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The Perceived Service Quality of Technology Markets and Its Effect on Customer Satisfaction

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Abstract- The customer satisfaction concept has been becoming more and more important for companies all around the world. To increase this satisfaction level, perceived service quality is one of the main factors that companies must take into consideration. As a result of the rapid change in technology and the decrease in time spent on shopping, the usage of technology markets has become more common. Measurement of perceived service quality and its impact on customer satisfaction has also become crucial for technology markets. In this study, SERVQUAL method, built up by Parasuraman, Zeithaml and Berry, has been used to measure perceived service quality. The population consists of 417 people above 18 years of age who live in Istanbul. A public survey is used as the data collecting method and a factor analysis, T-tests, an ANOVA/Welch test and a reliability analysis are performed from the acquired data by using the SPSS package program. Moreover, the model structured for the study is tested through a LISREL structural equation model.

Keywords- Perceived service quality, customer satisfaction, technology markets.

1. Introduction

Companies have to be customer oriented in an increasingly competitive business environment. Thus customer satisfaction emerges as a key factor in marketing. Customer satisfaction, on the other hand, depends on the relation between customers' expectations and the perception of the performance of the product/service acquired (Armstrong and Kotler, 2005).

Customer satisfaction has a positive impact on companies' profitability. Customer satisfaction establishes the basis of success in any business, due to the fact that it may result in repeat purchases, brand loyalty and positive word of mouth. There are numerous studies concerning the effect of customer satisfaction on repeat purchases, loyalty and retention. Many researches show that satisfied customers share their experiences with five or six other people. But on the other hand, dissatisfied customers tend to tell their bad experience with a product or service to another ten people (Angelova & Zekiri, 2011).

Service quality and customer satisfaction are very crucial concepts and thus they have been highly considered and discussed in the marketing environment. Various marketing researchers have pointed out the fact that, satisfied customers and service quality are important factors for organizational competitive benefit (Ruyter, 1997).

In the literature, the relationship between service quality and customer satisfaction is a debatable issue. The idea that the concepts of service quality and customer satisfaction are extremely related is very common in researchers. Although service quality and satisfaction are close in meaning, they are nonetheless distinct. Service quality was explained as overall evaluation of a product or service, while customer satisfaction was considered as specific evaluation (Tan et al., 2014).

2. Literature Review

2.1. Service Quality

Quality means "innate excellence" according to the common view and is viewed as "a precise and measurable variable" in a product-based approach. In this approach differences in quality mean differences in the quantity of some ingredient or attribute. So higher quality can only be obtained at higher cost. But on the other hand, quality is compared with the satisfaction in a user-based approach and in this approach the highest quality means the best satisfaction of consumers' preferences. In a manufacturing-based approach, quality is defined as "making it right the first time". This approach is supply based and concerned with engineering and manufacturing issues. Quality is defined in terms of cost and price in a value based approach (Yarimoglu, 2014).

The idea of service quality consists of comparisons customers make between their expectations and the perception of the service offered. The importance of the quality of the product and/or service lies in the fact that customers who perceive unsatisfied quality tend to change their buying habits (Wu et. al., 2014).

Service quality has been becoming the most powerful weapon of competition. Quality is a multi-dimensional fact. Therefore, obtaining the service quality without differentiating the important parts of quality is impossible. According to a common definition, service quality is defined as the total attributes of a service which gives it the ability to satisfy customers' demands (Kotler and Keller, 2006).

The fact that the nature of services is intangible and goods are tangible is one of the major differences between services and goods. Services have four characteristics which distinguish them from products: Intangibility, that is a service cannot be touched or tasted; inseparability, that is a service cannot be separated from its provider; variability, that is the quality of a service is dependent on how and when it is serviced; perishability, that is services are not storable for later use (Amstrong and Kotler, 2006). Measurement of service quality can be more complicated because services are intangible. Service quality measurement means how much the service offered meets the customers' expectations.

Customer expectations, on the other hand, are formed depending on various factors such as the amount of time to order and receive the service, the convenience of the usage of the service, pricing of the service, and the after-sales assurances (Dunne and Lusch, 1999).

