

Service Quality in Banks - A SEM Technique with AMOS

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ABSTRACT

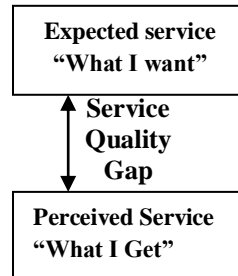
Consumer behavior has always been an interesting subject for marketers. With the constant increase of market, banking sector is one of the fastest growing sectors in India. This study examines the satisfaction level of consumer on major National banks, Private Banks and Foreign bank in India and services provided by them. It also provides a functional comparison of the two different approaches in terms of SERVQUAL model. The study also analyzes the relationship between deliverance of services and actual customer expectation with the help of factor analysis and regression analysis in SEM. This study will provide important insights to banks in redefining their corporate image to one that is customer-focused and driven by service quality. The findings of the study also suggest after evaluation of intrinsic and extrinsic cues of consumers from cross sections differ in evaluating a bank's performance and expectation of the end users. The results of Structural Equation Modeling (SEM) highlighted the precedence areas of service instrument. The gap scores show that there is ample extent for improvement in all the aspects related to service quality. SEM and estimation has proposed by AMOS.

Keywords: Banking Sector, Consumer Behavior, SERVQUAL, Structural Equation Modeling (SEM).

I. INTRODUCTION

Services have been defined in many ways but with no general agreement as to what really constitutes services. The American Marketing Association's definition of services as: activities, benefits or satisfactions, which are offered for sale, or are provided in connection with the sale of goods. According to (Stanton, 1986): Services are those separately identified, and essentially intangible, activities that provide want of satisfaction and that are not necessarily tied to the sale of a product or another service. To produce service may or may not require the use of tangible goods. However, when such use is required, there is no transfer of the title to these tangible goods. (Gummerson, 1987) suggested that "Services are something that can be bought and sold but which you cannot drop on your foot". (Kotler, 1993) defines services as any kind of performance that one party can offer to another that is essentially intangible and does not results in the ownership of anything. Thus, through different definitions it is understood that services have four important characteristics; they are intangibility, perishability, inseparability and heterogeneity The service system, therefore, is an integration of all these components, involving a large number of white-collar staff working with a purpose to satisfy the varying needs of customers. Service system exists because it helps client in meeting their own needs, it offers alternatives that are superior to self-service in cost, time and convenience, and it meets a wide variety of psychological and physiological needs. In the milieu of Service Quality, a significant issue in the current decade has arisen due to the unique quality gap between customer expectation and company performance. Analysis about gap model of SERVPERF is based on delivering quality banking services in Indian market. The intangibility dimensions of services are simultaneously associated with product features and services of banks as referred by Gronroos, C (1984). Financial liberalization has led to application of concentrated viable pressure in banking industry due to structural and technological changes. Indubitably owing to the belief that delivery of higher service quality is a must for attaining behavioral outcomes, recent years have witnessed a flurry of changes in service quality which have made banks like State Bank of India, Union Bank of India, ICICI bank etc to provide benchmarking in few services like cheque clearance, ATM facility, online banking, debit cards facility etc. Apart from this banks

should work on service quality from bottom line by retention of valuable customer with the improvement in speed of services, reducing time for monetary operations, having attentive conversant and resourceful employees, offering convenient or more branch locations and creating a well designed as well as navigable website as reviewed by Kesari Singh (2016). Customer assessment of service quality which will be analyzed by customer feedback and Banks real Performance ?



By Parasuraman, A. (1990)

1.1 Structural Equation Modeling:

Structural equation modeling (SEM) is a technique representing, estimating, and testing a network of relationships between variables. SEM included comparisons between “traditional statistical” and SEM analyses. For examples path analysis/ regression, repeated measures analysis/latent growth curve modeling, and confirmatory factor analysis (Rigdon, 1998).

1.2 Objectives of the Study

- To divulge the dimensions of service quality.
- To study the direct and indirect effects of service quality on customer loyalty on public, private and foreign sector banks.
- To offer suggestions for improvement of Service Quality in Public sector Banks based on the analytical results of the current study.
- To identify the interrelationships among the determinants of service quality.

