



The Concept of Low-Cost Airline Transportation: Definition and Meaning

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Abstract

The purpose of this study is to measure the quality perception of in-flight services for the passengers. For that purpose, the service quality performances of the two biggest Turkish low-cost airlines were evaluated within the scope of the study. The study was designed quantitatively, and the survey technique was used to collect data. The data was obtained with convenient sampling method by involving 608 participants using the package program. In the analysis, factor, frequency and reliability analysis, t-test, and oneway ANOVA tests were used. According to the results of the study, both of the Turkish low-cost airlines have high service quality scores. Another conclusion of the study is that the demographic differences are not a determinant in airline service quality perception.

Keywords

Service Quality • In-flight Services • Low-cost Airlines • Servperf

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Introduction

With the increasing importance of service enterprises and their share in the economy, quality service provision has become more considerable in terms of businesses, and in the literature, there have been numerous studies on increasing, improving, and measuring service quality. Tourism has a labor-intensive structure. In 2018, Turkey had approximately 15.8 million people working for the service industry. This ratio was equal to 54.9% of the total active domestic labor force. According to the Turkish Statistics Institute (TUIK) data, total tourism income of Turkey is approximately 29 billion USD (TUIK, 2019). High quality of service is crucial for the tourism industry and its sub-sectors, in terms of ensuring competitiveness and sustainability. The characteristics of an air travel (food and beverage services, entertainment systems, comfort, etc.) are similar to accommodation. In this context, it can be said that the quality of service in air transportation is as important as it is in accommodation sector. The main purpose of cabin services is to meet the basic needs of passengers, such as food and beverages, and to make the journey enjoyable for them. This is also one of the major marketing elements of airlines. Cabin service incorporate many factors, such as food and drink offered on board, TV and video display, internet access, entertainment systems, seat width and knee distance, aircraft cleaning, attitudes of the cabin crew, and materials placed on the toilet.

The main objective of this study is to evaluate perceived service quality of low-cost airlines. It is thought that the study explore whether passenger satisfaction may be achieved with low-cost services. As a result of the literature review, it is seen that previous service quality studies were conducted in the form of a general quality assessment by airline companies. Therefore, there is a gap in the literature at that point. This study which in-flight services is evaluated aims to make a contribution to the current literature.

Literature Review

Service Concept, Definition, and Importance

Service is an activity carried out by an individual or an organization for the benefit of another individual or organization (Altan & Atan, 2004). According to Zengin and Erdal (2000), “serving” is an abstract activity that is offered for sale at a certain price in order to meet people’s needs which does not require any proprietorship but provides benefit and gives satisfaction. Additionally, another definition of service concept is behavior; effort or action (Verma, 2012). Therefore, service can be described as paid or free of charge actions which are fulfilled for the benefit of individuals or organizations and which do not provide any tangible product but still satisfy the customers. On the other hand, services may also include physical products (Alrawadieh et al., 2019; Suer, 2014).

Demand for the service industry is directly proportionate to the level of urbanization, social life, economy, and education. High standards of living may lead to an increase in the customers' expectations towards goods and services (Ardic & Sadaklioglu, 2009).

Because of the intensely competitive environment which has been existing today, executives must develop strategies to keep their current customers. These strategies should be based on the factors that determine the customers' choice of the firm. Customer satisfaction ensures customer preferences are preserved (Garga and Bambale, 2016). It is stated that the services should be distinguished from the products because of their specific features, as these features influence marketing services (Bhattacharjee 2006, Altunisik & Karatas 2015).

Services cannot be touched, smelled, or tasted. The customers do not have any products after buying a service. For instance, an airline company does not produce any tangible product. The technical and non-technical services are for the benefit of customers (Verma, 2012). Physical products may contain services, and the services may contain physical products (Suer, 2014). Services are intangible elements (Bhattacharjee, 2006), and this feature limits the promotion and advertising activities of services (Altunisik & Karatas, 2015). Since services are intangible elements, it would be difficult for an operator to understand how consumers perceive services and quality (Altan & Atan, 2004). One of the most important features of a service is that it cannot be stocked. Balancing the supply and demand for services is equally important and difficult. The low occupancy rate and overbooking concept are natural consequences of being perishable. In addition, product recalling is not possible in the service sector (Altunisik & Karatas, 2015).

Service enterprises must develop "right the first time" principle in an applicable way since there would be no second chance when things do not go well. Each service experience is specific, and there is no rehearsal, no repayment. For example, there is no refund for an unsatisfied night at the hotel (Verma, 2012).

The existence of the human element in service production brings along the inevitability of mistakes to the table. On the other hand, this feature emphasizes that services provided can vary in terms of quality and standardization (Zengin & Erdal, 2000) Unlike physical products, the output of services are not stable. Offering a standard service is rather difficult. Even if customers receive the same service from the same place at the same time, their evaluations may be different. For example, the efficiency of two visits for the same doctor may be different (Verma, 2012). In service, production and consumption are simultaneous (De Esteban et al., 2015).

Services have certain attributes that distinguish them from physical goods. Physical assets can be traded, received, sold, transferred, stored, and kept for use,

at different times. However, services do not have the same characteristics (Gumus & Tutuncu, 2012). Consumers benefit from many tangible clues, such as resilience, label, appearance, and packaging, to evaluate the quality when purchasing a good. On the other hand, the quality assessment for service procurement is usually limited to the physical condition, equipment, personnel, and place where the service is being provided (Parasuraman, Zeithaml, & Berry, 1985).

