



**INVESTIGATING THE IMPACT OF SERVICE DIMENSIONS ON CUSTOMER SATISFACTION AND CUSTOMER LOYALTY: A CONTEXT ON EMERGING SERVICE ECONOMY**

**T. Islam<sup>1\*</sup>, S. N. Habib<sup>2</sup>, R. Islam<sup>3</sup> and R. Sharmin<sup>2</sup>**

<sup>1</sup>Department of Marketing, <sup>2</sup>Department of Management, Hajee Mohammad Danesh Science and Technology University, Dinajpur, Bangladesh, <sup>3</sup>Laxmipur Rajshahi, Bangladesh

\*Corresponding Author: Email: [tishimin@gmail.com](mailto:tishimin@gmail.com) ; Cell Phone: +8801729663084

DOI: <https://www.doi.org/10.59125/JST.20208>

**ABSTRACT**

This is an empirical endeavor to find out the impact of service dimensions on customer satisfaction and how customer satisfaction affects customer loyalty. In order to measure service quality SEVQUAL model was used based on five dimensions of quality -tangibility, empathy, responsiveness, reliability and assurance and to investigate which service determinants have direct impact on customer satisfaction correlation between the determinants and customer satisfaction was determined. Primary data was collected from 308 respondents who are customers of financial institutions in Bangladesh and analyzed using SPSS-17. Our empirical findings reveal that independent variables, the five dimensions of service quality is strongly correlated with customer satisfaction. Customer satisfaction has positive relationship with customer loyalty. Furthermore, it is found that the most important aspect is the level of assurance for achieving customer satisfaction and customer satisfaction is a strong predictor of customer loyalty.

**Keywords:** Satisfaction, SEVQUAL model, customer loyalty, SPSS, regression analysis.

**INTRODUCTION**

Service industry is growing at relatively faster rate as its contribution in world trade has increased from 9 percent in 1970 to 20 percent in 2019 and it is predicted that service will contribute about one-third in world trade by 2040 (WTO 2019). Intangibility feature of service makes it really tough for service providing organizations to have a unified definition and benchmarks of good service quality besides that the development in technology has changed the dimensions of relationship between customers and organizations engaged in service industry, that's why the quality of customer service, customer satisfaction and loyalty are becoming key for any organization to provide excellent quality (Marić *et al.* 2016).

The concept of service quality evolved during 1980s by the research of Churchill and Surprenant (1982) which has been popularized by the research and writings of Berry *et al.* (1988) and Parasuraman *et al.* (1988) through the theory of customer satisfaction and SERVQUAL-a measure to assess service quality (Fida *et al.* 2020). Though quality has not been perceived uniformly in all sectors, but in quest to defined service quality, Lewis (1993) defined service quality is how well the service delivery matches with customers' expectations. So service quality is result of assessment done by consumers between what they expect with their perception of what they get (Yadav and Rai 2019). Parasuraman *et al.* (1988), developed SERVQUAL as a measure to assess

service quality through five dimensions of quality. These dimensions include five areas that are tangibles, reliability, responsiveness, assurance, and empathy. They developed scale consist of 22 variables classified into the aforesaid dimension. The quality of delivery of service plays a major role in forming customer satisfaction and also have an impact on the relationship between the company and the customers (Amin and Isa 2008). Customer satisfaction is undoubtedly believed as a key to success as satisfied customer groups are critical for an organizations survival in terms of profit and also to be competitive in market (Kant and Jaiswal 2017). Customer satisfaction has been identified as an antecedent of service quality of banks and found significant positive relationship between service quality and customer satisfaction (Leninkumar 2017; Akhtar 2011; Yilmaz *et. al.* 2006). Organizations need to improve customer satisfaction to sustain level of customer loyalty (Heskett *et al.* 2008). Researcher have found significant relationship between customer satisfaction and customer loyalty (Leninkumar 2017). In different countries SERVQUAL model and the scale has been used to assess service quality in banking sectors (Fida *et al.* 2020; Kant and Jaiswal 2017; Banerjee and Sah 2012; Selvakumar 2015). So SERVQUAL models is definitely a popular model that can be used to assess service quality in banking sector (Kant and Jaiswal 2017). But it's difficult to generalize the findings of these type of studies conducted in foreign and in different passage of time, so this research work is undertaken to find out the service quality perception bank customers of Bangladesh in Covid-19 pandemic time.