In order to achieve the above objectives, the paper is organized as follows: the first section addresses the problems and issues related to the current research topic; the second section briefly describes the existing literature on the research topic; the third section explains the research methodology; the forth section discusses the results of the empirical analyses; and finally, the fifth section draws the major conclusions.

II. CONCEPTUAL FRAMEWORK AND REVIEW OF RELATED LITERATURE

Service providing organizations have in their possession kind of scrap heap that is why a customer does not come back. Being a service provider they should start measuring and reducing it otherwise they would have to bear it as a high cost scrap. For that reason organizations should strive for “zero defections” because customer can be served profitably as suggested by Reichheld, F and W. Earl Sasser, Jr. (1990). But due to cut throat competition in banking industry the private banks are giving a tough time to public banks, which is attributable to lack of enough service quality in market (Hunt Robert, 2009). Commencement about service quality was based on Japanese philosophy; according to it quality is what???? It was based on zero defects and doing it right the first time suggested by Crosby, Philip B. (1979). The quality concept was followed by Gravin (1983), with the thought of quality as “conformance to requirements”. As per Gronroos (1984) direction is required in service quality when; service provider knows how it will (service) be evaluated by consumer, according to that being an improver they will be able to influence those evaluation (Lewis and Booms, 1983).

For conceptualization and measurement of service quality they took studied 22 items of service given by Parasuraman, Zeithamal & Berry. (1985). According to authors services quality can be measured by feedback on how well the level of services delivered matches with customer expectation (Lewis and Booms, 1983). Apart from measuring service quality Gronroos (1978) has developed model in context of comparison of services with the expectation and perception of services that they receive, in the form of evaluative service quality. Study followed that satisfaction reveal to confirmation or disconfirmation of expectation of customer. It was expanded by Sasser, Olsen and Wycloff (1978) who discussed three different dimensions of service performance levels,

namely facility, material and personnel - these are involved in the manner in which services are delivered. Gronroos (1978) has postulated two types of services quality - technical quality and function quality. Technical quality includes services actually received by customers and functional quality involves the manner in which the services are delivered. Cronin (1992) has focused on satisfaction which emerges to have a stronger and more dependable effect on purchase intention than service quality. This is justified as public banks strive to insist on overall customer satisfaction program in comparison to strategy focusing solely on service quality. Customer service satisfaction is determined using items like interest, enjoyment, surprise, wise choice and doing the right thing. Customer satisfaction has been substantial to affect on both loyalty and repurchase intention for a variety of products (Bitner, 1990). It is argued that satisfaction in a services encounter impacts valuation of services quality and subsequent loyalty and switching behavior. Reichheld and Sesser (1990) have enlightened that consequently small reduction in customer defection rates can produce significant improvement in profitability. These improvements arise as a consequence of both cost saving and additional revenue generation, therefore the existing link between retention and profitability can be derived from a simple cost benefit equation stating that the cost of customer acquisition is generally higher than cost of retention.

2.1 Development of Conceptual Model

From the review of relevant literature, it is clear that most of the scholars consider five dimensions for measuring service quality. These seem to be most suitable to identify firms' service quality. In addition to the major antecedents developed by Parasuraman et al. (1988), some researchers found other factors significant in service quality study such as access to service, service offered, security, and reputation (Flavian et al. 2004). In a similar element, service quality dimensions guide to customer satisfaction. Once a firm makes its customers satisfied, they become loyal to the firm (Ehigie 2006). These determinant factors have theoretical importance as well as conceptual and anchored in empirical evidence that is included in our model. The model presented in Figure-1 illustrates direct and indirect links among the variables.

