

Service Quality And Customer Satisfaction In Airline Industry: A Comparison Between Turkish Founded Airlines

Vanini Claude MEGNE TCHOUBE¹

ABSTRACT: *The way of conducting business activities has considerably changed over the past few years. Both manufacturing and service sector have implemented new approaches in meeting organizational goals therefore performance. Service quality and customer satisfaction are two terms often used in marketing to assess how well customers' expectations are met. Turkish airline industry has witnessed series of changes since the deregulation law was enacted whereas globally or domestically (Tamer Çetin, 2016). Therefore, with the highly competitive market place that entails that of the country' domestic sector, companies are always striving to find adequate strategies to attract and retain the highest number of customers. Four airline companies namely: Atlas Global, Onurair, Pegasus and Turkish Airlines have been selected to efficiently evaluate this critical issue. In line with this, the dimensions of SERVQUAL method are chosen to highlight the satisfaction factor on a passenger's point of view; in other words, perceived performance. The aim of this paper is to identify through comparison the company that best and accurately implement service quality dimensions to reach the most suitable satisfaction factor which highly impact on the outcome and business growth.*

Reasons being of this purpose is to draw a correlation between all dimensions of quality and others like demographic. A survey was therefore conducted on potential passengers of the above mentioned airline companies living in Istanbul; questionnaires were distributed among respondents and evaluated using a quantitative approach. Results of the analysis were used to make conclusions and draw inferential questions.

Keywords: *Service quality, Customer Satisfaction, Customer loyalty*

Date of Submission: 03-01-2020

Date of Acceptance: 18-01-2020

I. INTRODUCTION

Service type of business often proves to be very critical to assess in respect to the non-standard attributes of evaluation that comprises its existence. Satisfying the needs and expectations of customers therefore relies on the execution of strategic tasks in respect to the type of industry in which they are operating. In line to this, other factors appear to strongly impact on firm's revenue given the type of order purchase, products utility, feedback as well as cost (Gour C. Saha, Theingi, 2009). Some findings have proven that providing the maximum of service quality to the market demand leverage the competitive advantage towards others in business. As the airline industry, has grown rapidly over the years, leading to launching of private's companies operating as charter carriers, we observe as a result innovation which in return prompt executives for continuous improvement of products and services offered to customers. Nevertheless, this observation does not disclaim the fact that cost is as well playing a vital role as punctuality and scheduling but rather occupies a secondary position in customer's purchase behavior (D. Gilbert, Robin K.C Wong 2003). Turkey a country of a population of more than seventy-nine million inhabitants with various city has deployed innovative measures in its transportation most especially in air transport after the year 1980s. We observe a considerable increment in passengers' shift towards airline services rather than other as deregulation laws have laid the ground for low-cost carriers into the business. Travelling by air is no longer considered as a luxurious or exotic thing (Özge, P., 2010). According to the Oxford Economics index, aviation was said to account for 1.1% of the national GDP in 2010 with a forecast of an increment in the upcoming years. Huge investments have been made so far by governments of various nations around the world in the aviation sector that fostered a deregulation in the industry leading to privatization of many brand names nowadays and access to flexible fare, low tariff-taxes, differentiation in services just name a few (Tamer Çetin, 2016). Differentiation, in most cases help in marketing strategies to promote the product or service relatively the brand in order to surpass competition and delivering more valuable services. Quality of service rendered to customers is currently rated as the one of the most important attributes in the continuity or sustainability of any business. It is defined as the total coefficient of evaluation of excellence in performance (Parasuraman et al, 1985). This concept has long been contemplated by researchers in various business field and associated to the satisfaction of end users towards a service or

¹MSc,Business Management Program, Social Sciences Institute, Istanbul Aydin University, Istanbul-TURKEY, vaniniclaude@gmail.com

placement of an order. The two variables service quality and customer satisfaction therefore seem dependent of each other as they serve as driving tools in customer's purchase attitude (Y.S. Fen, K. M. Lian;2007). While others view service quality as an important factor in company's growth, others like Olivier (1999) simultaneously identify customer satisfaction as the strongest component in maintaining customers and gaining their trust. Many research papers have explored either of the above-mentioned concepts as an attempt to unravel the cornerstone of some businesses competitive advantage against others. The Principle of Operations Management 7edition in the case of Arnold Palmer hospital identifies a focus on quality management as a vital tool used by managers to beat competition in the market. This in another word implies all. Some important figures whose work have been directed on the TQM with W. Edwards Deming as an example, attach a high esteem on continuous improvement of quality of products and service to meet up with demand expectations thus, customer's retention. Many scientific works on quality improvement have been centered on products rather than service industry making it slightly difficult for researchers to gathered up-to-date data from empirical studies.

Moreover, factors that require more than just scientific concern make the study on such domain unlikely proficient as they have no human control over. We note as some few examples: human error or mistakes, weather sudden changes and every other default occurring in the performance of a task which could not be predictable with full assurance. Therefore, in industries like the airline where most of this above mentioned factors do occur at times, it will be delusionary to assess or rate companies based on the management of those but rather attribute a ratio number in respect of the focus behind other drivers of satisfaction of needs. Airline market is regarded as a very critical industry; its growth often relies on relative environmental, social and economic factors which require carefully planned strategic tools to achieve sustainability. After the year 2003, Turkey followed the deregulation train with launching of new airline companies. In addition to that, innovations made in this sector have considerably elevated the number of customers nationally and also around the world. How do traditional airline carriers deploy their fleet in order to surpass the services of competitors in the face of consumers has drawn considerable attention on both academic and business point of view. Innovations in airline services around the world have constantly been observed over the years with a predominant shift into the economy. The aim of this study is to determine among some of the existing domestic airlines service providers in Turkey the one satisfying the larger number of consumers regardless of their profile as regular, frequent and constant type of consumers in domestic flight as well as the drivers attached to their purchase behavior using a comparative analysis based on chosen dimensions of quality and satisfaction they get in an in-flight process.

TURKISH AIRLINE INDUSTRY

The twenty first century has since its new entry encountered series of technical, scientific, environmental and many other innovations which have so far completed or rather improved the lives of those sharing our planet. Some of these greatest achievements were made in transport system. Although the country enjoys the other means of transport available to them to name water, road, rail etc. the focus on the airline sector is of importance as of the tremendous impact on the its economic and social conduit.

Turkey today accounts of eleven different air service suppliers that operate domestically on scheduled/ non-scheduled flights of which only few are publicly known both to nationals and foreigners; Turkish Airlines, Onur air, Pegasus, AtlasGlobal, Borajet, Anadolujet, Sun express, besides those, there is mention of additional ones such as: IZair, Corendon Airlines, Tailwing Airlines and Freebird Airlines. Despite the existence of other substitutes and alliances the market comprises of, some are not effectively regarded as actual threat to other competitors. Online websites such as Skyscanner.com as an example often display results of a search for ticket with only the commonly known carriers which subsequently impact on their image to be more accessible. THY the oldest air carrier in the country was founded in the year 1933 prior to the second world war era while Pegasus Airlines came in sixty-seven years later in 1990. OnurAir on the other hand was launched in 1992 and nine years post to that, we witnessed the introduction of AtlasGlobal into Turkish airline domestic market. Over the years, reports have showcased evolution in the industry especially expressed by the number of passengers yearly with the growth' percentage.

Turkey in its whole comprises of 10 different air carriers operating both as scheduled or charter carriers. Following the deregulation act in the years 80, various companies were founded in the private sector providing domestics but also international services for few namely; Pegasus, AtlasGlobal etc.

Onur airlines, is one among all private airline companies operating in Turkey. It was founded in 1992 but only began domestic flights in the year 2003. The airline services more than 10 airports locally with a high rate at Atatürk International Airport in Istanbul. Operating with a 23 fleet passengers types of aircraft, it also services numerous destinations around the world and is currently recognized as the largest private airline in the country; servicing the highest number of domestic flights with competitive fares. Most flights operated by the company departs from the largest airport in the nation namely Atatürk Airport. However. The company had

encountered hardship over the years which lead to reducing the number of fleet from 16 in 1997 to 9 in 1999 in respect to the country's critical economic situation then. It is recorded nowadays that the airline operates with over 30 fleets in its account and a seat capacity of 4.102 therefore placing him directly in the light of other competitors into the market place.

Atlas Global is a low-cost private carrier among airlines in Turkey. First established in 2001, it only commenced providing services for commercial purposes in 2004. Operating with eighteen fleet type of aircraft, unlike Onur Airlines, comprises of fewer international destinations.