This study makes two main contributions. First, it adds to existing literature by providing empirical evidence for better understanding the relationship between customer satisfaction and customer loyalty in the context of developing country. Second, the findings of this research will not only provide financial institution with useful information on how to evolve non-price competition strategies to retain customers, but also reveal the highly valued service items appreciated by service receivers, which will help policy makers of service economy in deciding how to allocate their scarce resources.

## RESEARCH OBJECTIVE

1. To assess the level of satisfaction regarding the quality of service provided by financial institutions.
2. To measure the impact of financial customer satisfaction on customer loyalty.

**Hypothesis 1:** Customer satisfaction is influenced by the quality of service provided by financial institutions.

**Hypothesis 2:** There has impact of financial customer satisfaction on customer loyalty.

## MATERIALS AND METHODS

This study has used a questionnaire designed using seven point Likert scale, where 7= Strongly Agree, 6= Agree, 5= More or less Agree, 4= Undecided, 3= More or less Disagree, 2= Disagree and 1= Strongly disagree. We selected only 28 banks (5 State Owned Commercial Bank, 1 Specialized Bank and 22 Private Commercial Bank) as sample. Therefore, the clients of those banks were considered as respondents of the study. The structured questionnaire survey was conducted using Google form, as it was during Covid-19 pandemic time so in person structured

questionnaire survey wasn't possible and that's why judgmental as well as convenience sampling method was used for the study. Also only 308 complete questionnaires were received during the targeted time of study that is why the sample size is only 308 respondents. Table 1 represent the demographic profile of the respondents, where female was 63% and male was 37% and below ten thousand income range 92.9% respondents resides and from ten to twenty range 20.1% respondents and more than twenty thousand range 37% respondent resides.

Here we analyzed the relation between the independent variables- tangibility, empathy, responsiveness, reliability and assurance with dependent variable that is customer satisfaction. Another relationship was assessed where customer satisfaction is the independent variable and customer loyalty is dependent. MS Excel was used to carry out calculations in some cases. SPSS (Statistical Package for Social Science) software was used for descriptive analysis and regression analysis as well.

## RESULT AND DISCUSSION

At first in this section the reliability and validity of the construct has been tested and then descriptive statistical analysis has been carried out for each study constructs. Then, a hypothesis test has been conducted to find out the relationships between each of the variables of this study. Finally, this section concludes with the summary of findings related to the hypotheses concerning service quality attributes, customer satisfaction and customer loyalty.

**Table 1.** Sample Demography

Variables	Values	Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Female	194	63	63	63
	Male	114	37	37	100
Income	<10,000	132	92.9	92.9	42.9
	10,000 to 20,000	62	20.1	20.1	63
	20,000>	114	37.0	37.0	100
Account Type	Current	70	22.7	22.7	22.7
	Savings	184	59.7	59.7	82.5
	Fixed Deposit	24	7.8	7.8	90.3
	Any other	30	9.7	9.7	100.0

**Table 2.** Reliability and Validity

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.942	0.942	6

**Table 3.** Total Statistics

Dimensions	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Tangibility	26.5180	31.237	0.810	0.715	0.933
Reliability	26.4032	30.614	0.851	0.778	0.928
Responsiveness	26.6487	30.088	0.878	0.784	0.924
Assurance	26.3378	30.575	0.858	0.743	0.927
Empathy	26.7552	29.933	0.816	0.705	0.932
Satisfaction	26.6032	31.525	0.739	0.573	0.941

The reliability test of the current study has pointed out that in terms of reliability the most important figure is the Alpha value. This is Cronbach’s Alpha, which, in this case is 0.942 in Table 2. Pallant (2001) stated that if any of the values in the Cronbach’s Alpha If Item Deleted Column Table 2 are higher than the final alpha value then the researcher may want to consider removing this item from the scale. In this study, all the values are less than the final Alpha value; therefore, all the values are reliable.

