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A Study on the Role of Food and Beverage Service Quality in the Preference of Air Transport Companies

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Abstract

The main purpose of this project is to find out if Turkish Airlines passengers' preferences are related with the quality of food that is being served during flight. With this purpose, 432 passengers who are travelling with Turkish Airlines conducted a poll at Kapadokya and Kayseri Airports. As a general result, the quality of food and beverage services are effective on passengers while deciding which airway transportation company they will prefer. The research shows that as distance increases, passengers care more about food, hygiene, drinks and menu, quality of service equipments and cabin attendants' service quality. Another results shows that passengers who mostly travels by plane cares more about food service and thinks that ticket prices should supply good food and beverage services. As research shows, non of the passengers thinks that tickets are cheap but high-income passengers think that prices are normal and also supplies food and beverega services.

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INTRODUCTION

With the World becoming common market, increment at global business trips and touristic trips, airway has become the most used way of transportation (Crawford and Melewar, 2003). Based on requests of travelling by airway, amounts of planes, airports, and passengers are increasing. This sector is globally developing especially on east parts of World which makes Turkey important as a result of its geographical location (Activity Report [SHGM], 2015). Also presences of hub points are a great advantage for Turkey as domestic and foreign passengers use them (Baker, 2013). Turkish Airlines (Turkish Airlines will be shortened as THY on the next part of the study) is one of the most important airway companies and it is competing eith other airway companies not only domestically but also globally. With the increase of passengers, it is important for airway companies to compete with different strategies to be the chosen one. For this reason, providing good quality food and beverage is important to be able to bring new passengers, keep old ones and grow to be a bigger company. Passengers will prefer their airway company according to their experiences about food services and these experiences will probably lead them to choose the same company in the future. This research is important to find out which factors about food and beverage are effective on passengers while choosing airway company. Also it is important as it gives advices to catering companies which are working with airway transportations.

LITERATURE REVIEW

Airline Management

Airway transportation became one of the most preferred transportation ways in the last 50 years with the development of aircraft technology, speed, comfort, increased number of educated people and keeping security levels high (Gürses, 2006). There are many national and international organizations/foundations that regulate the airline system to be able to safely pass the journey. The most important organizations which guides airline transportation are; International Civil Aviation Organization (ICAO), Europan Civil Aviation Conference (ECAC), Europan Organisation For The Safety of Air Navigation (EUROCONTROL) (The Union of Chambers and Commodity Exhanges of Turkey [TOBB], 2014; Erdem, 2010). The main purpose of these organizations is ensuring regular and safe growth of international aviation, preventing discrimination between states, ensuring equal opportunuties to member countries, ensuring sustainable air transport, managing air traffic, determining and implementing air rules (mfa.gov.tr, 2017; ecac-ecac.org. 2017; İnternational Civil Aviation Organization [ICAO], 2016). International Air Transport Association, IATA is the only organization that only transportation and ground service companies can be members of. IATA has really imporants aims such as providing price unity between countries, flying to destinations with one ticket, to provide a scheduled flight guarantee, to prevent possible unfair competition against organizations and passengers (Arıkan and Ahipaşaoğlu, 2005). The General Directorate of Civil Aviation (SGHM) and the State Airports Admininstration (DHM) are the organizations that direct aviation in Turkey. These organizations achive goals of national and international aviation. These goals are running aviation systematically, safely, proper to international rules and planning airport operating (Cihangir, 2015; Karaağaoğlu, 2015; Altındağ: 2013; Çelebi, 2008).

Aviation businesses can be categorized as airline Cargo transportation organizations, technical service providers, training service providers, ground service providers and airline passenger transport companies. Ground service companies are seperated to 3 groups as A, B and C. Catering companies Works dependently to group C ground services. Turkish DO&CO A.G. is placed in this catering group (Activity Report [SHGM], 2011).

Airline transportatin companies which carries cargo and passenger are divided into public sector airline businesses and private sector airline businesses in Turkey. THY is the only airline company which serves public service. By law 2189 of 20 May 1993, THY was founded in the name of 'Airlines State Administration' with only 5 aircraft and 28 seat capacity. Then it had been privatized and joined to 'Prime Ministry Public Administration'. Today THY contunies to give service as the biggest representative of its sector while increasing the number of aircraft and seat capacity each year (Çevik, 1996; Ulufer, 2013; Çelikkol, Uçkun, Tekin, and Çelikkol, 2012; Aktepe and Pars Şahbaz, 2010).

THY who carried 62.8 million passengers with 334 aircrafts and 66.174 seat capacity in 2016, attaches importance to quality of food and beverage service to be able to satisfy passenegrs (Activity Report [THY], 2016). THY provides two catering services: Business class and Economy class. Catering delivery service is suitable for turkish hospitality and is planned according to domestic flights, oceanic and international flights and these flights' boarding and flight times. While hot sandwiches and cakes are served in less than 3-hour flights, different hot and cold meals are served in business class and economy class in more than 3-hour flights. In addition, except for domestic flights, meals that special requested by passengers can be ordered according to certain categories within the rules set by IATA 24 hours before flights (turkishairlines.com., 2018). DO&CO prepares meals for THY. Turkish DO&CO Restaurant&Catering A.G. was founded in Austria in 1981. DO&CO started as a restaurant and deli shop, grew over time and started to serve in three different business divisions which are defined below (DO&CO Restaurants & Catering Aktiengesellschaft, 2010; DO&CO Restaurant & Catering A.G., 2010-2011).

1) International Organization Catering Services
2) Restaurants, Salons & Hotel Establishments
3) Airline Catering Services

Food and Beverage Service Quality in Airway Companies

While food and beverage service companies are being held in different classifications, airline catering companies produce food and beverage to be served during flights (Aktaş, 2001). 'Catering' means 'serving and providing food and beverages' as a Word (Sezgin and Özkaya, 2014). Airline catering companies which are founded to satisfy nutrition needs of customers, are very complicated companies. These companies work from taking orders to preparing and delivering (Zahari, Salleh, Kamaruddin and Katut, 2011; Rutkowska and Czarniecka-Skubina, 2015). If we consider an international airline catering company as an example, hundreds of landings and departures, which are including hundrends of staff working to serve food for thousands of passengers, are being made. All of these naturally causes complexity. (Jones, 2004). King (2001) described airline catering service as a high yields line of business. Airline catering services produce food and beverage for more than one million passengers and to be able to do this, they organize and make their plans well in very large kitchens.

