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| **RESEARCH ARTICLE**

## **Investigating the Impact of Service Quality Dimensions on Client Satisfaction in Bangladeshi Banks: A Study on Dinajpur City**

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| **ABSTRACT**

In this modern and competitive period, the banking sector has found it necessary to provide financial services to know and meet the client's needs and expectations to remain competitive in the present market conditions. Without satisfying the clients, the banking sector cannot obtain sustainable growth. Delivering superior quality banking services to the bank clients is often ensured and advised to satisfy bank clients and guarantee ongoing development. Guaranteeing better and quality financial services has become a key strategic tool for the banking sector. This study evaluates and investigates the effect of several dimensions of service quality of banking service on a client's satisfaction in Dinajpur City, Bangladesh. This study was quantitative in nature and distributed a structured, self-administered questionnaire, which is based on a convenience method, to 203 clients of various public and private banks in Dinajpur City, Bangladesh. The research questionnaire was enhanced in accordance with previous research. The data analysis was conducted using SPSS-25, and a five-point Likert scale was employed in this investigation. The hypothesis was proposed and developed, and the internal consistency of all items was accurate. For testing, a 5% level of significance is used for acceptance of the hypothesis. This study evaluates and shows that all service quality dimensions, such as tangibility, reliability, responsiveness, assurance, empathy, convenience, and compliance, have a positive impact and influence on bank client satisfaction and achieving sustainable banking growth. Because client value is considered an asset to organizations and organizations must ensure that they provide better financial services. This research has policy implications for the management authorities of the banking industry in order to achieve sustainable growth.

| **KEYWORDS**

Service Quality, Client Satisfaction, Client perception, Tangibility, Convenience, Compliance.

| **ARTICLE INFORMATION**

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### **1. Introduction**

Today, the banking industry is one of the leading sectors among other fast-developing industries in the world. The banking industry in our country is so competitive (Khan et al., 2023). Due to the growing competition from the increased number of commercial banks, which include both private and public, and the fastest-growing economy, the overall demand and expectation of clients have also increased more than ever before. Giese and Cote (2000) identified several service quality dimensions that contribute to bank client satisfaction, including tangibility, reliability, responsiveness, assurance, and empathy. But another two dimensions that have some positive impact on client satisfaction include convenience and compliance. Bank client satisfaction is a kind of response that is

cognitive and emotional. Responses of bank clients focus on particular financial products offered by banks, clients' experiences, and expectations (Akter & Sultana, 2021).

Every organization, especially banks, views client satisfaction as a major influence on corporate strategy. In this present situation, it is regarded as a benchmark. Client satisfaction is the precondition for client retention and repeat purchases, and this is most important for financial service organizations (Rahaman & Hossain, 2022). If organizations aim for client retention, clients' satisfaction is a better way to retain clients for future purchases (Taylor and Baker, 1994; Cronin and Taylor, 1992; and Parasuraman et al., 1998). Clients' satisfaction is attached to enhancing profitability, loyalty, retention of customers, and ensuring sustainable growth for the banking industry (Hallowell, 1996).

Clients' satisfaction has a hard impact on the overall performance and business strategies of private and public banks because the ultimate output of banks and financial institutions is evaluated by their clients (Hassan & Islam, 2023). According to Levesque and McDougall (1996), satisfaction is an "overall client attitude towards a service provider". Kotler et al. (2000) said that a client's satisfaction totally depends on how financial products and services fulfill or surpass client expectations. Banks and financial institutions all over the world are delivering identical financial products and services. Most banks provide the same services; improving the loyalty and satisfaction of clients is an important factor in accelerating and maintaining market position and becoming competitive. In reality, the perceived value of several client groups is different depending on the situation (Masukujjaman and Akter, 2010). Experiencing the actual banking and financial services offered by banks, clients generally enhance their perceptions of quality service and make up standards of expected quality of services. Quality of service is one of the important success factors that affects the competitiveness and sustainable growth of any business. A bank (both public and private) can differentiate itself from other competitors by providing better quality services. Offering better financial services, it is important to enhance the client's positive perception towards the banking organization and thus result in improvements in the client's loyalty, retention, and business performance. Quality of service is considered the most important area for researchers over the last decade in the banking sector (Avkiran, 1994; Johnston, 1997; Angur et al., 1999; Bahia and Nantel, 2000).

This research holds both academic and practical significance in the context of Bangladesh's banking sector. With increasing competition and evolving client expectations, understanding the role of service quality in shaping client satisfaction has become crucial for banks aiming for sustainable growth. From an academic point of view, this research contributes to the existing body of knowledge by examining the influence of specific service quality dimensions—such as reliability, responsiveness, assurance, empathy, convenience, compliance, and tangibility—on client satisfaction within the Bangladeshi banking industry. Objectives of this research includes determine the key service quality dimensions that impact client satisfaction in banks and evaluate the influence and relationship between service quality dimensions and client satisfaction in banks.

## **2. Literature Review**

Client Satisfaction is an analysis or measure of how well an organization's products or services fulfill or meet client's expectation. It reflects the overall emotional connection a client feels towards a brand after interacting with it very much. Rahman & Bhowmik (2024) identify that client satisfaction and retention are important for banks and financial institutions. The banking industry wants further implementations and reconstruction to satisfy the needs of clients because, in this respect, "client satisfaction is related to client loyalty, which is in turn related to profitability" (Ahmed & Islam, 2021). Many previous research studies show that in the banking industry, profitability was formed from the quality of banking services, and the best quality leads to satisfied clients who use more of the services and enable client retention to become higher (Parasuraman, Zeithaml et al., 1988; Cronin et al., 1992; Anderson, Ornell et al., 1994; Danaher, P.J., & Haddrell, V., 1996). Quality of services is accepted as one of the most important elements of a client's satisfaction (Parasuraman, Zeithaml, and Berry, 1994).

