to favorable WOM that is a valuable form of indirect advertising to a firm (Park and others, 2005). On the other hand, findings of the previous empirical research that investigate the relationship between customer satisfaction and WOM are not consistent. Although many of the researchers state that there is a positive relationship between customer satisfaction and WOM (Davidow, 2003; Brown and others, 2005; Babin and others, 2005), some researchers find a negative relationship between them (Hart and others, 1990). Also, studies that find no relationship between customer satisfaction and WOM are available in the related literature (Engel and others, 1969). The reason of these contradictory findings is explained by Wirtz and Chew (2002) with regard to asymmetric pattern of extremely satisfied and dissatisfied customers. That is to say extremely satisfied and extremely dissatisfied customers engage in more WOM compared to moderately satisfied customers (Wirtz and Chew, 2002).

Repurchase intention stands for the likelihood of the using a service provider one more time in the future (Fornell, 1992) and some researchers use the term "customer retention" instead of repurchase intention (Zeithaml, 1981). Jones and Sasser (1995) state that repurchase intention is essential to success of a company and it may be considered as the most important concept in marketing. Most of the previous research find that the customer satisfaction is the most important factor, which results in repurchase intention (Sharma and Patterson, 2000). However, findings regarding relationship between customer satisfaction and repurchase intention varies in previous studies. Cronin and Taylor (1992) and Davidow (2003), for instance, find a positive relationship between customer satisfaction and repurchase intention, while some previous research do not confirm the direct relationship (Sivadas and Baker-Prewitt, 2000). Rust and Zahorik (1993) explain the reason of these contradictory findings with regards to absence of alternative suppliers to switch by dissatisfied customers or abundance of alternative suppliers to switch by satisfied customers in order to increase the satisfaction level.



The final behavioral intention mentioned above, *customer feedback*, stands for "the transmission of negative information (complaints) or positive information (compliments) to providers about the services used" (Saha and Thengi, 2009). Although regular feedbacks from customers are determined essential to successful customer satisfaction strategies (Sonnenberg, 1991), limited number of previous research focus on the relationship between customer satisfaction and customer feedback (Saha and Thengi, 2009). Therewithal, Söderlund (1998) argues that receiving negative feedbacks from dissatisfied customers is more likely than receiving positive feedbacks from satisfied customers.

#### 1.4. A Brief Review of Previous Research

Although relationships between service quality, customer satisfaction and behavioral intentions are investigated in many areas, this review is limited to previous studies which focus on air transport sector. A great majority of these studies focus on measuring service quality of airline companies using GAP-5 model of SERVQUAL. Table 1 presents a brief review of previous research in airline industry.

Table 1: Previous Research on Service Quality, Customer Satisfaction, Customer Loyalty and/or Behavioral Intentions in Airline Industry

| Researcher                             | Country                          | Sample<br>Size | Unit of<br>Analysis   | Measurement<br>model of<br>service quality | Method of analysis                                      | Findings   |
|--|----------------------------------|----------------|---|--|---|--|
| Sultan and<br>Simpson<br>(2000)        | US and 12<br>Europe<br>countries | 1,956          | European and<br>US airline<br>passengers                                  | SERVQUAL                                   | T-test  | Reliability is the dominant dimension in the service quality paradigm as applied to international airline travel. The relative importance of dimensions influencing customer service quality expectations and perceptions does not vary by the nationality of airline passengers.  |
| Cunningha<br>m and<br>others<br>(2002) | U.S. and<br>Korea                | 250            | Student of an<br>MBA program<br>who use air<br>transportation             | SERVPERF                                   | Multiple<br>regression<br>analysis                      | For Korea, reliability, assurance and risk factors affect customer satisfaction. For U.S. reliability, inflight comfort and connections affect customer satisfaction.  |
| Park and<br>others<br>(2004)           | Korea                            | 592            | Korean<br>international<br>passenger                                      | SERVQUAL                                   | Path<br>Analysis  | Service value, passenger<br>satisfaction, and airline image are<br>each found to have a direct effect on<br>air passengers' decision making<br>processes.  |
| Ling and<br>Lin (2005)                 | China and<br>Taiwan              | 404            | Passenger who<br>travels<br>between<br>Taiwan and<br>China                | SERVPEX                                    | ANOVA,<br>SEM   | Reliability, tangibles,<br>responsiveness and assurance affect<br>customer satisfaction. Also,<br>customer preference is influenced<br>by reliability and tangibles.   |
| Park and<br>others<br>(2005)           | Australia                        | 501            | Australian international passenger  | SERVQUAL                                   | SEM   | Airline image and behavioral intention are positively affected by in-flight service and convenience and accessibility.   |
| Atilgan and others (2008)              | Turkey                           | 235            | Passenger of<br>Sun Express in<br>the Antalya<br>International<br>Airport | SERVQUAL                                   | T-test and corresponde nce analysis                     | "Food and beverage", "cabin aesthetics", "convenience", "dependability", "in-flight activities", and "personnel" dimensions have gaps.   |
| Clemes and<br>others<br>(2008)         | New<br>Zealand                   | 428            | Passenger of<br>international<br>flights                                  | SERVQUAL                                   | T-test,<br>ANOVA,<br>multiple<br>regression<br>analysis | Assurance, convenience, comfort, timeliness, helpfulness, meals and security are positively associated with service quality. Service quality affects customer satisfaction and customer satisfaction affect behavioral intentions. Perceived service quality differs with respect to age, gender, marital status, occupation and income. |