Quality of service can be expressed as attidues and behaviors that can ocur after use of product and service and performance evaluation in a long period (Hoffman and Bateson, 1997). When assessing performance, empathy, security, comfort and courtesy are evaluated (Tsaur, Chang and Yen, 2002). Customers / guests who consume goods and services make comparisons with other companies and, if they get satisfied, they buy it again. Therefore, improving quality of service is important for companies as it creates a good image perception, increasing the loyality, repurchasing and recommendation (Kozak, Özel and Karagöz Yüncü, 2011; Küçükergin, 2012). Menu planning, procurement, food safety (hygiene and sanitation), application of cooking techniques, loading and servicing are important factors affecting the quality of service in airlines.

Tatlılıoğlu (2010) pointed out that two important components of quality of service are the materials used by airline companies, such as disposable plastic forks, spoons, plates and washable and reusable porcelain-glass materials, trolleys and heaters during service.

Lee and Ko (2016a) determined that the quality of food and beverage service during flight is a decisive factor that affects the judgements of passengers in their research to find out the influence of in-flight food service quality on passengers' loyalty. For airway companies, menu selection, food management and good service are among the most important factors while choosing airlines to be used by passengers.

Romli, Rahman, and Isaac (2016) made a research about passengers' opinion about serving food and refusing collection and they point out that passengers tend to choose the airlines that provide the best meals during their travels more than one time.

Tayfun and Kara (2007), emphasized that to be able to determine the satisfaction level of customers, we should consider factors of food quality, staff behavior, service on time, physical characteristics of the place, quality and reasonable prices.

An and Noh (2009) found out that business class and economy class passengers pay attention to issues such as presentation, reliability and empathy in the service of alcoholic and non-alcoholic beverages. Some of the criterias being used to measure quality of service are skill, courtesy, knowledge of service and willingness to resolve problems (Biçici and Hançer, 2008; Sarıışık and Dikkaya, 2015; Öztürk and Seyhan, 2005). Atak (2006), stated that the staff who is serving different people with different food cultures should be educated, competent and knowledgeable.

One of the criteria used for the measurement of service quality is that if the service is done at the right time and in the correct way (Biçici and Hançer, 2008). Brady, Robertson and Cronin (2001), emphasized that the quality of service is directly and positively effective to create service value and customer satisfaction. Yavari, Khaniki, Mohseni and Kamali (2015), made a research in one of airline catering company in Iran to identify technical barriers and strategies at its hazard analysis and critical control points. As a result of this research, following regulations on food safety and hygiene regulations at international standards from production to consumption increases the quality. This is also a factor which is an element of demand in other food industries. Lee and Ko (2016b) found out that airline staff's hygiene management is lower than schools and hospitals' in their study of airline personel's performance in airline hygiene management. In this respect, it has been concluded that the passengers' perception of area hygiene and personal hygiene is low and according to this result, hygiene education should be more focused on.

Derin and Demirel (2010) stated that the positive image of the institutions will decrease the demand flexibility of the products and services but increase the profit with higher production prices.

Hypotheses

In the survey, it has been tried to determine the factors related to food and beverage in airline preferences of THY travelers. In this direction, hypotheses about the problems of researching the information in the literature have been created. These hypotheses are below.

Hypothesis 1: Between participants from different sexes, there is a significant difference at perceptions of hygiene and sanitation.

Hypothesis 2: There is a significant difference between the sexes of the participants and the components of the complementary services.

Hypothesis 3: Perceptions of food and beverage differ between passengers who travels long distance and short distance.

Hypothesis 4: There is a significant difference between participants' preferences for food and beverage and the frequency of using airline.

Hypothesis 5: In the airline preferences of participants, there is a significant and negative relationship between income status and ticket prices perceptions.

Hypothesis 6: In the airline preferences of the participants, there is a significant and positive relationship between nutritional elements and perception of food and drink preferences.

Hypothesis 7: In the airline preferences of the participants, there is a significant and positive relationship between menu-related elements and perception of nutrition-related elements.

Hypothesis 8: In the airline preferences of the participants, there is a significant and positive relationship between educational status and perceptions of occupational aspects.

METHODOLOGY

Purpose of the Research

The numbers of airline companies increases as aviation develops. Airway companies should pay more attention to the quality of food and beverage to be able to earn passengers' loyalty and attract more passengers. For this reason, airline companies should determine requests and needs of passengers and improve productin and service in this direction. According to this, this researchs purpose is to determine the effects of catering service quality on passengers. In this context, demographical characteristics of passengers, distribution percentages and frequencies of research area, dimensions related to food and beverage were determined and relations between these dimensions were evaluated and related results were tried to be determined.

Universe and Sample

As the universe contains generalizable elements of results of research the universe must be known to determine which data will be obtained and what needs to be covered. If the unit number of main mass of universe is large, it should be

possible to reach the data by selecting samples from the main mass. The size of sample which represents the unlimited universe is determined as 384 in table of sample size according to the universe (Yazıcıoğlu and Erdoğan, 2011; Arlı and Nazik, 2001; Ural and Kılıç, 2013). According to this, passengers who are traveling with THY is represented as the universe of the recearch. Passengers who are traveling at Kayseri and Kapadokya airports are represented as the samples. According to the estimates of the State Airports Authority at the end of April, 610.258 passengers traveled in Kayseri Airport and 87.619 passengers traveled in Kapadokya Airport, which makes totally 697.877 passengers (State Airports Authority [DHMİ], 2017). Firstly, permisson was requested from Cappadocia and Kayseri State Airports in order to collect data. After positive response to the permission request, the application process was started from waiting rooms of the airport.

Data Collection Tool and Techniques

Surveys were used as data collection tool method in the direction of the purpose determined in research. There are two parts of prepared surveys. In the first part, there are questions to determine the socio-demographic characteristics of passengers who joined survey and close-ended questions that will guide the research. This part contains 13 questions in total. In the second part, there are 39 expressions consisting of 8 pre-determined dimensions in order to determine the reasons of preference of food and drink for the passengers. Since the appropriate scale for the research was not found, these expressions in the scale were developed by examining previous studies and getting opinions of experts. In order to test the reliability of the scale, pilot scheme executed by 104 passengers and at the end of process, 1st Cronbach' Alpha score was found 0,89. Lorcu (2015), pointed out that Cronbach's Alpha value is highly reliable netween the range of 0, 80 $\leq \alpha \leq$ 1, 00. According to this, the result showed that the scale is highly reliable and process has been continued without any changes. In the evaluation of the expressions, the importance level response category was used to scale the type of response, which is a likert type scaling model (Bayat, 2004). For this purpose, 1 for "very insignificant", 2 for "insignificant", 3 for "no interest / no idea", 4 for "important" and 5 for "very important" used as an answer.

