

An Empirical Evaluation of Alternative Scales to Measure Service Quality and Assessment of Service Quality Dimensions

Rajesh Bhatt

Department of Business Administration
Bhavnagar University, Bhavnagar.
Gujarat, India - 364002.

E-mail : drrajeshbhatt@gmail.com

Anitha Sunil

L.J. Institute of Management Studies
Near NagdevkalyanMandir,
Near Sanand Cross Roads,
S.G Highway, Ahmedabad,
Gujarat - 382481.

E-mail : anita02sunil@gmail.com

Abstract

In service quality measurement disconfirmation-based scale SERVQUAL and performance only scale SERVPERF are being advocated as being the two widely applied service quality measurement scales. There have been historical arguments about comparative appropriateness of SERVQUAL and SERVPERF. Since focus of past studies has been more on methodological and diagnostic power of the scales in developed countries- this study represents an effort towards evaluating the two scales for banking industry in the context of a developing Country- India and particularly Gujarat state. The two alternative scales were compared in terms of reliability, validity, predictive ability to explain variation in Overall service quality, relationship with customer satisfaction and diagnostic capability for providing directions for managerial interventions. Based on results of this study, SERVQUAL model is identified more appropriate measurement for its diagnostic power, whereas SERVPERF scores on its predictive capability to explain overall service quality and association with customer satisfaction. The factor analysis indicates a seven dimensional structure instead of five. This study suggest for further research and extensive scale adaptation before scales developed in other countries are applied in Indian Context.

Key Words : Service Quality, SERVQUAL, OSQ, Factor Analysis

I. INTRODUCTION

The global banking scenario is currently undergoing radical transformation owing to the regulatory, structural and technological changes happening all across the world and Indian banking industry is no exception to the ongoing trend. One factor that is the main catalyst of growth of the service economy in India is the Liberalization reform. With the lowering of entry barriers and blurring product lines of the banks, the oligopolistic nature of Indian Banking is fast changing and giving way to a relatively free market place.

The key for survival in the global market for a service firm is to offer a service that in some way is superior to its competition. Because of the unique characteristics of services:-intangibility, perish ability, heterogeneity and inseparability of production and consumption, marketers of services face some very real and distinctive challenges. Standardization is difficult, quality control is difficult, mass production is not possible, communication and pricing is difficult and as service quality depends on many uncontrollable factors, there is no surety that services delivered matches with what was planned. As customers participate in and affect the transaction therefore, customer service is more important in services as compared to in manufacturing companies. Moreover, in the recent years the thrust on efficient customer service has increased tremendously because of increased competition from private players, improved technologies and growing customer sophistication. Consequent to the implementation of government policies on globalization and liberalization, consumers have become more and more aware of their requirements and the alternatives available in relation to services and the provider organizations. With greater choice and increasing awareness, Indian consumers are more demanding of quality services and players can no longer afford to neglect customer specific issues. And to add to it the perceptions and expectations are continuously evolving making it difficult for the service provider to measure and manage services effectively. Hereby we can infer that, long term survival in this sector, depends largely on a firm's understanding of customer's needs and problems, their perceptions and expectations of service quality.

Service quality has been recognized as a key factor in differentiating services and service marketers have experienced it for the past few years that competition can be well managed by differentiating through quality. Quality has been recognized as a strategic tool for attaining operational efficiency and improved business performance (Babakus and Boller, 1992; Garvin, 1983) Research has also shown that high service quality contributes significantly to profitability and productivity and consumers satisfied with service quality are most likely to remain loyal. Thus improving service quality is regarded as a way to strengthen competitiveness and profitability through increased customer satisfaction and loyalty behaviors by providing necessary needs.

Unlike goods quality, which can be measured objectively by indicators as durability and number of defects, Service Quality is abstract and elusive construct. Objective methods by which to assess the quality of service provision are therefore vital for attaining and retaining high quality services. Quality in services, has been conceptualized in different ways in services literature and based on different conceptualizations, alternative scales have been proposed for service quality measurement (Parasuraman et al, 1985, 1988, Cronin and Taylor, 1992, Teas) Despite considerable work undertaken in this area, lot of confusion is there about the dimensionality of service quality and yet there is no consensus as to which one of the measurement scales is robust for measuring and comparing service quality. Furthermore little work has been done to examine the applicability of these scales to the services industries in developing countries. This study attempts to examine the dimensionality of service quality and to assess the diagnostic usefulness as well the predictive capability of two widely advocated service quality scales, viz., SERVQUAL and SERVPERF in measuring service quality in retail banks.