|                                 |          |      |  |          |  | "Airline tangibles" is the most  |
|---------------------------------|----------|------|--|----------|--|--|
| Nadiri and<br>others<br>(2008)  | Cyprus   | 583  | North Cyprus<br>national<br>airline<br>passenger                             | SERVQUAL | SEM  | significant SQ dimension to affect<br>both customer satisfaction and<br>repurchase intention. Customer<br>satisfaction is positively related to<br>repurchase and WOM.   |
| Saha and<br>Thengi<br>(2009)    | Thailand | 1212 | Passenger of<br>low cost<br>Carriers   | SERVPERF | SEM  | Passenger satisfaction with service-<br>quality dimensions is found to be<br>very important in explaining<br>behavioral intentions. Satisfied<br>passengers are mostly influenced by<br>the schedule. Such customers<br>engage in positive WOM and have<br>high repurchase intentions.<br>Dissatisfied passengers prefer to<br>change airlines, rather than provide<br>feedback to the LCCs. |
| Ariffin and others (2010)       | Malaysia | 100  | Passengers of<br>LCC at Kuala<br>Lumpur<br>International<br>Airport          | SERVQUAL | Factor<br>analysis and<br>multiple<br>regression<br>analysis | Caring and tangible are the most<br>important dimensions of service<br>quality and only these dimensions<br>significantly affect customer<br>satisfaction.   |
| Ali and others (2014)           | Pakistan | 498  | Passenger of<br>Pakistan<br>International<br>Airlines                        | SERVQUAL | SEM  | Each of five dimensions of service quality has a positive effect on customer satisfaction.   |
| Gures and<br>others<br>(2014)   | Turkey   | 821  | Passenger in<br>four airports<br>(İstanbul,<br>Ankara, İzmir<br>and Antalya) | SERVQUAL | SEM  | Reliability and facilities have a significant positive effect on customer satisfaction. Customer satisfaction is found to be a significant determinant of customer loyalty.  |
| Suki (2014)                     | Malaysia | 300  | Passenger in<br>Federal<br>Territory of<br>Labuan,<br>Malaysia.              | SERVQUAL | SEM  | The relationship between customer satisfaction and 'word-of-mouth' recommendations is positive.  |
| Korkmaz<br>and others<br>(2015) | Turkey   | 311  | Passenger in<br>İzmir Adnan<br>Menderes<br>Airport                           | SERVQUAL | CFA,<br>multiple<br>regression<br>analysis                   | Perceived service quality has five<br>dimensions. Service quality has an<br>effect on "customer satisfaction"<br>and "repurchase intention".   |
| Singh<br>(2015)                 | India    | 526  | Indian<br>domestic full-<br>service<br>passengers                            | SERVPERF | SEM  | Passenger evaluation process flows<br>from perceived image to satisfaction<br>via passenger perceived value and<br>not directly from perceived image to<br>passenger satisfaction. Only<br>passengers' satisfaction is found to<br>have a direct influence on<br>passengers' future behavioral<br>intentions.  |

#### 2. Research Framework and Methodology

In this section, a conceptual model is presented and research hypotheses are proposed in the light of the information gathered from the literature. After conceptualization and operationalization, the research steps are provided and methods used in the study are presented.

### 2.1. Conceptual Model and Research Hypotheses

In the light of the information gathered from the literature, a conceptual model for the research is depicted in the Figure 2. This model shows hypothesized relationships among the constructs of perceived service quality, customer satisfaction, and behavioral intentions.

Broadly, this research investigates the impact of perceived service quality on customer satisfaction and the impact of customer satisfaction on behavioral intentions. Thus, three research questions are formulated:

R1: What are the dimensions of perceived service quality in the air transport sector? R2: What are the impacts of service quality dimensions on customer satisfaction?



R3: What is the impact of customer satisfaction on behavioral intentions?

Perceived service quality dimensions used in this research are developed on the basis of the AIRQUAL and SERVPERF models and focus group discussions with ten experienced customers. In the focus group, dimensions of SERVPERF model (reliability, assurance, tangibility, empathy, and responsiveness) and of AIRQUAL model (airline tangibles, terminal tangible, personnel, empathy, and image) are discussed to overhaul them and find out the most appropriate model. When group reaches a consensus on this matter, the model for perceived service quality has seven broad factors: airline tangibles, terminal tangibles, personnel appearance, flight attendants, ground staff, empathy, and image.

As mentioned hereinabove, although the causal relationship between perceived service quality and customer satisfaction is debated in the literature, the number of the previous research that test relationship between each dimension of perceived service quality and customer satisfaction is limited. One of the major concerns of this study, therefore, is to reveal the relationships between each dimension of service quality and customer satisfaction. Accordingly, the following hypotheses are proposed:

H1: Perceived quality of airline tangibles positively influences customers' satisfaction.

H2: Perceived quality of terminal tangibles positively influences customers' satisfaction.

H3: Perceived quality of personnel appearance positively influences customers' satisfaction.

H4: Services provided by flight attendants positively influences customers' satisfaction.

H5: Services provided by ground staff positively influences customers' satisfaction.

H6: Empathy showed by airline company positively influences customers' satisfaction.

H7: Image of the airline company positively influences customers' satisfaction.

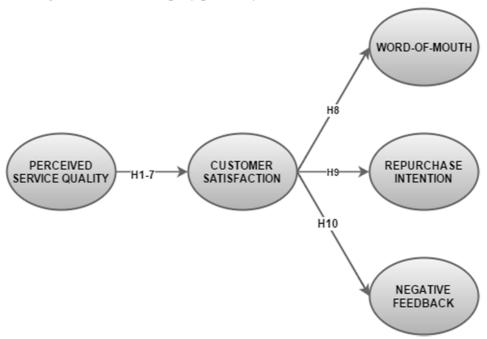


Figure 2: Conceptual Model

Despite the fact that both dissatisfied and satisfied customers might engage in word-of-mouth activities, a great majority of the previous research suggest that satisfied customers provide more frequent and positive WOM activities (Saha and Thengi, 2009). In this regard, the following hypothesis is proposed:



H8: Customer satisfaction positively influences word-of-mouth activities of the customers.

According to Saha and Thengi (2009), satisfied customers are more loyal to service providers than other customers with regard to repurchase intentions unless switching costs to another service provider are very high or better opportunities are not available. Therefore, the following hypothesis is proposed:

H9: Customer satisfaction positively influences repurchase intentions of the customers.

Owing to the fact that receiving negative feedbacks from dissatisfied customers is more likely than receiving positive feedbacks from satisfied customers (Söderlund, 1998), the following hypothesis is proposed:

H10: Customer satisfaction negatively influences negative feedbacks of the customers.

### 2.2. Methodology

The sample of this research comprises the passengers who had flown on any of the national airlines of Turkey in the recent year and they are selected using non-probability judgmental sampling technique. According to Judd and others (1991), judgmental sampling or purposive sampling is defined as picking the cases, which are judged to be typical of the interested population and it is assumed that errors of the judgment will tend to counterbalance one another.