Analysis of Data

The data obtained from the questionnaire were analyzed with the SPSS 21.0 (Statistical Program for Social Science) program. The skewness and kurtosis coefficients are used to determine the distribution of the obtained data. The coefficient of skewness was found between +1 and -1, and the coefficient of kurtosis was found between +2 and -2. According to these results, normal-distribution-parametric tests are applied (Hamdi İslamoğlu and Alnıaçık, 2014). The "T-test" was used to determine whether there was a significant difference between the responses of the passengers who responded to the questionnaire. For the analysis of 3 or more variables, "One Way ANOVA" was used. For the variables at the second section, "Correlation" analysis was used.

FINDINGS

Discoveries Related To Demographic Characteristics of Attender Passengers

Findings related to the socio-demographic characteristics of passengers who attended survey are given in Table 1. These findings are gennder, age, educatonal status, marital status and monthly incomes.

Table 1: Distribution of the Passengers Participating in the Survey according to Socio-Demographic Characteristics

Socio-Demographic Factors	Number (N)	Percentage (%)
Gender		
Female	168	38,9
Male	264	61,1
Total	432	100
Age		
Under 18 years old	13	3,0
Between the ages of 18-25	104	24,1
Between the ages of 26-44	231	53,5
45 years and over	84	19,4
Total	432	100
Educational Status		
Primary education	17	3,9
High school	76	17,6
Associate degree	90	20,8
Licence	190	44,0
Postgraduate	59	13,7
Total	432	100
Marital Status		
Bachelor	189	43,8
Married	243	56,3
Total	432	100
Monthly Income		
1.400 TL and below	47	10,9
Between 1.401TL and 2.100 TL	57	13,2
Between 2.101TL and 2800 TL	76	17,6
Between 2.801TL and 3.500 TL	55	12,7
3.501 TL and over	197	45,6
Total	432	100

As shown in Table 1, 38.9% of passengers participating in the survey are female and 61.1% are male. When we consider the age range of participating passengers, 3,0% are under 18 years old, 24,1% are between 18-25 years old, 53,5% are between 26-44 years old and 19,4% are over 45 years old. When the education levels are examined, 3.9% are from primary education, 17.6% are from high school, 20.8% are from associate degree, 44.0% are from licence and 13.7% are from postgraduatin programs. 43.8% of the passengers are single while 56.3% are married. When the monthly income of passengers participating in the survey is considered, it is seen that 10.9% of the participants' incomes are below 1.400 TL, 13.2% are between 1.400-2.100 TL, 17.6% are between 2.101-2.800 TL, 12.7% are between 2.801-3.500 TL and 44.6% are 3.501TL and above.

Opinions Regarding Research Field

In this part of survey, the participating passengers' frequency of airline usage in the last one year, their travels with THY frequency in the last one year, if they know that DO&CO is preparing food for THY, THY ticket prices, choosing THY in first preference, preference of food during flight and flight distances are generally the subjects of questions and findings. These are given in Table 2.

Table 2: Research Areas

Variable	Number(N)	Percentage (%)
Awareness of Turkish DO&CO		
Yes	180	41,7
No	252	58,03
Total	432	100
Airline usage frequency in the last one year		
1	48	11,1
2	67	15,5
3	78	18,1
4	62	14,4
5	54	12,5
6 and over	123	28,5
Total	432	100
THY usage frequency in the last one year		
1	111	25,7
2	82	19,0
3	64	14,8
4	61	14,1
5	42	9,7
6 and over	72	16,7
Total	432	100
THY's ticket prices		
Cheap	0	0
Normal	200	46,3
Expensive	232	53,7
Total	432	100
THY as a first choice		
Yes	289	66,9
No	143	33,1
Total	432	100
Prefering of eating during Flight		
Yes	347	80,3
No	85	19,7
Total	432	100
Flight distance		
Short distance less than 3 hours	353	81,7
Long distance more than 3 hours	79	18,3
Total	432	100

According to Table 2, more than half of passengers (%58,03) are unaware that Turkish DO&CO is producing food and beverages for THY. 11,1% of the passengers participating in the survey traveled by plane 1 time in the last year, while 15,5% of them flied 2 times, 18,1% of them flied 3 times, 14,4% of them flied 4 times, 12,5% of them flied 5 times and 28.5% of them flied more than 6 times.

%25,7 of the passengers traveled with THY 1 time in the last year, while %19 traveled 2 times, %14,8 traveled 3 times, %14,1 traveled 4 times, %9,7 traveled 5 times and %16,7 of them traveled 6 times and more. None of the passengers who joined survey thought that THY tickets cheap but %46,3 of them said tickets are normal and %53,7 said expensive. %66,9 of the travelers prefer THY as their first preference while %33,1 don't prefer it. It is seen that %80,3 of the passengers prefer to eat during flight and %19,7 don't prefer to eat. According to the table, it is seen that %81,7 of the passengers participating in the survey flew short distance while %18,3 flew long distance.

Reliability Analysis

After the reliability analysis of 39 terms which were used to determine passengers' perceptions of the quality of food and drink service, the coefficient of "2. Cronbach's Alpha'' was found as 94. This result shows that the scale is highly reliable. Table 3 contains the arithmetic mean and standard deviations of the items in the scale.

Table 3: Distribution of Arithmetic Mean and Standard Deviation Reliability Results for Passengers' Food Beverage Preferences

Size	**Expression**	$\bar{X}$	**s.s.**
Nutrition	Satisfaction of the products on the menu.	3,73	1,10
	Foods being rich in nutritional value	3,69	1,09
	The fact that the raw materials used in food production are fresh and organic.	3,86	1,07
	Standardization of tastes of food and drinks.	3,78	,96
	Appropriateness of foods for the target groups eating and drinking habit.	3,92	,97
Service	Serving at the right time.	3,81	1,08
	Serving on time.	3,83	1,07
	The service staffs being debonair and friendly.	3,88	1,08
	Service personel's solution oriented approach to problems	3,92	1,07
	Service personel's promotion of consumption of food and beverage related to their knowledge and skill level	3,85	1,07
	Serving food and drinks according to international standards.	3,82	,99
	The motivation of smells of foods and drinks to consume food and beverages.	3,77	1,03
	Having an appetizing view of the food's plate decor.	3,79	1,05
Hygiene and Sanitation	The service tools' being well-groomed.	3,97	1,04
	The portable dining table's being well-groomed.	4,00	1,07
	The service staff's being clean and meticulous.	4,00	1,05
	The image of the relevant company with the assumption that hygiene and sanitation rules are complied in production	4,00	1,04
Beverage	Serving drinks at the appropriate temperature.	3,93	1,06
	The variety of alcoholic beverages' being sufficient.	3,33	1,33
	The variety of soft drinks' being sufficient.	3,88	1,08
	Drink service in appropriate glasses.	3,87	1,08
Menu	The variety of diet food on the menu.	3,41	1,16
	The variety of vegetarian food on the menü.	3,20	1,19
	The variety of special and regional dishes on the menü.	3,39	1,11
	The variety of food which is suitable for children on the menu.	3,92	1,07
	Preparing / presenting the foods and drinks with attention to religious precision.	3,93	1,07
	Having a menu which is easy to read and understandable.	3,92	,93
	Detailed specification of the food and contents on the menu	3,75	1,07
	Better implementation of menu selection compared to other airlines.	3,36	1,11
Complementary Services	Equipments being used in accordance with service standards.	4,06	,81
	Positioning of serving dishes (forks, knives, plates, etc.) according to international standards.	3,80	,99
	Using innovative and conceptual designs in dining sets.	3,69	1,10
Employee	Presentation of food and beverage products by professional staff.	3,98	1,03
	The quality of service's making passengers feel special.	3,87	1,06
	Preparation of foods with traditional production.	3,80	1,03
	Reflection of ethnic/local ambience during the presentation.	3,46	1,20
Prices	Sufficient amount of services and products according to prices.	3,88	,95
	Including food and beverage service in ticket prices.	3,89	,97
	Keeping corporate image foreground instead of sold ticket prices.	3,99	1,00
General Average: 3,79 / Standard deviation: 0,59			

