A Survey of the Impact of Quality Dimensions of Airport Services upon the Foreign Tourists Satisfaction (A Case Study of an Iranian Airport)

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Abstract
The main purpose of this study is to investigate the impact of quality dimensions of airport services upon the foreign tourist's satisfaction in Mehrabad international airport in Iran. The research population includes all of foreign visitors upon to the end of 2013. With regard to the number of visitors, which is not clearly known, and viewing the ideas of the experts some 267 people were selected for the study. The methodologies of the present study have used the Gronroos, C.,(1984), model upon which the questionnaire and also we used. Cronbach's Alpha coefficient for the validity of questionnaire and also we used the same model to see the reliability of the questionnaire. The coefficient of the questionnaire was obtained (0.875), percent. The result of the data analysis indicates that there is a meaningful correlation between the dimensions of the measuring model of the services and rate of the satisfaction of the tourists used the airport services in Mehrabad international airport. There is also a meaningful relationship between the functional quality and the technical quality with mental perception of the tourists.

Keywords**:** Tourists, Service quality, Gronroos model.

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1-Introduction

Much of the growth in global tourism today has been facilitated, in major part by an increase in accessibility at many tourists' destinations (Duval, 2007). The recent developments in transportation infrastructure and technology allowed greater numbers of tourists to travel to far away destinations around the world. At the center of this development is the air transportation system. Air transport has become the fundamental cog in the global tourism interaction sphere (Duval, 2007).Thus, understanding the state of the air industry has become very important today, as it could single-handedly shape tourist flows where air access is the dominant network provision for accessibility and connectivity (Widarsyah, & et all, 2013).

Hence, passenger satisfaction is a key performance indicator for airport operations. International airports located in different regions or countries by and large do not compete with one another. Passengers often do not have a choice between airports, regardless of price and quality levels of airport services (Chao & et al, 2013). In other words, passenger demand for airport services is likely to be relatively inelastic (Doganis,1992).

Air transportation is an infrastructure it has a basic structural foundations of a society. It has one of the most important components of the production cycle and also the consumption process. Its location has the national system of all countries. Then Iran based on the official statistics, the direct activities of transportation is nine percent if the gross domestic production (GDP), in terms of machineries and business facilities. Nearly 1.3 million people work directly in transportation business in Iran. (Shiraz, A.R., 2010, P.LL)[1]

With respect to tourism industry, one of the most important dimensions of quality airport services is foreign tourist Satisfaction, and Mehrabad international airport in Iran as an international Airport has the modern airport facilities for foreign tourists.

Today's new environment and ever changing techniques in tourism need a continuous survey and research in order to create and to introduce some improved and more competitive strategies compared to the current needs in the industry (Millan Angel, 2004).

Nowadays, tourism development in any Programs such as regional, provincial, or national level has a key factor to start and run a business compared to agricultural and industrial sectors. Because it is the fastest and the most convenient way of handling a business in a country (Jagmohand, 1990)

Following tourism development in 1960s and 1970s, the economic results of that were surveyed by many researches. Also, since 1980s the importance and need for conducting research on the obstacles and the control on the environmental, social, and cultural impacts of tourism alone with the economic aspects of that came into consideration (Kim, 2005).

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[1] Shirazi, Ahmad Reza, 2010, p.ll, Air passenger rights.

Although, tourism development Possesses a lot of economic, cultural, and social benefits, but the problem is when the structural factors are not just enough to make benefits and instead of gains they make losses for the enterprise and the community. In this connection, we can count the abuse of national costumes, the misuse of values and traditions, drug addiction, crimes, vandalism, corruption, sexual abuses, and so on and so forth. These are the deficiencies and shortcomings of the programs in the tourism industry which faces its cultural development (Me Intyr, et all, 1993).

In 2007, the international tourism had a total of one billion dollars directly, for Iran, and a share of 700 million dollars indirectly for the gross domestic production (GDP) of the country. This particular industry could create 607.000 jobs directly for the nation (WTTC, 2008). The international tourism is not only a main source for income of lots of nations, but also it is a pioneer economic sector for the international trade (Pearce, 1992).

The entries of the international Passengers to Iran not only increase the national earnings of foreign exchange through tax management, employment and economic varieties, but also they create the regional growth and encourage investment in non–tourism sections. (Pearce, 1992).

Indeed, the international tourism is a means of strength and national development in fact , in a great number of countries, the earnings through tourism industry is an important source to compensate the deficit in financial credits of the other sectors in national economy (Mac,1992) Gringos Model.

Theoretical Foundations

The specialists have ways to compare the possible service quality submitted by the competitors for the consumers in the societies.

They discuss the point that all these models can be considered fit and suitable in different situations, and that they can be utilized for determination of the definite or relative amount of service quality (Alvani, et al, 2009).

 The models consist of the following details:

1-Only one of the specifications is used to determine the service quality and other features are not used or used or used apparently.

2-Only one specification can determine the service quality and at the same time other features are at the least Position to do so.