Physical aspects of the service environment, such as the availability of personnel, financial resources, general infrastructure, and the institution's reputation, are thought to influence how clients assess and perceive the quality

of services. This statement is also supported by Khan & Chowdhury (2022) and Bashir & Karim (2020) that the tangible structure of the institutions providing services affected the perception, responses, and behavioral intentions of bank clients. Other factors include price and service quality, as well as specific factors like situational and personal factors, which have an important impact on client satisfaction. According to Sultana et al. (2023), client satisfaction is a state of mind or attitude that bank clients have after receiving service, and it has a strong and clear connection to the different buying behaviours. In reality, the perceived value of several client groups is different depending on the situation (Masukujjaman and Akter, 2010). According to Bashir & Karim (2020), client satisfaction is an important mediator that leads to greater retention or loyalty, in turn resulting in larger profit for a bank and ensuring sustainable growth. It is regarded as the comparison of service performance expectations and evaluation as a fulfilment of the client's expectation (Jamal and Naser, 2003). According to the concept of Hoffman and Bateson (2008), client satisfaction is a possible work in a banking organization. It takes time to consider a wide range of developments and activities, like the quality of financial products and services, right pricing, human resource development, reducing waiting time in queues, and in-time services. Satisfying clients is related to eliminating the client's gap to match clients' expectations. According to Hossain & Khan (2022), a bank client's satisfaction can be measured by the SERVQUAL model.

This model is a quality management framework. The SERVQUAL model was developed by a group of American authors, Parsu Parasuraman, Valarie Zeithaml, and Len Berry (1988). This model developed five dimensions, which include reliability, assurance, tangibility, empathy, and responsiveness, in the early 1990s. Here, reliability refers to the ability to perform the predetermined financial services accurately. Assurance is a representation of staff members' expertise, civility, and capacity to inspire confidence. Tangibility includes physical facilities, equipment, and the existence of bank personnel. Empathy means caring and individualized attention that banks provide to their clients, which includes access, communication, and understanding the client's needs. Responsiveness generally refers to assisting clients and delivering prompt services. Zeithaml and Gremler (2010). Two critical factors influencing client satisfaction are compliance with regulations and the convenience of service delivery. While compliance enhances trust and legitimacy, convenience boosts usability and customer experience. This review explores how these dimensions affect bank client satisfaction based on current literature. According to Al-Smadi and Ahmad (2019), customers perceive regulatory compliance as a sign of institutional integrity and transparency, which in turn fosters satisfaction and loyalty. Similarly, Ghazali et al. (2020) noted that in Islamic banking systems, Shariah compliance directly correlates with client trust and long-term engagement. Jun and Palacios (2016) demonstrated that digital banking services improve customer satisfaction through ease of access and efficiency. Kumar & Sharma (2020) further emphasized that service convenience has a direct impact on perceived value and customer loyalty. Satisfaction generally refers to a general intention and perception based on their usage experience of banking services (Boonlertvanich, 2019). If services fail to fulfil the client's needs or demands, then the clients will remain displeased, and if the quality of service is consistent and adequate, clients will be delighted and happy (Nguyen et al., 2020). The proper service and larger quality represent the highest satisfaction (Yarimoglu, 2014). Several explanations of banking service quality have been developed by researchers.

According to Rauch et al. (2015), to narrate an inclusive appraisal for an organization, the management body has to associate its service performance with its client's expectations and determine the level of performance compared to rival organizations. Quality of services and related dimensions recover client satisfaction and expense management, upsurge revenue and profit generation, increase goodwill and enhance sustainable development (Yarimoglu, 2014). Several investigations, studies, and research show the relevance between service quality dimensions and a bank client's satisfaction. Ladhari (2009) identified that responsiveness and reliability were the most important and significant predictors of a client's satisfaction. Nahar et al. (2022) emphasized the significant role of technology and e-banking in enhancing clients security, trustworthiness, and overall service quality. Omar et al. (2015) shows assurance and empathy as basic key variables of a client's loyalty in banking services. The innovation and improvement of digital banking have transformed clients' expectations. Research shows that satisfaction in online banking (Yoon & Steege, 2013) is very important. Employee competence, courtesy, and problem-solving abilities are critical in shaping customer experiences (Mittal & Lassar, 1996).

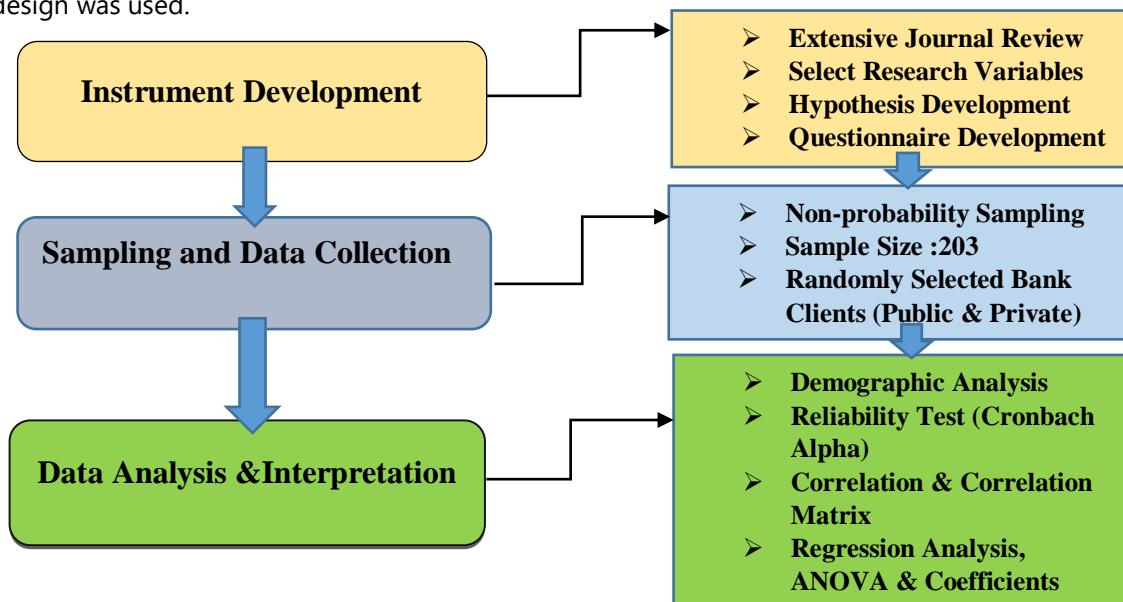
Banks and financial institutions that manage service failures successfully and practically can improve client satisfaction and loyalty (Tax, Brown, & Chandrashekar, 1998). Striking a balance between compliance and convenience is critical. The integration of RegTech—technology-driven compliance tools—allows banks to meet regulatory demands without compromising user experience. Fatoki (2021) highlighted how automation and artificial intelligence can simplify compliance while improving customer interaction. Rahman and Khan (2017) emphasized that consistent service quality reduces customer churn and builds long-term relationships, essential for stable income streams and profitability. Moreover, service quality indirectly promotes financial inclusion, a key component of sustainable economic development. According to Hasan and Kabir (2020), improving service quality in rural banks helps attract unbanked populations, contributing to inclusive growth.