Based on the arithmetic average according to Table 9, the highest three averages are "Clean-looking of dining table which foods are being served on, cleanliness and niceness of service personel in the direction of the hypothesis that hygiene and sanitation rules are followed by them in production, being well proportioned with the image of relevant company''. On the other hand, the lowest three averages are "the presence of variety of vegetarian food on the menu, the variety of alcoholic beverages and having better menu selections than other airlines".

T-Test Analysis

This method was used to determine if there is a statistical difference between two groups or not (Coşkun, Altunışık, Bayraktaroğlu and Yıldırım, 2015). According to this, the T-test is conducted to determine whether there is a significant difference between gender variables, nutrition, hygiene and sanitation and complementary services which is given in Table 4.

Table 4: Independent Sample T-Test Results Regarding Gender Variety, Nutrition Dimension, Hygiene and Sanitation Dimension and Supplementary Dimension

		Levene Test		**T-Test**		
		F	**P**	**T**	**S.d.**	**P(2-pointed)**
Nutrition Dimension	Equal Variances	,01	,90	2,53	430	,01
	Unequal Variances			2,52	350,37	,01
	Gender			**N**	**X**	**S.S**
	Female			168	3,91	,76
	Male			264	3,72	,74
Hygiene and Sanitation Dimension	Equal Variances	28,60	,00	3,82	430	,00
	Unequal Variances			4,20	429,99	,00
	Gender			**N**	**X**	**S.S**
	Female			168	4,21	,68
	Male			264	3,85	1,08
Supplementary Dimension	Equal Variances	5,43	,02	1,78	430	,07
	Unequal Variances			1,80	380,59	,07
	Gender			**N**	**X**	**S.S**
	Female			168	3,93	,79
	Male			264	3,73	,88

According to these findings, a significant difference ($p<0,05$) was found between gender, nutrition and perception of hygiene and sanitation sub-dimensions. It is seen that the perception of eating dimension and gender variable are higher in women than in men. It is seen that women care more whether foods are satisfying, nutritional valuable, suitable for eating and drinking habits, made from fresh and organic ingredients. It is also seen that the perception of hygiene and sanitation dimension of women is higher than that of men. Similar to these findings, Kim, Baek and Yang (2009) made a research on passengers who prefers airline catering companies and they found out that male passengers care least about hygiene of food and beverage service while female passengers care least about nutritional values of foods. According to these findings, hypothesis 1 was accepted. According to the table, there was no significant difference between participants' genders and complementary services dimension perceptions ($p> 0.05$). Unlike this study, however, Bekar and Sürücü (2015) found a significant difference between passengers' gender and

some complementary services in consumers' preferences for catering. According to this finding, hypothesis 2 was rejected. Table 5 shows the T-test to determine whether there is a significant difference between flight distance variables and sub-dimensions of preference for food and drink.

Table 5: Independent T-Test Results for Flight Distance, Food Beverage Preferences and Sub-Dimensions

		Levene Test		**T-Test**		
		F	**P**	**T**	**S.d.**	**P(2-pointed)**
Preferences for Food and Beverage	Equal Variances	7,04	,008	3,01	430	,00
	Unequal Variances			3,47	138,55	,00
	How long distance do you generally fly?			**N**	**X**	**S.S**
	Short Distance (Less than 3 hours)			353	3,75	,61
	Long Distance (More than 3 hours)			79	3,97	,48
Nutritional Dimension	Equal Variances	12,97	,00	1,97	430	,04
	Unequal Variances			2,58	173,57	,01
	How long distance do you generally fly?			**N**	**X**	**S.S**
	Short Distance (Less than 3 hours)			353	3,76	,79
	Long Distance (More than 3 hours)			79	3,94	,51
Hygiene and Sanitation Dimension	Equal Variances	,22	,63	2,20	430	,02
	Unequal Variances			2,42	129,36	,01
	How long distance do you generally fly?			**N**	**X**	**S.S**
	Short Distance (Less than 3 hours)			353	3,94	,98
	Long Distance (More than 3 hours)			79	4,21	,85
Beverage Dimension	Equal Variances	,75	,38	2,05	430	,04
	Unequal Variances			2,15	121,86	,03
	How long distance do you generally fly?			**N**	**X**	**S.S**
	Short Distance (Less than 3 hours)			353	3,71	,78
	Long Distance (More than 3 hours)			79	3,91	,73
Menu Dimension	Equal Variances	,03	,84	3,66	430	,00
	Unequal Variances			3,68	116,18	,00
	How long distance do you generally fly?			**N**	**X**	**S.S**
	Short Distance (Less than 3 hours)			353	3,54	,74
	Long Distance (More than 3 hours)			79	3,88	,74
Complementary Services Dimension	Equal Variances	,22	,63	2,16	430	,03
	Unequal Variances			2,16	115,53	,03
	How long distance do you generally fly?			**N**	**X**	**S.S**
	Short Distance (Less than 3 hours)			353	3,80	,84
	Long Distance (More than 3 hours)			79	4,03	,84
Employee Dimension	Equal Variances	4,46	,03	2,31	430	,02
	Unequal Variances			2,65	137,62	,00
	How long distance do you generally fly?			**N**	**X**	**S.S**
	Short Distance (Less than 3 hours)			353	3,73	,78
	Long Distance (More than 3 hours)			79	3,95	,62

According to the table, there was a significant difference between flight distance variables and perception of food and beverage preferences ($p < 0.05$). Due to this, it seems that all dimensions related to food and drink preferences in short distance flights are lower than in long distance flights. As flight distance increases, it is seen that passengers pay more attention to nutrition, hygiene and sanitation, drinks, menus, complementary services and occupational

dimension. Similarly, from Karaosmanoğlu's (2017) study conducted to evaluate the impact of catering services on customer satisfaction, food and beverage satisfaction in short, medium and long-term flights differs. Especially, the fact that the number of meals at longer distance flights are more, it affects passengers'satisfaction degrees. According to this finding, hypothesis 3 was accepted.