Reliability statistics Table 2 shows that the Alpha value is 0.942. The column (Cronbach’s Alpha if Item Deleted) reveals that the Cronbach’s Alpha of Customer Satisfaction is 0.941 (see table 3) which is less than the original alpha value, therefore the Alpha value of Customer Satisfaction is reliable. It has been observed that the Alpha value of customer Satisfaction also exceeded Nunnally and Bernstein (1994) recommended criterion of 0.70 for scale reliability.

The minimum and maximum value for customer satisfaction is 1 to 7 and the Mean and Standard Deviation is 5.25 and 1.26 respectively. The mean value of customer satisfaction is more than the neutral value that is 3.5. Customer loyalty ranges from 1 to 7 and the Mean and Standard Deviation is 5.27 and 1.31 respectively. It has been observed in the Table 4 that almost all the Mean are similar.

**Table 4.** Descriptive Statistics

Dimensions	N	Minimum	Maximum	Mean	Std. Deviation
Satisfaction	308	1.00	7.00	5.2500	1.26716
Tangibility	308	1.00	7.00	5.3352	1.20946
Reliability	308	1.00	7.00	5.4500	1.22481
Responsiveness	308	1.00	7.00	5.2045	1.24583
Assurance	308	1.00	7.00	5.5154	1.21990
Empathy	308	1.00	7.00	5.0981	1.33531
Loyalty	308	1.00	7.00	5.2760	1.31375
Valid N (list wise)	308				

**Pearson Correlation**

A correlation coefficient is a very useful way to summarize the relationship between two variables with a single number that falls between -1 and +1. Morgan et al. (2004) stated that: -1.0 (a perfect negative correlation), 0.0 (no correlation) +1.0 (a perfect positive correlation). Pallant (2001) suggested the following interpretation of r-value. r-value will indicate the strength of the relationship between two variables. r = 0.10 to 0.29 or r = -0.10 to -0.29 small, r = 0.30 to 0.49 or r = -0.30 to -0.49 medium, r = .50 to 1.0 or r = -0.50 to -1.0 large. The Pearson correlation analysis obtained for the three intervals scaled variables in the Table: 5 above. The sample size (N) is 308 and the significant level is 0.01 (p<0.01).

**Table 5.** Correlations

Dimensions	1	2	3	4	5	6
1 Satisfaction						
2 Tangibility	0.593*					
3 Reliability	0.649*	0.818*				
4 Responsiveness	0.687*	0.770*	0.827*			
5 Assurance	0.676*	0.756*	0.777*	0.794*		
6 Empathy	0.716*	0.667*	0.687*	0.776*	0.775*	
7 Loyalty	0.840*	0.540*	0.584*	0.641*	0.612*	0.690*

\*\* . Correlation is significant at the 0.01 level (1-tailed).

**HYPOTHESIS TESTING**

**H1:** Customer satisfaction is influenced by the quality of service provided by financial institutions

**Table 6.** Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.757 <sup>a</sup>	0.573	0.566	0.83450

a. Predictors: (Constant), Empathy, Tangibility, Assurance, Reliability, Responsiveness

\*\* Significant at the level of 0.005

From the Table 6, it had been seen that R value was 0.757. Therefore, R value (0.757) for the five dimensions suggested that there was a strong effect of five independent variables on dependent variable (customer satisfaction). It is also observed that the coefficient of determinations i.e. R-square value was 0.573, which representing that 57.3% variation of the dependent variable (Customer Satisfaction) is due to the independent variables (Empathy, Tangibility, Assurance, Reliability, Responsiveness) of financial institution in Bangladesh.