II. CONCEPTUAL BACKGROUND

Service quality measurement

Many researchers have defined service quality in different ways. Parasuraman et al. (1985) defines service quality as a function of the magnitude and direction of the gap between expectation and perception of the

performance received. Bitner, Booms and Mohr (1994) defined service quality as the consumer's overall impression of the relative inferiority/ superiority of the organization and its services. While Cronin and Taylor (1992) view service quality as a form of attitude representing a long run overall evaluation.

However, the credit for conceptualization of service quality goes to Parasuraman, Zeithaml and Berry (PZB 1985, 1988, 1990). Their research drew both academic and practitioner interest in service quality and served as a framework for further empirical research in this area. The customer's assessment of overall service quality depends on the gap between expectations and perceptions of actual performance levels (PZB 1985, 1988). The entire approach was developed on the tenet that customers form expectations of performances on the service dimensions, observe performance and later form performance perceptions. The initial results, based on some qualitative research, yielded 10 dimensions of service quality that included tangibles, reliability, responsiveness, competence, courtesy, credibility, security, access, communication and understanding the customer. Further empirical study (Parasuraman et al., 1988) resulted in a 22-item scale, named 'SERVQUAL', which measures service quality based on five dimensions, viz. tangibles, reliability, responsiveness, assurance and empathy. They propose that each quality dimension can be quantified by obtaining measures of expectations and perceptions of performance levels for service attributes relevant to each dimension, calculating the difference between expectations and perceptions of actual performance on these attributes, and then averaging across attributes. When the SERVQUAL scale was developed by researcher's aim was to provide a generic instrument for measuring service quality across a broad range of service categories. Rust and Oliver (1994) noted that the SERVQUAL instrument captured the crux of what service quality might mean, i.e. a comparison to excellence in service by the customer.

Although the SERVQUAL model has greatly contributed to the literature on service quality it has been criticized. Generally, critics have questioned the multidimensional nature of the instrument, psychometric properties, applicability as a generic scale and the feasibility of SERVQUAL as a framework in measuring service quality. The disconfirmation-based service quality measurement scale is inappropriate and it was suggested that service should be measured as an attitude (Cronin and Taylor, 1992). Because the expectations score is usually higher than perceptions scores, SERVQUAL exhibited variance restriction effects and the distribution of SERVQUAL scores was also non normal (Brown et al., 1993). The validity of the items and dimensions of the SERVQUAL instrument have been questioned. It has been suggested that the factor-loading pattern in a number of studies (Carman, 1990; Parasuraman et al., 1991; Babakus and Boller, 1992) indicates a weakness in terms of convergent validity because several of the SERVQUAL items had the highest loadings on different dimensions from those in Parasuraman et al. (1988). The five dimensions of SERVQUAL failed to construct a service quality measurement because of the inter-correlations among them and the SERVQUAL is uni-dimensional rather than a five-dimensional construct (Babakus and Boller 1992). They further suggested that the dimensionality of service quality may depend on the type of industry being studied. Based on criteria of face validity and factor analysis Eigen values greater than one, it is recommended that items on seven or eight of the original ten PZB dimensions be retained until factor analysis shows them to be unique (Carmen 1990). The researcher also suggested that the SERVQUAL needed to be customized by adding items or changing the wording of items. For these reasons, we can say that the stability of the SERVQUAL dimensions is impressive, but the evidence reported by lot of researchers suggests that the PZB dimensions are not completely generic (Carmen 1990, Babakus and Boller, 1992; Dabholkar et al. 1996.) In an empirical research, it was reported that the five factor structure in SERVQUAL does not hold up in the context of Indian banks (Angur, Natarajan, and Jahera 1999). Several researchers have contended that service quality is an aggregation of various quality sub-dimensions and that service quality is therefore a multilevel construct (as well as being a multidimensional construct) (Dabholkar et al., 2000; Brady and Cronin, 2001). Some researchers in view of the above stated problems proposed alternative measurement scales for service quality. A "performance based scale" named SERVPERF was developed and it was argued that service quality is more accurately assessed by measuring only perceptions of quality (Cronin and Taylor, 1992).