### 3. Methodology

In this study, the sample population is the banking clients in the Dinajpur City area who used several public and private banks. For sampling purposes, random sampling tools and techniques were used in the research, that was a non-probability approach. This research is conducted using primary data. A structured questionnaire was distributed among those bank clients at several bank branch locations in the Dinajpur City area, Bangladesh. To collect the responses of clients, I visited various bank branches in Dinajpur city (both public and private banks). The total sample size of this study is 203. This survey has two segments; the first segment collects demographic information of the clients, and the second segment is based on the variables with a five-point Likert scale questionnaire, where '1' is 'strongly disagree' and '5' is 'strongly agree'. Descriptive research has been undertaken to explore the sample data since the descriptive research model or design has been effective for conducting the research with a view to obtaining a determined research objective. This survey questionnaire was prepared based on a previous literature review. Here, we evaluate the reliability of all variables in this study by examining Cronbach's ( $\alpha$ ) value, which was considered to be reliable. In this research, we use SPSS version 25 for statistical analysis and testing hypotheses.

#### 3.1 Research Design

This research aimed to determine client satisfaction in the banking sector in Dinajpur City. The following research design was used.

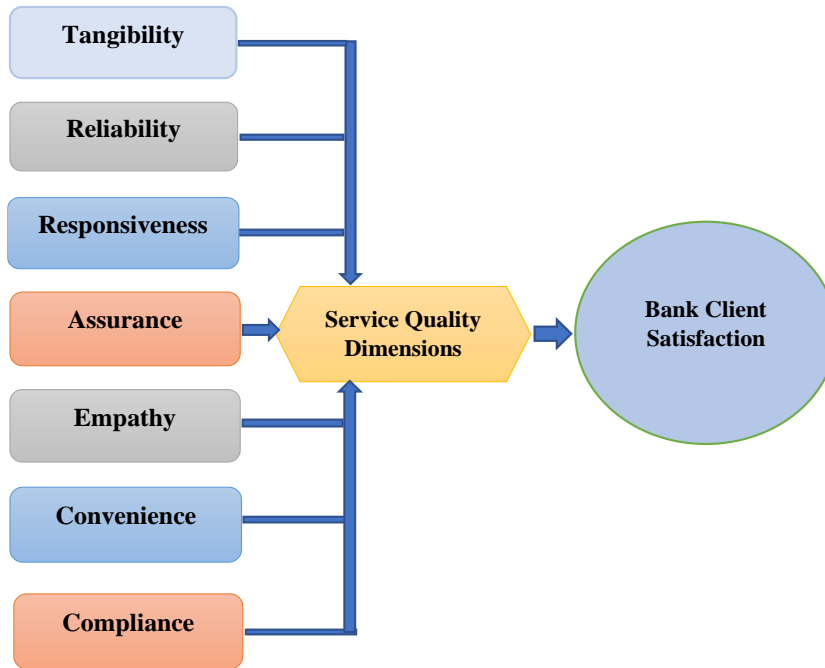


**3.2 Research Variables**

Determinants	Variables	Notations
Dependent Variables	Bank Client Satisfaction	<b>BCS</b>
Independent Variables	Tangibility	<b>TAN</b>
	Reliability	<b>REL</b>
	Responsiveness	<b>RES</b>
	Assurance	<b>ASS</b>
	Empathy	<b>EMP</b>
	Convenience	<b>CON</b>
	Compliance	<b>COM</b>

**3.3 Conceptual Framework**

A bank client’s satisfaction can be measured by the SERVQUAL model. This model is a quality management framework. The SERVQUAL model was developed by a group of American authors, Parsu Parasuraman, Valarie Zeithaml, and Len Berry (1988). On the basis of this model, we construct a conceptual framework of this research by adding two new variables, includes convenience and compliance.



**3.4 Research Hypothesis**

This research aims to address the following null hypothesis and alternative hypothesis:

- H<sub>0</sub>:** There is no relationship between service quality dimensions (Tangibility, Reliability, Responsiveness, Assurance, Empathy, Convenience, and Compliance) and client satisfaction in banking services
- H<sub>1</sub>:** There is a relationship between service quality dimensions (Tangibility, Reliability, Responsiveness, Assurance, Empathy, Convenience, and Compliance) and client satisfaction in banking services
- H<sub>0</sub>:** Service quality dimensions have no significant impact on overall bank client satisfaction.
- H<sub>2</sub>:** Service quality dimensions have a significant impact on overall bank client satisfaction.