We should use the balanced average in order to balance the high and low grades of different features. In other words the specifications compensate the different marks given to the service qualities, (Kavyani, 2004).

In 2005, Gronrooz had a survey to find out the perceptions of each customer for the service quality and the determination of the ways effective on the amount of service quality. He studied the behaviors of the consumers and reached to the point that the

actual service quality is somewhere between the expected quality and the real-world quality of the service.

The expected service quality is usually affected by the marketing activities, customs, ideologies, propaganda, advertisement previous experience, and etc. He implicitly pointed out that the expectations are the ideals that you can't go behind them. It seems that in order to keep the gap between the service quality expected and the received quality to the lowest extent, there are 2 elements which are vital and important for the firm which presents such services.

2-Literature of the Review and Background of Research

2-1-Airport Service Quality

One enterprise that lacked the application of this widely popular model has been the airport industry. The airport industry, while traditionally limited to public infrastructure, has been growing in importance due to it facilitation of the rise of global travel demand and the tourism industry (Samadi, 2012). As airplanes became more efficient, increasing passenger capacity and the ability to travel longer distances to far away destinations, an increase in the number of passengers and their expectations of services within the airport was inevitable (Widarsyah, & et all, 2013). Service quality as perceived by customers is a comparison between expectations and performance (Parasuraman, Zeithaml, & Berry, 1985). Grönroos (1990) stated that the overall perception of service quality is the gap between customers' expectations and actual experiences. Service quality is perceived as being good when a customer's experience equals their expectation. In summary, service quality is a comparison between customer expectations and experiences and is measured by the performance of service delivery (Chao & et al, 2013).

SERQUAL, a service quality framework developed by Parasuraman, Zeithaml, and Berry (1988), is measured by five aspects of service quality and remains widely used because of its good reliability and validity and low repetition. These five aspects are tangibles, reliability, responsiveness, assurance, and empathy (Chao & et al, 2013).

2-2-Mehrabad International Airport or Mehrabad:

Mehrabad International Airport or Mehrabad is an airport that serves Tehran, Iran. It was the primary airport of Tehran in both international and domestic passenger traffic but has been replaced by Tehran Imam Khomeini International Airport (IKA), in most of its international flights. It is still by far the busiest airport in Iran in terms of passenger traffic and aircraft movements, handling 13,163,368 passengers in 2010. The airport is located inside the city boundaries and is thus much easier to access than Tehran Imam Khomeini International Airport (IKA).Training, maintenance and engineering facilities of Iran Air and Iran Aseman Airlines are located at the airport.

An aircraft engineering and maintenance company Far Ashian, has a maintenance hangar adjacent to main airport premises. The hangar is linked to Mehrabad Airport through a taxiway crossing "Tehran-Karaj" Highway.

Far Ashian takes care of Aircraft of many companies e.g. (Mahan Air, Iran Air. Tehran Imam Khomeini International Airport (IKA) was scheduled to open in 2004 with international flights gradually changing from Mehrabad starting with flights to countries bordering the Persian Gulf. After IKA's initial opening in May 2004, due to complications, it was not until the end of 2007 that the plan to move the majority of international flights to the new airport was completed (Thomas.2007).

All international flights have now been moved to Tehran Imam Khomeini International Airport (IKA), except flights to Saudi Arabia for Hajj and Umbra.

History Mehrabad International Airport or Mehrabad:

The airport was first time used as an airfield for aviation club planes in 1938, then after World War II along with becoming internationally recognized by joining Iran civil aviation organization to the international civil aviation organization (ICAO), in 1949, the airport also became an air force base. Newly delivered Republic F-84G Thunderjets (fighter) and Lockheed T-33A Shooting Star (trainer) arrived, May 1957 and April 1956, respectively.[2] In 1955 just after construction of first asphalt paved runway a new terminal building (Current Terminal 1) for both international and domestic flights was designed and constructed. Among the designers of the initial modern buildings of the airport was the famous architect.[3,4](Brian Edwards. Taylor & Francis, 2005 pp: 72).

2-3-Background of Research

Martilla and James (1977) first introduced Importance-performance analysis (IPA) to investigate the service quality of an automobile dealer based on the importance and performance of its facilities. Easing wood and Arnott (1991) suggested that by substituting suitable measures, the IPA technique can be used to investigate the relationship between

Customers 'perceived importance and a firm's current level of performance. Tam and Lam (2004) employed the IPA technique to investigate the relationship between the weights and visibility indexes of terminal facilities, and to identify facilities requiring way finding improvements (Chao & et al, 2013).

Gronroos and his colleagues investigated the literature relevant to customer satisfaction and concluded that the se vices received by the consumer indicate the dimensions of the service quality including the technical dimension, knowledge, quality, technical capacity and capability, computer systems, machineries, technical solutions, functional quality, visional quality, internal relations, service preparation, external situation, access capability, and the consumer contacts the most famous model of the service quality used in Europe is the Gronroos model in 1982. This model is in fact based on 3 major qualities including functional quality, technical quality, and mental image. The present survey has designed upon the Gronroos model experiment.