Although, other researchers came up with various alternative scales of measurement of service quality, major literature is being contributed on the study of comparison of SERVQUAL and SERVPERF.

Performance based scale displayed better discriminant and nomological validity. The perceptions component outperforms SERVQUAL in predicting behavioral intentions.(Brown et al 1993).For the critique of the gap-based service quality analysis, Parasuraman, Zeithaml, and Berry,(1994) explain that using 'perceptions-only' is appropriate if the research purpose is to measure variances in some dependent construct: while, 'perceptions-minus' measurement is appropriate when the research purpose is to diagnose accuracy of service short-falls and use this information to allocate resources to improve SQ. The SERVQUAL scale would have greater interest for practitioners because of its richer diagnostic value. Various authors supported the above argument that while the SERVPERF scale is a more convergent and discriminant valid explanation of the service construct, possesses greater predictive power to explain variations in the overall service quality scores, and is also a more parsimonious data collection instrument, it is the SERVQUAL scale which entails superior diagnostic power to pinpoint areas for managerial intervention.(Angur et al,1999; Dabholkar et al,2000; Jain and Gupta, 2004 ; Francois et al, 2007) .

Based on the literature review, therefore this study conducts a comparative assessment of modified disconfirmation-based SERVQUAL scale and performance onlySERVPERF scale on reliability, validity,predictive capability on Overall service quality and diagnostic value. This study also examines the dimensionality of the scales to measure service quality.

Relationship of Service quality with customer satisfaction

In the service literature, Oliver (1980) explained that customer satisfaction entails the full meeting of customer expectation of the products and services. Customer satisfaction or dissatisfaction (CS/D) is a function of the disconfirmation arising from discrepancies between prior expectations and actual performance (Oliver 1980).If the perceived performance matches or even exceeds customers' expectations of services, they are satisfied(Parasuraman et al 1988).

In the services literature, strong emphasis is placed on relationship between service quality and customer satisfaction and whether they are distinct constructs (Parasuraman et al., 1985, 1988;, Bitner, 1990 Bolton and Drew, 1991; Cronin and Taylor, 1992; Taylor and Baker1994,). Some researchers contend that service quality and customer satisfaction measure the same thing (Spreng& Singh, 1993), while the majority believes they are different (Parasuraman et al., 1985, 1988;, Bitner, 1990 Bolton and Drew, 1991; Cronin and Taylor, 1992). Some researchers and academics described that customer satisfaction is an antecedent of service quality(Bitner, 1990 Bolton and Drew, 1991), whereas others have counter-argued that the service quality as an antecedent of customer satisfaction(Parasuraman et al., 1985, 1988; Cronin and Taylor, 1992; Taylor& Baker, 1994; Teas, 1994).The bulk of the literature tends to support satisfaction as an outcome of service quality. Bitner and Hubert (1994) demonstrated that customer satisfaction results from individual and global transactions, whereas service quality involves a general impression of the superiority or inferiority of the service provider and the services. Cronin and Taylor (1992) provide a comprehensive study regarding service quality and its relationship with customer satisfaction and loyalty based upon multi-industry sample data. From a comparative research among the four scales weighted and un-weighted versions of SERVQUAL and SERVPERF, they conclude that the un-weighted performance subscale of the SERVQUAL outperforms any other models in explaining customer satisfaction in the service environments.

Hence this study proposes to examine relationship of disconfirmation-based scaleSERVQUAL and performance only scaleSERVPERF with customer satisfaction.

III. METHODOLOGY

The main objective of this research is to assess the superiority of performance only scale SERVPERF and disconfirmation based scale SERVQUAL for measuring service quality in Indian retail banks.The two scales are compared on reliability, validity, diagnostic ability and the efficacy as a reliable predictor of overall service quality and customer satisfaction in retail banking. This study also examines the dimensionality of Service quality Scales.

tribution of risk tolerance across different socioeconomic characteristics of the investor is presented in Table 1. Statistical technique chi square test was conducted to study the relationship between risk tolerance level and Marital status, Education, Occupation etc. A p-value of 0.05 or lower was considered as significant.