**3.5 Model specification**

Based on Kithinji (2010) research, the econometric framework employed is the multiple linear regression model. The particular models are listed below.

$$(BCS) = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \epsilon \dots \dots \dots (1)$$

$$(BCS) = \alpha + \beta_1TAN + \beta_2REL + \beta_3RES + \beta_4ASS + \beta_5EMP + \beta_6CON + \beta_7COM + \epsilon \dots \dots \dots (2)$$

Here (BCS) means Bank Client Satisfaction is the **dependent variable**, and Tangibility, Reliability, Responsiveness, Assurance, Empathy, Convenience, and Compliance are the **independent variables**.  $\alpha$  and  $\beta$  are unknown parameters to be calculated;  $\epsilon$  is the error term.

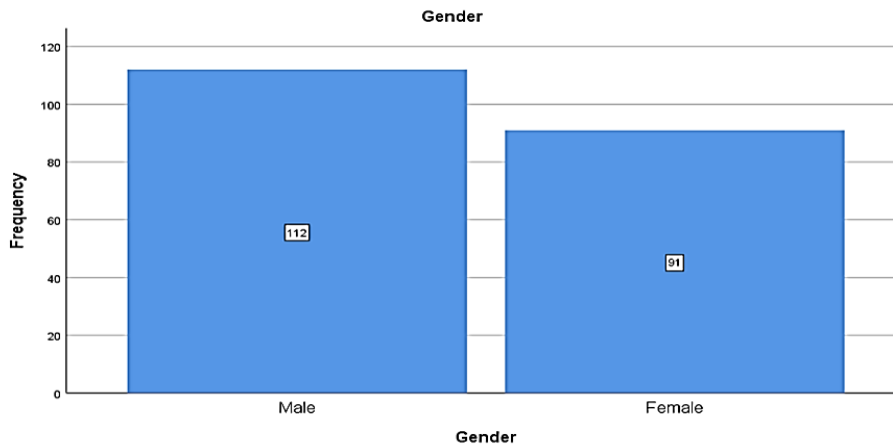
Here, **X1, X2, X3, X4, X5, X6, and X7** refers to **TAN, REL, RES, ASS, EMP, CON, and COM**, respectively. The estimation of these parameters will be conducted using a suitable statistical software package, ensuring that the assumptions of the multiple linear regression model are met. This will allow for a comprehensive analysis of how each independent variable influences bank client satisfaction, thereby providing valuable insights for enhancing service delivery in the banking sector.

**4. Analysis and Interpretation**

This section includes quantitative data analysis and interpretation. Here, various statistical methods and techniques were used for data analysis. The statistical analysis includes demographic analysis, data reliability test, descriptive analysis, Principal Component Analysis (PCA), correlation, regression, and Analysis of Variance (ANOVA). This data is analysis on the basis of SPSS-25 software by using a mathematical technique.

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	112	55.2	55.2	55.2
	Female	91	44.8	44.8	100.0
	Total	203	100.0	100.0	

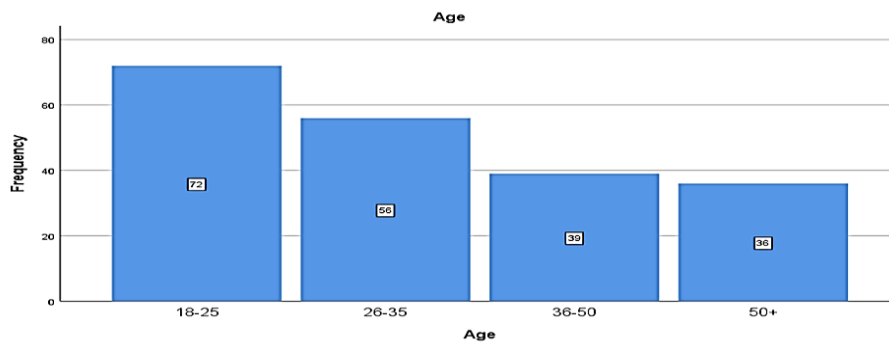
The table illustrates the gender distribution of the 203 participants, showing a slight majority of males (55.2%) compared to females (44.8%).



A bar graph illustrates the gender distribution, showing a greater number of male participants (112) than female participants (91).

		Age			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	72	35.5	35.5	35.5
	26-35	56	27.6	27.6	63.1
	36-50	39	19.2	19.2	82.3
	50+	36	17.7	17.7	100.0
Total		203	100.0	100.0	

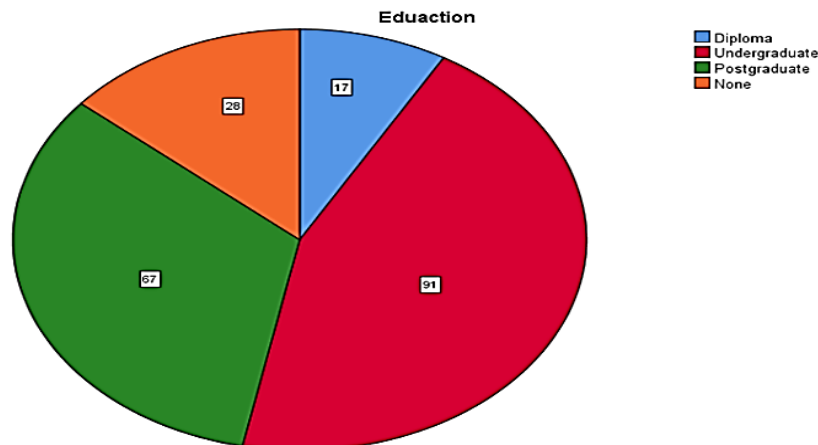
This table presents the age distribution of the study participants, categorized into four age groups: 18-25, 26-35, 36-50, and 50+. The total sample size is 203 participants. The "Valid Percent" column is identical to the "Percent" column, indicating that there are no missing values for the age variable. In essence, the table demonstrates that the sample is skewed towards younger participants, with the 18-25 and 26-35 age groups comprising the majority of the sample.