A customer's satisfaction with a product occurs when the product is used or consumed after purchase. However, service enterprises' satisfaction level with a product directly occurs during the production of specified service. In this case, the first determining factor is the quality of the service personnel and the service that personnel provides (Kilic & Eleren, 2009). The evaluation of the consumers' service quality perceptions is difficult due to the variability of the service characteristics (Demiciftci et al., 2017; Murray & Schlacter, 1990).

Product quality can be directly determined by technological examinations, statistical control methods, and numerical data in production enterprises, but measurement and control of service quality are not that easy (Kilic & Eleren, 2009). Moreover, problems that occur in service providers are generally subjective. These kinds of problems are not often solvable with general solutions, such as changing the product parts or production lines in manufacturing. In the case of enterprises that offer products and services in general, the problem arises in the services (Verma, 2012).

Quality of Service Concept

Service quality can be defined as meeting the needs of customers in the best way (Kocoglu & Aksoy, 2012). The reasons why the concepts of service quality gain importance can be listed as that the success of enterprises is directly proportional to providing quality products and services, the desire to increase market shares by increasing the quality of service provided, the desire to achieve higher profitability, the desire to create loyalty in customers, and etc. (Kilic & Eleren, 2009). Service quality, especially for service enterprises, has been more and more important day by day (Pekkaya & Akilli, 2013).

In order to manage service quality effectively, it is necessary to understand the concepts of satisfaction, quality, and value. Although these concepts are described as intangible, they play an important role in future purchasing decisions (Rust and Oliver, 1994) Since its intangible nature, it is difficult to define the quality of service. The definition of quality varies from person to person (Brown et al., 1991). In addition, both cultural and personal values have an impact on perceived service quality (Ladhari, Pons, Bressolles, & Zins , 2011). In the tourism sector, where the

competition is intense, service providers try to increase their service qualities to meet constantly changing customer expectations (Güven & Celik, 2012).

Various methods are available to measure perceived service quality. The most widely accepted ones are the *Servqual method*, which was found by Parasuraman, Zeithaml, and Berry (1985), and Cronin and Taylor's (1994). *Servperf method* was introduced via a critical review of Servqual. It is based on the differences between consumers' expectations and the perceived service quality. According to this model, the difference between perceived and expected service quality is the determinant of service quality. On the other hand, the *Servperf method* uses a performance-based evaluation and does not make an expectation assessment. This method argues that there is no need to compute the differences between the expectation on a received service and the perception of the quality of service. According to the *Servperf method* the expectation score is always the highest value for a customer.

The Concept of Airway Transportation, Definition, and Importance

Air transport enterprises are companies that carry cargo or passengers for a fee through a certain line of air vehicles or carry out these actions with non-commercial activities (Directorate General of Civil Aviation [DGCA], 2016). Commercial air transport is generally defined as leasing an aircraft or transporting passengers, cargo, or mail for a fee (The International Civil Aviation Organization [ICAO], 2016). Furthermore, an airline ticket is a significant part of travel expenditure (Cetin et al., 2016).

Presently, air travel is one of the safest means of transportation. In 2014, according to The International Air Transport Association (IATA) statistics, 38 million flights were made across the world and 3.3 billion passengers were carried. A total of 73 accidents occurred and 641 people lost their lives. According to these statistics, the likelihood of the occurrence of a fatal accident in air transport is about 1:3,166,666 (IATA, 2017). In Turkey, air travel has been a growing sector since 2000. The general passenger profile has changed to include different groups, ie, passengers who benefit from airline services are not only ones from the high-income group (Aydin & Yildirim, 2012).

In the aviation industry, it has become more important for managers of airline companies to get an idea of customers' perceptions of company brands, their service qualities, price levels, and other issues (Caber, 2018). It is crucial for airline operators to provide high-quality service to passengers by focusing on customer satisfaction. By doing so, they can maintain current customers and gain new ones and as a result, they can become able to compete with rivals (Kazancoglu, 2011). Price and quality of service are the primary weapons of airlines in competition. Airline companies understand that competing only for the price is not sustainable and does not enable

them to win customers in the long term and. The competitive advantage of airline companies depends on the high degree of service perceived by customers (Chen, Tseng, & Lin 2011). Thus, recognizing the preferences of each airlines' customer is a very important matter for managers. Airline management which provides and maintains a high quality of service can be successful (Hatipoglu & Isik, 2015).

Passengers spend more time on the flight than they usually spend at the airport. Airline companies should be closely interested in in-flight services which they offer to satisfy their customers/passengers. (Chen et al., 2011). Companies should pay attention to personnel who interact with customers, regardless of which business model they use (Forgas, Moliner, Sanchez, & Palau , 2010).

Airline Business Models

Within the airline industry, where intense competition conditions exist, firms have tried to compete using business models with similar and very limited differences for many years (Tasci & Yalcinkaya, 2015). Airline companies operate with different business models by making evaluations on geography, target groups, and etc. to be able to compete, ensure sustainability and make a profit. These business models are outlined below.