THY commonly known as the flag carrier of Turkey, is the first ever launched airline company in the country. Formally state owned company, the airline was founded in 1933 by the Ministry of defense with a very low budget of TRY 180,000 according to the investors relations (2013) to serve different purposes. It comprises of one subsidiary or tradeoff such as Anadolujet which has a wider range of affordable offers and mostly operate on shorter routes.

Pegasus was founded as joint venture in 1990 by Aer Lingus Group, Silkar Yatırım ve Insaat Organizasyonu A.S. and Net Holding A.S. Its main site Sabiha Gokcen airport where most schedule flight depart from is also known as Turkey's lowest airline cost wise. According to Pegasus online network, it comprises of 83 aircrafts which 75 belongs to Pegasus, 6 to Izair and 2 to Air Manas. The company only started operating domestically in the year 2005 after being handed over to the management of Esas Holding A.S and has then developed considerably and also extending his fleet. One of the recent updates is recorded to be that of cabin simulator used on board should in case of emergency.

Developments recorded in aviation sector on the land have tremendously impacted on the social and economic life of its inhabitants. As the demand curve for airline services is constantly shifting upward, we also observe increment in the creation and implementation of new jobs openings to support related activities. The Oxford Economics report of December (2016) supported by the IATA reveals an added value on the GDP which amount of 6 percent of the annual value in the year 2014; this subsequently of airline operations. Sector as that of tourism and air transport witnessed constructive changes as they attract a higher number of customers, therefore improving revenues. Not only are the benefits of air transportation in Turkey an expansion of tourism and catering services but also reinforcement of FDI and new form of businesses.

II. LITERATURE REVIEW

1- Service Quality

Early researches on quality effectiveness in marketing were developed on the basis of multiple item-instruments such as the SERVQUAL, RATER to name a few. Thus, for academic purpose, it was deemed necessary to assess quality of service as it incorporates both the disconfirmation and other service variables directly impacting on managerial issues. Therefore, the five dimensions used by Parasuraman et al., (1988b) to find the gap between performance and service expectations are namely: responsiveness, tangibility, empathy, reliability and assurance.

The most commonly used metric in marketing in the evaluation of service performance, the SERVQUAL method constitutes of various constructs narrowed down under five different dimensions of quality applicable to all indicators of the template. They are namely,

Tangibility: Unlike in goods quality where every indicator is being detected, other features such as the cleanliness of the aircraft, number and state of passengers' seats to name a few.

Reliability: is expressed by the ability the firm has to perform and fulfill promises upon expectations.

Assurance: is regarded as the capacity employees have to retain customer's trust and gain their credibility.

Empathy: as the word itself indicates, it is referred to as the special manner used on each and every customer to approach existing matters. In this case, no standard technique is used as it depends on profile, mood, gender to name a few.

Responsiveness: has its meaning in the customers' complaints management. Not only do business handle issues arising but also should they apply responsibility and role taking to understand the consumer better.

2- Customer Satisfaction

Traditionally, it is always important to have a happy customer than one with consistent complains for it will impact on the business at a measurable scale. But having to satisfy them through the services provided may sound even lot better as it serves as a vital strategy to create and maintain trust, loyalty and profit gain. Customer satisfaction is a business term commonly used as a measurement tool of products and services' effectiveness in meeting market expectations. In other words, it serves as a key performance indicator. Both tangible and intangible products' future seem to rely on this very critical concept. Debates concerning customer satisfaction have widely been on the scene over the years as the future of companies highly depends on its effective assessment. The use of various methods and approaches to this task have been developed by various actors to differentiate and outperform their competitors in the market place. However, the satisfaction

process being influenced by other factors namely individual expectations, direct contact to name a few; combining such characteristics to its definition not only explicit the understanding but also open room for debate on the question at a standard point of focus. It is very obvious today to forecast the intended future sales of a company irrespective of the formal production and defaults encountered in the product to be delivered to the public whilst the latter, the service type is classified as unstandardized due to individuals. According to (Kotler et al (2002), building a solid, positive and trustworthy relationship with customers benefits an upper advantage of one over his competitors. Thus, such relationship could extend to loyalty towards the brand. Measuring customer satisfaction in airline industry could be subjective to peculiar aspects other than the commonly known in this sector for as airline companies often do have similar features namely the seats, fleets at which they operate, same transit zones and or manner of approach towards customers. However, in the case of analyzing differentiated variables accordingly the "Expectancy-Disconfirmation" paradigm introduced by Gale (1994), results of each steps in the process seem to strongly depend on the former variable in the cycle; that of quality.

Customer Loyalty

Loyalty is recognized as to be the sense of allegiance or commitment towards a brand. Traditionally, it occurs after strong bonds have been built and continuously maintained for the benefit of the company's growth. As empirically focused on, contrast in detecting the exact meaning is yet to be puzzled out. Following the work of other authors, (Kim & Yoon, 2004), customer loyalty is defined as the tendency and free will buyers have towards a firm/business expressed by the frequent purchase of goods and services of the same provider. Building loyalty in the mind of customers' accounts of more than just offering coupon bonds or any other discount package which everyone is entitled to but rather investing in more strategic marketing techniques to attend the goal.

Previous researches in marketing oriented area have proven that the cost of gaining new customers is literally higher than that of sustaining the current ones. New buyers are often targeted as competitor's assets as they converted from the formal supplier's database to that of a new one (Kotler and Keller 1997). The satisfaction factor in this case plays a vital role as identified in Crosby et al (1990) work. Thus, various literatures determined other related factors of customer's loyalty combined with the former as: Trust, commitment and service quality. A paradigm has been developed as a model in business (Rauyruen and Miller, 2007) to highlight the correlation existing between loyalty and dependent variables.

Customers loyalty is a broad term that could impact either negatively or positively on the sales numbers if ultimately escalated. However, such assertion is not to be generalized in every part of the world for some findings (Maxwell and Bright, 2016) have demonstrated the inability to equally evaluate the level of loyalty in airline industry. Various factors such as the level of income, social and cultural behaviors, type of market, geographical location of the country to name a few lead to different results in profitability. For example, in more developed countries, passengers are most likely going to have a different perception of what it is to be on business class, having discount packages etc. than those in tiers countries.

Other academic publications have raised and theoretically demonstrated the hypothesis of customer's satisfaction and retention highly impacting on loyalty factor (Inamullah, 2012). It is always important for newly and or already existing businesses not to interpose marketing program from loyalty program for they serve different purposes. One focuses on the strength and weaknesses while the other is concerned with creating more value to brand loyalty and equity. A study by Wasib, Aminal and Idriss (2014); highlight the relationship between variables namely brand equity, loyalty with outcomes (behavior and habit) being intertwined. Many established firms are suffering from customer churn expressed by a defection rate which in return impact on the business. However, some marketers (Jill, Murray and Neil; 1995) have proposed a set of conduct to adopt and follow in a quest for customer churn diminishment namely:

- The measurement and defining the rate of retention,
- Identifying the problem which in this case is regarded as the reason in customers' shift and,
- Comparison between costs: basically, measuring both the cost of losing and retaining potential buyers.

The use of the Relationship quality (RQ) method has widely been spread around the world over the years thus commonly used nowadays to test hypothesis in business activities. A research carried in Malaysia (Chong, Low, Tai, Tan.L and Tan. S 2015) to undercover factors influencing the loyalty of customers in the country's airline industry identify the model as a standard technique used in both manufacturing and service industry by many authors to draw the correlation between variables. However, given the type of industry, the focus or rather the dimensions proposed in the model development slightly differ from each other.

Theoretical framework on customer satisfaction

The interest on leveraging the overall performance and surviving competition in business have led to researchers and practitioners engaging in developing more strategic and feasible techniques in some of the most

essentials functions of the organizational chart as that of the marketing mix. Opinions and techniques being drawn as a mean to efficiently evaluate the construct in order to draw the cluster of similarities in assessing the level of satisfaction in the mind of consumers. Nowadays, a more insightful mean for companies to evaluate the customer service index is deemed to be the NPS method. NPS which stand for Net Promoter Score has greatly contributed to diminishing the task in satisfaction assessment providing more accurate results which in return are used as point of focus to solving customers related issues. It was first introduced in business by his author, Reichheld (2003) as a barometer to customer to purchase habits and company's future growth. David VanAmburg, director of ACSI qualified the aviation sector; airline to be precised as a very sensible and critical one as it faces various problems on the daily basis. From flight delay and luggages lost to poor direct contact on in-flight service, all commercial airline companies do have to struggle to maintain the satisfaction level as high as possible to avoid dissatisfied customers being detractors of the business. This new strategy implemented in marketing operations helps in strategizing the future; therefore on the long-run. The above index is obtained by subtracting the number of promoters from that of the detractors you have in the business and expressed as a percentage. The higher the value, the better the customer satisfaction. Using a scale that ranges from 0-10 accordingly the category of the respondents, It is commonly used in business as a metric for brand loyalty also expressed here as the satisfaction level the consumers get from using a random brand and the likelihood for purchase behavior.