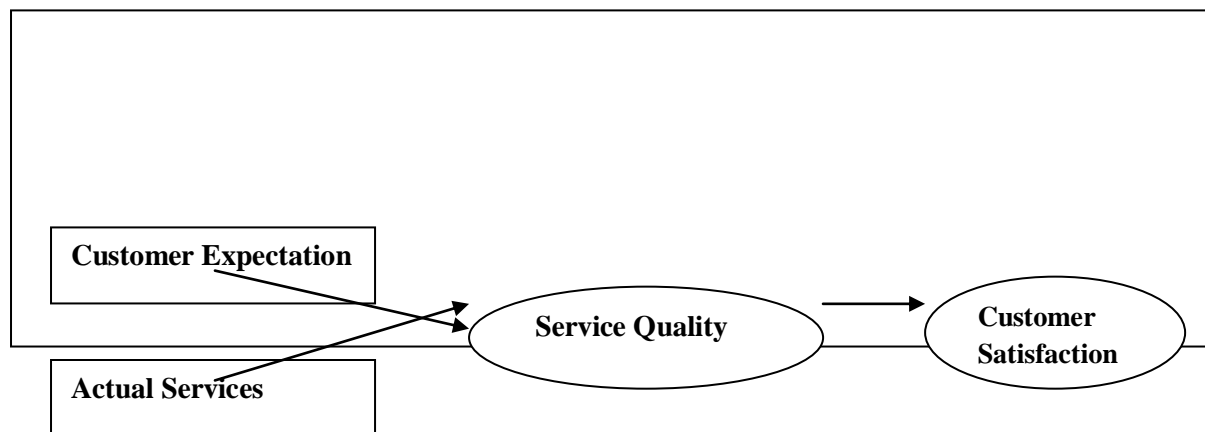


Figure 1: Conceptual Framework of Service Quality Dimension and Its Relationships with Satisfaction

III. METHODOLOGY

The study empirically investigates the relationship between service quality dimensions and customer satisfaction from the viewpoint of consumers of banking services in five zones of India. Which are east, west, south, north and central. Zeithaml et al.'s (1996) theoretical framework of behavioral intentions was used in the measurement of Behavior of customer and the five dimensions of SERVQUAL (Parasuraman et al., 1988) were used in the measurement of perception of service quality. A total of 909 usable responses were collected from customers of banks located in five zone in India analysis was done. Customers were approached to complete the questionnaire were Purposive sampling of Non-Probability sampling were used for the study. The objective of the current study is to test the 29 items of SERVQUAL construct and its relationship with Zeithaml et al.'s (1996) Multidimensional model of customer satisfaction. Customer perceptions of service quality were measured using 29 items of Modified SERVQUAL. They include the following dimensions: (1) Responsiveness (2) Communication (3) Empathy (4) Tangibility (5) Assurance (6) Reliability (7) Courtesy. A Five point Likert-type scale, ranking from (1) strongly disagrees to (5) strongly agrees was used to developed questionnaire.

3.1 Validity and Reliability Analysis

Content validity: For the present study, the content validity of the instrument was ensured as the service quality dimensions and items were identified from the literature and exploratory investigations, and were thoroughly reviewed by professionals and academicians. The First part of questionnaire measured the demographic characteristics: gender, marital status, age, income, education, and employment status. Second part of questionnaire was based on refinement of the 29-item instrument which was gathered from expectation and perceived service separately with pilot sample of 60 customers. The respondents were distributed uniformly from customer base of banking sector. To qualify for the pilot study, an adult respondent using the services of bank for at least one year was taken. Convenient sampling technique was used. Each item in the initial instrument was used to collect two sets of information—one was the expectation about the firms in general in each service category and other about the perception of a particular firm whose service quality was being assessed. A five point Likert type Scale ranging from “Most Important (5) to Least Important (1)” on expectation side and “Highly Satisfied” (5) to “Highly Dissatisfied” (1) on Perceived Service Side was used. Reliability of expected side was defined with Cronbach alpha which was 0.956 and standard value was 0.960 at 29 items. Reliability of perception side was calculated 0.924 and standard value was 0.930. This shows that data has satisfactory internal consistency reliability.

1.3 Hypotheses

As per the prior discussion, the present study accesses in detail the effects of customer satisfaction in terms of service quality to their valuable consumers. The study is based on the performance of public sector bank and private sector bank and foreign bank in Indian market. Satisfaction reveals to confirmation or disconfirmation in the expectation of customer. There may be a number of underlying reasons which may impact on valuation of services by consumers. Specifically, we examine the effect of quality on customer retention in banking industry. According to the conceptual framework discussed previously, it can be concluded that service quality leads to customer retention. However, effective service quality leads to both customer acquisition and retention. Following hypotheses stem from the question areas that are based on the earlier research findings as:

H₀₁: There is no significance relationship between assessments of service quality and customer satisfaction.

H₀₂: There is no significant gap between the expected and perception (actual service by bank) on bank customers.