Traditional Airline Model

The traditional airline model is basically derived from the services of countries' flag carrier airlines and their derivatives. The business model of a traditional airline can be explained as follows (Cento, 2008):

- ✓ Basic Business: Passenger, cargo, maintenance.
- ✓ Central and Intermediate Networks: Connecting to intermediate networks considering the demand and optimization of the central base.
- ✓ Global Player: Domestic-international routes and intercontinental flights from central bases and flights to almost every continent.
- ✓ Alliance: No airline alone can truly be a global airline. For this reason, they need partners to connect them to the whole world.
- ✓ Vertical Product Differences: Land-flight, electronic services, and travel rules that can address all possible markets.
- ✓ Customer Relationship Management: All traditional airlines have a loyalty program that will connect their customers to them.

Low-Cost Airline Model

Low-cost air travel or air transportation is often known as discounted or cheap airline with no free catering. In low-cost airlines, generally, seat capacity is up to 200

people, a single-type aircraft operates and ticket prices are lower in comparison with many traditional airlines (Baker, 2013). Low-cost airlines fundamentally benefit from the regulations in the national airline market and international liberal agreements (Bjelicic, 2007).

In the low-cost airline model, airline operators prefer secondary airports due to the contracts that cause significant reductions in their revenues (Francis, Fidato, & Humphreys, 2003). The emergence of low-cost airlines has been a major influence on the civil aviation market. Some passengers continue to use traditional airlines while others have opted for low-cost airlines (Forgas et al., 2010).

Low-cost airlines are focused on generating non-ticket revenues. The food and beverages sold in flights constitute a significant part of their revenues. Commissions, such as extra luggage fees, travel insurance, and hotel and car rental services also have importance in terms of non-ticket revenue (Doganis, 2006). Price and service quality in low-cost airlines are the key to customer satisfaction (Forgas et al., 2010).

Charter Carrier Model

Although it is sometimes a business model which small enterprises or business groups use to reach resort hotels, historic towns, or cruise ships waiting for them, charter air transport is generally offered in conjunction with accommodation and other services in a holiday package of tour operators (Cento, 2008).

Regional Carrier Model

The regional carrier model can often be defined as scheduled and unscheduled flights through smaller planes, usually between transfer centers and small settlements (Sarilgan, 2011).

Low-Cost Airline Business Concept

Low-cost airline operators have competitive advantages in many countries due to the low tariffs compared to traditional airline operators. The needs and expectations of all customers are not the same (Kim & Lee, 2011). So low-cost airlines have different package policies even among themselves. For example, West Jet offers simple snacks and beverages, but at the same time, it does not allow seat selection during online check-in (Gillen & Morrison, 2003).

Although low-cost airlines make cuts with the costs from services, they cannot reduce costs on safety issues. While the quality of service is a significant issue, safety is the first priority for all airline companies, both traditional and low-cost. (Rhoden, Ralston, & Ineson, 2008).

There are some features that distinguish the low-cost airline companies from the traditional ones. These features are the low-cost structures, the use of single type of airplanes, the use of uniforms in airplanes, the use of secondary airports, no service differences such as “business class” in the cabin, paid seat selection, no customer loyalty program, and no unionization.

However, a low-cost airline does not necessarily have all of these features. Conditions in a country such as competition, business policy, or legal legislation may lead to differences in low-cost policies. According to some studies (Belobaba, Odoni, & Barnhart ., 2016; Chiou & Chen, 2010; Gillen & Lall, 2004; Gillen & Morrison, 2003), the key features of low-cost airline operations include:

- ✓ Low Price Structure: Low price strategy is a top priority for the low-cost airline companies to compete. Providing high service quality without offering low prices may not increase the number of passengers.
- ✓ Using Single Type Aircraft: Low-cost airlines aim to reduce maintenance, spare parts, and crew training costs by using a single type of aircraft.
- ✓ Use of Secondary Airports: Airports take their natural value from their location. However, in order to be among the preferences of an airline, they must have an advantageous position because of the large economy, the dense population, or other factors that attract passengers. Low-cost airlines require less airport service than traditional airlines. Due to their limited needs, low-cost airlines prefer secondary or regional airports. As a result, they have a competitive advantage over traditional airlines with low airport fees, a shorter ground time between flights, less air traffic, and, therefore, less delay (European Low Fares Airline Association [ELFAA]., 2016).
- ✓ Cabin Services: Low-cost airlines offer one type of cabin with no business class, first-class, or premium class. In this way, no extra costs arise due to service differences. They also try to get the lowest cost by not offering free catering and keeping the knee distance between seats at the minimum limit.
- ✓ No seat selection: The low-cost airlines aim to reduce the cost of transactions and services at the airport by not offering seat selection and not issuing boarding passes.
- ✓ Direct Ticket Sales and Reservation: Unlike traditional airline companies, they do ticket sales directly via telephone or internet instead of ticket sales agencies. Thus, ticket sales costs can be minimized (ELFAA, 2016).
- ✓ No Customer Loyalty Program: By not using customer loyalty programs, the costs of operating expenses and awards are avoided.
- ✓ No Union and a Lower Wage Policy: Lower paid staff can be employed because of the lack of union activity in low-cost airlines.
- ✓ Nonstop Flights: Low-cost airlines avoid point-to-point travel costs by arranging point-to-point nonstop flights.