Net Promoter Score

DavidVanAmburg, director of ACSI qualified the aviation sector; airline to be precised asa very sensible and critical one as it faces various problems on the daily basis. Fromflight delay and luggages lost to poor direct contact on in-flight service, allcommercial airline companies do have to struggle to maintain the satisfaction levelas high as possible to avoid dissatisfied customers being detractors of the business.This new strategy implemented in marketing operations helps in strategizing thefuture; therefore on the long-run. The above index is obtained by subtracting thenumber of promoters from that of the detractors you have in the business andexpressed as a percentage. The higher the value, the better the customer satisfaction.Using a scale that ranges from 0-10 accordingly the category of the respondents, It iscommonly used in business as a metric for brand loyalty also expressed here as thesatisfaction level the consumers get from using a random brand and the likelihood forpurchase behavior.



Figure 4.1: Net Promoter Score

Source: <https://www.netpromoter.com/know/>

Other theories have been developed, proposed and utilized in business to measure theconformity of service performance. Some example of these philosophies are theexpectancy disconfirmation, assimilation, contrast and assimilation theories all aimedat perceiving and fill the gaps of expectations on a customer' based approach.

Expectancy/Disconfirmation Theory (EDT)

The initial purpose for producing and delivering goods and services to customers is to satisfy all expectations associated. Having a satisfy consumers always entails good performance from the producers. The EDT is derived from the Cognitive Dissonance Theory (CDT) first presented in 1957 by the researcher Leon Festinger. The latter is assessed as the dissonance one gets from conflicts in behaviors and consistency. In his work, the author attributed a more neutral term to the formal "Cognitive Dissonance" stated as "Consonance". The dissonance factor usually escalates in respect to how high or low the cognitions towards a particular concept are. In other words, the strive to maintain the factor at a well befitting range highly depends on the variables driving it and outcomes. Previous studies have addressed the dissonance traits and argued on the diminution approaches to maintain its consistency such as: decreasing empirical cognitions, entirely changing the formal thoughts and adding an intermediate factor with a stronger value than the already existing two conflicting terms.

existing two conflicting terms.

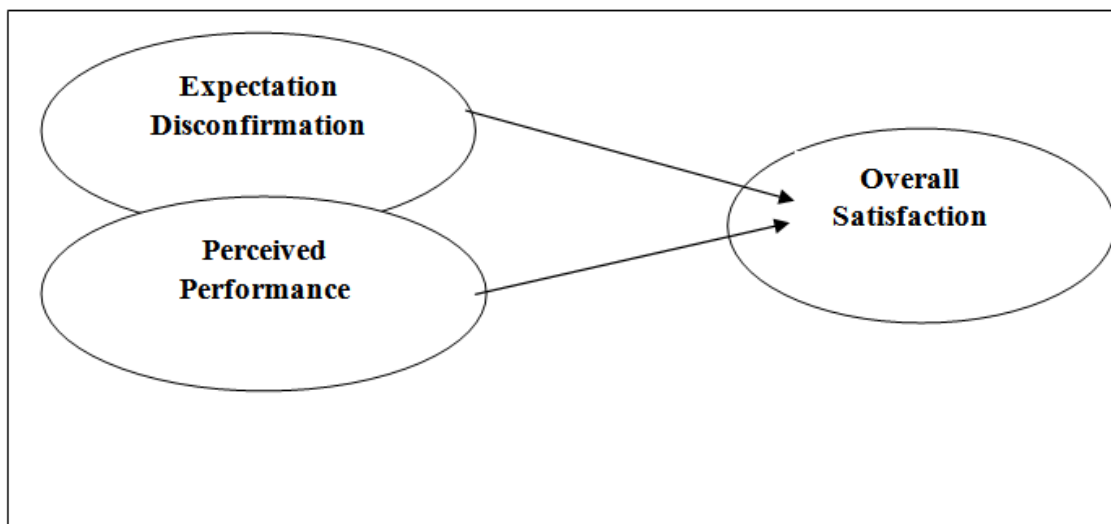


Figure 4.2: Expectation Disconfirmation Paradigm

Source: Saltari, S. (2007) “Application of Disconfirmation Theory on Customer Satisfaction Determination Model in Mobile Telecommunication: Case of prepaid mobiles in Iran, p.31.

In accordance with the CDT, a traditional definition of the disconfirmation theory would be based on the three different points as follow:

If prior beliefs of a product or service meet expectations, therefore we reach the satisfaction level

If performance fail to meet with customers’ expectations, therefore the dissatisfaction would be of used; and

If expectations are at a lower level than that of the performance, therefore it is a positive disconfirmation.

Tse and Wilson (1988) ‘work presented perceived performance as a vital tool used to assess the overall satisfaction of customers in regards to their antecedents’ work on service performance and satisfaction. In the case of Airline industry whereby passengers’ positive disconfirmation is generally considered by the high number of passengers in respect to affordable offers provided, the contrast is more appealing as satisfaction does not only accounts for one factor but rather a sum a cumulative determinant such as those of the SERVQUAL analysis.

III. REASEACH METHODOLOGY

This section of the study entails an argumentation through the use of different assessment techniques and approaches in order to compare the customer’s satisfaction level in few domestic airline companies in Turkey.

Aim/Purpose

The aim of this chapter is first and foremost to develop a design and research approach to be used in exploring and identifying different strategies and methods applied in some Turkish domestic airline companies in order to distinct their service while responding to customers’ expectations. Thus, the approach destined for this paper will help justifying the reasons of the methods in accordance with the stated objectives. The choice of method used is hereby elaborated as the link between aim of the paper and the research questions are met. The section addresses the various hypothesis raised in the course of the research which in return are scientifically tested using a distinct methodology’ description and model describing the different factors having effects on the comparative advantage of some domestic airline companies in Turkey. Hence limitations as well as ethics are hereby mentioned in this section. Past studies, as well as some customer’s feedbacks on some airline services received on previous experiences have enabled the drafting of a paradigm including considerable aspects of customer’s satisfaction level in the industry which could serve as standard requirements for service providers if consistent enough.

Research Approach

The study consists of passengers using domestics air carriers in Turkey; most especially with focus on four competitors namely OnurAir, Pegasus, THY and Altlas Global. A positivism philosophy is hereby adopted to mirror out the evidences of previous studies and propose related hypothesis to test different claims. The population parameter being potential customers, a questionnaire will be used and administered to respondents as a data collection technique. The choice of the above method is justified by the large number of possible outcomes one might get, therefore the sampling for more illustrated and accurate results. The frequency of

flights, number of regular customers registered for leisure or business purposes within Turkey, the advocacy of airline fares and purchase habits, income level and gender will independently map the way to establishing a relationship between factors impacting on service assessment therefore choice of an airline company rather than that of its competitors.

Research Design

This section of our research is attributed to the motivation towards the chosen method of investigation and data collection used here to test the different claims.

The population is to be sampled and directed to certain age group [18-45] regardless of their genders; the location, regionally defined as Istanbul where the airport with the higher quota of flights is recorded; this in order to throw more light to our previously stated aims and objectives in the above chapters. A quantitative method therefore stands as the best option to scientifically broadcast lapses in strategic decisions making process which deductively surface with customers' choice of some airline carriers rather than the existing ones. According to Malhotra (2008) works in determining the three different design approaches namely: exploratory, casual and descriptive techniques, it has been deemed best to follow the formal as it provides more insights on the nature of variables used to map out clearly defined process to any research. Exploratory design method will therefore contribute to generating prerequisite and primary data characterized as qualitative, thus consolidated with a quantitative approach of data collection as that of the questionnaires which would be destined to analysis through computerized method (SPSS) to generate quantified figures to customer's satisfaction in domestic flights on the landscape.

Research Design and Justifications

A model to exemplify the connection between variables affecting the choice of a companies is provided in the above section of this paper.