In their first researches, Zeithaml et al. (1996) have referred to ten dimensions of service quality. However, they found a strong correlation between these dimensions in their following researches. Therefore, they grouped these dimensions and named them as Reliability, Responsiveness, Assurance, Empathy and Tangibles to make a tool for testing the service quality, also known as SERVQUAL. In their researches, they emphasize that SERVQUAL is a lasting and reliable scale of service quality (Parasuraman et al., 1994). According to them, this tool is applicable in a wide spectrum of service fields such as libraries, hotels, hospitals, universities, etc. and some of SERVQUAL statements could be rephrased, or more statements could be added to it. Many researchers have applied SERVQUAL to their studies in different service fields.

2.2. Customer Satisfaction

The phrase "Customer Satisfaction" is not limited to the expression of a happy customer. It is rather more complex than that. This term is generally used in the business and commerce industry and defines the measuring of products and services provided by a company to meet the expectation of its customer. This measurement can be regarded as one of the important indices of a company's performance. Customer satisfaction is seen as a key factor and has become more important in business strategy in a competitive marketplace where businesses compete for customers. There are a lot of empirical researches in literature that establish the benefits of customer satisfaction for firms. It is certain that satisfied customers are key for long-term business success. It is also seen that customer satisfaction is important for all organizations, regardless of their size, whether profit or non-profit, local or multi-national. Companies which have more satisfied customers also have higher economic returns (Munusamy et al., 2010).

In marketing literature, customer satisfaction has been a central concept. Additionally, it can be regarded as a crucial end for all business activities. Companies face their hardest competition today, because they are undergoing a change in their business understanding such that product and sales philosophy is being replaced with a marketing philosophy, which gives a company more ability to compete (Kotler and Keller, 2006). Overall customer satisfaction means more profits and market share increase for companies. Many researchers and academicians have highlighted the

importance of customers. Connecting with customers by creating a strong customer relationship in order to meet their expectations is the primary concern of marketing (Angelova & Zekiri, 2011).

Measuring customer satisfaction is not only about making customers happy but also about profit and competitive advantage. Companies should observe the customer satisfaction signals regarding product, service and relationship to achieve long term success in the market. Measuring customer satisfaction ensures a detailed insight into the customer's pre and post purchase behavior. Understanding, developing and improving better customer services could not be possible without this approach (Cengiz, 2010).

Moreover, in formation of customer's desires for future purchase, customer satisfaction is a key factor (Mittal & Kamakura, 2001).

Satisfaction has been defined as the difference between customer expectation and service performance; however, there are still contrasts between quality and satisfaction. Satisfaction is a feeling that emerges after experience. On the other hand, in satisfaction, expectations for goods is "would", while in service quality, expectations for goods is "should". One does not need experience to evaluate service quality since service quality can be evaluated through any knowledge concerned service provider, while satisfaction results from the customer's own interaction with the service. Several researches have studied the relationship between service quality and satisfaction. Some of these researches' findings suggest that satisfaction results from service quality. On the other hand, some researches show that there is a two-way relation between satisfaction and service quality. (Mosahab et al., 2010)

3. Research

3.1. Research Objective

The main objective of this study in which the perceived service quality of the technology markets and its impact on customer satisfaction is measured, is to show that the quality of service has crucial importance in increasing customer satisfaction.

3.2. Sample Size and Sampling Technique

In this study, a total of 417 people above 18 years old living in Istanbul are surveyed between 16 January-10 February. Using 3 indicators for each latent variable and sample size of above 200 is enough for a research (Çokluk et al., 2012).

3.3. Research Instrument

Research data is obtained through a three part survey conducted to the sample given above. In the first part of the survey, there are 22 statements measured on the five point Likert scale (1=Strongly agree, 2=Agree, 3=Neither agree nor disagree, 4=Disagree, 5=Strongly disagree) for measuring perceived service quality (but three statements are eliminated because of the factor anlaysis). The second part of the survey contains 4 statements measured on the five point Likert scale for measuring customer satisfaction and the third part of the survey contains demographic characteristics such as gender, marital status, age, education, profession and income level.

3.4. Data Analysis

The research data obtained from the surveys conducted on 417 respondents are firstly analyzed by using SPSS statistical package program and then the validity and reliability of the research model and scale is tested through using LISREL structural equation model.

3.4.1. Demographic Characteristics

Demographic characteristics of respondents are presented in Table 1.

Table 1. Demographic characteristics of respondents.