This bar graph illustrates the age distribution of participants, showing the frequency of individuals within four age categories: 18-25, 26-35, 36-50, and 50+. The graph clearly demonstrates a decreasing trend in frequency with increasing age, with the 18-25 age group having the highest count (72) and the 50+ group having the lowest (36).

		Education			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Diploma	17	8.4	8.4	8.4
	Undergraduate	91	44.8	44.8	53.2
	Postgraduate	67	33.0	33.0	86.2
	None	28	13.8	13.8	100.0
Total		203	100.0	100.0	

The table provides a breakdown of the educational attainment of the 203 participants, categorized as Diploma, Undergraduate, Postgraduate, or None, highlighting that Undergraduate attainment is the most common (44.8%), and 13.8% of participants have no formal education.

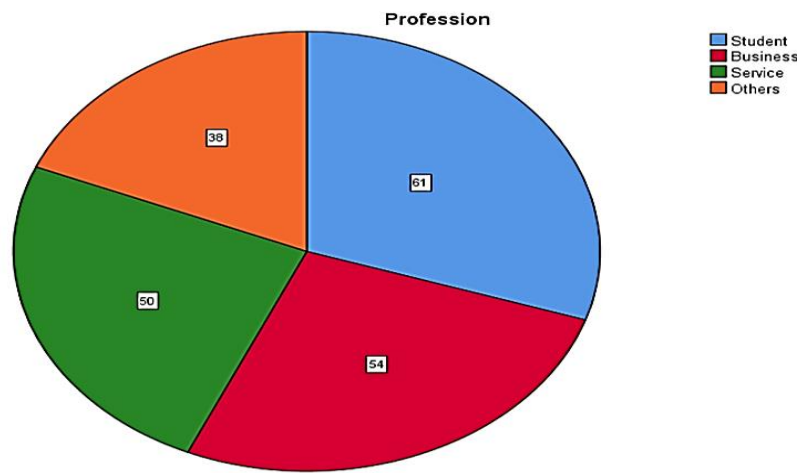


The pie chart represents the distribution of participants across four educational categories: Diploma, Undergraduate, Postgraduate, and None.

**Profession**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	61	30.0	30.0	30.0
	Business	54	26.6	26.6	56.7
	Service	50	24.6	24.6	81.3
	Others	38	18.7	18.7	100.0
	Total	203	100.0	100.0	

This table presents the professional distribution of the 203 study participants, categorizing them into four groups: Student, Business, Service, and Others. The table reveals a relatively balanced distribution of participants across different professions, with students forming the largest single group. The "Others" category suggests a diversity of professions beyond the explicitly listed categories.

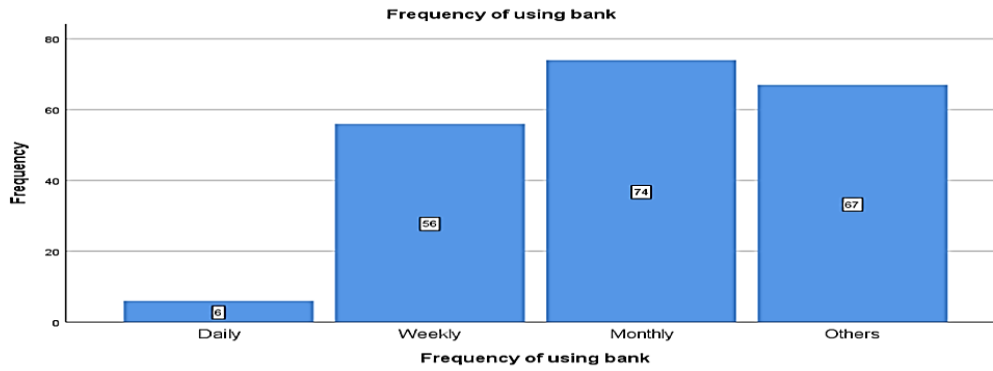


This pie chart depicts the distribution of participants across four professional categories: Student, Business, Service, and Others. The largest segment, representing Students, dominates the chart, followed by Business, Service, and then Others. The numbers within each slice indicate the frequency of participants in each respective category.

**Frequency of using bank**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Daily	6	3.0	3.0	3.0
	Weekly	56	27.6	27.6	30.5
	Monthly	74	36.5	36.5	67.0
	Others	67	33.0	33.0	100.0
	Total	203	100.0	100.0	

This table presents the frequency of bank usage among 203 participants, categorized into four groups: Daily, Weekly, Monthly, and Others. In summary, the table reveals that the most common frequency of bank usage among participants is monthly, followed by "Others" (which likely includes less frequent users). Daily usage is the least common.



This bar graph illustrates the frequency of bank usage among participants, categorized into Daily, Weekly, Monthly, and Others. The graph clearly shows that Monthly usage is the most frequent, followed closely by others, then Weekly. Daily usage is significantly less common. The numbers within each bar indicate the frequency of participants in each respective category.