Although these concepts are general features of low-cost airlines, they are adopting these to suit them due to differences in country legislation and market characteristics.

Methodology

The aim of the study is to determine service quality performances of the low-cost airlines operating in Turkey and to reveal the level of competition in the country. The target population of the study consists of passengers who have had flight experience through low-cost airline companies in Turkey. In 2016, the two biggest airlines in Turkey carried approximately 36 million passengers on domestic and international flights. 15 million passengers were transported in international flights. However, this number includes multiple flights. Because airline companies only show the number of tickets purchased in their statistics, there is no information available on the number of actual passengers. Moreover, it is not possible to determine how many of these passengers were Turkish.

The surveys were distributed and collected as online and hard copies between 02 March and 19 April 2017. Social media and forum sites were used for online surveys. Convenient sampling methods were used for the study.

In the study, the data was gathered from 623 participants by the survey method, but later, 15 forms were eliminated due to some missing values. At the end, 608 forms were used for analysis.

This study is designed as quantitative research. SPSS was used as the statistical analysis program for the data analysis. Reliability analysis, frequency analysis, independent bivariate t-test, and one-way ANOVA tests were applied in the package program, and the findings were presented in tabular form.

Design of the Survey

According to Jain et al., (2004) and Bulbul et al., (2008), in service quality studies of airline companies, Servperf scale studies were more explicative than Servqual scale.

Parasuraman et al. (1988) used the same proposals as the Servqual service quality scale, and Cronin et al. (1994) used the performance-based Servperf scale. In other words, only questions of perception are given on the scale. Questions aimed at measuring expectations were removed from the scale. The Turkish proposals of the scale were taken from the articles which had previously been studied with the Servqual / Servperf scales and were designed to be adapted to the in-flight services. The questions that are considered to measure the dimensions of service quality are as follows:

- 1,2,3,4 : Tangibles (Yildiz & Erdil, 2013)
- 5,6,7,8,9 : Reliability (Okumus & Asil., 2007)
- 10, 11, 12, 13 : Responsiveness (Okumus & Asil., 2007)
- 14, 15, 16, 17 : Assurance (Pekkaya & Akilliibik., 2013)
- 18, 19, 20, 21, 22 : Empathy (Ibik, 2006)

The scale was prepared using a 7-point Likert scale based on the recommendations of Parasuraman et al. (1988) and Pekkaya et al., (2013). The scale in both cases was from 1- strongly disagree to 7- strongly agree. No expression assignments have been made to 2,3,4,5, or 6. Weighted Servperf / Servqual was used on the original scale. However, in this study, the weighting could not be done due to a large number of incorrect data entries in the online surveys. The most useful SERVPERF/ SERVQUAL’s service quality dimensions which include 22-items were used. These items are as follows:

1. It has modern-looking aircraft.
2. The physical means are attractive (cabin, magazine).
3. Cabin crew has a neat and professional appearance.
4. The catering materials offered during the flight are of high quality.
5. Carry out the services when they are committed.
6. The services are fulfilled as promised.
7. It is a reliable airline.
8. Keeps the passenger and service records properly.
9. Always works to provide faultless service to passengers.
10. Cabin crew quickly meets passenger requests.
11. Cabin crew gives satisfactory answers to passenger problems.
12. Cabin crew is eager to help passengers.
13. Cabin crew is never too busy to meet passengers’ requests.
14. Passengers rely on cabin crew.
15. Passengers feel safe in payment transactions made by cabin crew.
16. Cabin crew is polite to passengers.
17. The cabin crew has the information to answer the questions of the passengers.
18. Cabin crew understands the individual needs of passengers.
19. Cabin crew shows individual attention to passengers.
20. The cabin crew gives passengers personal attention.
21. The cabin crew adjusts the service start time according to the needs of the passengers.
22. Cabin crew is receptive to personal requests by passengers.

Results

Demographic Results

The data were obtained from 608 participants. Passengers were classified according to their characteristics such as gender, age, marital status, education, income group, travel frequency, and recommendation status of the airline. The participants consisted of 81.9% male and 18.1% female. The majority of participants (%62,3) were between 20-29 years old. The majority of the participants (%60,7) have a bachelor's or master's degree. 33% of the participants' monthly income was 1500 TL and below. With regard to flight frequency, there is a distribution that can be considered as balanced. 73,8% of participants recommend their favorite airline to others.

Table 1
Demographic Results and Recommend Status

		(N=608)	
		N	%
Gender	Male	498	81,9
	Female	110	18,1
Age	0-19	73	12
	20-24	233	38,3
	25-29	146	24
	30-34	89	14,6
	Older than 35	67	11
Marital Status	Married	159	26,2
	Single	449	73,8
Education	Collage and below	192	31,6
	High School	47	7,7
	Bachelor's	279	45,9
	Master or higher	90	14,9
Income	0-1500TL	202	33,2
	1501-2500TL	113	18,6
	2501-3500 TL	129	21,2
	3501-4500 TL	71	11,7
	Higher than 4501TL	93	15,3
Travel Frequency	Once in a month	155	25,5
	Once in 3 months	183	30,1
	Once in 6 months	150	24,7
	Once in a year	120	19,7
Recommend Status	Yes	449	73,8
	No	159	26,2

Reliability Results

Reliability Test Result

The results of the reliability test are shown Table 2 and Table 3. In this study, Cronbach's Alpha value was 0.942. Also, 5 main dimensions of service quality's Cronbach's Alpha values were analyzed. Cronbach's Alpha was found to be 0.724 for "Tangibles", 0.878 for "Reliability", 0.871 for "Responsiveness", 0.876 for "Assurance" and 0.877 for "Empathy".