Firstly, the survey instrument is adopted from the AIRQUAL and SERVPERF models and previous research in the literature (Fournier and Mick, 1999; Maxham, 2000; Yi and La, 2004; Nadiri and others, 2008; Saha and Thengi, 2009), and translated into Turkish. Then, in a focus group that consists of 10 customers of national airline companies in Turkey, dimensions of both scales are discussed and the most appropriate instrument for Turkish passengers is found out. Before survey takes its final form, a pilot study conducted with 50 customers. According to the results of the pilot study, items of "effective air-conditioned areas for smokers" from the dimension of terminal tangibles and "availability of health personnel during the flights" and "care paid to passengers' luggage" from the dimension of empathy are omitted from the questionnaire. The final questionnaire comprises four parts. The first part contains general demographic questions to present the characteristics of the sample. The remained sections comprise questions regarding perceived service quality, customer satisfaction and future behavioral intentions, respectively and all items are measured using a five-point Likert scale anchored by "strongly disagree" and "strongly agree". Perceived service quality includes 34 items: four items for airline tangibles (AT), seven items for terminal tangibles (TT), four items for personnel appearance (PA), four items for flight attendants (FA), four items for ground staff (GS), seven items for empathy (EM), and four items for image (IM). Customer satisfaction level is measured with four items. Future behavioral intentions include 10 items: four items for word-of-mouth, three items for repurchase intentions and three items for negative feedback. Research model with the items and constructs is depicted in Figure 3.

The survey that is conducted during the mid-April and May 2016 is distributed to 500 national airline company passengers and these passengers are requested to fill out the questions in a self-administered manner. 351 of these questionnaires are returned and 348 of them are found to be useful. Therefore, the valid response rate is approximately 0.7.



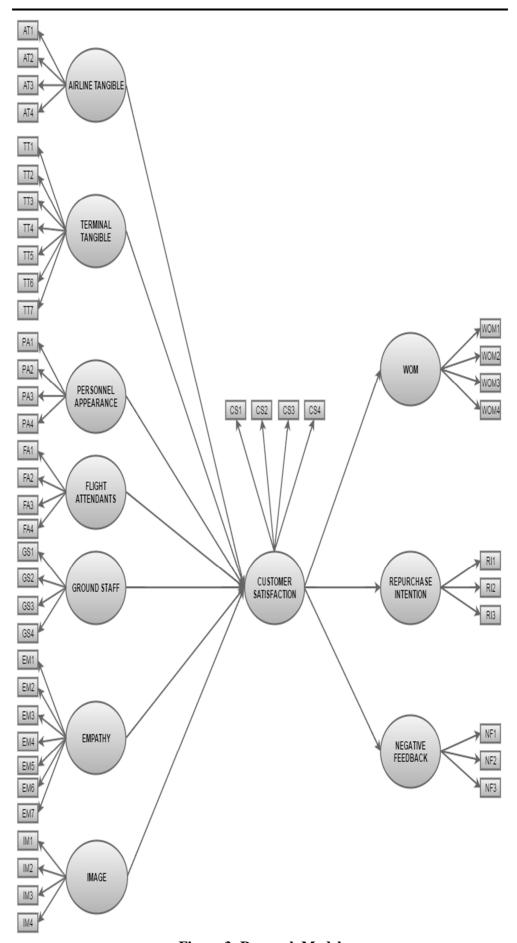


Figure 3: Research Model



#### 3. Data Analysis and Findings

SPSS 20.0 and LISREL 8.80 are used for data processing.

#### 3.1. Characteristics of the Sample

Table 2 presents the characteristics of the sample, of which 51% are female. A great majority of the participants are from 18-34 age group (82%) and they mostly hold bachelor's degree.

**Table 2: Characteristics of the Sample** 

| Variables              |                       | Frequency | Percentage |
|------------------------|-----------------------|-----------|------------|
| Gender                 | Female                | 178       | 0,511      |
|                        | Male                  | 170       | 0,489      |
| Age                    | 18-24                 | 100       | 0,278      |
|                        | 25-34                 | 184       | 0,529      |
|                        | 35-44                 | 23        | 0,066      |
|                        | More than 45          | 41        | 0,118      |
| <b>Education Level</b> | Less than high school | 3         | 0,009      |
|                        | High school graduate  | 56        | 0,161      |
|                        | Bachelor's degree     | 220       | 0,632      |
|                        | Master's degree       | 68        | 0,195      |
|                        | Doctoral degree       | 1         | 0,003      |

Participants are requested to choose one of the airline companies that they prefer mostly and reply the questions by considering this airline company. Figure 4 depicts the most preferred airline companies by the respondents. Approximately 70 percent of the participants prefer Turkish Airlines and it is followed by Pegasus Airlines and AnadoluJet, respectively.

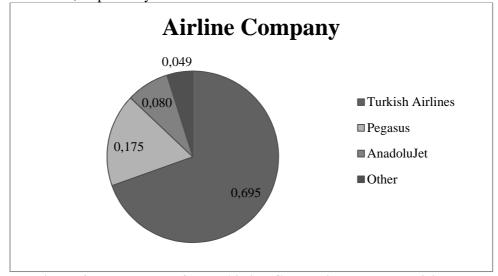


Figure 4: The Most Preferred Airline Companies by The Participants

# **3.2. Structural Equation Modeling (SEM)**

SEM is performed to confirm reliability and validity of the measures and examine the structural relationships between constructs. In this study, maximum likelihood is preferred as the estimation method due to the fact that it provides a consistent approach for parameter estimation problems.