Data were gathered from personal interviews conducted in major cities of Gujarat. A total of 299 usable questionnaires were gathered from consumers at their residences. In the present study, non probabilistic method has been used for sampling. A modified SERVQUAL Scale, based on the depth interviews with 10 customers of different major banks was used for the study. Parasuraman, Zeithaml and Berry's (1988) 22 item SERVQUAL scale was modified by incorporating five new items and removing two items. Wherever required, slight modifications in the wording of scale items were made to make the questionnaire understandable to the surveyed respondents. Because SERVQUAL is a gap analysis between service perceptions scores and expectations scores, service quality items were used to measure both perceptions and expectations, so a total of 50 statements were used. Items of bank service quality are shown in annexure. Items with asterisk mark next to item number are additionally incorporated ones. To measure overall customer satisfaction, this study uses a single item measurement scale. A consumer's satisfaction level is coded from 1 representing very dissatisfied to 7 representing very satisfied. Service quality dimensions and direct measure of overall service quality are also measured on seven point likert scale. Cronin and Taylor (1992) have used similar measures for assessing validity of multi-item service quality scales

IV. FINDINGS AND DISCUSSION

Reliability and validity of alternative measurement Scales

Initial composite reliability coefficient of service quality items for Gap based measure and for performance based measure was found to be 0.888 and 0.914 respectively. All the items loaded predictably well and by dropping any of the items were not improving the Cronbach alpha of either of the measures, so all the 25 items were preserved for further analysis.

To assess the construct validity, one should determine (1) Convergent validity-the measure is provided by the extent to which it correlates highly with other measures designed to measure the same construct (2) Discriminant validity-is the extent to which the measure is indeed novel. Discriminant validity is indicated by predictably low correlations between the measure of interest and other measures that are supposedly not measuring the same variable or concept whereas evidence of convergent validity is provided by the extent to which it correlates highly with other methods designed to measure the same construct (Churchill 1979). Convergent and discriminant validity of the two scales was assessed by computing correlation coefficients for different pair of scales. The results are summarized in Table 1. Both scales are showing discriminant and convergent validity.

Table 1: Correlation Coefficients

| | SERVPERF | SERVQUAL | OSQ | Satisfaction |
|--------------|----------|----------|-------|--------------|
| SERVPERF | 1 | | | |
| SERVQUAL | 0.623 | 1 | | |
| OSQ | 0.566 | 0.504 | 1 | |
| Satisfaction | 0.599 | 0.514 | 0.605 | 1 |

The ability of a scale to explain the variation in the overall service quality (measured directly through a single item scale) was assessed by regressing respondents perceptions of overall service quality on its corresponding multi-dimensional service quality scale. The regression results point to the superiority of Performance only scale over disconfirmation-based scale in explaining greater proportion of variance in the overall service quality (0.320), which is in conformity with findings of Cronin and Taylor (1992). These

values are significant at p value of 0.01. With one unit increase in measure of performance scale, the overall service quality measure is predicted to increase by 0.566 as per the regression equation whereas the same value of Gap score is 0.504.

Table 2: Predictive Capability of Alternative Service Scales- Regression results

| <i>Dependent variable</i> | <i>Independent Variable</i> | <i>R²</i> | <i>Adjusted R²</i> | <i>B Coefficient</i> | <i>p value</i> |
|---------------------------|-----------------------------|----------------------|-------------------------------|----------------------|----------------|
| Overall service Quality | Performance scale | 0.320 | 0.318 | 0.566 | 0.000 |
| | Gap Scale | 0.254 | 0.252 | 0.504 | 0.000 |

So we can say that based on the predictive capability of the two scales on overall service quality, disconfirmation-based measure is a better predictor.

Relationship of alternative measurement scales with Customer Satisfaction

To reach the research objective of finding the efficacy of service quality scales in explaining customer satisfaction, correlation analyses was used. The performance only scale outperforms gap scale in explaining the variation in satisfaction with Pearson Correlation Coefficient $r=0.599$ (p value = 0.000) as compared to Gap score with $r=0.514$.