One Way ANOVA

Table 6 shows the results of the variance analysis conducted to determine whether there is a significant difference between the airline use frequency of passengers and the reasons for food and beverage preferences and sub-dimensions.

Table 6: Results of ANOVA Analysis on Comparing Food Beverage Preferences and Subscale Variables of Participants in Terms of Airline Use Variance

		Sum of Squares	S. d.	Squares Average	F	P	Significant Difference
Reasons of Food and Beverage Preferences	Between groups	5,116	5	1,023	2,920	,013	4>3 6+>3
	In-group	149,263	426	,350			
	Total	154,379	431				
	In-group	396,453	426	,931			
	Total	403,680	431				
Beverage Dimension	Between groups	9,816	5	1,963	3,311	,006	6+>2 4>3 6+>3 6+>5
	In-groups	252,620	426	,593			
	Total	262,436	431				
	In-group	244,874	426	,575			
	Total	247,965	431				
Price Dimension	Between groups	13,799	5	2,760	5,788	,000	4>1 4>2 4>3 5>1 6+>1 6+>2 6+>3
	In-group	203,145	426	,477			
	Total	216,944	431				

According to Table 6, it is seen that there is a significant difference between airline usage frequency variable, food and beverage preference reasons, beverage size and price dimension ($p < 0,05$). According to this, it can be said that the passengers who travels between 4-6 times and more, are more likely to prefer the food and drink preference than the ones traveling 3 times. Similarly, according to the frequency of students' eating, Unur and Kanca (2013) found a significant difference in the level of food and beverage service satisfaction of students who eat in the central cafeteria. According to this finding, hypothesis 4 was accepted.

Correlation Analysis

Correlation shows the relationship between two or more variables. Conditions, such as relations direction, level and meaning, are subjetcs of correlation (Türel, 2006; Aloba Köksal, 2003). Findings related to correlation analysis of some factors related to the scale are given in Table 7.

Table 7: Findings of Correlation

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Educational status (1)	1								
Marital status (2)	,176**	1							
Monthly income (3)	,513**	331**	1						
THY ticket price (4)	-,275**	-,033	-,270**	1					
F&B preferences s.(5)	-,019	002	-,005	-,109*	1				
Nutritional d. (6)	,037	051	024	-,180**	718**	1			
Beverage d. (7)	-,009	-,058	-,035	-,001	827**	516**	1		
Menu d.(8)	,071	016	028	-,101*	646**	329**	381**	1	
Employee d.(9)	-,085	048	-,074	-,086	831**	529**	684**	458**	1

** Significant correlation at the level of 0.01 (2-tailed)

According to Table 7, it is seen that there is a meaningful and negative relationship between the income status of the passengers participating in the survey and how the ticket prices are found (r = -27 ** and p <0,01). According to this data, low-income passengers find the ticket price expensive when high-income passengers find it normal.

Similar to this result, in a survey of airline operators, Dilek (2007) found a significant and positive relationship between the level of income of traveling passengers and perceptions of airline ticket prices. Hypothesis 5 is accepted in this context. There is a significant positive correlation between nutritional dimension and preference for food and drink (r = 0,71 ** and p <0,01). According to this; it can be said that the participants who are satisfied with the elements related to the nutritional dimension of the foods in the menu prefer to eat while traveling. There is a significant and positive relationship between the menu and the feeding dimension (r = 0.32 ** and p <0.01). Producing the foods in the menu in accordance with the nutritional elements can be effective in the preferences of the passengers. Likewise, Cevizkaya (2015) has come to the conclusion that consumers prefer ethnic restaurants pay more attention to the presentation of foods, the clarity of menus, the variety of menus and the food content of the foods. Hypothesis 6 and 7 are accepted according to these results. There was no relationship between participants' educational status and occupational dimension (r = -0.85). Contrary to this finding, Çetiner (2010) concluded that the educational status of the consumers and the personel working in the catering enterprises differed according to the hygiene rules. Hypothesis 8 was rejected based on the findings obtained from this verb.

CONCLUSION AND RECOMMENDATIONS

Airline companies want to be more preferred by offering the best service to many issues that will create a positive perception on passengers' journey to compete with national and international airlines. Food and beverage services are an important issue in terms of airline operations. To be able to create a positive image, to ensure the sustainability of its existing location and to have loyal passengers, airlines should attach importance to the quality of food and

beverage service. It is very important to determine the desires and expactatations of passengers who have different ability of taste. In this study, the preferences of passengers who are traveling with Turkish Airline and the factors determining the quality of food and beverage service and the perceiptions of passengers related to these factors were evaluated and the following results were obtained. From the results obtained from the survey, when the passengers are evaluated in terms of their demographic characteristics, more of the passengers are married, are between 26-44 years old and male. The majority of attendants have high level of income. The majority of attendants also do not know situation that the meals which are serviced in Tutrkish Airline, are prepared by Turkish DO&CO Company. The majority of attendats travel 6 times or more in a year and travels by Turkish Airlines once a year. The majority of passangers find tickets expensive and prefer to eat in spite of short journeys.

As the result of T-test, there are significant difference between the dimensions of nutrition and hygiene/sanitation on the preference of passengers. Women give more importance than men. According to women, delicious, substantial, nutritious and organic meals are more important facts than men. Also as a general sense, hygiene and sanitation are more important for women passengers. Another finding shows that supplementary services such as the quality, design of service tools are both important for men and women passengers.

There are significant difference between flight distances and preffered foods, nutrition dimension, hygiene/sanitation dimension, menu, supplementary service dimension, employee dimension. Importance of dimensions raises together with the longer flight distances. Because longer flight distances cause air pressure, dry weather and exhaustion on passengers. Longer flight distances requires more meal times so Passengers pays more attention to the meal services. Variety of food and beverage can be more enjoyable at longer flight distances such as clean foods and tables, good-humoured personnels. A good quality of food/beverage services effect service satisfaction, then the Turkish Airline Company, then the whole country.