Table 3: Standardized loadings, t-values, reliability coefficients and AVE values of independent variables

| values of ir  | idependent vai | riables |             |       |
|---|----------------|---------|-------------|-------|
| Construct and Items   | Standardized   | t-value | Reliability | AVE   |
| Airline Tangible  | Loadings       |         | 0.773       | 0.466 |
| Aircrafts are modern-looking                                      | 0.73           | 14.61   |             |       |
| Quality of catering served in plane                               | 0.69           | 13.69   |             |       |
| Comfort of the plane seats  | 0.58           | 10.99   |             |       |
| Quality of air-conditioning in the planes                         | 0.72           | 14.46   |             |       |
| Terminal Tangibles  | 0.72           | 11.10   | 0.824       | 0.415 |
| Number of shops in airport  | 0.48           | 8.77    | 0.021       | 0.115 |
| Size of the airport in holding passengers                         | 0.68           | 13.51   |             |       |
| Comfort of waiting hall of the airport                            | 0.70           | 14.05   |             |       |
| Effective air-conditioning in the airport                         | 0.71           | 14.19   |             |       |
| Effective sign system in airport                                  | 0.66           | 12.87   |             |       |
| Availability of trolleys in airport                               | 0.67           | 13.13   |             |       |
| Reliability of security control system                            | 0.58           | 11.00   |             |       |
| Personnel Appearance  | 0.50           | 11.00   | 0.873       | 0.639 |
| Flight attendants are well-dressed                                | 0.73           | 15.24   | 0.075       | 0.037 |
| Tight attendants are well dressed                                 | 0.75           | 13.24   |             |       |
| Flight attendants have a neat appearance                          | 0.77           | 16.19   |             |       |
| Ground staff are well-dressed                                     | 0.83           | 18.21   |             |       |
| Ground staff have a neat appearance                               | 0.86           | 19.07   |             |       |
| Flight Attendants   |                |         | 0.909       | 0.721 |
| They have sincere interest in fulfilling my                       | 0.89           | 20.83   |             |       |
| needs   |                |         |             |       |
| They are willing to help passengers                               | 0.89           | 20.76   |             |       |
| They are friendly to passengers                                   | 0.84           | 19.10   |             |       |
| They have knowledge to answer my                                  | 0.77           | 16.69   |             |       |
| questions   |                |         |             |       |
| Ground Staff  |                |         | 0.927       | 0.758 |
| They have sincere interest in fulfilling my                       | 0.89           | 21.02   |             |       |
| needs   |                |         |             |       |
| They are willing to help passengers                               | 0.91           | 21.96   |             |       |
| They are friendly to passengers                                   | 0.87           | 20.33   |             |       |
| They have knowledge to answer my                                  | 0.81           | 18.11   |             |       |
| questions   |                |         |             |       |
| Empathy   |                |         | 0.792       | 0.464 |
| Punctuality of the departures and arrivals                        | 0.55           | 10.49   |             |       |
| Number of flights to satisfy passengers'                          | 0.58           | 11.24   |             |       |
| demands   |                |         |             |       |
| Compensation schemes in case of loss or hazard                    | 0.60           | 11.64   |             |       |
| Transportation between city and airport                           | 0.52           | 9.77    |             |       |
| Services regarding entertainment (magazines, TV etc.)             | 0.64           | 12.56   |             |       |
| Quality of online services  | 0.68           | 13.59   |             |       |
| Error-free reservation and ticketing                              | 0.64           | 12.54   |             |       |
| Image   |                |         | 0.851       | 0.651 |
| Consistency of ticket prices with given                           | 0.57           | 11.16   |             |       |
| service   |                |         |             |       |
| Image of the airline company                                      | 0.91           | 21.47   |             |       |
| In its customers' sight, this airline company has a strong image. | 0.91           | 21.61   |             |       |
| In my sight, this airline company has a strong image.             | 0.79           | 17.31   |             |       |
| image.  |                |         |             |       |

The measurement model is assessed after evaluating the reliability, convergent validity, and discriminant validity of the items and constructs. The Cronbach's alpha correlation coefficients of all variables and standardized loading items are presented in Table 3 and Table 4. All Cronbach's alpha coefficients are greater than 0.70 and



therefore variables show high reliability among indicators. The all standardized loading items, which are greater than 0.4, are considered significant and the average variance extracted (AVE) of the latent constructs ranges from 0.403 to 0.758. However, recommended threshold value is 0.50 by Hair and others (2010). Hence, our data have almost good convergent validity.

Table 4: Standardized loadings, t-values, reliability coefficients and AVE values of dependent variables

| values of depo                                 |                          | ies     |             |       |
|--|--------------------------|---------|-------------|-------|
| Construct and Items                            | Standardized<br>Loadings | t-value | Reliability | AVE   |
| Customer Satisfaction                          |                          |         | 0.795       | 0.580 |
| Overall, I am satisfied with this airline      | 0.84                     |         |             |       |
| My choice to fly with this airline was a wise  | 0.81                     | 18.73   |             |       |
| one  |                          |         |             |       |
| I think I did the right thing when choosing    | 0.87                     | 20.86   |             |       |
| this airline                                   |                          |         |             |       |
| I do not prefer another company instead of     | 0.45                     | 8.68    |             |       |
| this airline company                           |                          |         |             |       |
| Word-of-Mouth                                  |                          |         | 0.851       | 0.707 |
| I would recommend my family and relatives      | 0.94                     |         |             |       |
| to fly with this airline                       |                          |         |             |       |
| I would recommend my friends to fly with       | 0.94                     | 33.78   |             |       |
| this Airline                                   |                          |         |             |       |
| I say positive things about this airline       | 0.94                     | 34.23   |             |       |
| company to other people                        |                          |         |             |       |
| I say positive things about this airline       | 0.42                     | 8.26    |             |       |
| company on the internet                        |                          |         |             |       |
| Repurchase Intention                           |                          |         | 0.760       | 0.403 |
| I would select the same airline again if I am  | 0.87                     |         |             |       |
| going to fly another time                      |                          |         |             |       |
| I would select the same airline again when     | 0.47                     | 8.89    |             |       |
| another company is cheaper                     |                          |         |             |       |
| I would select the same airline again when     | 0.48                     | 9.11    |             |       |
| another company has more suitable flight       |                          |         |             |       |
| time   |                          |         |             |       |
| Negative Feedback                              |                          |         | 0.766       | 0.538 |
| I would tell airline representatives exactly   | 0.85                     |         |             |       |
| what I think if a certain situation occurs     |                          |         |             |       |
| regarding this airline                         |                          |         |             |       |
| I would demand to speak with manager in        | 0.76                     | 11.96   |             |       |
| charge if a certain situation occurs regarding |                          |         |             |       |
| the airline                                    |                          |         |             |       |
| I would say negative things on the web page    | 0.56                     | 9.57    |             |       |
| of this airline if a certain situation occurs  |                          |         |             |       |
| regarding this airline.                        |                          |         |             |       |