H₀₃: There is no significant relationship between customer expectations, perception, overall service quality and customer satisfaction among bank customers.

III. EMPIRICAL FINDINGS

Data collected were analyzed through a series of validated tools and procedures. The results of the analysis are described in the following sub sections. The profiles of the respondents are shown in the Table 1. The profiles focus on the demographic of respondents. From the Table, it shows that out of 909 respondents, 34% of the respondents are female and 66% are male. The occupations of respondents were varied. The majority of the respondents were in service group (66%), follows by business (18.48%) etc. In term of income, almost half of the respondents earned less than 2.99 lakh per annum.

Table 1: Demographic Characteristics of the Respondents

S. No.	Respondent's characteristics	% of respondents
1	Gender	
	Male	65.89%
	Female	34.10%
3	Age Group	
	16-25	41.03
	26-35	29.26
	36-45	13.97
	46-55	10.89
	>55	4.84
4	Occupation	
	Student	12.76
	Service	66.22
	Business	18.48
	Housewife	2.53

5	Income	
	<1.8	19.36
	1.9-2.99	26.29
	3-4.5	26.62
	4.51-6	7.59
	>6	20.13
6	Educational Qualification	
	Higher Secondary	4.40
	Graduate	30.80
	Professional Graduate/Post Graduate	59.51
	PhD	5.28
7	Banks	
	Public Bank	58.63
	Private Bank	37.18
	Foreign Bank	4.18

4.1 Exploratory Factor Analysis

In order to explore the underlying dimensions of perceptions score of service quality in banking sector on 29 statements, exploratory factor analysis was performed. The exploratory factor analysis results are shown in Tables 2, 3, 4 and 5. The results from Table 3 shows that value of KMO statistic is very high (.952) and Bartlett's test of Sphericity is significant (sig= .000), which reveals that data is appropriate for factor analysis. The total variance shown in this Table, accounted for by all of the six components explains nearly 60.982 per cent of the variability in the original 29 variables (Table 5). So, we can reduce the original dataset by using these five components (Eigen values greater than 1 as shown in Table 5).

Table 2: Descriptive Statistics

S.no	Mean	Standard Deviation	S.no	Mean	Standard Deviation
Q1	3.5640	.88860	Q16	3.4160	1.33915
Q2	3.4939	.83407	Q17	3.6730	.94141
Q3	3.4082	.92429	Q18	3.4816	.94058
Q4	3.3370	.94201	Q19	3.5083	.98806
Q5	3.3915	.97072	Q20	3.4638	.91606
Q6	3.4461	.94512	Q21	3.3526	.97132
Q7	3.5651	.86695	Q22	3.3726	.90910
Q8	3.3882	.86604	Q23	3.3860	.93738
Q9	3.4549	.88222	Q24	3.3471	.91858
Q10	3.3782	.90619	Q25	3.3804	.94615
Q11	3.4828	.94885	Q26	3.4127	.93312
Q12	3.4016	1.67453	Q27	3.4004	.89657
Q13	3.4794	.91655	Q28	3.3370	.90093
Q14	3.3871	.93037	Q29	3.3693	.94938
Q15	3.4205	.87851			

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.952
Bartlett's Test of Sphericity	Approx. Chi-Square	9.301E3
	Df	4.06
	Sig.	.000

Table 4: Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.933	32.483	32.483	8.933	32.483	32.483	2.880	10.472	10.472
2	2.337	8.498	40.981	2.337	8.498	40.981	2.566	9.330	19.802
3	1.520	5.527	46.509	1.520	5.527	46.509	2.285	8.309	28.112
4	1.341	4.878	51.386	1.341	4.878	51.386	2.404	8.741	36.853
5	1.045	3.799	55.185	1.045	3.799	55.185	2.217	8.060	44.913
6	.812	2.952	58.136	.812	2.952	58.136	2.690	9.782	54.695
7	.783	2.847	60.984	.783	2.847	60.984	1.729	6.288	60.984
8	.759	2.762	63.745						
9	.732	2.664	66.409						
10	.713	2.592	69.001						
11	.682	2.479	71.480						
12	.617	2.245	73.725						
13	.598	2.176	75.901						
14	.554	2.015	77.917						
15	.539	1.961	79.877						
16	.516	1.875	81.752						
17	.481	1.750	83.502						
18	.472	1.717	85.218						
19	.461	1.675	86.893						
20	.430	1.562	88.455						
21	.425	1.547	90.002						
22	.399	1.450	91.452						
23	.385	1.400	92.852						
24	.372	1.352	94.204						
25	.354	1.286	95.491						
26	.336	1.222	96.713						
27	.324	1.177	97.890						
28	.303	1.102	98.991						
29	.277	1.009	100.000						