		Frequency	Percentage
Gender	Female	171	41,1
	Male	246	58,9
	Total	417	100
Marital Status	Single	226	54,2
	Married	191	45,8
	Total	417	100
Age	18-29	192	46,0
	30-39	180	43,2
	40-49	31	7,4
	50+	14	3,4
	Total	417	100
Education	Primary school	9	2,2
	High school	93	22,3
	Associate degree	104	24,9
	University	159	38,1
	Postgraduate	52	12,5
	Total	417	100

		Frequency	Percentage
Profession	Public employee	149	35,7
	Private sector employee	142	34,1
	Student	105	25,2
	Retired	15	3,6
	Unemployed	6	1,4
	Total	417	100
Income level	0-1500	120	28,8
	1501-3000	211	50,6
	3001-4500	70	16,8
	>4501	16	3,8
	Total	417	100

The data in Table 1. show that;

a. Of the total 417 survey participants, %41.1 (171 people) is female and %58.9 (246 people) is male,

b. Of the total 417 survey participants, %54,2 (226 people) is single and %45.8 (191 people) is married,

c. Of the total 417 survey participants, %46,0 (192 people) is between the age of 18-29, %43,2 (180 people) is between 29-39, %7,4 (31 people) is between 39-49, %3,4 (14 people) is above 50,

d. Of the total 417 survey participants, %2,2 (9 people) is primary school graduate, %22,3 (93 people) is high school graduate, %24.9 (104 people) has associate degree, %38,1 (159 people) is university graduate and %12,5 (52 people) is postgraduate,

e. Of the total 417 survey participants, %35,7 (149 people) is public employee, %34.1 (142 people) private sector employee, %25,2 (105 people) is student, %3,6 (15 people) is retired and %1,4 (6 people) is unemployed,

f. Of the total 417 survey participants, the income of the %28,8 (120 people) is under 1500 TL, the income of the %50,6 (211 people) is between 1501-3000 TL, the income of the %16,8 (70 people) is between 3001-4500 TL and the income of the %3,8 (16 people) is above 4501 TL.

3.4.2. General Findings

Table 2. Technology Markets Used Before

Technology Market	Frequency	Percentage
MediaMarkt	133	31,9
Bimeks	107	25,7
Teknosa	94	22,5
Gold	53	12,7
Vatan	30	7,2
Total	417	100

MediaMarkt is the mostly used technology market according to survey participants' responses. Of the total 417 survey participants, %31,9 (133 people) have used MediaMarkt (Table 2).

The statistical data of the responses of survey participants to "perceived service quality" statements are shown in Table 3.

Table 3. The mean values of the participants' responses to "perceived service quality" questions.

PERCEIVED SERVICE QUALITY	Min	Max	Mean	St. Dev.
Technology markets have up-to-date equipment.	1	4	1,74	0,787
Internet sites of technology markets are visually appealing.	1	4	1,78	0,803
Internet sites of technology markets are well designed and useful.	1	4	1,79	0,801
The appearances of the Internet sites of technology markets are in keeping with the type of services provided.	1	4	1,72	0,774
When technology markets promise to do something by a certain time, they do so.	1	5	3,99	0,897
Technology markets are dependable.	1	5	3,91	0,914
Technology markets provide their services at the time they promise to do so.	3	5	4,15	0,818
Technology markets keep their records accurately.	1	5	4,00	0,909
Technology markets tell customers exactly when services will be performed.	2	5	4,42	0,752
Employees of technology markets are always willing to help customers.	2	5	4,41	0,764
Employees of technology markets are not too busy to respond to customer requests promptly.	2	5	4,43	0,741
You can trust employees of technology markets.	1	3	1,63	0,710
You feel safe in your transactions with technology markets' employees.	1	3	1,62	0,711
Employees of technology markets are polite.	1	3	1,66	0,729

Employees get adequate support from technology markets to do their jobs well.	1	3	1,58	0,689
Technology markets give you individual attention.	1	3	1,49	0,711
Employees of technology markets know what your needs are.	1	3	1,49	0,711
Technology markets have operating hours convenient to all their customers.	1	3	1,49	0,711
Technology markets have your best interests at heart.	1	3	1,49	0,711

When we look at the responses of participants, it is seen that "Employees of technology markets are not too busy to respond to customer requests promptly." statement has the biggest mean value. The statistical data of the participants' responses to "customer satisfaction" questions are presented in Table 4.

Table 4. The mean values of the participants' responses to "customer satisfaction" questions.