Also, discriminant validity is checked by comparing the shared variances with the square root of AVE. Table 5 presents that all shared variances of one construct with other constructs are less than the square root of AVE for each construct, confirming adequate discriminant validity. Moreover, inter-construct correlations are calculated as shown in Table 5. All constructs are found positively correlated (p<0.01) with the customer satisfaction and customer satisfaction is positively correlated with WOM, repurchase intention and negative feedback. According to findings, word-of-mouth has the highest correlation with customer satisfaction (r=0.775, p<0.01). Therefore, there is no multicollinearity problem in the data. Means of the constructs range from 2.977 to 4.041 on 5-point Likert scale.



|                          | AT     | TT     | PA     | FA     | GS     | EM     | IM     | CS     | WOM    | RI     | NF   |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|
| Airline<br>Tangible      | 0.683  |        |        |        |        |        |        |        |        |        |      |
| Terminal<br>Tangible     | 0.487* | 0.644  |        |        |        |        |        |        |        |        |      |
| Personnel<br>Appearance  | 0.445* | 0.378* | 0.799  |        |        |        |        |        |        |        |      |
| Flight<br>Attendants     | 0.520* | 0.510* | 0.549* | 0.849  |        |        |        |        |        |        |      |
| Ground<br>Staff          | 0.511* | 0.528* | 0.489* | 0.765* | 0.871  |        |        |        |        |        |      |
| Empathy                  | 0.625* | 0.586* | 0.409* | 0.532* | 0.547* | 0.681  |        |        |        |        |      |
| Image                    | 0.592* | 0.429* | 0.499* | 0.520* | 0.481* | 0.668* | 0.807  |        |        |        |      |
| Customer<br>Satisfaction | 0.584* | 0.459* | 0.471* | 0.503* | 0.496* | 0.671* | 0.702* | 0.762  |        |        |      |
| Word-of-<br>Mouth        | 0.524* | 0.463* | 0.477* | 0.488* | 0.460* | 0.584* | 0.681* | 0.775* | 0.841  |        |      |
| Repurchase<br>Intention  | 0.409* | 0.318* | 0.268* | 0.302* | 0.344* | 0.518* | 0.515* | 0.634* | 0.600* | 0.635  |      |
| Negative<br>Feedback     | 0.339* | 0.296* | 0.340* | 0.355* | 0.355* | 0.284* | 0.299* | 0.416* | 0.458* | 0.305* | 0.73 |
| Mean                     | 3.609  | 3.415  | 4.041  | 3.890  | 3.790  | 3.305  | 3.685  | 3.476  | 3.662  | 2.977  | 3.65 |
| Std.<br>Deviation        | 0.768  | 0.693  | 0.669  | 0.724  | 0.773  | 0.710  | 0.829  | 0.732  | 0.771  | 0.894  | 0.77 |

Structural model is evaluated by investigating fit indices and variance-explained estimates (see Table 6). The findings indicate that chi-square of the model equals 3096.77 with 1049 degree of freedom. The values for comparative fit index (CFI) and normed fit index (NFI) are above 0.9 and they indicate satisfactory fit (Bentler, 1990). However, goodness of fit index (GFI) is not found above 0.9 that is the minimum satisfactory value (Joreskog and Sorbom, 1996). It can be said that the hypothesized model is acceptable.

**Table 6: Model Fit Indices** 

| Model Values  | Recommended Values | Results |
|---------------|--------------------|---------|
| Chi-Square    |                    | 3096.77 |
| Df            |                    | 1049    |
| Chi-square/df | <3.0               | 2.95    |
| CFI           | >0.9               | 0.96    |
| GFI           | >0.9               | 0.73    |
| NFI           | >0.9               | 0.94    |
| SRMR          | < 0.08             | 0.065   |
| RMSEA         | < 0.08             | 0.075   |
| PNFI          | >0.5               | 0.87    |

Table 7 presents the standardized path coefficients of the structural model. Surprisingly, terminal tangibles, flight attendants and ground staff have no significant effect on customer satisfaction and proposed hypotheses –H2, H4, and H5- are not sustained. The strongest significant determinant of customer satisfaction is found as image ( $\beta$ =0.40, p-value<0.001), whereas the least important determinant of customer satisfaction is appearance of the personnel ( $\beta$ =0.14, p-value<0.01). Also, as expected, airline tangibles ( $\beta$ =0.16, p-value<0.05) and empathy ( $\beta$ =0.22, p-value<0.05) have positive effects on customer satisfaction. Moreover, word-of-mouth intentions ( $\beta$ =0.92, p-value<0.001) and repurchase intention ( $\beta$ =0.94, p-



value<0.001) are significantly and positively influenced by customer satisfaction as proposed with H8 and H9. However, customer feedback ( $\beta$ =0.52, p-value<0.001) is positively affected by the customer satisfaction on the contrary to proposed hypothesis.

**Table 7: The Standardized Path Coefficients** 

|     | Path                                  | Estimate | S.E.  | t-    | p     | Results   |
|-----|---------------------------------------|----------|-------|-------|-------|-----------|
|     |                                       |          |       | value |       |           |
| H1  | Airline Tangible -> Customer          | 0.160*   | 0.082 | 1.97  | 0.049 | Supported |
|     | Satisfaction                          |          |       |       |       |           |
| H2  | Terminal Tangible -> Customer         | 0.020    | 0.066 | 0.30  | 0.764 | Not       |
|     | Satisfaction                          |          |       |       |       | supported |
| Н3  | Personnel Appearance -> Customer      | 0.140**  | 0.052 | 2.71  | 0.006 | Supported |
|     | Satisfaction                          |          |       |       |       |           |
| H4  | Flight Attendants -> Customer         | -0.040   | 0.077 | -0.52 | 0.603 | Not       |
|     | Satisfaction                          |          |       |       |       | supported |
| H5  | Ground Staff -> Customer Satisfaction | 0.086    | 0.076 | 1.13  | 0.258 | Not       |
|     |                                       |          |       |       |       | supported |
| Н6  | Empathy -> Customer Satisfaction      | 0.22*    | 0.11  | 1.97  | 0.049 | Supported |
| H7  | Image -> Customer Satisfaction        | 0.40***  | 0.072 | 5.53  | 0.000 | Supported |
| H8  | Customer Satisfaction -> WOM          | 0.920*** | 0.044 | 20.80 | 0.000 | Supported |
| Н9  | Customer Satisfaction->Repurchase     | 0.940*** | 0.050 | 19.01 | 0.000 | Supported |
|     | Intention                             |          |       |       |       |           |
| H10 | Customer Satisfaction -> Negative     | 0.520*** | 0.059 | 8.83  | 0.000 | Not       |
|     | Feedback                              |          |       |       |       | supported |

The findings indicate that all independent variables (airline tangible, terminal tangible, personnel appearance, flight attendants, ground staff, empathy, and image) account for 71 percent of the total variance in customer satisfaction of passengers of airline companies in Turkey (R2=0.71) and customer satisfaction accounts for 85, 90, and 27 percent of the total variance in word-of-mouth intention, repurchase intention, and customer feedback, respectively.