In the study, there are negative correlation between incomes of passengers and ticket prices. None of passengers finds the Turkish Airline tickets cheap. Wealthy passengers find the tickets at normal price but passneger who have low incomes find the ticket prices expensive. So wealthy passngers thinks that the payment to tickets they made meets the food/beverage service they need in plane. According to datas, there is a significant and positive correlation between nutrition and menu dimensions. So nutrition dimension is very important for passengers. Menus in airways changes according to babies and children,routes, time of flight and time of departure also the passengers who has health and regional issues. So passengers think that meals have to be prepared according to the nutritional facts. The conclusion shows that Passengers prefer delicious, nutritious and fresh food/drinks in airway services.

All informations and datas were analyzed and several suggestions have been developed. These suggestions were developed for Airway Companies, Airway Catering Enterprises and future academicians.

Suggestions for Airway Companies: It is obvios that the passengers who travels by Turkish Airlines, are well educated and wealthy. It shows that the expectations of passengers are quite high. So food and beverage services must be continuosly renovated according to the preferences of passengers. The research analysis shows that passengers still prefers high quality meal services although they fly at short distances. There may be limited food and

beverage diversification at short distances. So Airway Companies should demonstrate their company logos or ads upon their equipments or packages. The behaviours and outlookings of crew members are very significant facts on passenger satisfaction. So lessons about hygiene and sanitation should have been given to the crew members continuously. Besides ensuring the hygiene at longer distances is highly important for passenger health. At human poisoning cases, planes can not complete the flight to the lower areas so it causes worse consequences. So Airway Companies should pay more attention to hygiene at longer flight distances. Airway companies should improve the quality of food and beverage services so passengers who finds ticket expensive, can equalize this situation with a good quality of meal service. If this happens, wealthy passenger prefers Turkish Airlines more and they gain advantages over rival companies at a high valued profits.

Suggestions for Airway Catering Companies: Airway Catering enterprises can use their own logos or ads more specificially upon their equipments or packages to raise awareness for pasangers. During flights not to experience a food poisoning, production crew must be more careful when they are cooking, freezing, storing and uploading the foods. In this way both food safety and community healt care can be provided.

Menus are more important at longer flight distances. Menus can be created special for children and they can add more variety to the menus. Menus should be prepared according to the nutritional features of passengers more. Also they need to use more fresh, nutritious and organic foods. Special foods can be uploaded to planes for the passengers who have food allergy and health issues. Also uploading foods for economy class according to the flight distance could increase the satisfaction. Thus, flights will become less problematical. Also Meals should be serviced as a local or indigenous to the destination they fly to. Also Catering Companies should work with master chefs who have different nationalities. So they can cook more suitable foods for passengers who have different nationalities. Airway Catering Companies should pay more attention to feedbacks of passengers about the food quality. They should produce or innovate according to the feedbacks.

Suggestions for other academicians: This study have been conducted in order to determine the airway food/beverage preference of Turkish people (economy class) who travels by Turkish Airlines at Kayseri and Kapadokya Airport. Future researchers can investigate and match airports that one includes catering services to prices and one does not include catering services to prices. This research can be implemented taking account of the distance fact. This research can be implemented by seperating or comparing Seat classes, nationality differences and different destinations.

REFERENCES

Activiti Report (SHGM) (2015). Sivil Havacılık Genel Müdürlüğü. Web: http://web.shgm.gov.tr/documents/sivilhavacilik/files/pdf/kurumsal/raporlar/2015_faaliyet_raporu_29.02.2016.pdf, (Accessed Date: 03.01.2018).

Activity Report (SHGM) (2011). Sivil Havacılık Genel Müdürlüğü. Web: http://web.shgm.gov.tr/documents/sivilhavacilik/files/pdf/kurumsal/faaliyet/2011.pdf, (Accessed Date: 24.01.2018).

Activity Report (THY) (2016). Türk Hava Yolları Web: http://investor.turkishairlines.com/documents/ThyInvestorRelations/download/faaliyet_raporu/YK_Faaliyet_Raporu_4Q2016_TR.pdf, (Accessed Date: 20.12.2017).

Aktaş, A. (2001). *Ağırlama Hizmet İşletmelerinde Yiyecek İçecek Yönetimi*. Antalya: Livane Matbaası.

Aktepe, C. & Pars Şahbaz, R. (2010). Türkiye'nin En Büyük Beş Havayolu İşletmesinin Marka Değeri Unsurları Açısından İncelenmesi ve Ankara İli Uygulaması. *C.Ü. İktisadi ve İdari Bilimler Dergisi*, 11(2), 69-90.

Aloba Köksal, B. (2003). İstatistik Analiz Metotları. İstanbul: Çağlayan Kitabevi.

Altındağ, D. (2013). *Türkiye'de Sivil Havacılık Sektöründe Çalışan Uçuş Personelinin Çalışma Koşullarına Yönelik Bir Alan Araştırması*. (Yayımlanmamış Yüksek Lisans Tezi). Pamukkale Üniversitesi Üniversitesi Sosyal Bilimler Enstitüsü Çalışma Ekonomisi ve Endüstri İlişkileri Anabilim Dalı, Denizli.

An, M. & Noh, Y. (2009). Airline Customer Satisfaction And Loyalty: İmpact Of İn-Flight Service Quality. *Serv Bus*, 3:293–307.

Arıkan, İ. & Ahipaşaoğlu, S. (2005). *Ulaştırma İşletmeleri.* Ankara: Gazi Kitabevi.

Arlı, M. & Nazik, M. H. (2001). *Bilimsel Araştırmaya Giriş.* Ankara: Gazi Kitabevi.

Atak, M. (2006). *Yiyecek İçecek İşletmelerinde Servis Elemanlarının Hizmet İçi Eğitiminin İş Tatminine etkisi, Kuzey Kıbrıs Türk Cumhuriyeti Uygulaması*. (Yayımlanmamış Yüksek Lisans Tezi). Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Turizm İşletmeciliği Anabilim Dalı, İzmir.

Baker, A. (2013). Service Quality And Customer Satisfaction in The Airline Industry: A Comparison Between Legacy Airlines And Low-Cost Airlines. *American Journal of Tourism Research*, 2(1), 67-77.

Bayat, B. (2014). Uygulamalı Sosyal Bilim Araştırmalarında, Ölçme, Ölçekler ve "Likert" Ölçek Kurma Tekniği. *Gazi Üniversitesi İktisadi İdari Bilimler Fakültesi Dergisi*, 16(3), 1-24.

Bekar A. & Sürücü, Ç. (2015). Yiyecek İçecek İşletmesi Tasarımının Tüketici Tercihleri Üzerindeki Etkisi. *Türkiye Sosyal Araştırmalar Dergisi*, 19(1), 349-376.