CUSTOMER SATISFACTION	Min.	Max.	Mean	St.Dev.
Technology markets meet my expectations.	1	5	1,65	0,827
I'm pleased with the service quality of technology markets.	1	5	1,81	0,890
I recommend technology markets to my friends.	1	5	1,75	0,896
I intent to do shopping from technology markets in the future.	1	5	1,72	0,855

3.4.3. *Reliability Analysis Results*

The internal consistency of the study was calculated using the statistical Cronbach's Alpha coefficient. Cronbach's Alpha values of 0.900 and 0.871 in the presence of the research question show that it has a high internal consistency (Table 5).

Table 5. The reliability analysis results of the research questions.

QUESTION GROUP	VARIABLE NUMBER	CRONBACH'S ALPHA COEFFICIENT
Perceived Service Quality	19	0,900
Customer Satisfaction	4	0,871

3.4.4. Results of Factor Analysis

To measure the number of sub-dimensions, a factor analysis is applied to survey statements. Factor analysis is generally used to analyze the correlation level of variables with each other. As a result of factor analysis, by means of summarizing data consisting large number of variables, less factor groups are generated with minimum level of data loss (Gegez, 2005). Kaiser-Meyer-Olkin (KMO) sample adequacy criteria is an index that compares observed correlation coefficients to size of partial correlation coefficients for the variables in factor analysis. KMO rate is required to be greater than 0,5. The greater this rate is, the better it is at performing a data set factor analysis (Kalaycı, 2010). As a result of the KMO test applied to survey data, KMO value is found as 0,885. This demonstrates that suitability of variables to the factor analysis is at very good level. Furthermore, provided that the p value of the Bartlett test is less than 0,05 significance level, it can be said that there is enough level of relationship between variables to perform a factor analysis (Durmuş et al., 2011). As the results of both the Kaiser-Meyer-Olkin (KMO) sample adequacy test and the Bartlett globosity test are meaningful, data set is found to be acceptable for factor analysis (KMO=0,885, χ^2Bartlett Test (253)= 11349,533, p=0.000). Within the feasibility test, on the scale of perceived service quality, factor analysis with principal components analysis and varimax rotation is performed. Statements measuring "perceived service quality" come under five factors, eigenvalues of which are greater than 1. The factors obtained reveal a variance of % 81,591.

As a result of factor analysis, it was seen that variables come under 5 different groups. Statements under factors are shown at Table 6.

Table 6. Factors with regard to Survey Statements

Factor name	Statements Constituting Factors	Factor Weight	Explanatorriness of Factor (%)	Reliability ("Cronbach's Alpha" value)
Tangibles	Technology markets have up-to-date equipment.	0,876	18,783	0,936
	Internet sites of technology markets are visually appealing.	0,864		
	Internet sites of technology markets are well designed and useful.	0,870		
	The appearances of the internet sites of technology markets are in keeping with the type of services provided.	0,883		
Reliability	When technology markets promise to do something by a certain time, they do so.	0,921	10,700	0,891
	Technology markets are dependable.	0,909		
	Technology markets provide its services at the time they promise to do so.	0,599		
	Technology markets keep their records accurately.	0,906		
Enthusiasm	Technology markets tell customers exactly when services will be performed.	0,794	6,377	0,899
	Employees of technology markets are always willing to help customers.	0,833		
	Employees of technology markets are not too busy to respond to customer requests promptly.	0,828		
Trust	You can trust employees of technology markets.	0,751	9,085	0,807
	You feel safe in your transactions with technology markets' employees.	0,781		
	Employees of technology markets are polite.	0,674		
	Employees get adequate support from technology markets to do their jobs well.	0,838		
Sensitivity	Technology markets give you individual attention.	0,971	36,647	0,999
	Employees of technology markets know what your needs are.	0,971		
	Technology markets have operating hours convenient to all their customers.	0,970		
	Technology markets have your best interests at heart.	0,971		

In social sciences, factor analysis is used to test construct validity ((Karadeniz et al, 2015). However, it is required to calculate numerically the reliability of factors obtained via factor analysis and this calculation can be made by using the Alpha model. Factors and the statements under them are reliable provided that Cronbach's Alpha value regarding each factor is 0,70 and above (Durmuş, et al., 2011). As a result of the factor analysis applied to survey data, minimum Cronbach Alpha value is determined as 0.807 and we can say that the factors are reliable.