**Descriptive Statistics**

	N Statistic	Mean		Std. Deviation Statistic	Variance Statistic	Skewness		Kurtosis	
		Statistic	Std. Error			Statistic	Std. Error	Statistic	Std. Error
Tangibility	203	18.0000	.16978	2.41898	5.851	-.863	.171	2.059	.340
Reliability	203	19.1675	.20207	2.87900	8.289	-.897	.171	.511	.340
Responsiveness	203	17.2759	.18730	2.66862	7.122	-.360	.171	.739	.340
Assurance	203	20.2709	.20940	2.98353	8.901	-1.333	.171	1.995	.340
Empathy	203	18.6552	.18569	2.64562	6.999	-.505	.171	.127	.340
Convenience	203	18.3596	.18283	2.60497	6.786	-.845	.171	1.614	.340
Compliance	203	18.6502	.14584	2.07790	4.318	.258	.171	.533	.340
BankClientsSatisfaction	203	18.6847	.19441	2.76991	7.672	-.654	.171	1.749	.340
Valid N (listwise)	203								

N (Statistic): This column shows the number of observations (respondents) for each variable, which is consistently 203 across all variables. This suggests a complete dataset with no missing values for these variables. This table offers a thorough summary of central tendency (Mean) and variability (Variance and Standard Deviation), for the listed variables, likely related to client satisfaction or service quality.

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.711	.710	5

The reliability of the scale used to measure bank client satisfaction was assessed using Cronbach's Alpha. This indicates a good level of internal consistency among the items. Particularly, a Cronbach's Alpha of .711 suggests that the items within the bank client satisfaction scale are measuring a similar underlying construct. The Cronbach's Alpha based on standardized items was .710, which is very close to the regular Cronbach's Alpha. This similarity indicates that standardizing the items had minimal impact on the reliability, further supporting the consistency of the scale. In conclusion, the results of the reliability analysis demonstrate that the five-item scale used to measure bank client satisfaction is reliable and internally consistent. This finding supports the use of this scale for further analysis and interpretation of bank client satisfaction levels.

### Scale Statistics

Mean	Variance	Std. Deviation	N of Items
18.68	7.672	2.770	5

The Scale Statistics provide a general overview of bank client satisfaction in Dinajpur. The mean score suggests a moderate level of overall satisfaction, while the standard deviation indicates a reasonable degree of variability. These findings provide a foundation for understanding the broader trends in client satisfaction, which can be further explored through the analysis of individual item statistics and correlations.

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.786
Bartlett's Test of Sphericity	Approx. Chi-Square	302.541
	df	28
	Sig.	.000

These tests are crucial in factor analysis, a statistical method used to reduce a large number of variables into a smaller set of underlying factors. They help determine if your data is suitable for factor analysis. The KMO statistic ranges from **0 to 1**. A value closer to 1 indicates that the data is more suitable for factor analysis. In this case, **.786** is considered "Middling" to "Meritorious," suggesting that the sampling adequacy is good and factor analysis is likely appropriate.

### Communalities

	Initial	Extraction
Tangibility	1.000	.475
Reliability	1.000	.606
Responsiveness	1.000	.300
Assurance	1.000	.632
Empathy	1.000	.354
Convenience	1.000	.466
Compliance	1.000	.633
BankClientsSatisfaction	1.000	.630

Extraction Method: Principal Component Analysis.

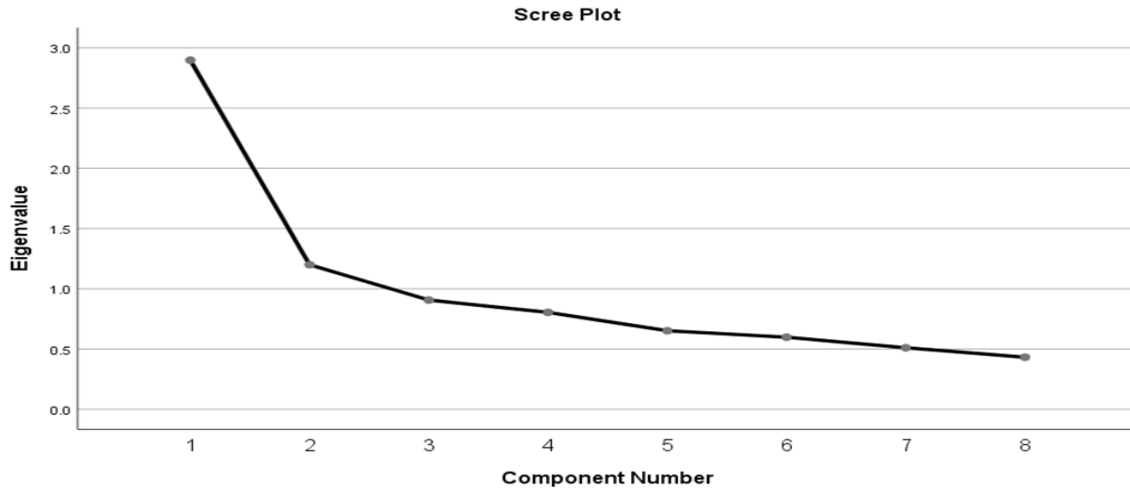
In factor analysis, communalities represent the proportion of each variable's variance that is explained by the extracted components. In simpler terms, it tells you how much of the variability of each original variable is explained by the common factors you've identified. All values are 1.000. This is because, initially, each variable is assumed to be perfectly predicted by itself. In other words, before any factors are extracted, each variable's variance is fully accounted for by itself. These values represent the proportion of variance in each variable that is explained by the extracted factors. Values range from **0 to 1**. A value closer to 1 means that a large portion of the variable's variance is explained by the factors. A value closer to 0 means that a small portion of the variable's variance is explained by the factors. Variables like Assurance (.632), Compliance (.633), and Bank Clients Satisfaction (.630) have relatively high communalities. This suggests that the extracted factors do a good job of explaining the variance in these variables. Variables like Responsiveness (.300) and Empathy (.354) have lower communalities. This indicates that the extracted factors don't explain as much of the variance in these variables. There might be other factors not included in the analysis that contribute to the variance of these variables, or these variables might have more unique variance.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.897	36.217	36.217	2.897	36.217	36.217	2.148	26.845	26.845
2	1.200	14.994	51.211	1.200	14.994	51.211	1.949	24.366	51.211
3	.906	11.331	62.543						
4	.804	10.052	72.594						
5	.652	8.150	80.744						
6	.598	7.476	88.220						
7	.511	6.383	94.603						
8	.432	5.397	100.000						

Extraction Method: Principal Component Analysis.