The Initial Eigen values - first 7 factors are meaningful as they have Eigen values > 1. Factors 1, 2, 3, 4, 5, 6 and 7 explain by 32.483%, 8.498%, 5.527, 4.878, 3.799, 2.952 and 2.847 % of the variance respectively – a cumulative total of 60.948 % (which was acceptable). The Extraction Sums of Squared Loadings provides 60.948 % similar information based only on the extracted factors.

Table 5: Factor Matrix

	Component			
	1	2	3	4
Knowledge and caliber to answer customer's specific query and request.	.667		-.158	
Employees are consistently generous and courteous.	.657	.135	-.196	
Employees are good in understanding customer grievances and processes.	.645	.112	-.139	
Employees deliver caring and individual attention to customers by knowing the customer's best interest at heart.	.618	.125	-.259	
Delivering services quickly at all times.	.614		.216	-.219
Employees are very helpful	.608	-.360		
The services available in most of the banks are efficient and up to the quality	.607			.243

mark.				
A sense of public responsibility among bank employees in terms of being punctual, regular and sincere.	.602	.115	-.152	
Records accurate and presentable.	.596	.256		-.124
Updates its technology regularly to improve the capability to provide service to customers in a more effective manner.	.591		.281	-.222
Promotional activities like advertisement, publicity, website, brochures are worth the information.	.589		.164	
Employees behavior.	.589			.143
Ambiance and other furnishing are comfortable for customers to interact.	.582	.178	.134	
Bank giving good services in reasonable time and minimum cost but not compensating with quality.	.579	.145		.105
Advanced technology and clarified processes so that services are delivered without delays.	.576	-.110	.230	-.272
Equal treatment to all customers without any partiality by bank employees.	.568	.134	-.121	
Bank procedures and processes are without error (flawless).	.563	.176	-.156	
provide prompt services	.562	-.200		-.112
Customer realizes their safety, security, satisfaction and pleasure felt in their bank transaction.	.551	.243		
Solving all problems instantly	.545	-.270	-.170	
Employees are decent and neatly dressed.	.543		.144	.110
Feedback is considered to improve bank's service standard	.531	-.381	-.140	.134
Convenient operating hours and working days.	.521		.204	.260
Notifies their customers' about several types of account	.516	-.147		
Providing facilities like A.T.M., Debit Card, Credit Card, Mobile banking, Internet Banking, etc are convenient to the customers.	.497	.210	.207	
Bank's branches and A.T.M.'s at those locations which are convenient to all sections of the society.	.494	.221	.181	
Bank concerned about updating the customers' information, services used, quality delivered and actual output.	.491	-.359		.135
Quality services and maintains schedule as promised.	.409			.153
Employees hold necessary skills in a critical problem's solution	.379			.195

The Factor Matrix represents information from initial un-rotated solution. The values are weights that relate the item (or variable) to the respective factor. All the items have high positive weights with the first factor. At this stage the solution has not taken into consideration the correlation between the three factors. Subsequent information is more readily interpretable.

Table 6: Goodness- of – fit test

Chi-Square	Df	Sig.
845.025	296	.000

The Goodness-of-fit Test determines if the sample data (correlations) are likely to arisen from three correlated factors. In this situation we want the probability value of the Chi- Square statistic to be greater than the chosen alpha (generally 0.05). Based on our results the four factor model is a good description of the data.