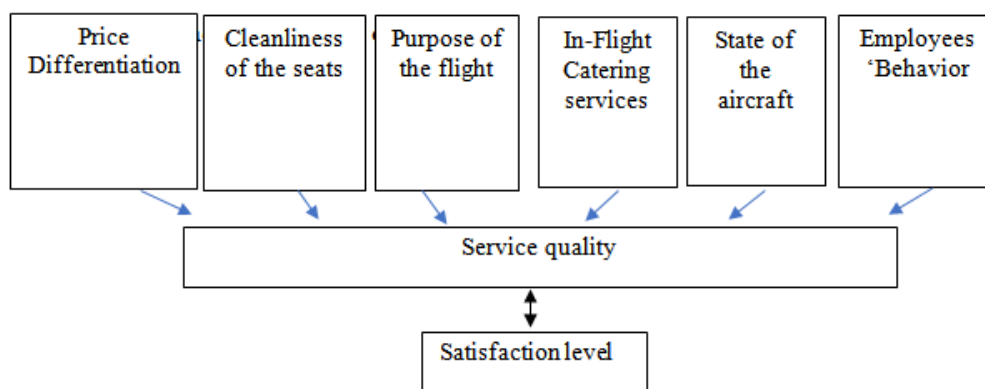


Figure 3.1: Research Design Model

Customers feedbacks such as online platforms, simple interviews word of mouth to mouth to name a few have proven that price plays a vital role in a choice of a good or service. However, the quality is sometimes at stake when identical offers are in the market place with competitors striving to win loyalty and thrust.

Cleanliness of the seats here is hereby expressed by the physical appearance; the comfortability one gets when seated as he/she embark to a stated destination. All relevant and expected features shall fit requirements of the ASCI conventions.

Travelling from one location to the other often does not have the same purpose for all passengers. Therefore, expectations for a business could not be replace as that of leisure or the type of class each service purchaser falls into.

In-Flight catering services are sometimes viewed as the root of any decision making towards any purchase order or reservation in a customers' perspective. A personal experience has enabled the development of a self-metric rating services accordingly the type of facilities available such as: entertainment, handouts, books and or newspapers, menu to name a few.

Employees' behavior has long been the focus of many numerous researchers in the quests of companies' success when involving both direct and indirect contact with customers. Park et. al (2004) and Zeithaml (1988) have demonstrated in their studies how important is the labor as it can affect the business positively or negatively in respect to customers' perceptions. Thus, the empathy dimension of service quality in airline industry should be given more attention.

The high concentration of Low Cost Carriers in Turkey has enabled the private sector to deploy its feet in other to beat the existing competition. Moreover, we observe a higher number of Airbus, Cargo and Charter carriers. Nevertheless, the choice of an airline despite the destination of the flight is also usually found reason in the type and age of the aircrafts to be used.

Hypotheses

The following hypothesis will be raised in the course of the research and their validity will be tested using a multiple linear regression model followed by a statistical analysis of data to arrive our findings. They are listed below as follow:

- Ho₁: If tangibility increases then customer satisfaction will increase.
- Ho₂: If empathy increases then customer satisfaction will increase (Employees’ behavior towards customers on an In-Flight process motivates customers to generate future purchase).
- Ho₃: If differentiation strategy (price, added advantages) and focus strategy in Turkish airline industry increase then will customer satisfaction
- Ho₄: If words of mouth to mouth positively increase then the repurchase attitude of passengers will also increase.
- Ho₅: If airline service quality offered by direct contact increase then the choice of a particular service provider will shift positively.
- Ho₆: If purpose of a travel is well-defined then the choice of an airline will be made easier.

IV. DATA ANALYSIS AND RESULTS

This present section of the study entails an observation and interpretation of results depicted from the designed questionnaires. To measure the correlation and closeness between variables, quantitative methods such as reliability test, correlation and exploratory factor analysis are hereby used as means for assessment.

4.1 Descriptive Statistics

The descriptive analysis hereby entails frequencies of some of the demographic questions administered during the survey to different respondents all fitting the chosen range for the sample of the study. Details of percentiles, frequencies to name a few are shown in the below tables as follow:

Table 4.1: Frequency table for gender

| | | Frequency | Percent |
|-------|--------|-----------|---------|
| Valid | Female | 157 | 51.6 |
| | Male | 147 | 48.4 |
| | Total | 304 | 100.0 |

The above table for gender’s frequency showcases a total number of 304 respondents among which 157 were female and 147 males. With a higher frequency than that of the males, it is wise to affirm that there were more females surveyed than the opposite sex.

Table 4.2: Frequency table for age

| | | Frequency | Percent |
|-------|---------|-----------|---------|
| Valid | 20below | 19 | 6.3 |
| | 21-29 | 161 | 53.0 |
| | 30-39 | 87 | 28.6 |
| | 40-49 | 23 | 7.6 |
| | 50above | 14 | 4.6 |
| | Total | 304 | 100.0 |

Table 4.2 here of frequency for age presents the age range chosen for the sample data. It is shown that from a total of 304 individuals, the highest frequency of passengers belongs to those between the age of 21-29; followed by that of 30-39, 40-49, below 20 and 50 and above in a descendant order. The greatest valid percent attributed to the second age group (20-29) enables us to testify that there are more young individuals using air transportation services in Turkey most especially Istanbul than older one. This could be attributed to the fact that as they grow older they tend to travel less or rather use other means of transport.

Table 4.3: Frequency table for origin

| | | Frequency | Percent |
|-------|----------|-----------|---------|
| Valid | African | 83 | 27.3 |
| | American | 48 | 15.8 |
| | Asian | 87 | 28.6 |

| | | |
|----------|-----|-------|
| European | 86 | 28.3 |
| Total | 304 | 100.0 |

The cosmopolitan city of Istanbul does accommodate both local citizens and foreigners from all over the world who for various reasons travel across and outside the country on different basis to satisfy their needs and wants. The results shown above present the Asian as the origin with the highest frequency (87) and a percentage (28.6%) followed by the European with a frequency of 86, next the African with a frequency of 83 and lastly the American with a frequency of 48. Therefore, it could be confidently affirmed based on the results from the above table that those of Asian origin travel more on regional air routes in Turkey than others.

Table 4.4: Frequency table for citizenship

| | | Frequency | Percent |
|-------|-------|-----------|---------|
| Valid | No | 207 | 68.1 |
| | Yes | 97 | 31.9 |
| | Total | 304 | 100.0 |

The above table represents the total number of surveyed passengers in terms of citizenship. Two options are chosen for the questionnaire which are respectively “no” for individuals not holding any Turkish citizenship and “yes” for the reverse case. Results here show from a total number of 304 a higher frequency (207) and percent (68.1) for passengers without a Turkish nationality and a lower one (97) and (31.9%) for nationals. These could be interpreted as foreigners in Istanbul use more air transportation services rather than local citizen.

Table 4.5: Frequency table for status

| | Frequency | Percent |
|---------------|-----------|---------|
| Civil worker | 104 | 34.2 |
| Retired | 7 | 2.3 |
| Self-Employed | 50 | 16.4 |
| Student | 122 | 40.1 |
| Unabledtowork | 11 | 3.6 |
| Unemployed | 10 | 3.3 |
| Total | 304 | 100.0 |

Six categories have been chosen to group passengers according to their status namely civil worker, retired, self-employed, student, unemployed and unable to work. Thus, outcomes of the proposed questions indicate that students have the highest travel frequency (122) and percent (40.1) compare to other groups. The lowest frequency among all categories is shown to be that of the retired. Therefore, it will be wise to affirm given the above results that people that travel regionally the most in Istanbul are considered to be students; followed by civil-workers, self-employed, unable to work, unemployed and lastly retired.

Table 4.6: Frequency table for regularity in using airline services

| | | Frequency | Percent |
|-------|---------|-----------|---------|
| Valid | 1-5 | 141 | 46.4 |
| | 6-10 | 103 | 33.9 |
| | 11-15 | 34 | 11.2 |
| | 16-20 | 11 | 3.6 |
| | 20above | 14 | 4.6 |
| | 16.00 | 1 | .3 |
| | Total | 304 | 100.0 |

The table above reflects results on the question of how often do individuals travel on domestic air routes from Istanbul to other cities in the land of Turkey within a year. We depict a higher frequency in the range 1-5 times of 141 and a percent of 46.4 followed by the range 6-10times a year with a frequency of 103 with 33.9 as percent; all total surveyed recorded as to be 304 in number. The lowest category which is assigned to that of 16times a year on the other hand only accounts for 1 in frequency with a percent of .3.