Based on the eigenvalues greater than 1 rule, you would likely retain two components for further analysis. However, you should also consider the theoretical meaningfulness of the components and the interpretability of the rotated solution. If the two components make sense in the context of your research question and provide a clear and interpretable factor structure, then retaining them is appropriate. The decision of how many components to retain is not always straightforward and should be based on a combination of statistical criteria and theoretical considerations.



It's important to note that this decision aligns with the "eigenvalues greater than 1" rule you likely encountered in the "Total Variance Explained" table. If you observed that only the first two components had eigenvalues greater than 1, then the scree plot reinforces that decision. In Conclusion, the scree plot visually confirms that two components should be retained for further analysis. This decision is based on the location of the elbow, which marks the point where the eigenvalues start to level off, indicating that additional components contribute minimally to explaining the variance in the data.

**Component Matrix<sup>a</sup>**

	Component	
	1	2
BankClientsSatisfaction	.767	
Tangibility	.687	
Convenience	.682	
Reliability	.621	-.470
Empathy	.584	
Responsiveness		
Compliance		.659
Assurance	.540	-.583

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

Bank Clients Satisfaction (.767), Tangibility (.687), Convenience (.682), Reliability (.621), and Empathy (.584) have relatively high positive loadings on Component 1. This suggests that Component 1 represents a factor related to the overall customer experience and satisfaction, encompassing aspects like physical facilities, ease of use, dependability, and personalized attention. Assurance (.540) also has a moderate positive loading on Component 1. Compliance (.659) has a high positive loading on Component 2. This suggests that Component 2 represents a factor related to adherence to rules, regulations, and ethical standards. Reliability (-.470) and Assurance (-.583) have moderate negative loadings on Component 2. This suggests that there is an inverse relationship between these variables and Compliance in this component. It may mean that when Compliance is high, Reliability and Assurance tend to be perceived as lower. Responsiveness has no loading in either component. This suggests that Responsiveness may not be well-represented by these two components, or it may be a more complex variable that requires further investigation.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
Assurance	.791	
Reliability	.776	
Tangibility	.550	
Convenience	.531	
Compliance		.789
BankClientsSatisfaction		.663
Responsiveness		.546
Empathy		.473

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Assurance (.791), Reliability (.776), Tangibility (.550), and Convenience (.531) have high loadings. This suggests that Component 1 represents a factor related to the quality and delivery of core banking services. It encompasses aspects like competence, dependability, physical facilities, and ease of access. Compliance (.789), Bank Client Satisfaction (.663), Responsiveness (.546), and Empathy (.473) have higher loadings. This suggests that Component 2 represents a factor related to customer-centricity and adherence to standards. It encompasses aspects like regulatory compliance, overall satisfaction, promptness of service, and personalized attention. In summary, the rotated component matrix provides a simplified and more interpretable representation of the factor structure.

		Correlations							
		Tangibility	Reliability	Responsiveness	Assurance	Empathy	Convenience	Compliance	BankClientsSatisfaction
Tangibility	Pearson Correlation	1	.328**	.160*	.301**	.285**	.405**	.228**	.431**
	Sig. (2-tailed)		.000	.022	.000	.000	.000	.001	.000
	N	203	203	203	203	203	203	203	203
Reliability	Pearson Correlation	.328**	1	.112	.432**	.352**	.298**	.060	.312**
	Sig. (2-tailed)	.000		.112	.000	.000	.000	.393	.000
	N	203	203	203	203	203	203	203	203
Responsiveness	Pearson Correlation	.160*	.112	1	.101	.230**	.177*	.199**	.219**
	Sig. (2-tailed)	.022	.112		.153	.001	.011	.004	.002
	N	203	203	203	203	203	203	203	203
Assurance	Pearson Correlation	.301**	.432**	.101	1	.150*	.306**	.002	.278**
	Sig. (2-tailed)	.000	.000	.153		.033	.000	.980	.000
	N	203	203	203	203	203	203	203	203
Empathy	Pearson Correlation	.285**	.352**	.230**	.150*	1	.214**	.203**	.374**
	Sig. (2-tailed)	.000	.000	.001	.033		.002	.004	.000
	N	203	203	203	203	203	203	203	203
Convenience	Pearson Correlation	.405**	.298**	.177*	.306**	.214**	1	.216**	.488**
	Sig. (2-tailed)	.000	.000	.011	.000	.002		.002	.000
	N	203	203	203	203	203	203	203	203
Compliance	Pearson Correlation	.228**	.060	.199**	.002	.203**	.216**	1	.400**
	Sig. (2-tailed)	.001	.393	.004	.980	.004	.002		.000
	N	203	203	203	203	203	203	203	203
BankClientsSatisfaction	Pearson Correlation	.431**	.312**	.219**	.278**	.374**	.488**	.400**	1
	Sig. (2-tailed)	.000	.000	.002	.000	.000	.000	.000	
	N	203	203	203	203	203	203	203	203