Table 2
Reliability Test Result

N	Number of Items	Cronbach's Alpha
608	22	0,942

Table 3
Reliability Results for Service Quality Dimensions

Dimensions	N	Number of Items	Cronbach's Alpha
Tangibles	608	4	0,724
Reliability	608	5	0,878
Responsiveness	608	4	0,871
Assurance	608	4	0,876
Empathy	608	5	0,877

Factor Analysis

The factor analysis of the scale is shown in Table 4. In the analysis, the KMO value was found as 0.946 and the Barlett Test value was found as 8596.113. The KMO value is between 0.90 and 1.00, which means that the sampling adequacy is very good for factor analysis (Alpar, 2017: 268). The KMO value and the meaningful presence of the Barlett Test mean that the scale is suitable for the factor analysis. The Direct Oblimin method was used for rotation due to the presence of correlation between factors. The factor analysis results of the scale were similar to Parasuraman et al.'s (1991) analysis because of the high correlation between the factors and the fact that the sub-dimensions could be perceived by the participants in different factors. Participants thought that the third proposal (Cabin crew has a neat and professional appearance) was under the dimension of responsiveness, but this question was not eliminated by the fact that this was a physical feature. The 4th proposal (The catering materials offered during the flight are of high quality) and the 18th proposal (Cabin crew understands the personal needs of passengers) were removed from the data set.

Table 4
Factor Analysis

Dimensions	Factor 1	Factor 2	Factor 3	Factor 4
Tangibles				
Q1				0,854
Q2				0,803
Q3	0,546			0,441
Q4		0,551		0,331
Reliability				
Q5		0,906		
Q6		0,804		
Q7		0,582		
Q8		0,572		
Q9		0,722		
Responsiveness				
Q10	0,588			
Q11	0,546			
Q12	0,666			
Q13	0,651			
Assurance				
Q14	0,700			
Q15	0,716			
Q16	0,861			
Q17	0,829			
Empathy				
Q18	0,444		0,539	
Q19			0,798	
Q20			0,764	
Q21			0,768	
Q22			0,763	

n:608 KMO=0,946

Bartlett's Sph X²: 8596,113; p: 0,000

Total Variance Explained: %67,576 Eigenvalue: 1

Table 5 shows the correlation between service quality scale dimensions. These five dimensions have a moderate and high correlation with each other. Specifically, assurance and responsiveness have a high correlation of dimensions (0,800).

Table 5
Correlation Analysis

Dimensions	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Tangibles	1				
Reliability	0,602	1			
Responsiveness	0,556	0,663	1		
Assurance	0,487	0,615	0,800	1	
Empathy	0,514	0,514	0,708	0,655	1

Descriptive Statics

The average answers' scores given by participants are shown in Table 6. According to the results of the analysis, the highest average score was given to "Assurance" (5,37) and the lowest score was given to "Empathy. Another result of the analysis is that all the items' scores were higher than "4.00" which is the middle point of the scale.

Table 6
Descriptive Statics

	N	Mean	Std. Deviation
Tangibles	608	4,59	1,19
Q1	608	4,66	1,50
Q2	608	4,07	1,54
Q3	608	5,51	1,31
Reliability	608	4,81	1,32
Q5	608	4,47	1,74
Q6	608	4,91	1,57
Q7	608	5,28	1,45
Q8	608	4,67	1,54
Q9	608	4,62	1,54
Responsiveness	608	5,03	1,24
Q10	608	5,01	1,40
Q11	608	4,96	1,44
Q12	608	5,07	1,44
Q13	608	4,97	1,43
Assurance	608	5,37	1,18
Q14	608	5,18	1,32
Q15	608	5,16	1,46
Q16	608	5,64	1,32
Q17	608	5,40	1,33
Empathy	608	4,45	1,30
Q19	608	4,40	1,55
Q20	608	4,10	1,58
Q21	608	4,08	1,66
Q22	608	4,74	1,47

A T-test was performed to examine the relationship between the dimensions of service quality and gender, and the results of the analysis are shown in Table 7. According to the results, there is no significant difference in all 5 dimensions between genders.

Table 7
Results of T Test

		t	df	Sig.(2-tailed)
Tangibles	Equal variances assumed	0,706	606	0,480
Reliability	Equal variances assumed	0,038	606	0,969
Responsiveness	Equal variances assumed	0,201	606	0,841
Assurance	Equal variances assumed	0,063	606	0,950
Empathy	Equal variances assumed	0,204	606	0,838

The one-way ANOVA test was performed to examine the relationship between the dimensions of service quality and income, and the results of the analysis are shown in Table 8. According to the results, there is no significant difference in all 5 dimensions between income groups.