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[2] -Iranian Air Force
[3] -William Pereira.
[4] -http://www.tkellner.com/index.php?id=3267.

With regard to the issue that service quality has many aspects, we can make a frame of reference to show the structure of the service quality.

Indeed, marketing experts have already realized the different visions by using the dimension of the functional quality for the services.
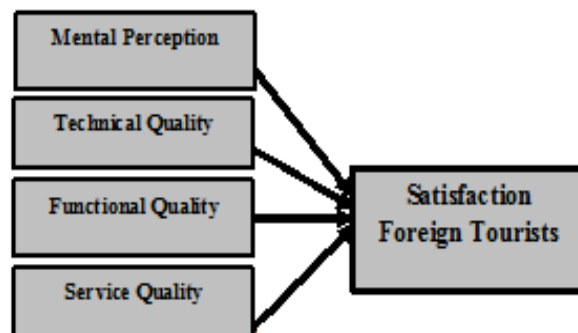
They have largely accepted so far that the technical quality had an underlying impact upon the perception of the customers (Gronroos, 2006 & Rust., 2000).

This study is an indicator of the issue that the positive feelings of the consumers can easily increase the locality of the customers.

The conceptual Model of Research the theoretical model of the present survey is the same as the appraisal model of service quality of Gronroos. With regard to the point that the service quality has different dimensions, we can as far as possible make a frame of reference to show the structure of service quality.

Scientists of marketing have already recognized different visions by utilizing the dimension of functional quality, and they vastly agreed with the opinion that the technical quality has a significant effect on the perception of the customers in terms of services quality. In general, measuring of technical quality includes the utilization of quality techniques.

In fact based on this model, there is a direct and meaningful correlation between the functional quality and the technical quality in terms of the perception of the service quality. And finally, the current study suggests that the service quality can directly cause satisfaction for the consumers. Therefore, the conceptual model of the present research is as follows:

Figure (1): The conceptual Model Of the research

3-Methodology

This search is a kind of practical researches and is a geodesic research, practically the group of people that these statistics are asked them are all of the foreign tourists that used Mehrabad international airport for travel and flight during in the Month of April 2013. And according to false statistics that the numbers of these tourists are unknown we used the method of accidental sampling in the research. During the research, the researcher went to the airport in the Month of April 2013 and completes the research questionnaire as many as the sample was there. The best approach to determining sample size is the application of one of several formulas. For populations that are

large, Cochran developed the formula to yield a representative sample for proportions (Yamane T., 1967):

$$n = \frac{(Z_{\frac{\alpha}{2}})2 * p.(1-p)}{e^2}$$

Which is valid where n is the sample size, Z^2 is the abscissa of the normal curve that cuts off an area at the tails (1 – equals the desired confidence level, e.g., 95%), e is the desired level of precision, p is the estimated proportion of an attribute that is present in the population. The value for Z is found in statistical tables which contain the area under the normal curve; e is level of precision.

Snedecor GW, Cochran WG. (1989), formula is used or measuring the quantity of the sample and the quantity of the sample was equal to 267 people. In addition to the above mentioned question are applied for gathering data in the research and by means of inter viewer ask the people dealing in research sampling some questions after offering the necessary education and teaching. Grounders evolutional question are that is for measuring the service is applied for gating data and by means of interview some questions are asked by interview form the people dealing in research sampling.

Data are analyzed or cheeked in two levels:

Illative level and descript level by means of SPSS Statistics software (originally, Statistical Package for the Social Sciences), coding and entering data is used in the software and also die rent average, redundancy, percentage redundancy, standard deviation, visage and model are used.to check that are the data's normal or not the Kolmogorov-Smirnov test is used for checking the effect of independent variables on dependent variables and distinguishing the most important variable or the most effective variable, the regression multi vitiate analysis is used. Now we should give the questionnaire to supervisor or methodology professor to check the credit to complete the research. For the final measuring, we used Cronbach's Alpha coefficient for questionnaire was equal to: (0.825, 0.754, 0.780, 0.843, 0.871), and for all questionnaires was equal to: (0.8750), that present in the table of (1).

Table (1): Cronbache alpha coefficient for every subunit of questionnaire and for all questionnaires

Order	Subunits	Questions	Cronbache Alpha (%)
1	Tourist Satisfaction	1-5-	0.825
2	Mental Perception	5-10	0.754
3	Technical Quality	10-15	0.780
4	Functional Quality	15-20	0.843
5	Service Quality	20-30	0.871
3	All questionnaires	1-30	0.875

Reference: Finding Research (calculation by software SPSS).