Thus, the one of the objective this research, determining which service quality measurement scale better explains variations of customer satisfaction reveals that the performance only service quality measurement scale outperforms the disconfirmation-based scale in explaining customer satisfaction scores in Retail banking. This result is in accordance with Cronin and Taylor's (1992) argument that perception-based service quality measurement scale outperforms a Gap-based service quality measurement scale in explaining variation of customer satisfaction.

Diagnostic power of alternative measurement Scales

The major reason to measure service quality as a multi-item construct is to identify the areas in which the firm is deficient and thus develop strategies to overcome these quality shortfalls. If the dimensions are analysed on performance only measure, all the banks are providing quality service as the mean rating for each dimension is more than 4. But when these values are compared with the maximum attainable score of 7 (7 point likert scale), then banks are deficit in almost all the dimensions. Both the scales were capable to identify the deficient areas, however were different in terms of order in which the identified areas need to be improved. The order of importance of dimensions in terms of managerial intervention in case of performance only scale for reliability dimensions is 14,6,10,8,12,15. The Gap score suggested a different order as follows 14,15,10,6,12,8.

Table 3: Comparison of alternative Scales on Diagnostic power

| Scale item | Reliability | Mean Gap score | Mean perception Score |
|-----------------------------------|---|-----------------------|------------------------------|
| 12 | Being sincere in solving problems | -.4314 | 4.899 |
| 14 | Providing services as promised | -.5886 | 4.652 |
| 6 | Providing services at the promised time | -.4381 | 4.672 |
| 10 | Maintaining error free records | -.5284 | 4.726 |
| 15 | Performing service right the first time | -.5351 | 4.913 |
| 8 | Reputation of the company | -.2609 | 4.806 |
| Order of priority for improvement | | 14,15,10,6,12,8 | 14,6,10,8,12,15 |

Note: Only reliability dimension is used in the discussion

The order of importance of dimensions is important for any organization as resources are always scarce and the management will always like to improve quality in the area with the maximum deficit, followed by others. The gap score is based on customer's actual expectation whereas for the performance score we are assuming the expectation value to be the maximum possible value (which may not be the case). Customer may not give equal importance to all the dimensions and the expectation level of them may not be a constant value but may differ depending upon the importance assigned by the customer. Performance only measure being based on implied comparison with maximum attainable score, may suggest intervention in areas where the performance level of the firm already matches with customer expectations. By comparing customer expectations of service versus perceived service across dimensions, managers can identify service shortfalls and use this information to allocate resources to improve service quality (Parasuraman et al, 1994) So from diagnostic perspective, therefore disconfirmation-based scale SERVQUAL is a better choice as compared to performance only measure.

Dimensionality of disconfirmation-based measure of service quality

The main reason for developing a multi-item construct to measure service quality, instead of using a single measure construct is to identify the deficient areas of service quality, which requires managerial intervention. And as pointed from the above analysis and discussion, disconfirmation-based measure is a better choice when service quality is to be used as a diagnostic tool. Cronin and Taylor 1991, proponent of performance only scale have suggested that service quality is uni-dimensional and do not consist of five dimensions as proposed by Parasuraman et al, 1988. Moreover, when performance only scores were subjected to factor analysis, the structure was highly unstable and with lot of cross-loadings, it was not possible to convert it into a set of interpretable factors. So even though factor analysis of both the scales was conducted dimensionality of service quality, using only gap based measure is discussed in this study.

In order to accurately measure service quality, the first step is scale refinement by eliminating the unnecessary and irrelevant scale dimensions with the help of reliability analysis. Initial composite reliability coefficient of service quality items based on Gap Score turns out to be 0.888, which is much above the acceptable level. Deletion of any of the items of the scale did not improve the Cronbach's Alpha value, so the scale was not refined and 25 items were preserved.

Table 4 : KMO and Bartlett's Test

| | | |
|--|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .805 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 2873.255 |
| | Df. | 300 |
| | Sig. | .000 |

After checking the scale reliability, the appropriateness of the data collected was examined using various measures. The Bartlett test of Sphericity and Kaiser-Meyer-Olkin measure of sampling adequacy, are used to determine the factorability of correlation matrix as a whole (table 1). The test value (2873.255) of Bartlett's test of Sphericity is large and significant ($p < 0.000$). KMO value is found to be .805, which is greater than the acceptable level of 0.6. Thereby, both the test indicate that data is appropriate for factor analysis

Majority of the values in the correlation matrix are greater than 0.05, which revealed that there is enough correlation to go ahead with the factor analysis. Multi-collinearity is not a problem as the determinant is (4.78 E-05) is greater than the necessary value of 0.00001.