Table 7: Pattern Matrix

	Factors			
	1	2	3	4
Employees deliver caring and individual attention to customers by knowing the customer's best interest at heart.	.705			
Employees are consistently generous and courteous.	.678			
Records accurate and presentable.	.620	.127	.128	
Bank procedures and processes are without error (flawless).	.617			
Employees are good in understanding customer grievances and processes.	.591		.102	
Knowledge and caliber to answer customer's specific query and request.	.586			
A sense of public responsibility among bank employees in terms of being	.556			.101

punctual, regular and sincere.				
Equal treatment to all customers without any partiality by bank employees.	.502			.175
Customer realize their safety, security, satisfaction and pleasure felt in their bank transaction.	.403	.161	.110	.199
Bank giving good services in reasonable time and minimum cost but not compensating with quality.	.377			.288
Feedback is considered to improve bank's service standard		-.521		.213
Employees are very helpful	.155	-.464	.277	
Bank concerned about updating the customers' information, services used, quality delivered and actual output.		-.439	.121	.280
Solving all problems instantly	.285	-.403	.170	
Provide prompt services	.254	-.295	.266	
Advanced technology and clarified processes so that services are delivered without delays.			.673	
Updates its technology regularly to improve the capability to provide service to customers in a more effective manner.			.671	
Delivering services quickly at all times.			.606	
Promotional activities like advertisement, publicity, website, brochures are worth the information.			.320	.277
Convenient operating hours and working days.			.103	.586
The services available in most of the banks are efficient and up to the quality mark.	.136	-.110		.509
Employees are decent and neatly dressed.	.109		.166	.377
Bank's branches and A.T.M.'s at those locations which are convenient to all sections of the society.	.181	.200	.151	.359
Ambiance and other furnishing are comfortable for customers to interact.	.248	.124	.150	.350
Quality services and maintains schedule as promised.				.350
Employee's behavior.	.205	-.136		.348
Providing facilities like A.T.M., Debit Card, Credit Card, Mobile banking, Internet Banking, etc are convenient to the customers.	.153	.205	.204	.343
Employees hold necessary skills in a critical problem's solution	.105	-.122		.340
Notifies their customers' about several types of account		-.198	.193	.261

The Pattern Matrix shows the factor loadings for the rotated solution. Factor loadings are similar to regression weights (or slopes) and indicate the strength of the association between the variables and the factors.

The solution has been rotated to achieve an interpretable structure. When the factors are uncorrelated the Pattern Matrix and the Structure Matrix should be the same.

Table 8: Structure Matrix

	Factors			
	1	2	3	4
Employees are consistently generous and courteous.	.700	-.256	.486	.453
Knowledge and caliber to answer customer's specific query and request.	.682	-.294	.495	.494
Employees deliver caring and individual attention to customers by knowing the customer's best interest at heart.	.674	-.275	.406	.434
Employees are good in understanding customer grievances and processes.	.668	-.249	.501	.458
Records accurate and presentable.	.650		.483	.425
A sense of public responsibility among bank employees in terms of being punctual, regular and sincere.	.625	-.242	.420	.470
Bank procedures and processes are without error (flawless).	.615	-.166	.419	.391
Equal treatment to all customers without any partiality by bank employees.	.586	-.204	.382	.478
Bank giving good services in reasonable time and minimum cost but not compensating with quality.	.566	-.164	.420	.536
Customer realize their safety, security, satisfaction and pleasure felt in their bank transaction.	.560		.445	.487
Feedback is considered to improve bank's service standard	.412	-.616	.375	.435

Employees are very helpful	.490	-.599	.532	.416
Bank concerned about updating the customers' information, services used, quality delivered and actual output.	.347	-.536	.386	.438
Solving all problems instantly	.479	-.523	.445	.343
Updates its technology regularly to improve the capability to provide service to customers in a more effective manner.	.458	-.228	.695	.450
Delivering services quickly at all times.	.504	-.242	.685	.454
Advanced technology and clarified processes so that services are delivered without delays.	.459	-.248	.684	.397
Promotional activities like advertisement, publicity, website, brochures are worth the information.	.488	-.239	.551	.533
Provide prompt services	.493	-.439	.500	.370
The services available in most of the banks are efficient and up to the quality mark.	.514	-.290	.439	.637
Convenient operating hours and working days.	.390	-.229	.415	.609
Ambiance and other furnishing are comfortable for customers to interact.	.541		.483	.569
Employees behavior.	.515	-.308	.443	.556
Employees are decent and neatly dressed.	.464	-.173	.458	.545
Bank's branches and A.T.M.'s at those locations which are convenient to all sections of the society.	.459		.423	.515
Providing facilities like A.T.M., Debit Card, Credit Card, Mobile banking, Internet Banking, etc are convenient to the customers.	.453		.447	.510
Notifies their customers' about several types of account	.412	-.341	.442	.464
Quality services and maintains schedule as promised.	.335	-.192	.314	.433
Employees hold necessary skills in a critical problem's solution	.323	-.224	.242	.404

The Structure Matrix shows the correlations between the factors and the items for the rotated solution.