Table (2): variable of regression model

Order	Subunits of variable in the model			
1	Independent variable	Symbol	dependent variable	Symbol
2	Mental Perception	X_{11}	Tourist Satisfaction	Y_{ij}
3	Technical Quality	X_{12}	Tourist Satisfaction	Y_{ij}

4	**Functional Quality**	X_{21}	**Tourist Satisfaction**	Y_{ij}
5	**Service Quality**	X_{22}	**Tourist Satisfaction**	Y_{ij}

Reference: Finding of Research

4-Data analysis

4-1- Descriptive Statistics of data

Whereas, the main purpose of this study it was to investigate the impact of quality dimensions of airport services upon the foreign tourists' satisfaction in Mehrabad international airport in Iran. Hence, according with the result of the descriptive statistics of data that there is in the table number of the (3), we can be see that in this table there are many of presents the descriptive statistics of data, include: number (N), minimum, maximum, mean, and standard deviation, Variance, range, sum, skewness and kurtosis for each service dimension and overall evaluation for each airport.

Table (3): Descriptive Statistics of Data

			Report		
Variable	**Tourist satisfaction**	**Mental Perception**	**Technical Quality**	**Functional Quality**	**Service Quality**
Mean	2.8877	3.2283	3.0870	2.8913	3.5978
N	276	276	276	276	276
Std. Deviation	2.11619	2.31879	1.70764	1.96953	2.98990
Variance	4.461	5.357	2.916	3.879	8.939
Skewness	1.154	.587	-.097	.903	.927
Kurtosis	.862	-1.220	-1.718	-.377	-.663
Range	8.00	6.00	4.00	6.00	8.00
Sum	798.00	892.00	852.00	798.00	993.00
Minimum	1.00	1.00	1.00	1.00	1.00
Maximum	9.00	7.00	5.00	7.00	9.00
Valid N (listwise)	276	276	276	276	276

Reference: Finding Research (calculation by software SPSS).

Descriptive Statistics of data: The variables were measured from 1 = "Poor," 2 = "Fair," 3 = "Average," 4 = "Good," 5 = "Excellent," and 0 = "Did Not Use."

4-2- Kolmogorov-Smirnov test for normality of distributing studied variable:

In this section of research, before using of the tests, first the normality of research variables distribution should be guaranteed. If data related to research components are normal, testy is suitable to study parametric tests, but if research data isn't normal, so non-parametric test is used. To study the normality of components, Kolmogorov-Smirnov test is used which is a non-parametric test. Calculating the statistics of this test is possible by SPSS software. As the rate of presented statistics by this test is more than 5%, statistical zero assumption (H_0) based on normality of distributing studied variable with 95% confidence is accepted.

The Test of Normality of Distributing of Variable Research:

$\{$ **H₀:** The entire variable in this research: (tourist satisfaction and mental perception, technical quality, functional quality, service quality), are followed of the normality of distributing.

H₁: The entire variable in this research: (tourist satisfaction and mental perception, technical quality, functional quality, service quality), are not followed of the normality of distributing.

Table (4): The One-Sample Kolmogorov-Smirnov Test

One-Sample Kolmogorov-Smirnov Test		Tourist Satisfaction	Mental Perception	Technical Quality	Functional Quality	Service Quality
N		276	276	276	276	276
Normal Parameters a,b	Mean	2.8225	3.0507	2.9130	2.7174	3.4239
	Std. Deviation	2.18782	2.51345	1.94648	2.16413	3.16078
Most Extreme Differences	Absolute	.259	.202	.206	.181	.221
	Positive	.259	.202	.152	.181	.221
	Negative	-.155	-.141	-.206	-.105	-.157
Kolmogorov-Smirnov Z		4.300	3.354	3.422	3.000	3.670
Asymp. Sig. (2-tailed)		.783	.865	.928	.876	.954
a. Test distribution is Normal.						
b. Calculated from data.						

Reference: Finding Research (calculation by software SPSS).

4-3- The Correlations between Variable Research

All the solidarity factors are positive on Gronerz service measuring model dimension and this means that all the changes are in the same direction. Hence, the correlations between variable researches that calculation by of data, is present in the table number of (5).

Table (5): The Correlations between Variable Researches

Correlations		Tourist Satisfaction	Mental Perception	Technical Quality	Functional Quality	Service Quality
Tourist Satisfaction	Pearson Correlation	1	.868**	.751**	.813**	.849**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	276	276	276	276	276
Mental Perception	Pearson Correlation	.868**	1	.883**	.857**	.961**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	276	276	276	276	276

Technical Quality	Pearson Correlation	.751**	.883**	1	.818**	.814**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	276	276	276	276	276
Functional Quality	Pearson Correlation	.813**	.857**	.818**	1	.839**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	276	276	276	276	276
Service Quality	Pearson Correlation	.849**	.961**	.814**	.839**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	276	276	276	276	276
**. Correlation is significant at the 0.01 level (2-tailed).						

Reference: Finding Research (calculation by software SPSS).