All the above statistical tools indicated that the data was fit for factor analysis.

Factor Analysis

The 25 dimension scale was subjected to factor analysis using Principal Component method (PCM) with varimax rotation to bring out the factors assessing the service quality of banks. The results brought out

seven factors having eigen value above one and explaining the total variance of 62.286%. A summary of results of the factor analysis presenting factor loadings for various dimensions, mean gap score, eigen values, percentage of variance explained and individual Cronbach's Alpha value for each factor is given in Table 5. Different factors have been assigned descriptive labels based on the factor loading of the dimensions containing each factor. The various factors have been described as below:

| | | <i>Mean Gap score</i> | <i>Factor Loadings</i> | <i>Eigen values</i> | <i>% of variance explained</i> | <i>Cronbach alpha</i> |
|----|--|-----------------------|------------------------|---------------------|--------------------------------|-----------------------|
| | Reliability | -.4638 | | 2.963 | 11.851 | 0.778 |
| 12 | Being sincere in solving problems | -.4314 | .775 | | | |
| 14 | Providing services as promised | -.5886 | .649 | | | |
| 6 | Providing services at the promised time | -.4381 | .592 | | | |
| 10 | Maintaining error free records | -.5284 | .542 | | | |
| 15 | Performing service right the first time | -.5351 | .519 | | | |
| 8 | Reputation of the company* | -.2609 | .447 | | | |
| | Responsiveness | -.4599 | | 2.563 | 10.250 | 0.73 |
| 7 | Responding immediately to your requests | -.6254 | .737 | | | |
| 9 | Prompt service to customers | -.3177 | .720 | | | |
| 5 | Keeping you informed about when services will be performed | -.3579 | .617 | | | |
| 3 | Employees willingness to help you | -.5385 | .563 | | | |
| | Tangibility | -.5334 | | 2.294 | 9.175 | .646 |
| 24 | Visually appealing and attractive physical facilities | -.7458 | .735 | | | |
| 25 | Well dressed and neat employees | -.3545 | .701 | | | |
| 22 | Modern looking equipment | -.4314 | .581 | | | |

| | | <i>Mean Gap score</i> | <i>Factor Loadings</i> | <i>Eigen values</i> | <i>% of variance explained</i> | <i>Cronbach alpha</i> |
|----|---|-------------------------------|----------------------------|-------------------------|--|---------------------------|
| 20 | Attractive and visually appealing logo, advertisements, pamphlets etc | -.6020 | .493 | | | |
| | <i>Courtesy & Competence</i> | -.4493 | | 2.253 | 9.013 | .718 |
| 2 | Employees who are consistently courteous | -.3947 | .789 | | | |
| 1 | Knowledgeable and well informed Employees | 0.5284 | .786 | | | |
| 4 | Employees providing correct and complete information* | -.4248 | .433 | | | |
| | <i>Understanding the customer</i> | -.5552 | | 2.043 | 8.170 | .683 |
| 16 | Employees understanding your specific needs | -.7425 | .780 | | | |
| 17 | Giving individual attention | -.3344 | .699 | | | |
| 18 | Company having your best interest at heart | -.5886 | .567 | | | |
| | <i>Access</i> | -.6109 | | 2.015 | 8.060 | .634 |
| 13 | Company having operating hours, convenient to all its customers | -.6722 | .669 | | | |
| 21 | Easy Documentation and simple procedures* | -.6120 | .655 | | | |
| 11 | Easy to reach the appropriate staff person* | -.5485 | .560 | | | |
| | <i>Security</i> | -.5853 | | 1.442 | 5.767 | 0.541 |
| 19 | Feeling safe in your transactions with the company | -.5719 | .680 | | | |
| 23 | Consistency in Bank's level of service* | -.5987 | .618 | | | |

Note: Dimensions with asterisk mark are added to original SERVQUAL dimensions

Factor 1: Reliability

This factor is the most important factor accounting for 11.815 % of the total variance and an eigen value of 2.963. It reveals that six dimensions are loaded on this factor. The dimensions are related to the ability to perform the promised service dependably and accurately. The highest loading is for the dimension -Being sincere in solving problems, with a loading of 0.775.