4.2 GAP Analysis

Table 9: Means of Perception and Expectation on Seven dimensions for banking

Dimensions	Customers' perception	Customers' expectation	Mean difference	t Value	p value
Responsiveness	4.25981	3.43619	.823616	26.574	.000
Communication	4.22323	3.44646	.776769	24.820	.000
Empathy	4.18647	3.43399	.752475	21.320	.000
Tangibles	4.20468	3.49565	.709021	22.763	.000
Assurance	4.18619	3.39054	.795655	23.482	.000
Reliability	4.18042	3.37404	.806381	22.437	.000
Courtesy	4.17785	3.36377	.81408	22.447	.000

Gap analysis (Gap 5 = perception minus expectation) was performed to calculate the service quality in banking sector. In services, quality is measured by the perception of the customer on how well the service has been delivered (Hampton, 1993; Lewis, 1983). It is significant to test the customer's perceptions (actual experience) to see whether the service quality provided by the banking sector was meeting, exceeding or diminishing below the expectations. In turn, it can also be a measurement of satisfaction/dissatisfaction with the delivery of services. Therefore, the study of Gap 5 can be a useful tool for management in controlling the service delivery in banking industry. The results revealed that in all the service quality parameter of banking industry in India the gap-scores are negative and for each of seven dimensions, the gap scores were statistically significant (sig. <.00) This can be interpreted as a gap between what was expected and perceived, thus demonstrating a failure in service delivery and service quality at all the category in banking service sector in India.

The maximum gap in Responsiveness, reliability and courtesy dimension restated the deficiencies in delivery of expected services during claims settlement, and in general, in handling customer problems. It reflects wide dissatisfaction regarding non delivery of personalized attention to the varied and changing needs of customers as well as not being able to prove as value for money, innovative or financially stable company, and good employee behavior. Prioritized deployment of resources to these dimensions is necessary to accomplish the desired results.

4.3 SEM Analysis

The multiple regressions are applied to analyze individual service quality dimensions as independent variables against a separate measure of Overall satisfaction of customers in bank as dependent variable. The items are summed up to reproduce the even original dimensions which are analyzed separately against the overall Service Quality as follows. Regression command is usually used to compute multiple correlations (that is the strength of relationship between several independent and a single dependent variable). SPSS generates a score that measures the strength of relationship between the dependent variable and the independent variable. Along with the computation of r , SPSS prints out a probability value (p) associated with r to indicate the significance of that association. Once again, a $p < .05$ is generally interpreted as indicating a statistically significant correlation. If $p > .05$, the strength of association between the two variables is usually not considered statistically significant; or the relationship between the two constructs is considered weak or nonexistent. The r square (or r^2) is simply the square of r , but it has special significance. The r^2 value is the proportion of variance in one variable accounted for (or explained) by the other variable. SPSS calculates the constant and the co-efficient (called β – values) for the regression equation. The path coefficients for the full model are reported in table 10.

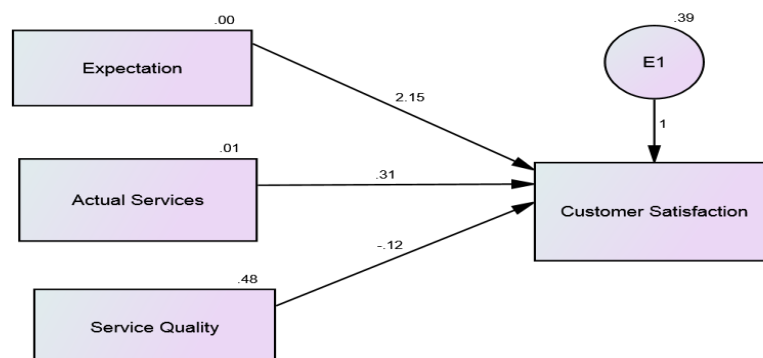
All path coefficients are positive and significant. The result shows a positive relationship between Customer Expectation and Service Quality (0.37) and Customer Perception and Service Quality (0.991). The direct relationship between Customer Expectation and overall satisfaction was (0.34) the relationship between Customer Perception and overall satisfaction was (0.991).