So, there is a positive factor between functional quality and the technical quality goes up too and (as the functional quality goes down technical quality goes down and decrease's too). There is a significant relation between functional quality and subjective perception, and there is a satisfaction between functional quality and tourist satisfaction by amount of 0.813, that shows there is a intensive relation there. There is also a positive and signification solidarity between technical quality and subjective perception. There is also a significant relation between technical quality and tourist's satisfaction, and between subjective perception and tourist satisfaction.

4-4- The Test of Hypotheses Research:

4-4-1-The First Hypotheses of Research:

There is a significant relationship between tourist satisfaction and mental perception

{ **H$_0$:** there is no significant relationship between tourist satisfaction and mental perception.

H$_1$: there is a significant relationship between tourist satisfaction and mental perception.

Table (6): First Hypothesis Testing

Variables Entered/ Removed ^{b}			
Model	Variables Entered	Variables Removed	Method
1	Mental Perception	.	Enter
a. All requested variables entered.			
b. Dependent Variable: Tourist satisfaction			

Reference: Finding of Research (calculation by software SPSS).

Table (7): Model Summary of Variable in the First Hypotheses of Research

			Adjusted R	Std. Error of
Model	R	R Square	Square	the Estimate
1	.868[a]	.753	.752	1.08867

Model Summary

a. Predictors: (Constant), Mental Perception

Reference: Finding of Research (calculation by software SPSS).

The amount of customer subjective perception of solidarity factor in a bar shape diagram with tourist satisfaction variable in Mehrabad international airport in Iran is equal to 0.868. The total determining factor is also equal to 0.753 and adjusts faction determining factor to 0.752 or about %90.it means that more than %9 percent at the tourist's satisfaction variable changes is determined by subjective perception variable.

Table (8): The Analysis of Variance in the First Hypotheses of Research

ANOVA[b]

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	991.555	1	991.555	836.611	.000[a]
Residual	324.746	274	1.185		
Total	1316.301	275			

a. Predictors: (Constant), Mental Perception
b. Dependent Variable: Tourist satisfaction

Reference: Finding of Research (calculation by software SPSS).

Table (9): The Coefficients of Variable in the First Hypotheses of Research

Coefficients [a]

Model	Un standardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	.518	.103		5.018	.000
Mental Perception	.755	.026	.868	28.924	.000

a. Dependent Variable: Tourist satisfaction

Reference: Finding of Research (calculation by software SPSS).

As the Sig value (equals to zero) is less than 0/05 percent null hypothesis is rejected and we can say there is a significant relationship between mental perception logarithm and tourist satisfaction logarithm, regression model is as follows:

Regression Model (1): $Ln (Y_1) = 0.518 + .755 \times Ln (X_{11})$

Interpretation of First hypothesis regression model:

According to this model, since the logarithm coefficient of mental perception has a positive sign, it could be said, in Mehrabad international airport in Iran the two variables, tourist satisfaction and mental perception, have direct relationship. It means if one increases so does the other one and vice versa. Also according to tourist mental perception logarithm coefficient, it could be concluded that, for each unit increase in

mental perception logarithm, tourist satisfaction logarithm value increases 0.755 in average.

4-4-2-The Second Hypotheses of Research:

There is a significant relationship between tourist satisfaction and technical quality.
$\{$ **H₀:** there is no significant relationship between tourist satisfaction and technical quality.
H₁: there is a significant relationship between tourist satisfaction and technical quality.

Table (10): Second Hypothesis Testing

	Variables Entered/Removed [b]		
Model	Variables Entered	Variables Removed	Method
1	Technical Quality	.	Enter
a. All requested variables entered.			
b. Dependent Variable: Tourist satisfaction			

Reference: Finding of Research (calculation by software SPSS).

Table (11): Model Summary of Variable in the Second Hypotheses of Research

	Model Summary			
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.751[a]	.564	.563	1.44673
a. Predictors: (Constant), Technical Quality				

Reference: Finding of Research (calculation by software SPSS).

The amount of customer subjective perception of solidarity factor in a bar shape diagram with tourist satisfaction variable in Mehrabad international airport in Iran is equal to 0.751. The total determining factor is also equal to 0.564 and adjusts faction determining factor to 0.563 or about %90.it means that more than %9 percent at the tourist's satisfaction variable changes is determined by subjective perception variable.

Table (12): The Analysis of Variance in the Second Hypotheses of Research

	ANOVA[b]					
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	742.808	1	742.808	354.894	.000[a]
	Residual	573.493	274	2.093		
	Total	1316.301	275			
a. Predictors: (Constant), Technical Quality						
b. Dependent Variable: Tourist satisfaction						

Reference: Finding of Research (calculation by software SPSS).

Table (13): The Coefficients of Variable in the Second Hypotheses of Research

		Un standardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.363	.157		2.312	.022
	Technical Quality	.844	.045	.751	18.839	.000
a. Dependent Variable: Tourist satisfaction						

Reference: Finding of Research (calculation by software SPSS).