Table 8
Results of Oneway Anova Test

	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>P</i>
<i>D1 Between Groups</i>	4,010	4	1,002	0,698	0,594
<i>Within Groups</i>	866,115	603	1,436		
<i>Total</i>	870,125	607			
<i>D2 Between Groups</i>	13,860	4	3,420	1,969	0,980
<i>Within Groups</i>	1047,135	603	1,737		
<i>Total</i>	1060,815	607			
<i>D3 Between Groups</i>	11,720	4	2,930	1,892	0,110
<i>Within Groups</i>	933,616	603	1,548		
<i>Total</i>	945,336	607			
<i>D4 Between Groups</i>	4,828	4	1,207	0,864	0,485
<i>Within Groups</i>	842,657	603	1,397		
<i>Total</i>	847,485	607			
<i>D5 Between Groups</i>	3,80	4	0,955	0,558	0,693
<i>Within Groups</i>	1032,374	603	1,712		
<i>Total</i>	1036,193	607			

Conclusion

Air transport is one of the most competitive sectors today and for this reason, airline operators should take measures to protect and improve their current market. The brand image is crucial for an airline to enhance customer loyalty, and the quality of service has great significance for the brand image. Kazanoglu, (2011) concluded that service quality is significant in terms of creating customer loyalty.

According to Vieira et al. (2019), the number of tourist increased dramatically as different alternatives emerged for visitors with the entrance of low-cost airlines to the market. In Turkey, low-cost airlines offer generally similar services (full economy class, no in-flight entertainment systems, short distances between seats and etc.). Therefore, the differences between the services offered may lead to an increased perception of service quality.

In general, it can be said that Turkish low-cost airlines are successful in terms of service quality when it is considered that the 7 points Likert scale was used in the study. Considering the service limits of low-cost airlines, it can be said that high customer satisfaction arises from low expectations. According to Parasuraman et al., (1985) quality service consists of the positive difference between perception and expectation.

One of the findings is that there is a middle and high-level correlation between all service quality dimensions. The results of the study have a similarity with the results

of some other researches on the quality of service (Brady & Cronin., 2001; Cronin & Taylor, 1994).

Another finding of this study is showing that the demographic characteristics of the participants such as gender, income, and etc. do not make a significant difference in perception of service quality dimensions. These findings are similar to the results that Aydin and Yildirim, (2012) reached. Nevertheless, there are some other studies showing that people who prefer low-cost airlines have different demographic characteristics in comparison with the ones who prefer other business models (Vieira et al., 2019).

The data of the study were obtained from social platforms. Therefore, the demographic characteristics of the participants such as age, gender, income, and marital status were not balanced. Moreover, although there have been four airlines operating in Turkey, the scope of the study is limited to two airlines which are low-cost ones.

Both airlines within the scope of the study, mainly manage their operations at Istanbul Sabiha Gokcen Airport. Since factors such as the location, flight time, etc. may affect customers' airline preferences, airline companies must show flexibility on services in order to satisfy their customers who have different demographic characteristics.. At that point, it may be rewarding for airline companies to conduct studies to gain insight into the expectations of different demographic groups.

In addition, only Turkish passengers were involved in the study. Measuring the perceived service quality of international passengers may be important for understanding the international competitive power of airlines in Turkey.

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References

- Alpar, R. (2017). *Çok değişkenli istatistiksel yöntemler*. [Multivariate Statistical Methods] (5. ed.). Ankara: Detay Yayınları.
- Altan, S., & Atan, M. (2004). Bankacılık sektöründe toplam hizmet kalitesinin SERVQUAL analizi ile ölçümü [Measurement of Total Service Quality in The Banking Sector with SERVQUAL Analysis]. *Gazi Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 1, 17–32.
- Alrawadieh, Z., Cetin, G., Dincer, M. Z., & Istanbulu Dincer, F. (2019). The impact of emotional dissonance on quality of work life and life satisfaction of tour guides. *The Service Industries Journal*, 1–15.
- Altunisik, R., & Karatas, A. (2015). Turizm işletmeleri ve pazarlama stratejileri [Tourism Administrations and Marketing Strategies] B. Zengin, & S. Demirkol in., *Turizm İşletmeleri* (3. b., s. 543–563). İstanbul: Değişim Yayınları.
- Ardic, K., & Sadaklioğlu, H. (2009). Şehirleraras Yolcu taşımacılığında hizmet kalitesinin ölçümü: Tokat örneği [Measurement of Service Quality in Public Transportation: Tokat Case]. *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 23(3), 167–187.