3.4.5. *Results of T-tests and ANOVA/Welch tests*

Perceived service quality and customer satisfaction dimensions are tested through an independent t-test and one way ANOVA/Welch tests. First, the dimensions of perceived service quality and customer satisfaction were tested by independent samples t–test according to the participants' gender and marital status (Table 7, Table 8). The test results show that there is no significant difference in the variables according to the participants' gender and there is significant difference in dimension named as "Sensitivity" according to marital status.

Table 7. T-Test Results According to Gender

Variables/ dimensions	Gender	N	Mean	Std. Dev.	p value (Sig.)
Tangibles	Female	171	1,722	0,741	0,177
	Male	246	1,784	0,713	
Reliability	Female	171	4,057	0,735	0,241
	Male	246	3,982	0,790	
Enthusiasm	Female	171	4,454	0,686	0,815
	Male	246	4,394	0,685	
Trust	Female	171	1,622	0,598	0,081
	Male	246	1,622	0,541	
Sensitivity	Female	171	1,489	0,710	0,873
	Male	246	1,491	0,709	
Customer Satisfaction	Female	171	1,700	0,737	0,944
	Male	246	1,757	0,736	

Table 8. T-Test Results According to Marital Status

Variables/ dimensions	Marital Status	N	Mean	Std. Dev.	p value (Sig.)
Tangibles	Single	226	1,772	0,731	0,872
	Married	191	1,743	0,718	
Reliability	Single	226	3,983	0,784	0,365
	Married	191	4,048	0,749	
Enthusiasm	Single	226	4,364	0,696	0,307
	Married	191	4,483	0,668	
Trust	Single	226	1,608	0,562	0,777
	Married	191	1,638	0,568	
Sensitivity	Single	226	1,574	0,750	0,000 Sig. (2tailed) =0,008
	Married	191	1,392	0,645	
Customer Satisfaction	Single	226	1,748	0,745	0,878
	Married	191	1,716	0,726	

The difference in variables (Tangibles, Reliability, Enthusiasm, Trust, Sensitivity and Customer Satisfaction) is tested through the One Way Variance Test (ANOVA/Welch) according to participants' age, profession, income level and education. In the first step of One Way Variance Test, the equation of variances has to be tested. If the variances are homogenous, the ANOVA test should be used, and if the variances are not homogenous, the Welch test should be used (Durmuş et al., 2011). The homogeneity and One Way Variance Analysis Tests show that (Table 9-13);

- There is significant difference in the variables named "reliability", "enthusiasm" and "sensitivity" according to the participants' age.
- There is significant difference in the variables named "reliability" according to the participants' education.
- There is significant difference in the variables named "reliability" and "customer satisfaction" according to the participants' profession.
- There is no significant difference in the variables according to the participants' income level.
- There is no significant difference in the variables according to the used technology market.

Table 9. One Way Variance (Anova / Welch) Test results According to Age

Variables/ Dımensıons	Homogeneity test P value (sig.)	p value (Sig.)		Result
		Anova	Welch	
Tangibles	0,344	0,081	-	H_o accepted
Reliability	0,000	-	0,000	H_o rejected
Enthusiasm	0,245	0,016	-	H_o rejected
Trust	0,335	0,279	-	H_o accepted
Sensitivity	0,001	-	0,030	H_o rejected
Customer Satisfaction	0,120	0,135	-	H_o accepted

Table 10. One Way Variance (Anova / Welch) Test results According to Education

Variables/ Dımensıons	Homogeneity test P value (sig.)	p value (Sig.)		Result
		Anova	Welch	
Tangibles	0,623	0,849	-	H_o accepted
Reliability	0,494	0,029	-	H_o rejected
Enthusiasm	0,339	0,652	-	H_o accepted
Trust	0,411	0,855	-	H_o accepted
Sensitivity	0,013	-	0,435	H_o accepted
Customer Satisfaction	0,535	0,431	-	H_o accepted

Table 11. One Way Variance (Anova / Welch) Test results According to Profession

Variables/ Dımensıons	Homogeneity test P value (sig.)	p value (Sig.)		Result
		Anova	Welch	
Tangibles	0,592	0,071	-	H_o accepted
Reliability	0,000	-	0,000	H_o rejected
Enthusiasm	0,404	0,059	-	H_o accepted
Trust	0,016	-	0,362	H_o accepted
Sensitivity	0,001	-	0,058	H_o accepted
Customer Satisfaction	0,405	0,047	-	H_o rejected