As the Sig value (equals to zero) is less than 0/05 percent null hypothesis is rejected and we can say there is a significant relationship between technical quality logarithm and tourist satisfaction logarithm, regression model is as follows:

Regression Model (1): $Ln (Y_1) = 0.363 + .844 \times Ln (X_{12})$

Interpretation of Second Hypothesis Regression Model: According to this model, since the logarithm coefficient of mental perception has a positive sign, it could be said, in Mehrabad international airport in Iran the two variables, tourist satisfaction and technical quality, have direct relationship. It means if one increases so does the other one and vice versa. Also according to technical quality logarithm coefficient, it could be concluded that, for each unit increase in technical quality logarithm, tourist satisfaction logarithm value increases 0.844 in average.

4-4-3-The Third Hypotheses of Research:

There is a significant relationship between tourist satisfaction and functional quality.
{
H₀: there is no significant relationship between tourist satisfaction and functional quality.
H₁: there is a significant relationship between tourist satisfaction and functional quality.

Table (14): Third Hypothesis Testing

	Variables Entered/Removed [b]		
Model	Variables Entered	Variables Removed	Method
1	Functional Quality	.	Enter
a. All requested variables entered.			
b. Dependent Variable: Tourist satisfaction			

Reference: Finding of Research (calculation by software SPSS).

Table (15): Model Summary of Variable in the Third Hypotheses of Research

| | | | Adjusted R | Std. Error of |
Model	R	R Square	Square	the Estimate
1	.813[a]	.660	.659	1.27719
a. Predictors: (Constant), Functional Quality				

Reference: Finding of Research (calculation by software SPSS).

The amount of customer subjective perception of solidarity factor in a bar shape diagram with tourist satisfaction variable in Mehrabad international airport in Iran is equal to 0.813 The total determining factor is also equal to 0.660 and adjusts faction determining factor to 0.659 or about %90.it means that more than %9 percent at the tourist's satisfaction variable changes is determined by subjective perception variable.

Table (16): The Analysis of Variance in the Third Hypotheses of Research

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	869.351	1	869.351	532.950	.000[a]
	Residual	446.950	274	1.631		
	Total	1316.301	275			
a. Predictors: (Constant), Functional Quality						
b. Dependent Variable: Tourist satisfaction						

Reference: Finding of Research (calculation by software SPSS).

Table (17): The Coefficients of Variable in the Third Hypotheses of Research

	Un standardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
1 (Constant)	.590	.124		4.775	.000
Functional Quality	.822	.036	.813	23.086	.000
a. Dependent Variable: Tourist satisfaction					

Reference: Finding of Research (calculation by software SPSS).

As the Sig value (equals to zero) is less than 0/05 percent null hypothesis is rejected and we can say there is a significant relationship between functional quality logarithm and tourist satisfaction logarithm, regression model is as follows:

Regression Model (1): $Ln (Y_1) = 0.590 + .822 \times Ln (X_{21})$

Interpretation of Third Hypothesis Regression Model:

According to this model, since the logarithm coefficient of functional quality has a positive sign, it could be said, in Mehrabad international airport in Iran the two variables, tourist satisfaction and functional quality, have direct relationship. It means if one increases so does the other one and vice versa. Also according to functional quality logarithm coefficient, it could be concluded that, for each unit increase in

functional quality logarithm, tourist satisfaction logarithm value increases 0.755 in average.

4-4-4-The Fourth Hypotheses of Research:

There is a significant relationship between tourist satisfaction and service quality.

{ H_0: there is no significant relationship between tourist satisfaction and service quality.
  H_1: there is a significant relationship between tourist satisfaction and service quality.

Table (18): Fourth Hypothesis Testing

Variables Entered/Removed [b]			
Model	Variables Entered	Variables Removed	Method
1	Service Quality		.Enter
a. All requested variables entered.			
b. Dependent Variable: Tourist satisfaction			

Reference: Finding of Research (calculation by software SPSS).

Table (19): Model Summary of Variable in the Fourth Hypotheses of Research

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.849[a]	.720	.719	1.15954
a. Predictors: (Constant), Service Quality				

Reference: Finding of Research (calculation by software SPSS).

The amount of customer subjective perception of solidarity factor in a bar shape diagram with tourist satisfaction variable in Mehrabad international airport in Iran is equal to 0.849 The total determining factor is also equal to 0.720 and adjusts faction determining factor to 0.752 or about %90.it means that more than %9 percent at the tourist's satisfaction variable changes is determined by subjective perception variable.

Table (20): The Analysis of Variance in the Fourth Hypotheses of Research

ANOVA [b]					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	947.899	1	947.899	705.002	.000[a]
Residual	368.402	274	1.345		
Total	1316.301	275			
a. Predictors: (Constant), Service Quality					
b. Dependent Variable: Tourist satisfaction					

Reference: Finding of Research (calculation by software SPSS).

Table (21): The Coefficients of Variable in the Fourth Hypotheses of Research

	Coefficients [a]				
	Un standardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
1 (Constant)	.811	.103		7.877	.000
Service Quality	.587	.022	.849	26.552	.000
a. Dependent Variable: Tourist satisfaction					

Reference: Finding of Research (calculation by software SPSS).