Table 10: The results of structural equation model testing

Parameters	Path	R	R ²
1	Customer Expectation- Overall Service Quality	0.37	.001
2	Customer Expectation – Customer Satisfaction	0.34	0.01
3	Customer Perception- Overall Service Quality	0.991	0.982
4	Customer Perception – Customer Satisfaction	0.977	0.955

One implication of this finding is that the overall service quality is influenced more by a consumer's perception. It is necessary to compare the paths leading to overall service quality to understand the role of perception in the service quality. That is, if the magnitude of the path between the overall service quality and customer satisfaction is not larger than the individual paths between customer perception/customer expectation and overall service quality. The results show that the path between Customer Perception and overall service quality (0.991) and the path from Customer Expectation to overall service quality.

4.4 Proposed Estimation of SEM with AMOS 21



Estimates (Group number 1 - Default model)

Scalar Estimates (Group number 1 - Default model)

Maximum Likelihood Estimates

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
CustomerSat	<---	ActualServ	.312	1.529	.204	.838	
CustomerSat	<---	Expectation	2.150	2.129	1.010	.312	
CustomerSat	<---	ServQual	-.117	.170	-.689	.491	

Standardized Regression Weights: (Group number 1 - Default model)

	Estimate
CustomerSat <--- ActualServ	.038
CustomerSat <--- Expectation	.186
CustomerSat <--- ServQual	-.127

Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
ActualServ	.006	.002	3.742	***	
Expectation	.003	.001	3.742	***	
ServQual	.476	.127	3.742	***	
E1	.386	.103	3.742	***	

P value which define by *** is less than to .05 that's why estimation of this model is accepted.

IV. DISCUSSION & CONCLUSION

The nature of banking services encourages customers to demand the highest possible quality. In order to achieve this, it is essential to be very close to customers to capture information on customer current and future needs, expectations and perceptions. The main objective of this study was to examine the effect of service quality on customer satisfaction. This study also evaluated that there is a degree of prediction of service quality on the multidimensional model. With the help of seven factors all hypothesis has been accepted that's why consumer behavior pertaining to one of the fast growing service sector i.e., Banking, has been investigated in past as suggested by the review of literature. However, lack of sufficient research in India on this account, encouraged this research. The purpose of this study was to advance the understanding about service quality in India. This was done by assessing: (1) whether persons with different occupations differ in their perception and attributes about public banks, private bank & foreign bank in India; (2) whether persons from different age groups differ in their perception about performance of public, private and foreign banks in terms of total service quality. The results suggest that the highest factor affecting on customer satisfaction is service quality. The bankers cannot afford the risk of losing the side of "service quality". The nature and frequency of studies in India concerning total service quality / customer service in banks is extremely limited. These limited studies of academicians and practitioners have reported very poor service quality mostly in public sector banks (Brahmanandan and Narayana, 1990; Elias, 1982; Nageshwar and Promod, 1990; Nageswar, 1987; Sessa Sai, 1999; Sundaram, 1984). The present study confirms such findings. However, it brings to light that poor service quality among Indian banks is mostly because of deficiency in tangibility and responsiveness. Public sector banks meet nearly 90% banking needs of the country and retail banking constitutes eighty percent of their total banking business. Investment in relevant banking technology particularly ATM's and internet facility will take care of most of their retail banking Committee Report (1989) stressed mechanization of Indian banks. Many other researchers have suggested banking technology as a means to improve customer service. The results of this study indicated that service quality is an important antecedent of customer satisfaction. These dimensions include tangibles, reliability, responsiveness, assurance, and empathy. Moreover, our findings show that service quality is an important antecedent of customer satisfaction. This finding reinforces the need for banks managers to place an emphasis on the seven dimensions of service quality. Since the results of this study are based on consumers' perceptions only, future research should investigate the congruence between consumers' and service providers' perceptions. This will help the banking industry to better understand whether both consumers and banks have the same perceptions regarding issues relevant to retention.

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