Table 4.7: Frequency table for reason for travelling

| | | Frequency | Percent |
|-------|--------------------|-----------|---------|
| Valid | Business | 57 | 18.8 |
| | Businessandleisure | 3 | 1.0 |
| | Educational | 56 | 18.4 |
| | Education leisure | 2 | .7 |

| | | |
|---------|-----|-------|
| Leisure | 186 | 61.2 |
| Total | 304 | 100.0 |

Table 4.7 of frequencies and percent represent that of the reason that foster every travel decision passengers make before embarquing on the journey. A total of 304 answers were collected on the question. The highest frequency is registered as that of leisure (186) with a percent of 61.2 which accounts for more than two times that of educational (18.4) and business (18.8). It clearly indicates that the first motive in travelling around the country for both locals and foreigners is said to be leisure (tourism, honeymoon, holidays etc.)

4.2 NormalityTest

The Normality test is vital in analyzing or rather determining the skewness of any distribution. Thus the constant use of the above method to accurately describe or give an approximate of the distribution’s type related with adequate variables has led to the standardization of the method in scientific and academic researches. It has been argumeted and proven by statistic practitioners such as Hair et al (2010) that not only does the normality test apply to univariate data sets but also to multivariate models thus multivariate analysis. It is therefore essential to synthetize different aspects of the current set to identify a particular distribution. The below table displays all variables utilized for this analysis as well as the sample size. All variables are hereby represented as the five dimensions of the SERVQUAL method commonly used in Marketing to evaluate performances.

Table 4.8: Normality test

| | Tangibles | Assurance | Reliability | Empathy | Responsiveness |
|-------------------------|-------------|-----------|-------------|---------|----------------|
| Mean | 3.4679 | 3.4343 | 3.3377 | 3.4112 | 3.523 |
| 95% confidence interval | Upper bound | | | | |
| | 3.377 | 3.3424 | 3.2433 | 3.3124 | 3.3953 |
| Lower Bound | | | | | |
| | 3.5588 | 3.526 | 3.4322 | 3.51 | 3.6507 |
| Median | 3.5 | 3.6667 | 3.3333 | 3.5 | 4 |
| Variance | 0.649 | 0.662 | 0.7 | 0.786 | 1.28 |
| Std deviation | 0.80556 | 0.81338 | 0.83689 | 0.87522 | 1.13137 |
| Minimun | 1 | 1 | 1 | 1 | 1 |
| Maximun | 5 | 5 | 5 | 5 | 5 |
| Range | 4 | 4 | 4 | 4 | 4 |
| Interquatile range | 1 | 1 | 1.25 | 1 | 1 |
| Skewness | -0.371 | -0.395 | -0.261 | -0.447 | 0.732 |
| Kurtosis | 0.174 | 0.112 | -0.06 | 0.235 | -0.147 |

The Skewness and Kurtosis factors for each of the five dimensions of service quality will be evaluated given the below values to test the normality of distribution. Data are approximately or perfectly normally distributed if the statistic Kurtosis value falls between $z \pm 3$ and Skewness of ± 1.96 . However, greater number of studies on the Kurtosis which in return question the test’s reliability has been recorded as it is very critical in determining the shape of the distribution (Balanda and MacGillivray, 1988).

Skewness and Kurtosis test ($z \pm 1.96$), coupled with graphical analysis of the dimension’s histograms reveal the approximate of a normal distribution of items. Thus a skewness of -0.371 (SE= 0.140) and a kurtosis of 0.174 (SE= 0.279) which z value that falls or rather closer to the threshold.

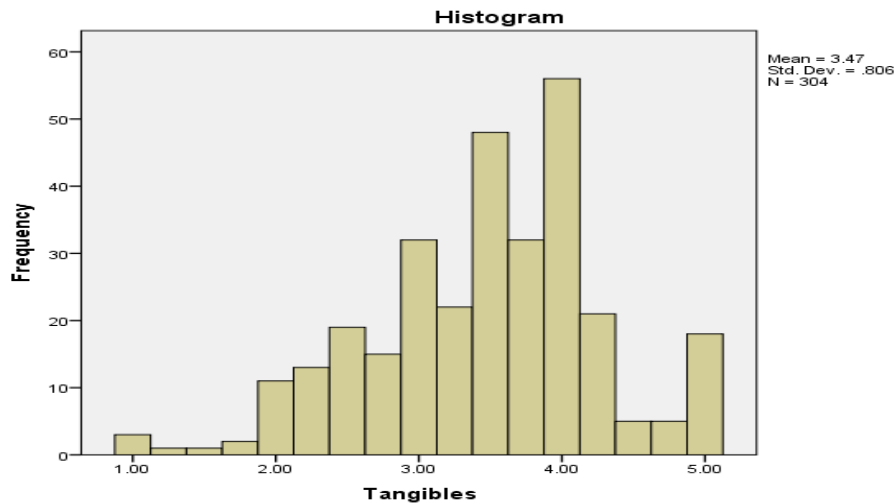


Figure 4.1: Histogram for Tangibles

Here above is an illustration of results of the normality test in term of tangibles. A statistical analysis conducted on data is hereby expressed as histogram to determine the nature of the distribution.

4.2.1 Assurance

A skewness and Kurtosis test ($z \pm 1.96$), coupled with graphical analysis of the dimension’s histograms, box plots as well as the normal Q-Q plots reveal the approximate of a normal distribution of items. Thus a skewness of -0.395 (SE= 0.140) and a kurtosis of 0.112 (SE= 0.140) with z value that falls or rather closer to the threshold.

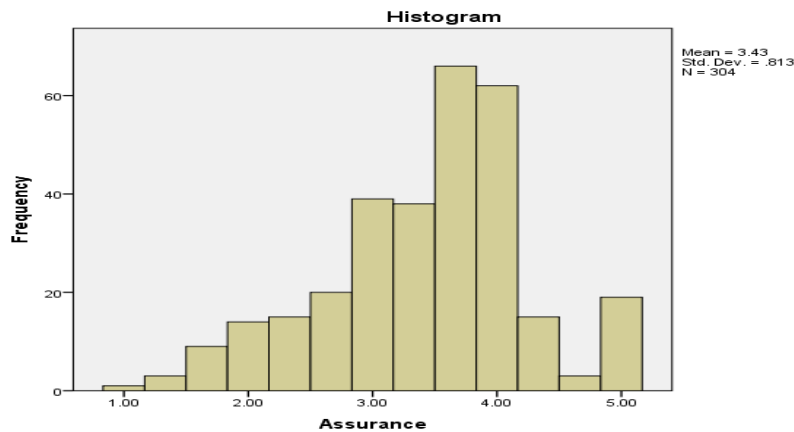


Figure 4.2: Histogram for Assurance

The above figure is an illustration of results of the normality test in term of assurance. A statistical analysis conducted on data is hereby expressed as histogram to determine the nature of the distribution.

4.2.2 Reliability

Skewness and Kurtosis test ($z \pm 1.96$), coupled with graphical analysis of the dimension’s histograms, box plots as well as the normal Q-Q plots reveal the approximate of a normal distribution of items. Thus a skewness of -0.261(SE= 0.140) and a kurtosis of -0.060(SE=0.279) which z value that falls or rather closer to the threshold.

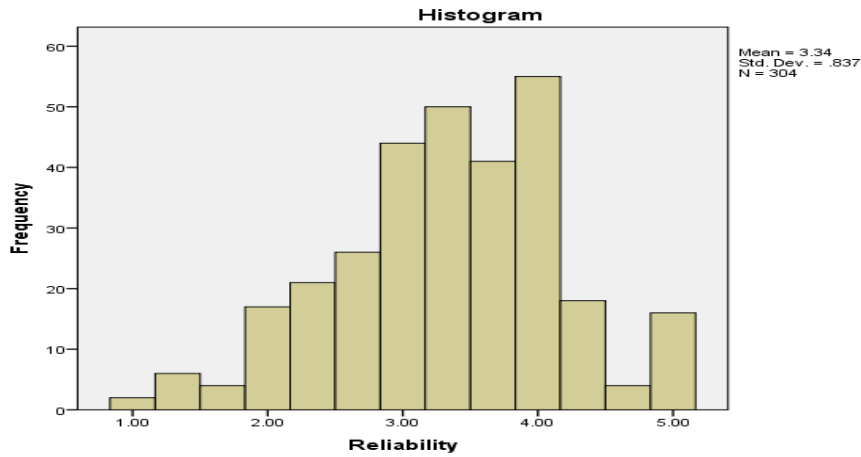


Figure 4.3: Histogram for Reliability

Here are above results of the normality test for reliability; graphically represented as histograms.