As the Sig value (equals to zero) is less than 0/05 percent null hypothesis is rejected and we can say there is a significant relationship between service quality logarithm and tourist satisfaction logarithm, regression model is as follows:

Regression Model (1): $Ln (Y_1) = 0.8 + .587 \times Ln (X_{22})$

Interpretation of Fourth Hypothesis Regression Model:

According to this model, since the logarithm coefficient of service quality has a positive sign, it could be said, in Mehrabad international airport in Iran the two variables, tourist satisfaction and service quality, have direct relationship. It means if one increases so does the other one and vice versa. Also according to service quality logarithm coefficient, it could be concluded that, for each unit increase in service quality logarithm, tourist satisfaction logarithm value increases 0.755 in average.

4-4-5-The Main Hypotheses of Research:

There is a significant relationship between tourist satisfaction and mental perception, technical quality, functional quality, service quality.

$\Big\{$ **H$_0$:** there is no significant relationship between tourist satisfaction and mental perception, technical quality, functional quality, service quality.
H$_1$: there is a significant relationship between tourist satisfaction and mental perception, technical quality, functional quality, service quality.

Table (22): Main Hypothesis Testing

Variables Entered/Removed [b]			
Model	Variables Entered	Variables Removed	Method
1	Service Quality, Technical Quality, Functional Quality, Mental Perception	.	Enter
a. All requested variables entered.			
b. Dependent Variable: Tourist satisfaction			

Reference: Finding of Research (calculation by software SPSS).

Table (23): Model Summary of Variable in the Main Hypotheses of Research

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.881[a]	.776	.773	1.04269
a. Predictors: (Constant), Service Quality, Technical Quality, Functional Quality, Mental Perception				

Reference: Finding of Research (calculation by software SPSS).

The amount of customer subjective perception of solidarity factor in a bar shape diagram with tourist satisfaction variable in Mehrabad international airport in Iran is equal to 0.881 The total determining factor is also equal to 0.776 and adjusts faction determining factor to 0.773 or about %90.it means that more than %9 percent at the tourist's satisfaction variable changes is determined by subjective perception variable.

Table (24): The Analysis of Variance in the Main Hypotheses of Research

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1021.669	4	255.417	234.931	.000[a]
	Residual	294.631	271	1.087		
	Total	1316.301	275			
a. Predictors: (Constant), Service Quality, Technical Quality, Functional Quality, Mental Perception						
b. Dependent Variable: Touristsatisfaction						

Reference: Finding of Research (calculation by software SPSS).

Table (23): The Coefficients of Variable in the Main Hypotheses of Research

Coefficients [a]						
		Un standardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.523	.115		4.555	.000
	Mental Perception	.589	.116	.677	5.062	.000
	Technical Quality	-.155	.075	-.138	-2.074	.039
	Functional Quality	.290	.059	.287	4.883	.000
	Service Quality	.048	.076	.070	.635	.006
a. Dependent Variable: Tourist satisfaction						

Reference: Finding of Research (calculation by software SPSS).

As the Sig value (equals to zero) is less than 0/05 percent null hypothesis is rejected and we can say there is a significant relationship between mental perception, technical quality, functional quality, service quality logarithm and tourist satisfaction logarithm, regression model is as follows:

Regression Model (1):
$Ln (Y) = 0.523 + .589 \times Ln (X_{11}) + (-.155) \times Ln (X_{12}) + .290 \times Ln (X_{21}) + .048 \times Ln (X_{22})$

Tourist satisfaction= $Ln (Y) = 0.523 + .589 \times Ln(X_{11}) + (-.155) \times Ln (X_{12}) + .290 \times Ln(X_{21}) + .048 \times Ln(X_{22})$

Interpretation of Main Hypothesis Regression Model:

According to this model, since the logarithm coefficient of mental perception, technical quality, functional quality, service quality has a positive sign, it could be said, in Mehrabad international airport in Iran the variables, tourist satisfaction and mental perception, technical quality, functional quality, service quality, have direct relationship. It means if one increases so does the other one and vice versa. Also according to tourist mental perception, technical quality, functional quality, service quality logarithm coefficient, it could be concluded that, for each unit increase in mental perception, technical quality, functional quality, service quality logarithm, tourist satisfaction logarithm value increases 0.755 in average.

5-Discussion and Conclusion

The study of analysis outcomes that has two variables shows that there is a statistical significant relation between the dimension of Gronroos, C., (1984), servicing evaluation model and the amount of tourists satisfaction of airport services in Mehrabad international airport that is about 95%to specify this finding, we should say that when tourist are satisfied with different dimension of servicing quality so they are satisfied whit other services and airport situations and rules. This finding also validates Hossainizadeh findings (2008) that in his research, the quality of services were effective on Homa Airport Company's customer loyalty.