- Aydin, K., & Yildirim, S. (2012). The Measurement of Service Quality with Servqual for Different Domestic Airline Firms in Turkey. *Serbian Journal of Management*, 7 (2), 219-230.
- Bulbul, H., & Demire, Ö. (2008). Hizmet Kalitesi Ölçüm Modelleri Servqual ve Servperf'in Karşılaştırılmalı Analizi [Quality of Service Measurement Models: Comparative Analysis of Servqual And Servperf]. *Selçuk Üniversitesi Sosyal Bilimleri Enstitüsü Dergisi* (20), 181-198.
- Baker, D. M. (2013). Service quality and customer satisfaction in the airline industry: In comparison between legacy airlines and low-cost airlines. *American Journal of Tourism Research*, 2(1), 67-77.
- Belobaba, P., Odoni, A., & Barnhart, C. (2016). *The Global Airline Industry* (2. b.). Chichester: John Wiley & Sons, Ltd.
- Bhattacharjee, C. (2006). *Services marketing: Concepts, planning and implementation*. New Delhi: Excel Books.
- Bjelcic, B. (2007). The bussiness model of low cost airlines-past, present, future. S. Gross, & A. Schröder içinde, *Handbook of Low Cost Airlines* (s. 16). Göttingen: Erich Schmidt Verlag GmbH.
- Brady, M. K., & Cronin, J. J. (2001). Some new thoughts on conceptualizing perceived service Quality: a hierarchical approach. *Journal of Marketing* (65), 34-49.
- Brown, S. W., Gummesson, E., Edvardsson, B., & Gustavsson, B. (1991). *service quality: multidisciplinary and multinational perspectives*. Lexington: Lenxington Books.
- Caber, M. (2018). Customer-Based Market Positions of Domestic Airlines in Turkey. *Journal of Tourismology*, 4(1), 9-19.
- Cento, A. (2008). *The Airline Industry*. Heidelberg: Springer.
- Cetin, G., Akova, O., Gursoy, D., & Kaya, F. (2016). Impact of Direct Flights on Tourist Volume: Case of Turkish Airlines. *Journal of Tourismology*, 2(2), 36-50.
- Chen, Y.-H., Tseng, M.-L., & Lin, R.-J. (2011). Evaluating The Customer Perceptions on In-Flight Service Quality. *African Journal of Bussiness Management*, 5(7), 28-54.
- Chiou, Y. C., & Chen, Y. H. (2010). Factors influencing the intentions of passengers regarding full service and low cost carriers: A note. *Journal of Air Transport Management*, 16(4), 79-87.
- Cronin, J. J., & Taylor, S. A. (1994). Servperf versus servqual: Reconciling performance-based and perceptions-minus-exceptions measurement of service quality. *Journal of Marketing*, 58(1), 125-131.
- De Esteban, J., Cetin, G., & Antonovica, A. (2015). Theory of knowledge of tourism: A sociological and epistemological reflection. *Journal of Tourismology*, 1(1), 2-15.
- Demirçiftçi, T., Cetin, G., & Bilgihan, A. (2017). Coping with RM challenges in hospitality education. *Journal of Revenue and Pricing Management*, 16(5), 499-512.
- DGCA. (2016, 11 30). Shgm WebCite: <http://web.shgm.gov.tr/tr/havacilik-personeli/2138-kabin-memuru>
- Doganis, R. (2006). *The Airline Bussiness* (2. b.). New York: Mpg Books.
- ELFAA: European Low Fares Airline Association. (2016, 12 13). ELFAA WebCite: <http://www.elfaa.com/documents/ELFAABenefitsofLFAs2004.pdf>
- Forgas, S., Moliner, M. A., Sanchez, J., & Palau, R. (2010). Antecedents of airline passenger loyalty: Low-cost versus traditional airlines. *Journal of Air Transport Managment*, 16(4), 229-233.

- Francis, G., Fidato, A., & Humphreys, I. (2003). Airport–airline interaction: The impact of low-cost carriers on two European airports. *Journal of Air Transport Management*, 9(4), 267–273.
- Garga, E., & Bambale, A. J. (2016). The impact of service quality on customer patronage; mediating effects of switching cost and customer satisfaction. *International Journal of Global Business*, 9(1), 39–58.
- Gillen, D., & Morrison, W. (2003). Bundling, integration and the delivered price of air travel: are low cost carriers full service competitors? *Journal of Air Transport Management*, 9(1), 15–23.
- Gumus, S., & Tutuncu, M. (2012). Hizmet, hizmet pazarlaması, türkiye’de bireysel emeklilik sistemi ve pazarlama stratejisi. [Service, Service Marketing, Private Pension System And Marketing Strategies In Turkey] İstanbul: Hiperlink.
- Güven, M., & Çelik, N. (2012). Analitik hiyerarşi süreci yöntemi ile otel işletmelerinde hizmet kalitesini değerlendirme: Bartın örneği [Evaluation of Service Quality in Hotel Enterprises with Analytic Hierarchy Process Method: The Case Of Bartın]. *Uluslararası Yönetim İktisat ve İşletme Dergisi*, 3(6), 1-20.
- Hatipoğlu, S., & Isik, E. S. (2015). Havayolu ulaşımında hizmet kalitesinin ölçülmesi: iç hatlarda bir uygulama. *Kahramanmaraş Sütçü İmam Üniversitesi Sosyal Bilimler Dergisi*, 12(2), 293–312.
- ICAO, (2016, 12 04). ICAO WebCite: http://www.icao.int/Meetings/STA10/Documents/Sta10_Wp007_en.pdf
- IATA, (2017, 11 26). IATA Annual Review 2016: <http://www.iata.org/about/Documents/iata-annual-review-2016.pdf>
- İbik, Ö. A. (2006). Rekabet Ortamında Hizmet Kalitesinin Önemi ve Bir Havayolu İşletmesinde Hizmet Kalitesinin Gerçekleştirilmesine Yönelik Bir Uygulama Basılmamış Yüksek Lisans Tezi [The Importance Of Service Quality In Competitive Environment and An Application Towards The Realization of Service Quality In An Airlines Corporate]. Kocaeli Üniversitesi Fen Bilimleri Enstitüsü.
- Jain, S. K., & Gupta, G. (2004). Measuring service quality: servqual vs. servperf scales. *Vikalpa*, 29(2), 25–38.
- Kazancıoğlu, İ. (2011). Havayolu firmalarında müşteri sadakatinin yaratılmasında kurum imajının ve algılanan hizmet kalitesinin etkisi [The Effects of Firm Image and Perceived Service Quality for Customer Loyalty in Airlines] *Akdeniz İ.İ.B.F. Dergisi*, 21, 130–158.
- Kılıç, B., & Eleren, A. (2009). Turizm sektöründe hizmet kalitesi ölçümü üzerine bir literatür araştırması [A Literature Review on Service Quality Measurement in Tourism]. *Alanya İşletme Fakültesi Dergisi*, 1(1), 91–118.
- Kim, Y. K., & Lee, H. R. (2011). Customer satisfaction using low cost carriers. *Tourism Management*, 32(2), 235–243.
- Kocoglu, C. M., & Aksoy, R. (2012). Hizmet kalitesinin servperf yöntemi ile ölçülmesi: otobüs işletmeleri üzerinde bir uygulama [The Measurement of Service Quality by Means of Servperf Method: An Application on The Bus Companies]. *Akademik Bakış Dergisi* (29), 1–25.
- Ladhari, R., Pons, F., Bressolles, G., & Zins, M. (2011). Culture and personal values: How they influence perceived service quality. *Journal of Business Research*, 64(9), 951–957.
- Leech, N. L., Barrett, K. C., & Morgan, G. A. (2005). *SPSS for Intermediate Statistics: Use and Interpretation* (2. b.). New Jersey: Lawrence Erlbaum Associates, Inc.