Table 12. One Way Variance (Anova / Welch) Test results According to Income Level

Variables/ Dımensıons	Homogeneity test P value (sig.)	p value (Sig.)		Result
		Anova	Welch	
Tangibles	0,729	0,695	-	H_o accepted
Reliability	0,247	0,054	-	H_o accepted
Enthusiasm	0,265	0,732	-	H_o accepted
Trust	0,145	0,205	-	H_o accepted
Sensitivity	0,158	0,573	-	H_o accepted
Customer Satisfaction	0,424	0,595	-	H_o accepted

Table 13. One Way Variance (Anova / Welch) Test results According to Used Technology Market

Variables/ Dımensıons	Homogeneity test P value (sig.)	p value (Sig.)		Result
		Anova	Welch	
Tangibles	0,038	-	0,253	H_o accepted
Reliability	0,011	-	0,560	H_o accepted
Enthusiasm	0,243	0,226	-	H_o accepted
Trust	0,773	0,074	-	H_o accepted
Sensitivity	0,019	-	0,052	H_o accepted
Customer Satisfaction	0,005	-	0,178	H_o accepted

3.4.6. *Research Model and Hypotheses*

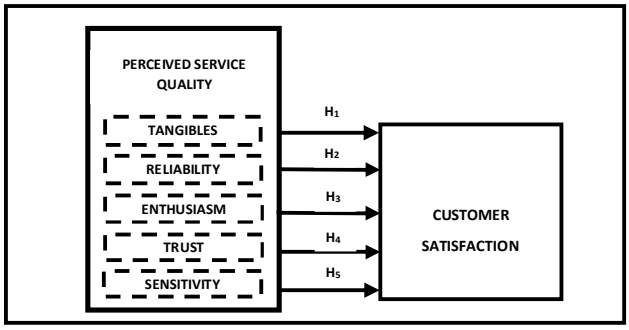

Fig. 1: The Perceived Service Quality of Technology Markets and Its Effect on Customer Satisfaction (Research Model)
Source: Developed by researcher.

According to factor analysis it is seen that perceived service quality consists of five dimensions. Research hypotheses are presented below:

H1: The variable named "Tangibles" is statistically significant in explaining customer satisfaction.

H2: The variable named "Reliability" is statistically significant in explaining customer satisfaction.

H3: The variable named "Enthusiasm" is statistically significant in explaining customer satisfaction.

H4: The variable named "Trust" is statistically significant in explaining customer satisfaction.

H5: The variable named "Sensitivity" is statistically significant in explaining customer satisfaction.

3.4.7. *Testing the Developed Model and Hypotheses with the Structural Equation Model*

A confirmatory factor analysis has been made via the LISREL structural equation model. The goodness of fit statistics are as follows: chi-square (χ^2) value=391,81, p=0,00; Degrees of Freedom= 215; χ^2/sd= 1,82; Root Mean Square Error of Approximation-(RMSEA)=0.044; Goodness of Fit Index (GFI)=0.92; Adjusted Goodness of Fit Index (AGFI)=0.90; Comparative Fit Index (CFI)=0.99; Normed Fit Index (NFI)=0.97; Root Mean Square Residual (RMR)=0.028 and Standardized Root Mean Square Residual (SRMR)=0.043. Values derived from the structural equation model and the acceptability criteria of the goodness of fit statistics (Çokluk et al., 2012) are shown in Table 14.

Table 14. Values Derived from the Structural Equation Model and the Acceptability Criteria of the Goodness of Fit Statistics

Goodness of fit Index	**Values Derived from the Model**	**Acceptability Criteria**
Chi-Square (χ^2)/ sd	1,82	≤ 2 perfect fit
GFI	0,92	≥ 0,90 good fit
RMSEA	0,044	≤ 0,05 perfect fit
RMR	0,028	≤ 0,05 perfect fit
SRMR	0,043	≤ 0,05 perfect fit
CFI	0,99	≥ 0,95 perfect fit
NFI	0,97	≥ 0,95 perfect fit