5-1-Discussion and Conclusion for the First Hypotheses in This Research:

The first hypothesis of research was there is a significant relationship between tourist satisfaction and mental perception. Hence, the result statistics related to this hypotheses show that, the first hypotheses was verified and validated that his title was the effect of tourists subjective perceptions on their tourist satisfaction and the final outcome showed that this 5.357 variance specified. Moreover, the second hypotheses was verified and validated that his title was the effect of tourists subjective mental perceptions on their tourist satisfaction and the final outcome showed that this 9% variance specified and in final this hypotheses was validated. Also, we are can be doing a comparative with Iranzade and others (2010) studied, that was investigations to relationships between effects customer's subjective perception from Pasargadae bank services and had a primary effect on customer satisfaction. Because, the result of studied of the Iranzade and et. all (2010), findings of the this researchers and result of

this study show that effects customer's subjective perception from Pasargadae bank services and had a primary effect on customer satisfaction. To specify this in doing we can be clear that conception and subjection or mental perception that is created in customers and tourist to be satisfied.

5-2-Discussion and Conclusion for the Second Hypotheses in This Research:

The second hypothesis of research was there is a significant relationship between tourist satisfaction and technical quality. Hence, the result statistics related to this hypotheses show that, the second hypotheses was verified and validated that his title was the effect of tourists technical quality on their tourist satisfaction and the final outcome showed that this 2.916 variance specified. Hence, the second hypotheses of the research whit the name of the technical quality of services on tourist subjective perception from Mehrabad international airport service was effective too. The outcomes showed that services technical quality variable specified 75.10 percent (or 75/10%) of tourist subjective. Also, we are can be doing a comparative with Iranzadeh and et, all (2010) and Kang, G.D. James, J. (2004), studied, that was investigations to relationships between effects customer's subjective perception from "Service Quality Dimensions. In these studies there was a significant relation between different dimensions of servicing quality on customer's perception and subjective perception. To specify this finding, we can declare that the customers and tourists would choose and buy those products and services that they believe they had paid have the most valuable price and the best quality. The purpose of the most value and the best quality is the difference in the total value and the total value and the total expenses that they will pay. So as the customer satisfaction decreases due to low due to quality in servicing will cause a decrease in income and decrease in company's expenses. Accordingly all the airport managers and head masters should be sensitive about this problem and more sensitive about standards and they should be able to achieve the tourist expectation at quality of servicing whit competing trends. So the belief of most at marketing experts is that all the servicing company should achieve customer's expectation and perception from the quality of services.

5-3-Discussion and Conclusion for the Third Hypotheses in This Research:

The third hypothesis of research was that there is a significant relationship between tourist satisfaction and functional quality. Hence, the result statistics related to this hypotheses show that, the third hypotheses was verified and validated that his title was the effect of tourists' functional quality perceptions on their tourist satisfaction and the final outcome showed that this 3.879 variance specified. Also, we are can be doing a comparative with Lee, J. H., and et, all (2011), studied, that was investigations to the influence of service quality on satisfaction and intention. Hence, we can are said that the result of Lee, J. H., and et, all (2011), studied, is same with this current study.

5-4-Discussion and Conclusion for the Fourth Hypotheses in This Research:

The fourth theory's analysis and research showed that the quality of services effects on the tourists satisfaction of the airport services and supply 0 .8990 percent (or 89/90%) of the tourists satisfaction variance. Hence, the result statistics related to this hypotheses show that, the third hypotheses was verified and validated that his title

was the effect of tourists' quality of services on their tourist satisfaction and the final outcome showed that this 8.939variance specified. Also, we are can be doing a comparative with Iranzade and et, all (2010), studied, that was investigations to the influence of service quality on satisfaction and intention. Hence, we can are said that the result or this finding is the same as Iranzade and et, all (2010), findings and in this finding the quality of service was effective on customer satisfaction. On way that on service company can be different from other companies and competitors is offering permanent services with the best quality. Analysis shows that the quality of services had a good effect on customer satisfaction so they bought and used more. Finally the quality of services and customer's satisfaction are dependant variables.

5-5-Discussion and Conclusion for the Main Hypotheses in This Research:

The Main hypotheses in this research was with the title of the investigate of the impact of quality dimensions of airport services upon the foreign tourists satisfaction as a Case Study in the Mehrabad International Airport in Iran (MIAR). Hence, we are testing the main hypotheses in this research, that was with title of the there is a significant relationship between tourist satisfaction and mental perception, technical quality, functional quality, service quality. Hence, the result statistics related to this hypotheses show that, the third hypotheses was verified and validated that his title was the effect of tourists' functional quality perceptions on their tourist satisfaction and the final outcome showed that this 9% variance specified. Also, we are can be doing a comparative with Iranzade and others (2010) studied, that was investigations to relationships between effects customer's subjective perception from Pasargadae bank services and had a primary effect on customer satisfaction. Because, the result of studied of the Iranzade and et. all (2010), findings of the this researchers and result of this study show that effects customer's subjective perception from Pasargadae bank services and had a primary effect on customer satisfaction.

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