In the Table 7, Unstandardized coefficients indicated how much the dependent variable (Customer Satisfaction) varies with independent variable (five dimensions), when all other independent variables are held constant. The beta coefficients indicated that how and to what extent the dimensions such as tangibility, reliability, responsiveness, assurance, and empathy influence

customer satisfaction. It had been found that, reliability (beta = 0.172, t= 2.101, p<0.001), responsiveness (beta=0.161, t=1.970, p<0.001) and empathy (beta =0.369, t=5.942, p<0.001), had the highest influence on customer satisfaction whereas, tangibility (beta = -0.037, t= -0.505, p<0.001) and assurance (beta=0.152, t=5.942, p<0.001), had relatively lower impact on customer satisfaction of financial institutions of Bangladesh.

**H2:** There has impact of financial customer satisfaction on customer loyalty.

**Table 7.** Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	0.950	0.235		4.045	0.000
Tangibility	-.037	0.074	-.035	-.505	0.614
Reliability	0.172	0.082	0.166	2.101	0.036
Responsiveness	0.161	0.082	0.158	1.970	0.050
Assurance	0.152	0.077	0.147	1.989	0.048
Empathy	0.369	0.062	0.389	5.942	0.000

a. Dependent Variable: Satisfaction

**Table 8. Regression Analysis**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.840(a)	0.706	0.705	0.71299

A Predictors: (Constant), Satisfaction

\*\* Significant at the level of 0.005

From the Table 8, it had been seen that R value was 0.840. Therefore, R value (0.840) for the customer satisfaction suggested that there was a strong effect of this independent variable (customer satisfaction) on dependent variable (customer loyalty). It also observed that the coefficient of determination i.e. the R-square value was 0.706, which representing that 70% variation of the dependent variable (customer loyalty) is due to the independent variable (customer satisfaction) of service industry in Bangladesh.

From the Table 9, Unstandardized coefficients indicated how much the dependent variable (Customer loyalty) varies with independent variable (Customer satisfaction), when all other independent variables are held constant. The beta coefficients indicated that how and to what extent the factor customer satisfaction influence customer loyalty. It had been found that, customer satisfaction (beta =0.840, t=27.135, p<0.001) had the highest influence on customer loyalty of service industry in Bangladesh.

**Table 9. Coefficients (a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	.701	.173		4.043	.000
	Satisfaction	.871	.032	.840	27.135	.000

a Dependent Variable: Customer loyalty of financial institutions

\*\* Significant at the level of 0.005

## CONCLUSIONS

On the basis of analysis of data, the research finds the effect of service quality dimension on customer satisfaction. From the findings of Table 5, it can be seen that the correlation (r) of tangible, reliability, responsiveness, assurance and empathy all the values are more than 0.50, that means determinants of service dimension has strong positive impact on customer satisfaction that means service quality can have significant impact in satisfying customers in the service economy in Bangladesh. The value of Beta co-efficient is 0.840 that signifies that customer satisfaction has strong correlation with service quality and customer loyalty. Based on the research findings, there are some suggestions. This research shade light on the fact that service quality and customer satisfaction are correlated. The service quality provided by the financial institution needs to be improved on tangibility, responsiveness and empathy dimensions in order to improve customer satisfaction. Also it has found a strong correlation between customer satisfaction and customer loyalty. In order to maintain and improve customer loyalty through improved service quality, the management should pay attention to directly related process of services to the customers such as ease terms of loans, prompt problem solving. This study was conducted during pandemic situation so it has used purposive sampling method and also the sample size is small which has made the scope of the study limited for different statistical measures. Also it was difficult to get data on such topic as customers are not comfortable to share feeling and data regarding financial issue. Future research is expected to conduct a deeper analysis of the theory used in this research so that more complex measurement of the indicators can be undertaken.