Factor 2: Responsiveness

This factor accounts for 10.250 % of the total variance and an eigen value of 2.563. It includes four dimensions that emphasizes on the willingness to help customers and provide prompt services.

Factor 3: Tangibility

The total variance explained by this factor is 9.175, with an eigen value of 2.294

This factor accounts for the appearance of physical facilities, equipment, personnel and written materials

Factor 4: Courtesy and Competence

This factor explains 9.013 percentage of the variation and have an eigen value of 2.253. The factor includes 0 dimensions related to politeness, respect, friendliness of contact personnel and possession of required skills and knowledge to perform service

Factor 5: Understanding the customer

This factor includes making efforts to understand the needs of the customer. The total variance explained is 8.170 and the eigen value is 2.043.

Factor 6: Access

This factor explains 8.060 % of total variance and has an eigen value of 2.015. It involves approachability and ease of contact.

Factor 7: Security

The total variance explained by this factor is 5.767%, with an eigen value of 1.442 This factor includes dimensions related to customers feeling safe and free from any kind of doubt or risk.

The factor analysis output is inconsistent with the hypothesized model(Parasuraman 1988) and is suggesting a seven dimensional structure.

V. CONCLUSION

A review of literature suggests that disconfirmation-based SERVQUAL and performance only SERVPERF as being advocated as being the two most widely advocated and applied service quality measurement scales. Since the focus of past studies has been more on the methodological and diagnostic power of the two scales in developed countries- this study represents effort towards evaluating the two scales in the context of a developing Country- India. The present study conducted an analysis of the appropriateness of using performance only measure SERVPERF and disconfirmation based measure SERVQUAL in the assessment of service quality of banks in Gujarat State.

A survey was survey consumers of retail banks in the major cities of Gujarat. The two alternative scales were compared in terms of reliability, convergent and discriminant validity, predictive ability to explain variation in Overall service quality, relationship with customer satisfaction and diagnostic capability for providing directions for managerial interventions in the area of service quality shortfalls. So far as the assessment of two scales on the first three dimensions is considered, both the scales are comparable and have having reliability, convergent validity and discriminant validity. Performance only measure is able to explain more variation in the overall service quality measured using a single item construct than the gap based scale. It was also found from the study that performance only measure is more strongly related with

customer satisfaction and hence is a more effective predictor of customer satisfaction. But when it came to diagnostic power disconfirmation-based scale turns out to be the superior scale among the alternative scales of measurement. As performance only scale is based on implied comparison, the deficient areas were not properly identified. Hence, it is suggested that it is not unnecessary to measure customer expectations, but is useful in identifying the deficient areas required for managerial intervention

Both the performance only measure (studied but not included in the discussion) and disconfirmation-based measure exhibited factor instability, with neither measure generating a factor loading pattern consistent with the originally defined Service quality Model (Parasuraman et al, 1985). Not only were the factor loading patterns generated in this study different from the hypothesized models, they were also inconsistent when compared with each other. The factor loading pattern of performance only measure, was more unstable and difficult to interpret, in comparison to disconfirmation-based measure. The factor loading pattern for the disconfirmation-based measure resulted in a seven dimensional construct which were categorized as- Reliability, Responsiveness, Tangibility, Courtesy and competence, understanding the Customer, Access, security. The dimensions were more similar to the original 10 dimensions suggested by Parasuraman et al, 1985, to measure service quality. As suggested by Carman (1990), it is found out that the number of service quality dimensions could vary depending on the nature of industry and cultural context. Angur, Natarajan and Jahera (1999) reported that the five factor structure in SERVQUAL does not hold up in the context of Indian banks. So based on this study it is recommended in future researches that the initial pool of items can be based on the original 10 dimensions of service quality and an extensive qualitative research can be conducted to generate additional pool of items.

Though the study proposes interesting findings, here are some of its limitations. A single service setting with small database of 299 observations, restricted to Gujarat state only, preclude generalizability of the study findings. Studies of similar kind with larger sample sizes in different service settings in different countries, need to be undertaken to ascertain superiority and applicability of the two alternative measurement scales.

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