4.2.3 Empathy

Skewness and Kurtosis test ($z \pm 1.96$), coupled with graphical analysis of the dimension's histograms, box plots as well as the normal Q-Q plots reveal the approximate of a normal distribution of items. Thus a skewness of -0.447($SE = 0.140$) and a kurtosis of 0.235($SE = 0.279$) which z value that falls or rather closer to the threshold.

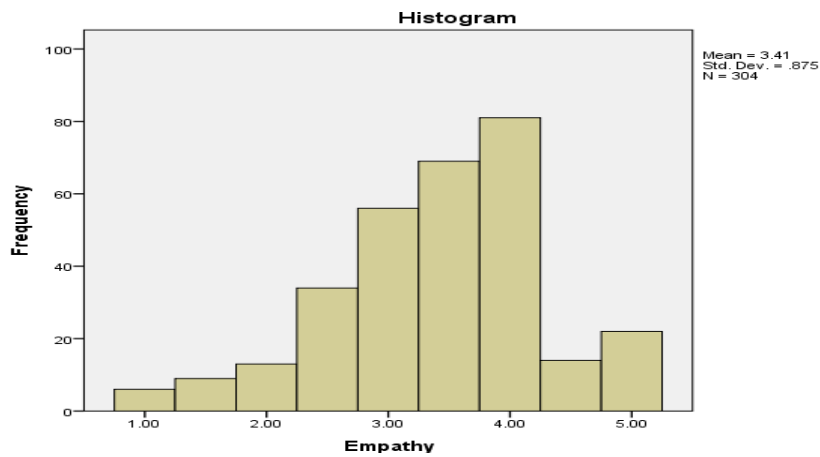


Figure 4.4: Histogram for Empathy

The above figure illustrates a graphical interpretation of the normality test for Empathy, hereby expressed as histogram.

4.2.4 Responsiveness

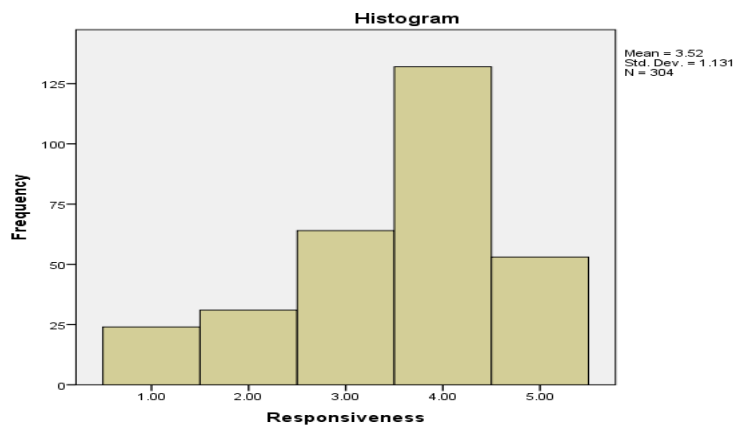


Figure 4.5: Histogram for Responsiveness

The above figure indicates a graphic interpretation of the normality test for the responsiveness dimension. Standard deviations

The below table displays each dimension’s standard deviation after computerized values selected for the normality test.

Table 4.9: Standard deviations

| SD | Tangibles | Assurance | Empathy | Responsiveness | Reliability |
|--------|-----------|-----------|---------|----------------|-------------|
| Values | 0.80556 | 0.81338 | 0.87522 | 1.13137 | 0.83689 |

The above table after comparison, reveals a closeness between the four dimensions ‘standard deviations respectively tangibles, assurance, empathy and reliability which values are approximately equal at one decimal. However, the responsiveness factor on the other hand displays the highest S.D value; summarized as respondents all thinking different.

Correlations

The correlation analysis is a statistical method used in assessing the relationship between variables which happened to be continuous. It will therefore be applied here to determine the strength of affinity between five dimensions of the SERVQUAL.

Table 4.10: Pearson Correlations Coefficient

| Tangible | Assurance | Reliability | Empathy | Responsiveness |
|----------------|-----------|-------------|---------|----------------|
| Tangible | 1 | .778 | .763 | .729 |
| Assurance | .778 | 1 | .725 | .627 |
| Reliability | .763 | .725 | 1 | .670 |
| Empathy | .729 | .627 | .670 | 1 |
| Responsiveness | .592 | .629 | .582 | .575 |

A sample size of 304 passengers of some of the commonly domestic known airlines in Turkey most especially in Istanbul area were surveyed about some reasons in the choice of a company when flying domestically. The Pearson’s correlation analysis therefore reveals a strong correlation

Table 4.11: Items Correlations Coefficient

| Pearson Correlation | s1 | s2 | s3 | s4 | s5 | s6 | s7 | s8 | s9 | s10 | s11 | s12 | s13 |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| s1 | 1 | .441 | .403 | .486 | .439 | .391 | .369 | .461 | .422 | .394 | .363 | .343 | .398 |
| s2 | .441 | 1 | .480 | .470 | .530 | .489 | .516 | .521 | .470 | .511 | .485 | .471 | .393 |
| s3 | .403 | .480 | 1 | .544 | .504 | .471 | .427 | .513 | .442 | .365 | .439 | .376 | .431 |
| s4 | .486 | .470 | .544 | 1 | .475 | .552 | .544 | .507 | .499 | .370 | .465 | .444 | .482 |
| s5 | .439 | .530 | .504 | .475 | 1 | .558 | .452 | .462 | .382 | .541 | .455 | .445 | .550 |
| s6 | .391 | .489 | .471 | .552 | .558 | 1 | .536 | .527 | .430 | .551 | .560 | .485 | .520 |
| s7 | .369 | .516 | .427 | .544 | .452 | .536 | 1 | .622 | .600 | .545 | .550 | .538 | .418 |
| s8 | .461 | .521 | .513 | .507 | .462 | .527 | .622 | 1 | .626 | .568 | .542 | .507 | .582 |
| s9 | .422 | .470 | .442 | .499 | .382 | .430 | .600 | .626 | 1 | .511 | .515 | .548 | .491 |
| s10 | .394 | .511 | .365 | .370 | .541 | .551 | .545 | .568 | .511 | 1 | .654 | .510 | .534 |
| s11 | .363 | .485 | .439 | .465 | .455 | .560 | .550 | .542 | .515 | .654 | 1 | .591 | .507 |
| s12 | .343 | .471 | .376 | .444 | .445 | .485 | .538 | .507 | .548 | .510 | .591 | 1 | .523 |
| s13 | .398 | .393 | .431 | .482 | .550 | .520 | .418 | .582 | .491 | .534 | .507 | .523 | 1 |

The results displayed in the table simply represent the relation between all questions administered in the survey as how correlated they are to each other. For example, S1 is correlated to S2 at 44%, S1 42% to S9 and so forth.

In social science, item communalities are often considered to be low or moderate which entails an extraction factor of ranging from .40 to .70 for realistic data (Anna and Jason 2005). However, a low record of extraction might as well refer to an extra item or rather a non-correlation between factors.

Table 4.12: Communalities

| | Initial | Extraction |
|----------------|---------|------------|
| Tangibles | 1.000 | .822 |
| Assurance | 1.000 | .775 |
| Reliability | 1.000 | .768 |
| Empathy | 1.000 | .705 |
| Responsiveness | 1.000 | .606 |

Extraction method: Principal Component Analysis

The above communalities table mathematically demonstrated how much of a variance' proportion of each variable could be explained by the factors. They are namely: tangibles, assurance, reliability, empathy and responsiveness. The initial values 1, simply determine the proportion one could explain a variable by itself whereas the extraction entails the proportion of variance

Independent T-Test Statistics

This section here entails an analysis of some demographic variables with the dimensions of the SERVQUAL in order to determine the relation between each. An independent t-test statistic will therefore be used to reach conclusions.

In order to determine the nature of the data used in the sample, a t-test is therefore conducted and results presented below.

Table 4.13: T-test for tangibility and gender

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | |
|-----------|-----------------------------|---|------|------------------------------|---------|
| | | F | Sig. | T | df |
| Tangibles | Equal variances assumed | 1.536 | .216 | -1.927 | 302 |
| | Equal variances not assumed | | | -1.933 | 301.757 |

The above table indicates results of the Levene's test of equality for variance as well as the equality t-test for means between the tangibility dimension of the SERVQUAL method and the gender factor.