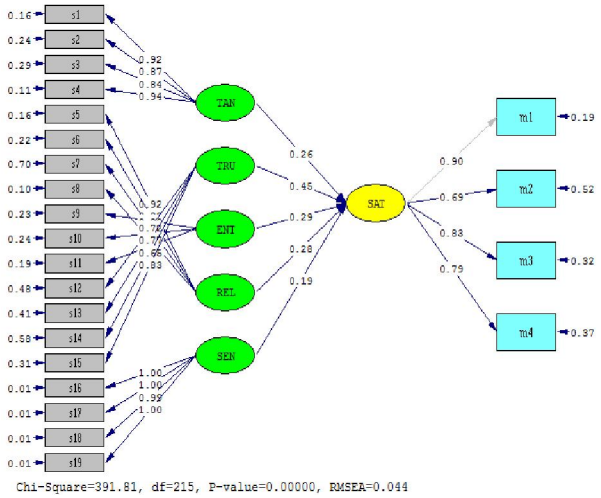

Fig. 2. Standardized solution derived from the second-order confirmatory factor analysis.

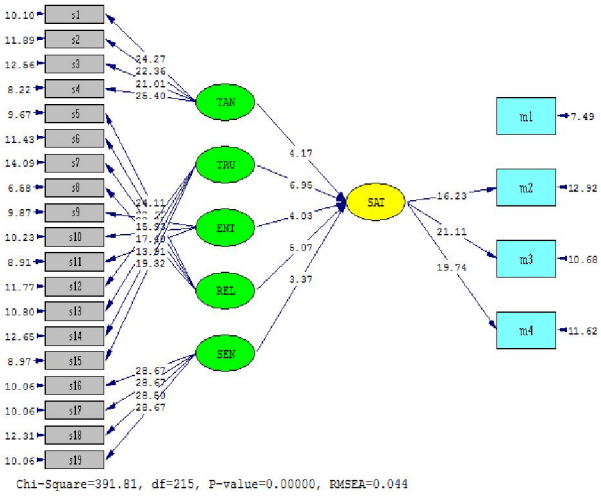

Fig. 3. t values derived from the second-order confirmatory factor analysis.

Table 15. Results of the Structural Equation Analysis

Dependent Variable	Independent Variable	Standardized Solution	t Values
Customer Satisfaction (SAT)	Tangibles (TAN)	0,26	4,17
	Reliability (REL)	0,28	5,07
	Enthusiasm (ENT)	0,29	4,03
	Trust (TRU)	0,45	6,95
	Sensitivity (SEN)	0,19	3,37

When both the path diagram derived from the second-order confirmatory factor analysis and t values are examined, t values and standardized solution values are seen to be meaningful with a 0,01 reliability level. The standardized solution values derived from the second-order confirmatory factor analysis are shown in Fig. 2, while those of t in Fig. 3.

When the goodness of fit statistics in Table 14 and the results of the structural equation analysis in Table 15 are taken into consideration, the model, which is used for investigating the relationship between perceived service quality and customer satisfaction and whose acceptability is tested by LISREL structural equation model, is found satisfying in terms of significance and reliability.

4. Conclusion

In the contemporary world, it is getting more and more significant to increase the customers' satisfaction. In this study, the relationship between perceived service quality and customer satisfaction has been analysed.

The SPSS (Statistical Package for Social Sciences) statistics package has been used in the analysis and interpretation of data, while the LISREL structural equation model has been chosen for testing the significance and reliability of the developed model in this study. Statistical analyses have been performed and survey results have been examined through SPSS program. Statistical analyses and tests used in research data analysis are as follows: Frequency Analysis, Factor Analysis, Reliability Analysis, t-Tests and ANOVA/Welch tests.

Demographic features of survey participants have been tested by frequency analysis and then the perceived service quality statements tested by factor analysis. As a result, perceived service quality, the independent variable, consisted of five factors, which are tangibles, trust, enthusiasm, reliability and sensitivity. The dependent variable, customer satisfaction, happened to be the only factor itself. Following the factor analysis, reliability of dependent and independent variables have been tested by Cronbach's Alfa method. The result of that analysis shows that answers given to survey questions have had a high rate of internal consistency.

Taking the relationship between variables into account, the model in Fig. 1 has been developed. It consists of 5 independent variables, creating the perceived service quality, and a dependent variable

affected by these independent variables. In order to test the significance and reliability of that model, a second-order confirmatory factor analysis has been performed, following which goodness of fit statistics, t value and standardized solution results have been examined. Consequently, the model has been found to be significant and reliable, along with being tested as acceptable.

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