Biçici, F. & Hançer, M. (2008). Kusadası ve Didim' deki Üniversite Ögrencilerinin Yiyecek İçecek İsletmelerinde Sunulan Hizmetlerle İlgili Beklentileri ve Bu Hizmetlerin Kalite Ölçümü. *Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Dergisi,* 10(3), 49-67.

Brady, M. K., Robertson, C. J. & Cronin, J. J. (2001). Managing Behavioral İntention in Diverse Cultural Environments an İnvestigation of Service Quality, Service Value And Satisfaction on American And Ecuadorian Fast- Food Customers. *Journal of İnternational Management*, 7, 129-149.

Cevizkaya, G. (2015). *Tüketicilerin Etnik Restoran İşletmelerini Tercih Nedenleri: İstanbul'da Bir Araştırma.* (Yayımlanmamış Yüksek Lisans Tezi). Balıkesir Üniversitesi Sosyal Bilimler Enstitüsü Turizm İşletmeciliği ve Otelcilik Anabilim Dalı, Balıkesir.

Cihangir, B. (2015). *Türk Kamu Yönetiminde Stratejik Planlama: Sivil Havacılık Genel Müdürlüğü Üzerinde Bir Uygulama*. (Yayımlanmamış Yüksek Lisans Tezi). İnönü Üniversitesi Sosyal Bilimler Enstitüsü Siyaset Bilimi ve Kamu Yönetimi Anabilim Dalı, Malatya.

Coşkun, R., Altunışık, R., Bayraktaroğlu, S. & Yıldırım, E. (2015). *Sosyal Bilimlerde Araştırma Yöntemleri*. Sakarya: Sakarya Yayıncılık.

Crawford, G. & Melewar, T. C. (2003). The İmportance of İmpulse Purchasing Behaviour İn The İnternational Airport Environment. *Journal of Consumer Behaviour*, 3(1), 85-98.

Çelebi, A. (2008). *Türkiye'nin Tam Üyelik Sürecinde AB Sivil Havacılık Mürettebatına Uyum Düzeyi ve Türkiye-AB Sivil Havacılık Sorunları*. (Yayımlanmamış Yüksek Lisans Tezi). Ufuk Üniversitesi Sosyal Bilimler Enstitüsü Uluslararası İlişkiler Anabilim Dalı, Ankara.

Çelikkol, E.S., Uçkun, C.G., Tekin, V.N. & Çelikkol, Ş. (2012). Türkiye'de iç Hatlardaki Havayolu Taşımacılığında Müşteri Tercihi ve Memnuniyetini etkileyen Faktörlere Yönelik Bir Araştırma. *İşletme Araştırmaları Dergisi*, 4(3), 70-81.

Çetiner, H. (2010). *Yiyecek İçecek İşletmelerinde Hijyen Sanitasyon ve Personelin Hijyen Kurallarına İlişkin Davranışlarında Eğitim Faktörü*. (Yayımlanmamış Yüksek Lisans Tezi). Gazi Üniversitesi Eğitim Bilimleri Enstitüsü Turizm İşletmeciliği Eğitimi Anabilim Dalı, Ankara.

Çevik, U. (1996). Türkiye'de Sivil Havacılık Sektörü ve Sivil Havacılık Sektörüne Sağlanan Devlet Desteği. (Yayımlanmamış Yüksek Lisans Tezi). Anadolu Üniversitesi Sosyal Bilimler Enstitüsü, Eskişehir.

Derin, N. & Demirel, E. T. (2010). Kurum İmajının Kurum Kimliği Açısından Açıklanabilirliği: İnönü Üniversitesi Turgut Özal Tıp Merkezi Örneği. *Hacettepe Sağlık İdaresi Dergisi*, 13(2), 155-193.

Dilek, Ö. (2007). *Şehirlerarası Havayolu Talep Tahmini: Erzurum Üzerine Bir Uygulama.* (Yayımlanmamış Yüksek Lisans Tezi). Atatürk Üniversitesi Sosyal Bilimler Enstitüsü İktisat Anabilim Dalı, Erzurum.

DO&CO Restaurant &Catering A.G. (2010/2011.) 1 Nisan 2010- 31 Mart 2011 Mali Yılı Hesap Dönemi Bağımsız Denetimden Geçmiş Konsolide Finansal Tabloları. Web: http://www.doco.com/Portals/8/dokumente/tr/Jahres-Quartalsberichte/Yillik_Finansal_Rapor_2010_2011.pdf, (Accessed Date: 24.01.2018).

DO&CO Restaurants & Catering Aktiengesellschaft, (2010). Web: http://www.doco.com/Portals/8/dokumente/de/Downloads/prospekt_2611_deutsch.pdf, (Accessed Date: 31.03.2017).

Erdem, M. (2010*). Sivil Havacılık Sektöründe Gelir Yönetimi: Türk Hava Yolları Anonim Ortaklığı Uygulaması.* (Yayımlanmamış Yüksek Lisan Tezi). İstanbul Üniversitesi Sosyal Bilimler Enstitüsü Çalışma Ekonomisi ve Endüstri İlişkileri Anabilim Dalı, İstanbul.

Gürses, F. (2006). *Havayolu İşletmeciliğinde Müşteri Tercihlerini Etkileyen Faktörler ve Yerli Yolculara Yönelik Bir Araştırma.* (Yayımlanmamış Yüksek Lisans Tezi). Balıkesir Üniversitesi Sosyal Bilimler Enstitüsü Turizm İşletmeciliği ve Otelcilik Anabilim Dalı, Balıkesir.

Hamdi İsalamoğlu, H. & Alnıaçık, Ü. (2014). *Sosyal Bilimlerde Araştırma Yöntemleri*. İstanbul: Beta Basım Yayım Dağıtım A.Ş.

Hoffman, K.D. & Bteson, J.E. (1997). Essentials of Service Marketing. USA: The Dryden Press.

İnternational Civil Aviation Organization (ICAO) (2016). Product & Services Catologue. Web: http://www.icao.int/publications/catalogue/cat_2016_en.pdf, (Accessed Date: 20.02.2017).

Jones, P. (2004). *Flight Catering.* Oxsford: Elsevier.

Karaağaoğlu, N. (2015). *Sivil Havacılık Alanındaki Sektör Beklentileri ve İstihdam Taleplerinin Akademik Programların Oluşturulmasında Etkisi: YÖK-SHGM Sivil Havacılık Eğitim Komisyonu Çalışmaları*. (Yayımlanmamış Yüksek Lisans Tezi). Maltepe Üniversitesi Sosyal Bilimler Enstitüsü Halkla İlişkiler ve Tanıtım Anabilim Dalı, İstanbul.