## REFERENCES

- Akhter W, Abbasi AS, Ali I and Afzal H. 2011. Factors affecting customer loyalty in Pakistan, African Journal of Business Management. 5(4): 1167-1174.
- Ajmal H., Khan R. A., and Fatima M. (2018). Impact of service quality on customer satisfaction in banking industry of Pakistan: A case study of Karachi. Journal of Social and Administrative sciences, 5(3): 219-238.
- Amin M, and Isa Z. 2008. An examination of the relationship between service quality perception and customer satisfaction: A SEM approach towards Malaysian Islamic banking. International Journal of Islamic and Middle Eastern Finance and Management. 1(3): 191–209.
- Berry L, Zeithaml V and Parasuraman A. 1988. “The Service-Quality Puzzle”, Business Horizons. 31(5): 35-43.

- Banerjee N. and Sah S. 2012. "A comparative study of customers' perceptions of service quality dimensions between public and private banks in India", *International Journal of Business Administration*. 3(5): 33-44.
- Churchill JGA, and Surprenant, C. (1982). An investigation into the determinants of customer satisfaction. *Journal of marketing research*, 19(4): 491-504.
- Fida BA, Ahmed U, Al-Balushi Y and Singh D. 2020. Impact of service quality on customer loyalty and customer satisfaction in Islamic banks in the Sultanate of Oman. *Sage Open*. 10(2): 2158244020919517.
- Heskett JL, Jones TO, Loveman, GW, Sasser, WE and Schlesinger LA. 2008. Putting the service-profit chain to work. *Harvard Business Review*. 86: 118–129. Retrieved from Islamic Financial Services Board. (2018). <http://www.ifsb.org/>
- Kant R and Jaiswal D. 2017. The impact of perceived service quality dimensions on customer satisfaction: An empirical study on public sector banks in India. *International Journal of Bank Marketing*. 35 (3): 411-430. Retrieved from DOI 10.1108/IJBM-04-2016-0051.
- Leninkumar V. 2017. The relationship between customer satisfaction and customer trust on loyalty. *International Journal of Academic Research in Business and Social Sciences*.7: 450–464.
- Lewis BR. 1993. Service quality: recent developments in financial services. *International Journal of Bank Marketing*. 119(6): 19-25.
- Marić D, Marinković V., Marić R, and Dimitrovski, D. (2016). Analysis of tangible and intangible hotel service quality components. *Industrija*, 44(1), 7-25. doi. 10.5937/industrija1-8437.
- Nunnally JD, Bernstein IH. *Psychometric theory*. 3. New York: McGraw-Hill; 1994.
- Pallant, J. (2001), *SPSS survival manual - a step by step guide to data analysis using SPSS for windows (version 10)*, Buckingham Open University Press.
- Parasuraman A, Zeithaml VA and Berry LL. 1988. SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*. 64(1): 12–40.
- Selvakumar JJ. 2015. Impact of service quality on customer satisfaction in public sector and private sector banks, *Purushartha: A Journal of Management, Ethics and Spirituality*. 8(1): 1-12.
- Yadav MK, and Rai AK. 2019. An assessment of the mediating effect of customer satisfaction on the relationship between service quality and customer loyalty. *IUP Journal of Marketing Management*. 18(3): 7-23.
- Yılmaz V, Çelik EH and Ekiz HE. 2006. "Kuruma ba ğlılı ğı etkileyen faktörlerin yapısal e Őitlik modelleriyle ara Őtırılması: özel ve devlet bankası örne ği", *Anadolu Üniversitesi Sosyal Bilimler Dergisi*. 2: 171-184.
- Zeithaml V, Berry L, and Parasuraman A. 1996. The behavioral consequences of service quality. *Journal of Marketing*. 60: 31–46.
- World Trade Organization. 2019. [https://www.wto.org/english/res\\_e/booksp\\_e/02\\_wtr19\\_1\\_e.pdf](https://www.wto.org/english/res_e/booksp_e/02_wtr19_1_e.pdf)