Table4.14: Independent Sample t-test for tangibles and gender

| | | t-test for Equality of Means | | | |
|-----------|-----------------------------|---|-----------------|-----------------------|---|
| | | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference Lower |
| Tangibles | Equal variances assumed | | .055 | -.17736 | -.35848 |
| | Equal variances not assumed | | .054 | -.17736 | -.35792 |
| | | t-test for Equality of Means | | | |
| | | 95% Confidence Interval of the Difference | | | |
| | | Upper | | | |
| Tangibles | Equal variances assumed | | .00377 | | |
| | Equal variances not assumed | | .00321 | | |

T-test Statistics results

If $p < .05$, then reject the null hypothesis H_0 and accept H_1 : There is a difference between gender and tangibles

If $p > .05$, then accept H_0 : Males and females have same perception of customer satisfaction in terms of tangibles.

In order to find accurate results to test our hypothesis, the significance value, equal variances assumed and not assumed for both male and females will be evaluated to check the similarities in the shape of the distribution.

According to the results from the table, the significance 2-tailed P value (.055) >P (.050), therefore it will be wise to accept the null hypothesis Ho: Males and females are slightly different from each other; they don't vary much in terms of mean and or variances.

Table 4.15: Independent sample t-test for tangibles and citizenship

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | |
|-----------|-----------------------------|---|------|------------------------------|---------|
| | | F | Sig. | t | df |
| Tangibles | Equal variances assumed | .026 | .872 | 1.514 | 302 |
| | Equal variances not assumed | | | 1.479 | 177.535 |

| | | Independent Samples Test | | | |
|-----------|-----------------------------|--------------------------|-----------------|-----------------------|---|
| | | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |
| | | | | | Lower |
| Tangibles | Equal variances assumed | .131 | .14972 | .09891 | -.04492 |
| | Equal variances not assumed | .141 | .14972 | .10121 | -.05000 |

| | | Independent Samples Test | | |
|-----------|-----------------------------|---|--|--|
| | | t-test for Equality of Means | | |
| | | 95% Confidence Interval of the Difference | | |
| | | Upper | | |
| Tangibles | Equal variances assumed | .34436 | | |
| | Equal variances not assumed | .34944 | | |

T-test Statistics results

If $p < .05$, then reject the null hypothesis Ho and accept H1: There is a significant difference between citizenship and tangibles

If $p > .05$, then accept Ho: Both Turkish and foreigners have the same perception of customer satisfaction in terms of tangibles.

The above provides us with the independent sample t-test results of tangibles and citizenship. The group statistics indicates a higher number of respondents with no Turkish nationality (N=207) while the opposite case accounts for only (N=97). The sample means however, seen not to significantly differ from each other $\mu=3.5157 \geq \mu=3.3660$. An in-depth analysis of the table indicates a significance 2-tailed P value (.131) >P (.050). Therefore, there is enough evidence to support the claim Ho stating “: Both Turkish and foreigners have the same perception of customer satisfaction in terms of tangibles”

Independent T-Test Cut Point

The analysis of multiple demographic variables with the dimensions of the SERVQUAL is hereby addressed in this section and results of the t-test cut point are presented in the following tables as follow:

Table 4.16: Independent sample t-test cut point for tangibles and age group

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|-----------|-----------------------------|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|---|--------|
| | | F | Sig. | T | Df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | | Lower | Upper |
| Tangibles | Equal variances assumed | .009 | .924 | -1.037 | 302 | .301 | -.22845 | .22040 | -.66217 | .20527 |
| | Equal variances not assumed | | | -1.040 | 14.294 | .316 | -.22845 | .21967 | -.69868 | .24179 |

The above table here shows a statistic cut point analysis of variables namely tangibles and age group. With a total number of 304 respondents, there are two categories represented here such:

- Group1: all individuals between 18 and 50 years old
- Groups 2: all individuals aged 50 years and above.

T-test Statistics results

If $p < .05$, then reject the null hypothesis H_0 and accept H_1 : There is a significant difference between age groups and tangibles

If $p > .05$, then accept H_0 : Both respondents below 50years and 50years and above have the same perception of customer satisfaction in terms of tangibles.

The highest total number recorded is that of the first group (N=290) against 14 of the second group. Their mean and standard deviation slightly differ whereas a considerable difference exists in their standard errors. The significant 2-tailed P value (.0381) > (.050) could therefore be account for enough reason to reject the null hypothesis.

Table4.17: Independent sample t-test cut point for assurance and status

| | | Levene's Test for Equality of Variances | | Independent Samples Test | | | | | | | |
|-----------|-----------------------------|---|------|--------------------------|-------|-----------------|-----------------|-----------------------|---|--------|-------|
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | | |
| | | | | | | | | | | Lower | Upper |
| Assurance | Equal variances assumed | .265 | .607 | .391 | 302 | .696 | .10249 | .26192 | -.41292 | .61791 | |
| | Equal variances not assumed | | | .412 | 9.694 | .690 | .10249 | .24903 | -.45476 | .65975 | |

T-test Statistics results

If $p < .05$, then reject the null hypothesis H_0 and accept H_1 : There is a significant difference between status and assurance

If $p > .05$, then accept H_0 : Both employed and unemployed passengers have thesame perception of customer satisfaction in terms of assurance.

The results displayed here above, most especially the significance 2-tailed value $P(.696) > P(.050)$ at 95% level of confidence, It could therefore be wise to support the claim with all tangible facts included on the table; thus accept the null hypothesis:Both employed and unemployed passengers have the same perception of customer satisfaction in terms of assurance.

Table 4.18: Independent sample t-test cut point for assurance and age group

| | | Levene's Test for Equality of Variances | | Independent Samples Test | | | | | | | |
|-----------|-----------------------------|---|------|--------------------------|--------|-----------------|-----------------|-----------------------|---|--------|-------|
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | | |
| | | | | | | | | | | Lower | Upper |
| Assurance | Equal variances assumed | 1.518 | .219 | -.923 | 302 | .357 | -.20558 | .22263 | -.64368 | .23251 | |
| | Equal variances not assumed | | | -1.193 | 15.297 | .251 | -.57236 | .16119 | | | |

T-test Statistics results

If $p < .05$, then reject the null hypothesis H_0 and accept H_1 : There is a significant difference between age group and assurance

If $p > .05$, then accept H_0 : Young and Old passengers have the same perception of customer satisfaction in terms of assurance.

As the interpretation is furthered to the 2-tailed significance value interpretation, both value $P=.357$ and $P=.251 > P=.050$; however, are not considered as equivalent to each other or rather similar. Despite the difference observed in the means, standard deviations and significance P values, there is not enough evidence to claim the null hypothesis; therefore, the null will be accepted; in other words, both old and young customers do have the same perception of assurance for airline companies.

Table 4.19: Independent T-test cut point for assurance and travelling frequency

| | | Levene's Test for Equality of Variances | | Independent Samples Test | | | | | | | |
|-----------|-----------------------------|---|------|--------------------------|--------|-----------------|-----------------|-----------------------|---|--------|-------|
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | | |
| | | | | | | | | | | Lower | Upper |
| Assurance | Equal variances assumed | .457 | .500 | -1.363 | 302 | .174 | -.29312 | .21509 | -.71639 | .13015 | |
| | Equal variances not assumed | | | -1.287 | 15.309 | .217 | -.29312 | .22773 | -.77767 | .19144 | |

Two categories have been chosen for the test which entails the first group as that of those who travel less or up to twenty times per year while the other constitutes of a travelling of a minimum of twenty times yearly. It was therefore recorded as a total of 289 surveyed who travel at least once or twenty times a year at a maximum with a mean ($\mu = 3.4487$) and the standard deviation ($\sigma = .80971$) against 15 for the other category with a mean of ($\mu = 3.1556$) and a standard deviation ($\sigma = .86251$). It is then obvious that many people travel regionally in Turkey however less than twenty times a year on an average.

T-test Statistics results

If $p < .05$, then reject the null hypothesis H_0 and accept H_1 : There is a significant difference between frequency of travel and assurance

If $p > .05$, then accept H_0 : Both regular and frequent passengers have the same perception of customer satisfaction in terms of assurance.

The independent sample test table above also indicate a significant P value greater than the P statistic initial value (.050) for both equal variances assumed and not assumed respectively ($P = .174$) and ($P = .217$). This stands as evidence to reject the alternative claim. Therefore, support the null hypothesis which entails that both regular and frequent airline customers have the same perception of assurance.

The results of the table above could be interpreted as follow: individuals aged 50 and below rely more on airlines rather than those aged 50 and above.