#### **Discussions and Conclusion**

The present study investigates the effects of service quality dimensions on customer satisfaction and effect of customer satisfaction on future behavioral intentions of customers based on the data collected from customers of Turkish airline companies.

It is expected that when the quality of airline tangibles that are physical surroundings represented by objects increase, customer satisfaction level also increase. For instance, passengers want to sit comfortable and clean seats, wide pitches and aisles. Associatively, the built hypothesis' statistical results support this point of view. Furthermore, customers want to see good-looking and kind personnel, this is supported by hypothesis statistically and quality of personnel appearance influences satisfaction in a positive way. Additionally, empathy is known as one of the most important emotion related with human relations. In respect of the structural equation model results, hypothesis of empathy showed by airline companies positively influences customers' satisfaction is statistically significant.

The impression of the airline company has also effects on customers' satisfaction. The expression of more social responsibility activities and permanent substantial image, more customer satisfaction is supported statistically. The opinions of the other people can make common ground on the society. In other words, word-of-mouth activities are the most effective way to impress others for gotten services. Our findings show that the word-of-mouth activities have positive effect on customer satisfaction as expected. Also, the proposed hypothesis according to satisfied customers are more loyal to service providers than other customers with regard to repurchase intentions unless switching costs to another service provider are very high or better opportunities are not available, is accepted, as well.



Beside this, there is no sufficient evidence to reject the three null hypotheses that are conducted in the beginning of the study in order to reveal the effects of perceived service quality by customers on satisfaction. Firstly, previous research show that perceived quality of terminal tangibles is a significant determinant of customer satisfaction. In spite of that, generally, customers of domestic flights occupy the terminals for short time. Terminal tangibles are more important for the small section of customer whose plane is delayed or cancelled or customers of connecting flights. Additionally, in this case, if the delay is not related with the terminal conditions, customers are focused on delayed or cancelled plane not the terminal tangibles mostly. Thus, the terminal tangible problems stay in the background. In the recent conditions, services which are provided by both flight attendants and ground staff have same circumstances. High level service provided by the personnel of the airline companies is perceived as ordinary care by customers. Hence, it can be expected that these kinds of services do not have positive effects on customers' satisfaction level on the basis of airline companies. When considered from this point of view, service provided by flight attendants and ground staff of airline companies has no effect on customer satisfaction anymore because of the fact that customers perceive these high services provided by the personnel of all airline companies in Turkey is acceptable quality level.

Furthermore, it is found that customer satisfaction affects negative feedbacks of customers positively unlike proposed hypothesis regarding the negative relationship between customer satisfaction and negative feedbacks from customers. It may be because of the loyalty of the customers. Stated in other words, satisfied and loyal customers make contribution to their service providers when a certain situation occurs regarding the service provider and give feedbacks to make these situations right. Therefore, the positive relationship between customer satisfaction and negative feedbacks is not surprising.

Moreover, empirical findings via structural equation modeling bring out that the standardized beta coefficient of image has the highest value among all research hypotheses. It shows that customers of airline companies in Turkey are in tendency to be satisfied with the high image of the company. On the other hand, it is seen that flight attendants' and ground staff's service quality do not affect the customers' satisfaction level.

Ahead of the analysis, obtained data from airline customers is examined in detail and confounding factors are avoided. Nevertheless, the study has several limitations. First of all, owing to the fact that the present study is concerned about the whole Turkey, the sample size is not adequate exactly to analyze the customers' framework of airlines and a more comprehensive study is required. Apart from aforecited limitation, as it is well known, Turkish Airlines is a worldwide company. It has many additional concessions than other companies and a great majority of the customers who participate in the survey are customers of Turkish Airlines. Therefore, examining this airline with others may cause unfair competition effects on customer satisfaction. These effects should be evaluated and the analyses may be needed to regenerate. Lastly, the only participants of this research are domestic flight's customers who do not spend too much time at the terminal before and after their flight. Hence, perceived quality of terminal tangibles may not be a determinant of customer satisfaction for these customers. In this case, further research is recommended to focus on the customers of foreign and connecting flights to reveal the relationship between terminal tangibles and customer satisfaction.

In spite of the limitations of this study however, it is important to have conducted the study in order to provide baseline information about the air quality among passengers in Turkey. Additionally, given approaches are strongly supported by statistical findings.

Within the scope of research, if the sample size increases homogeneously by throughout Turkey, reliability, validity and verisimilitudinous of the obtained results may remain. Enhanced validity of the findings may provide some advantages to



airline companies which operate in Turkey. Thereby, they may realize their weaknesses and focus on the lacks. Particularly, airline companies should focus on improving their image that is found as the strongest determinant of customer satisfaction. These companies may take precautions to overcome the deficiencies according to obtained results. As a result, by providing significant customer satisfaction, both the companies will sustain their operations efficiently and the customers will get the most out of provided services.