Karaosmanoğlu, K. (2017*). Uçuş-İçi Yiyecek İçecek Hizmetinin Müşteri Memnuniyetine Etkisi.* (Yayımlanmamış Yüksek Lisans Tezi). Adnan Menderes Üniversitesi Sosyal Bilimler Enstitüsü Turizm İşletmeciliği Anabilim Dalı, Aydın.

Kim, CB, Baek SH. & Yang I.S. (2009). The Measurement Of Expected And Perceived Service Quality Of İn Flight Meal By Customers. *The Korean Journal of Food and Nutrition,* 22(1), 57- 62.

King, T. (2001). İnfilight Catering. *Tourism And Hospitalicy research,* 3(2), 181-184.

Kozak, N., Özel, Ç. H. & Karagöz Yüncü, D. (2011). Hizmet Pazarlaması. Ankara: Detay Yayıncılık.

Küçükergin, K. G. (2012). *Müşteri Sadakatinin Oluşum Sürecine Müşteri Tatmini ve Ataletin Etkisi: Yiyecek- İçecek İşletmelerine Yönelik Bir Uygulama*. (Yayımlanmamış Yüksek Lisans Tezi). Gazi Üniversitesi Eğitim Bilimleri Enstitüsü Turizm İşletmeciliği Eğitimi Anabilim Dalı, Ankara.

Lee, J. & Ko, S. (2016a), Effect of the In-Flight Meal Service Quality on the Customer Value and Loyalty. *Indian Journal of Science And Technology*, 9(26), 1-6.

Lee, J. & Ko, S. (2016b), The Analysis of The İmportance- Performance of The Flight Meal Hyjiene Management. *İndian Journal of Science And Technology*, 9(31), 1-7.

Lorcu, F. (2015). *Örneklerle Veri Analizi, SPSS Uygulamalı*. Ankara: Detay Yayıncılık.

Öztürk, Y. & Seyhan, K. (2005). Konaklama İşletmelerinde Sunulan Hizmet Kalitesinin Servqual Yöntemi İle Ölçülmesi. *Anatolia: Turizm Araştırmaları Dergisi*, 16(2), 170-182.

Romli, F.I., Rahman, Abdul.K. & Ishak, F.D. (2016). In-Flight Food Delivery And Waste collection Service. *Innovation in Aerospace Engineering and Technology Publishing*, 1-7.

Rutkowska, E. & Czarniecka-Skubina, E. (2015). Catering Services in Poland And in Selected Countries. *Szczecin University Scientific Journal,* No. 872. Service Management, 15 (1).

Sarıışık, & Dikkaya, (2015). Hizmet Kalitesi Kapsamında Heveslilik Boyutuna İlişkin Beklenti ve Algıların Belirlenmesi. *Kastamonu Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi,* Nisan 2015, Sayı:7, 37-51.

Sezgin, A. C. & Özkaya, F. D. (2014). Toplu Beslenme Sistemlerine Genel Bir Bakış. *Akademik Gıda*, 12(1), 124-128.

State Airports Authority (DHMİ). (2017). Yolcu Trafiği (Gelen-Giden). Web: http://www.dhmi.gov.tr/istatistik.aspx, (Accessed Date: 09.09.2017).

Tatlılıoğlu, F. (2010). *Havacılıkta Tedarik Zincirinde İkram Hizmetlerinin İncelenmesi ve Bir Uygulama.* (Yayımlanmamış Yüksek Lisans Tezi). İstanbul Teknik Üniversitesi Fen Bilimleri Enstitüsü Endüstri Mühendisliği Anabilim Dalı, İstanbul.

Tayfun, A. & Kara, D. (2007). Turizm İşletme Belgeli Restoranlardan Hizmet Alan Müşterilerin Memnuniyet Düzeyleri Üzerine Bir Araştırma. *Elektronik Sosyal Bilimler Dergisi*, 6(21), 273-292, Web: http://dergipark.ulakbim.gov.tr/esosder/article/view/5000068092, (Accessed Date: 31.03.2017).

The Union of Chambers and Commodity Exhanges of Turkey (TOBB) (2014). Türkiye Sivil Havacılık Meclisi Sektör Raporu. Web: https://www.tobb.org.tr/Documents/yayinlar/2015/71GK/ekonomikrapor-2014.pdf, (Accessed Date: 24.01.2018).

Tsaur, S-H., Chang, T-Y. & Yen, C-H. (2002). The Evaluation Of Airline Service Quality By Fuzzy MCDM. *Tourism Management*, 23/ 107-115.

Türel, S. (2006). İstatistik Ders Notları. Isparta: SDÜ Basımevi.

Ulufer, S. (2013). *Sivil Havacılıkta İnsan Kaynakları Yöneticilerinin Karar Verme Stratejileri ve Mesleki Doyum İlişkileri (Havayolu Firmaları Örneği)*. (Yayımlanmamış Yüksek Lisans Tezi). Beykent Üniversitesi Sosyal Bilimler Enstitüsü İşletme Yönetimi Anabilim Dalı, İstanbul.

Unur, K. & Kanca, B. (2013). Mersin Üniversitesi Merkezi Kafeterya'daki Yiyecek İçecek Hizmetlerinin Öğrenciler Tarafından Algılanan Kalite, Memnuniyet ve Algılanan Risk Açısından Değerlendirilmesi. *Düzce Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 3(1), 1-36.

Ural, A. & Kılıç, İ. (2013). *Bilimsel Araştırma Süreci ve SPSS ile Veri Analizi*. Ankara: Detay Yayıncılık.

Yavari, H., Khaniki, G. J., Mohseni, M. & Kamali, K., (2015). Implementation of Hazard Analysis Critical Control Point in One of The Iranian Flight Catering Establishment: Technical Barriers And Strategies. *Journal of Food Safety And Hygien,* 1(1).

Yazıcıoğlu, Y. & Erdoğan, S. (2011). *SPSS Uygulamalı Bilimsel Araştırma Yöntemleri*. Ankara: Detay Yayıncılık.

Zahari, M., Salleh, M., Kamaruddin,M.S.Y. & Katut, M.Z, (2011), İn-Flight Meals, Passenger's Level Of Satisfaction And Re-Fliying İntention. *İnternational Journal Of Social, Behavioral, Educational, Bussiness And Undistrial Engineering*, 5(12), 1982-1989.

https://www.turkishairlines.com/tr-tr/ucak-bileti/ucus-deneyimi/ucak-ici-ikram/index.html, (Accessed Date: 17.01.2018).

https://www.ecac-ceac.org/about-ecac, (Accessed Date: 31.08.2017).

http://www.mfa.gov.tr/eurocontrol.tr.mfa, (Accessed Date: 29.03.2017).