- Murray, K. B., & Schlacter, J. L. (1990). The impact of services versus goods on consumers' assesment of perceived risk and variability. *Journal of the Academy of Marketing Science*, 18(1), 51–65.
- Okumus, A., & Asil, H. (2007). Havayolu taşımacılığında yerli ve yabancı yolcuların memnuniyet düzeylerine göre beklentilerinin incelenmesi [Investigation of Expectations of Domestic and Foreign Passengers According to Satisfaction Levels in Airline Transportation]. *Kocaeli Üniversitesi Sosyal BilimlerEnstitüsü Dergisi* , 1(13), 152–175.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. B. (1985). A conceptual model of service quality and its implications for future research. *The Journal of Marketing*, 49(4), 41–50.
- Parasuraman, A., Zeithmal, V. A., & Berry, L. L. (1988). Servqual: A multi item scale for measuring consumer perception of service quality. *Journal of Retailing*, 64(11), 12–37.
- Pekkaya, M., & Akilli, F. (2013). Hava yolu hizmet kalitesinin servperf-servqual ölçeği ile değerlendirmesi ve istatistiksel analizi. [Statistical Analysis And Evaluation Of Airline Service Quality By Servperf-Servqual Scale]. *AİBÜ-İİBF Ekonomik ve Sosyal Araştırmalar Dergisi*, 1(9), 75–96.
- Rhoden, S., Ralston, R., & Ineson, E. M. (2008). Cabin crew training to control disruptive airline passenger behavior: a cause of tourism concern? *Tourism Management*, 29, 538–547.
- Rust, R. T., & Oliver, R. L. (1994). Service Quality: Insights and Managerial Implications from the Frontier. R. T. Rust, & R. L. Oliver içinde, *Service Quality: New Directions in Theory and Practice* (s. 1-20). Thousand Oaks: Sage Publications, Inc.
- Sarılgan, A. E. (2011). Türkiye’de bölgesel havayolu taşımacılığının geliştirilmesi için gerekenler [The Requirements of Developing the Regional Airline Transportation in Turkey]. *Anadolu Üniversitesi Sosyal Bilimler Dergisi*, 11(1), 69–88.
- Suer, İ. (2014). Pazarlama ilkeleri. [The Principals of Marketing]. Ankara: Nobel Akademik Yayıncılık.
- Tasci, D., & Yalcinkaya, A. (2015). Havayolu sektöründe yenibir iş modeli: bağlı düşük maliyetli havayolu (airline within airline) modeli ve anadolujet örneği bağlamında bir karşılaştırma [A New Business Model in the Airline Sector: A Comparison in the Context of the Airline Within Airline Model and the Case of Anadolujet]. *Eskişehir Osmangazi İİBF Fakültesi Dergisi*, 10(2), 177–201.
- TUIK. (2019, 05 30). Tuik web cite: <http://tuik.gov.tr/UstMenu.do?metod=temelist>
- Verma, H. V. (2012). *Services Marketing: Text and Cases* (2. b.). Delhi: Dorling Kindersley Pvt. Ltd.
- Vieira, J., Câmara, G., Silva, F., & Santos, C. (2019). Airline choice and tourism growth in the Azores. *Journal of Air Transport Management*, (77), 1–6.
- Yıldız, O., & Erdil, T. S. (2013). Türkiye havayolu taşımacılığı sektöründe hizmet kalitesinin karşılaştırılmalı ölçülmesi [Comparative Measuring of Service Quality in The Passenger Carriage of Turkish Airlines Industry]. *Öneri Dergisi*, 10(39), 89–100.
- Zengin, E., & Erdal, A. (2000). Hizmet sektöründe toplam kalite yönetimi [The Total Quality Management in Service Sector]. *Journal of Qafqaz University* , 3(1), 43–56.