#### References

- Ali, F., Omar, R. and Amin, M. (2013). An examination of the relationships between physical environment, perceived value, image and behavioural intentions: a SEM approach towards Malaysian resort hotels. *Journal of Hotel and Tourism Management*, 27(2), 9-26.
- Ali, F., Del, B.D., and Filieri, R. (2014). An assessment of service quality and resulting customer satisfaction in Pakistan International Airlines: findings from foreigners and overseas Pakistani customers, *International Journal of Quality & Reliability Management*, 32(5), 486-502.
- Amin, M. and Nasharuddin, S.Z. (2013). Hospital service quality and its effects on patient satisfaction and behavioural intention. Clinical Governance: An International Journal, 18(3), 238-254.
- Anderson, E.W. and Sullivan, M.W. (1993). The antecedents and consequences of customer satisfaction for firms. *Marketing Science*, 12, 125-143.
- Ariffin, A.A.M., Salleh, A.H.M., Aziz, N.A., and Asbudin, A.A. (2010). Service quality and satisfaction for low cost carriers. *International Review of Business Research Papers*, 6(1), 47-56.
- Ataman, G., Behram, N. K., & Esgi, S. (2011). Is Amaçli Havayolu Pazarinda Hizmet Kalitesinin Servqual Modeli Ile Ölçülmesi ve Türk Hava Yollari'Business Class' Yolculari Üzerine Bir Arastirma, *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, (26), 73-87.
- Atilgan, E., Akinci, S., and Aksoy, S. (2008). Measuring and mapping customers' expectations and perceptions for airlines: The Sunexpress case with the GAPS model. *Journal of Global Strategic Management*, 3, 67–78.
- Babakus, E. and Boller, G.W. (1992). An empirical assessment of SERVQUAL scale. *Journal of Business Research*, 24(3), 253-68.
- Babin, B.J., Lee, Y.-K., Kim, E.-J. and Griffin, M. (2005). Modeling Customer Satisfaction and Word-Of-Mouth: Restaurant Patronage in Korea, Journal of Services Marketing, 19(3), 133-139.
- Basfirinci C. and Mitra A. (2015). A cross cultural investigation of airlines service quality through integration of Servqual and the Kano model. *Journal of Air Transport Management*, 42, 239 -248.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238–246.
- Brown, T.J., Barry, T.E., Dacin, P.A. and Gunst, R.F. (2005). Spreading the word: investigating antecedents of consumers' positive word-of-mouth intentions and behaviors in a retailing context, *Journal of the Academy of Marketing Science*, 33(2), 123-38.
- Carman, J.M. (1990). Consumer perceptions of service quality: an assessment of the SERVQUAL dimensions. *Journal of Retailing*, 66, 33-5.
- Chiu, S.C., Liu, C.H. and Tu, J.H. (2016) The Influence of Tourists' Expectations on Purchase Intention: Linking Marketing Strategy for Low-Cost Airlines, *Journal of Air Transport Management*, 53, 226-234.
- Clemes, M.D., Gan, C., Kao, T.H., and Choong, M. (2008). An empirical analysis of customer satisfaction in international air travel. Innovative Marketing, 4(2), 49–62.
- Cronin, J.J., and Taylor, S.A. (1992). Measuring service quality: A re-examination and extension. *Journal of Marketing*, 56, 55–67.



- Cronin, J.J. and Taylor, S.A. (1994). SERVPERF versus SERVQUAL: reconciling performance-based and perceptions-minus-expectations measurement of service quality. *Journal of Marketing*, 58, 125-31.
- Cunningham, L.F., Young, C. E., and Lee, M. (2002). Cross-cultural perspectives of service quality and risk in air transportation. *Journal of Air Transportation*, 7(1), 3-26.
- Davidow, M. (2003). Have you heard the word? The effect of word of mouth on perceived justice, satisfaction and repurchase intentions following complaint handling. Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior, 16(1), 67-80.
- Demirbağ, O, Yozgat, U. (2016). Hizmet Alan (Müşteri) ve Hizmet Veren (Çalışan) Perspektifinden Hizmet Kalitesinin SERVQUAL Yöntemiyle Ölçümü: Bir Kamu Kurumu Olarak PTT İncelemesi., *The Journal of International Scientific Researches*, 1 (1), 78-89.
- Ekiz, E.H., Hussain, K., and Bavik, A. (2006). Perceptions of Service Quality in North Cyprus National Airline, Tourism and Hospitality Industry 2006 New Trends in Tourism and Hospitality Management, 18th Biennial International Conference, May 03-05, Opatija, Croatia: Faculty of Tourism and Hospitality Management, Proceeding Book, 778-790.
- Engel, J.E., Kegerreis, R.J. and Blackwell, R.D. (1969). Word-of-Mouth Communication by the Innovator, *Journal of Marketing*, 33, 15-19.
- Fishbein, M. and Ajzen, I. (1975). Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research. Addison-Wesley, Reading, MA.
- Fornell, C. (1992). A national customer satisfaction barometer: The Swedish experience. *Journal of Marketing*, 56, 6–21.
- Fournier, S. and Mick, D.G. (1999). Rediscovering Satisfaction. *Journal of Marketing*, 63, 5-23.
- Gures, N., Arslan, S. and Tun, S.Y. (2014). Customer Expectation, Satisfaction and Loyalty Relationship in Turkish Airline Industry. *International Journal of Marketing Studies*, 6(1), 66-74.
- Hair, J.F., Jr., Black, W.C., Babin, B.J., and Anderson, R.E. (2010). Multivariate data analysis: A global perspective (7th ed.). NJ: Prentice Hall.
- Hu, L.T. and Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55.
- Johan, M.R.M., Noor, N.A.Z.M., Bahar, N., Yan, L.M. and Ping, L.H. (2014). Factors Affecting Customer Loyalty towards Airlines Industry in Malaysia: An Exploratory Analysis. *Interdisciplinary Journal of Contemporary Research in Business*. 6, 12-23.
- Johns, N., Avci, T. and Karatepe, O.M. (2004). Measuring service quality of travel agents: evidence from Northern Cyprus. *The Service Industries Journal*, 24(3), 82-100.
- Jones, T.O. and Sasser W.E. (1995). Why Satisfied Customers Defect, *Harvard Business Review*, (Nov-Dec), 88-99.
- Joreskog, K. G. and Sorbom (1996). LISREL 8 User's Reference Guide. Scientific Software International, Chicago.
- Judd, C.M., Smith, E.R. and Kidder, L.H. (1991). Research Methods in Social Relations, 6th ed., Holt, Rinehart and Winston, Inc., Fort Worth, TX.
- Kotler, P. and Armstrong, G. (1996). Principles of Marketing. Prentice-Hall, New Jersey.
- Korkmaz, H., Giritlioglu, İ. and Avcikurt, C. (2015). Havayolları İç Hatlarda Algılanan Hizmet Kalitesinin Müşteri Memnuniyeti ve Tekrar Satın Alma Davranışına Etkisi, *Karabük Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 5(2), 248-265.
- Kuo. Y.F. (2003). A study on service quality of virtual community websites. *Total Quality Management & Business Excellence*, 13(4), 461-473.