Table 4.20: Independent sample t-test cut point statistics for reliability and age group

| | | Levene's Test for Equality of Variances | | Independent Samples Test | | | | | | | |
|-------------|-----------------------------|---|------|--------------------------|--------|-----------------|-----------------|-----------------------|---|--------|-------|
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | | |
| | | | | | | | | | | Lower | Upper |
| Reliability | Equal variances assumed | .011 | .916 | -.783 | 302 | .435 | -.17931 | .22915 | -.63024 | .27162 | |
| | Equal variances not assumed | | | -.883 | 14.687 | .391 | -.17931 | .20300 | -.61280 | .25418 | |

T-test Statistics results

If $p < .05$, then reject the null hypothesis H_0 and accept H_1 : The reliability factor is significantly different for young and old passengers.

If $p > .05$, then accept H_0 : Both age groups of passengers have the same perception of reliability.

The table here above indicates results of the t-test analysis including reliability and age group factors. The total number $N = 14$ represents that of individuals age 50 and above while the remaining $N = 290$ for passengers below that age range. Thus the significance 2-tailed value for both equal variances assumed and not assumed is greater than the initial .050 ($P = .435$ and $P = .391$) which entails; there are not enough evidences to reject the H_0 . It can therefore be affirmed that the reliability factor is the same for both young and old passengers.

Table 4.21: Independent sample t-test cut point for reliability and status

| | | Independent Samples Test | | | | | | | | |
|-------------|-----------------------------|---|------|------------------------------|-------|-----------------|-----------------|-----------------------|---|--------|
| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | Lower | | Upper |
| Reliability | Equal variances assumed | 1.300 | .255 | -.145 | 302 | .885 | -.03900 | .26955 | -.56943 | .49143 |
| | Equal variances not assumed | | | -.109 | 9.340 | .915 | -.03900 | .35623 | -.84040 | .76240 |

T-test Statistics results

If $p < .05$, then reject the null hypothesis H_0 and accept H_1 : The reliability factor is significantly different for employed and unemployed passengers.

If $p > .05$, then accept H_0 : Both employed and unemployed passengers have the same perception of reliability.

The 2-tailed significant value for both equal variances assumed and not assumed is higher than the standard value ($P = .050 < .885$; $.050 < .915$). Therefore, it will be wise to say with enough evidence to support the claim "both employed and unemployed passengers assess reliability the same way". In other words, the choice of a domestic airline is made not based on the status when considering reliability but rather other variables to be mentioned in further studies.

Table 4.22: Independent sample t-test cut point for reliability and travelling frequency

| | | Independent Samples Test | | | | | | | | |
|-------------|-----------------------------|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|---|--------|
| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | Lower | | Upper |
| Reliability | Equal variances assumed | .066 | .798 | -1.821 | 302 | .070 | -.40200 | .22078 | -.83646 | .03246 |
| | Equal variances not assumed | | | -2.114 | 16.092 | .050 | -.40200 | .19015 | -.80492 | .00092 |

The table here above show results of the statistical analysis between the reliability factor and the frequency at which passengers travel per year in the land of Turkey considering only regional routes. It indicates that from a total of 304 respondents, 289 travel at a frequency of less or 20 times yearly with a mean of $\mu = 3.576$ while the remaining 15 travel for more with a mean of $\mu = 2.9556$.

T-test Statistics results

If $p < .05$, then reject the null hypothesis H_0 and accept H_1 : There is a significant difference between frequency of travel and reliability

If $p > .05$, then accept H_0 : Both regular and frequent passengers have the same perception of customer satisfaction in terms of reliability.

Results for Levene's test for equal variance and t-test for equal means are displayed here above. To test the claim, attention is to be directed to the 2-tailed p-value for variances. P-value hereby for variances assumed (.070) $> (.050)$ the statistic value. Given the numbers indicates above, it therefore wise to support the null hypothesis: both regular and frequent passengers have the same perception of reliability. In other words, reliability of an airline depends on other factors rather than how frequent people fly.

V. CONCLUSION

The concepts of service quality and customer satisfaction are two terms often used internationally in business to emphasize on reasons behind success of some companies over their competitors. However, some studies attribute customer's purchase behavior not only to standards of evaluation but also prerequisites perceptions of the product or service to be rendered. Up to date in marketing and every other business field, there are still investigations on the question of arriving at a standard of comparison of customer satisfaction.

This paper illustrate and investigate the interrelations between the five dimensions of the SERVQUAL analysis and customer satisfaction in some domestic airlines in Turkey. Among the chosen parameters which includes four of the domestic airline companies operating in Turkey, the most preferred or one is THY. The ranking therefore continues with Pegasus, Atlasglobal and Onurair in a descending order. THY being the first ever launched airline company in the country, this serves as an added advantage over other brands. Thus, with the launching of Anadolujet, its subsidiary, a greater number of affordable offers are now available, therefore increasing the brand awareness over the country.

Pegasus airlines, a low cost carrier company has shown through results to be highly competitive nowadays in the market place despite the different strategy used. Founded many years post that of THY, the airline company is beating records competing with the country's flag carrier. Perhaps a more strategical approach to overcome lapses will set the brand at a higher rank. Passengers choosing to fly with Pegasus tends to be more price sensitive, and concerned with the tangible aspects.

A bias concept was found in customers' perception of airline companies in Turkish domestic market place. All low cost carriers are often expected to provide a narrower range of services compare to that of competitors such as: low fares, less comfort, little to no catering services during the flight, more delays to name a few. Atlasglobal on the contrary, does provide more affordable price tickets one of the most important factors to consider for low cost carriers however, registered and operates as a full time carrier. The ambiguity there lies in the similarities with other low cost competitors in the marketplace. Perhaps a more customized or rebranding of services offered will be essential for brand awareness.

Onurair is attributed the lowest score given results of analysis placing the brand in the last position in the ranking of the four mentioned airline service providers. Despite the supposed constant low fares and appealing aircrafts, customers do consider many other factors when evaluating the airline. In other words, price factor alone doesn't seem to be convincing enough to customers rather other important criteria such as on-time delivery of service, empathy should be given more attention. Most passengers disregarded the company's customers approach and service performance.

REFERENCES

- [1] **Ali R. G, Setareh F, Dr. Rohaizat B. (2015).** "International Journal of Academic Research in Business and Social Sciences" Service Quality Measurements: A Review. Vol. 5 (2)
- [2] **Balanda, Kevin P., and H. L. MacGillivray. (1988).** "The American Statistician" Kurtosis: a critical review. 42(2), 111-119.
- [3] **Bratley Gale, B. T Gale, & Robert Chapman W. (1994).** Managing customer value: Creating quality and service that customers can see.
- [4] **Chris A. (2008).** The 5 Service Dimensions All Customers Care About
- [5] **David. G, Robin K.C Wong, (2003).** "Tourism Journal" Passenger expectations and airline services: a Hong Kong based study. Vol 24 (5). Pp 519-532
- [6] **Doane, D. P., & Seward, L. E. (2011).** "Journal of statistics education" Measuring skewness: a forgotten statistic?. 19(2).
- [7] **Elkhani, N., & Bakri, A. (2012).** Review on Expectancy Disconfirmation Theory (EDT) Model in B2C E-Commerce. "Journal of Information Systems Research and Innovation"
- [8] **Gour C. Saha, Theingi, (2009).** "Managing Service Quality: An International Journal" Service quality, satisfaction, and behavioural intentions: A study of low-cost airline carriers in Thailand. Vol 19 (3)
- [9] **Özge, P. (2010).** Competitive Strategies of Airline Companies Operating in Turkish Domestic Aviation Market.
- [10] **Philip K, Gary A. (1994).** Principles of Marketing. Prentice-Hall, 1980.

- [11] **Tse, D. K., & Wilton, P. C. (1988).** "An extension. *Journal of marketing research*" Models of consumer satisfaction formation. 25(2), 204-212.
- [12] **Rasmus .L. Jensen, (2009).** Delivering Excellent Service Quality in Low Cost Aviation: A Process Perspective On Passenger Market in Copenhagen Airport
- [13] **U. Khan, N. Khan; (2014).** "International Proceedings of Economics Development and Research" Customer Satisfaction in Airline Industry. Vol76. 12; Pakistan
- [14] **Wasib B Latif, Md.Aminal Islam and Idriss B. Mohle. N (2014).** A conceptual Framework to Build Brand Loyalty in the Modern Marketing Environment. "Journal of Asian Scientific Research" Vol 4: 547-537.
- [15] **Y. Sheau Fen, K.M. Lian; (2007).**"Sunway Academic Journal" Service Quality and Customer Satisfaction: Antecedents of Customer's Re-Patronage Intentions