- Ling, F.I., and Lin, K. (2005). Difference in service quality of cross-strait airlines and its effect on passengers' preferences. *Journal of the East Asia Society for Transportation Studies*, 6, 798–813.
- Maxham, J. G., III (2001). Service recovery's influence on consumer satisfaction, positive word-of-mouth, and purchase intentions. *Journal of Business Research*, 54(1), 11-24.
- Nadiri, H. and Hussain, K. (2005). Diagnosing the zone of tolerance for hotel services. *Managing Service Quality*, 15(3), 259-77.
- Nadiri, H., Hussain, K., Ekiz, E.H. and Erdogan, S. (2008). An Investigation on the Factors Influencing Passengers' Loyalty in the North Cyprus National Airline, *The TQM Journal*, 20(3), 265-280.
- Newman, K. (2001). Interrogating SERVQUAL: a critical assessment of service quality measurement in a high street retail bank. *International Journal of Bank Marketing*, 19(3), 126-39.
- Pakdil, F. and Aydın, O. (2007). Expectations and perceptions in airline services: An analysis using weighted SERVQUAL scores. *Journal of Air Transport Management*, 13, 229–237.
- Parasuraman, A., Berry, L.L. and Zeithaml, V.A. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(4), 41-50.
- Parasuraman, A., Berry, L.L. and Zeithaml, V.A. (1988). SERVQUAL: a multipleitem scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 4(1), 12-37.
- Parasuraman, A., Berry, L.L., and Zeithaml, V.A. (1991). Perceived service quality as a customer based performance measure: An empirical examination of organizational barriers using an extended service quality model. *Human Resource Management*, 35–64.
- Park, J. W., Robertson, R., and Wu, C.L. (2004). The effect of airline service quality on passengers' behavioral intentions: A Korean case study. *Journal of Air Transport*, 10(6), 435–439.
- Park, J.W., Robertson, R., and Wu, C.L. (2005). Investigating the effects of airline service quality on airline image and passengers' future behavioural intention: Findings from Australian international air passengers. *The Journal of Tourism Studies*, 16(1), 2–11.
- Pekkaya, M. and Akilli, F. (2013). Statistical analysis and evaluation of airline service quality by servperf-servqual scale, *Ekonomik ve Sosyal Araştırmalar Dergisi*, 9 (1), 75-96.
- Rust, R.T. and Zahorik, A.J. (1993). Customer satisfaction, customer retention, and market share. *Journal of Retailing*, 69(2), 193-215.
- Saha, G.C. and Theingi, T. (2009). Service Quality, Satisfaction, and Behavioural Intentions: A Study of Low-Cost Airline Carriers in Thailand, *Managing Service Quality*, 19(3), 350-372.
- Sharma, N. and Patterson, P.G. (2000). Switching costs, alternative attractiveness and experience as moderators of relationship commitment in professional consumer services International Journal of Service Industry Management, 11(5), 470-490.
- Singh, A.K. (2015). Modeling Passengers' Future Behavioral Intentions in Airline Industry Using SEM. *Journal of Advances in Management Research*, 12(2), 107-127.
- Sivadas, E. and Baker-Prewitt, J. (2000). An examination of the relationship between service quality, customer satisfaction, and store loyalty. *International Journal of Retail & Distribution Management*, 28(2), pp. 73-82.
- Sonnenberg, F.K. (1991), Marketing To Win, Harper and Row, New York, NY.



- Söderlund, M. (1998). Customer satisfaction and its consequences on the customer behavior revisited: the impact of different levels of satisfaction on word-of-mouth, feedback to the supplier and loyalty. *International Journal of Service Industry Management*, 9(2), 169-88.
- Suki, N.M. (2014). Passenger satisfaction with airline service quality in Malaysia: A structural equation modeling approach, *Research in Transportation Business & Management*, 10, 26-32.
- Sultan, F. and Simpson, M.C. Jr (2000). International service variants: airline Passenger expectations and perceptions of service quality, *Journal of Services Marketing*, 14(3), 188-216.
- Taylor, S.A., Baker, T.L. (1994). An assessment of the relationship between service quality and customer satisfaction in the formation of consumers' purchase intentions. *Journal of Retailing*, 70 (2), 163-178.
- Tsaur S.H., Chang T.Y., and Yen C.H. (2002). The evaluation of airline service quality by fuzzy MCDM. *Tourism Management*, 23, 107–115.
- Tsoukatos, E. and Mastrojianni, E. (2010). Key determinants of service quality in retail banking. *EuroMed Journal of Business*, 5(1), 85-100.
- Wilson A., Zeithaml V.A., Bitner M.J. and Gremler D.D. (2008). Services Marketing, McGraw-Hill Education.
- Wirtz, J. and Chew, P. (2002). The Effects of Incentives, Deal Proneness, Satisfaction, and Tie Strength on Word-Of-Mouth Behavior, *International Journal of Service Industry Management*, 13(2), 141-162.
- Yıldız E. (2016) Effects of Service Quality on Customer Satisfaction, Trust, Customer Loyalty and Word of Mouth: An Application on Cargo Companies in Gümüşhane, 12-14 October, *Uluslararası Osmaneli Sosyal Bilimler Kongresi*, Bilecik, 844-853.
- Yıldız, S. and Kurtuldu, H. S. (2014), Factors Affecting Electronic Service Brand Equity, in *Transcultural Marketing for Incremental and Radical Innovation*, B. Christiansen, S.Yıldız ve E.Yıldız (Edt.), (434-492), USA; IGI Global.
- Yıldız S. and Yıldız E. (2015). Service Quality Evaluation of Restaurants Using The AHP and TOPSIS Method, *Journal of Social and Administrative Sciences*, 2(2), 53-61.
- Yi, Y. and La, S. (2004). What influences the relationship between customer satisfaction and repurchase intention? Investigating the effects of adjusted expectations and customer loyalty. *Psychology and Marketing*, 21(5), 351-372.
- Zeithaml, V. A. (1981). How Consumer Evaluation Processes Differ Between Goods and Services, Marketing of Services, J. H. Donnelly and W. R. George, eds. Chicago, IL: American Marketing Association, 186-190.