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

The correlation analysis reveals that all seven service quality dimensions have statistically significant positive relationships with bank client satisfaction ( $p < .01$ ), indicating that enhancements in any of these areas are associated with increased client satisfaction. Among these, **Convenience** ( $r = .488$ ) and **Tangibility** ( $r = .431$ ) show the strongest positive correlations, suggesting they play the most influential roles in shaping customer satisfaction. Moderate positive correlations are also observed for **Empathy** ( $r = .374$ ), **Compliance** ( $r = .400$ ), **Assurance** ( $r = .278$ ), and **Responsiveness** ( $r = .219$ ), demonstrating that these dimensions also contribute meaningfully, though to a lesser extent. Additionally, various dimensions are significantly correlated with each other—for instance, **Reliability** is positively associated with **Assurance** ( $r = .432$ ), **Empathy** ( $r = .352$ ), and **Tangibility** ( $r = .328$ )—indicating that improvements in one aspect of service quality may reinforce others. However, not all pairings show significant relationships; notably, **Reliability–Compliance** ( $r = .060$ ,  $p = .393$ ) and **Assurance–Compliance** ( $r = .002$ ,  $p = .980$ ) show no significant correlation, suggesting these dimensions may function more independently. Importantly, while these findings support a strong link between service quality and satisfaction, they reflect correlation rather than causation.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.651 <sup>a</sup>	.423	.403	2.14072

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

The table titled "Model Summary" presents the overall fit statistics of a regression model predicting an outcome variable based on seven predictors: Compliance, Assurance, Responsiveness, Empathy, Convenience, Tangibility, and Reliability. The correlation coefficient (R) is 0.651, indicating a moderate to strong positive linear relationship between the combined predictors and the dependent variable. The R Square value is 0.423, which means that approximately 42.3% of the variance in the dependent variable is explained by the predictors in the model. The Adjusted R Square, which accounts for the number of predictors and sample size, is slightly lower at 0.403, suggesting a reliable level of explained variance after adjusting for model complexity. The standard error of the estimate is 2.14072, representing the average distance that the observed values fall from the regression line. Overall, this model shows a good fit with meaningful explanatory power.

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	656.203	7	93.743	20.456	.000 <sup>b</sup>
	Residual	893.620	195	4.583		
	Total	1549.823	202			

a. Dependent Variable: BankClientsSatisfaction

b. Predictors: (Constant), Compliance, Assurance, Responsiveness, Empathy, Convenience, Tangibility, Reliability

This table presents the ANOVA (Analysis of Variance) results for the multiple linear regression model you previously provided the Model Summary for. A p-value of .000 (which is actually less than .0005) indicates that the results are statistically significant. This ANOVA table indicates that the regression model is statistically significant (F = 20.456, p < .0005). This means that the predictors (Compliance, Assurance, Responsiveness, Empathy, Convenience, Tangibility, Reliability), as a group, significantly predict Bank Clients Satisfaction. The model accounts for a considerable amount of the variance in Bank Clients Satisfaction in Dinajpur City. This means there is strong evidence to reject the null hypothesis (that there is no relationship) and accept the alternative hypothesis and conclude that the model as a whole is a significant predictor of Bank Clients Satisfaction.

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3.238	1.965		-1.647	.101
	Tangibility	.182	.073	.159	2.507	.013
	Reliability	.055	.062	.057	.879	.381
	Responsiveness	.039	.059	.038	.666	.506
	Assurance	.083	.058	.089	1.426	.155
	Empathy	.182	.064	.174	2.862	.005
	Convenience	.298	.066	.280	4.487	.000
	Compliance	.342	.077	.256	4.431	.000

a. Dependent Variable: BankClientsSatisfaction

The multiple linear regression model reveals the individual contributions of each service quality dimension to Bank Client Satisfaction. Among the predictors, Convenience, Compliance, Empathy, and Tangibility are statistically significant, with Empathy significant at the 0.01 level and both Convenience and Compliance highly significant at the 0.001 level. Tangibility also meets the 0.05 significance threshold. These variables demonstrate a meaningful relationship with client satisfaction. In contrast, Reliability, Responsiveness, and Assurance are not statistically

significant, indicating they do not contribute uniquely to explaining client satisfaction in this model. The strongest predictors, based on both unstandardized and standardized coefficients, are Convenience and Compliance, highlighting their dominant influence in predicting satisfaction. Empathy and Tangibility also provide notable contributions, though to a lesser extent.

Then the fitted Regression Model is:

$$(BCS) = -3.238 + .159(TAN) + .057(REL) + .038(RES) + .089(ASS) + .174(EMP) + .280(CON) + .256(COM) + \text{Eit.....}$$

#### 4.1 Findings

Tangibility, reliability, responsiveness, assurance, empathy, convenience, and compliance have a statistically significant positive impact on client satisfaction. Among this, convenience and tangibility exhibit the strongest correlation with client satisfaction, indicating that easy access to services and appealing physical facilities are key drivers. Responsiveness and assurance also show meaningful influence, suggesting that timely service and staff competence are critical to building trust with clients. The findings confirm that improving service quality directly enhances client satisfaction, which in turn supports banking growth. The quantitative analysis shows high reliability of the data, with strong internal consistency across service quality dimensions. Private banks in Dinajpur city tend to perform better than public banks in dimensions like convenience, responsiveness, and technological integration. These findings emphasize that banks in Dinajpur city must prioritize convenient, reliable, and client-focused service delivery to maintain competitive advantage and long-term growth.

#### 5. Conclusion

This research highlights the importance of providing high-quality banking services in Dinajpur City, especially amid growing local and global competition. It explores the relationship between client satisfaction and service quality dimensions: tangibility, reliability, responsiveness, assurance, empathy, convenience, and compliance. The findings show that assurance had the highest mean score, while reliability had the lowest, indicating varying levels of client perception across dimensions. Compliance and convenience, introduced as new dimensions, were found to significantly impact client satisfaction positively. Statistical analysis, including correlation and regression, confirms a strong positive relationship between service quality and client satisfaction. The study also observes that economic growth in Bangladesh has influenced the banking sector in Dinajpur, leading to increased competition, income levels, and a focus on customized services. Ultimately, the research concludes that client satisfaction is essential for achieving sustainable growth in the banking industry, and banks must prioritize service quality to retain clients, attract new ones, and maintain a strong market position.

#### 5.1 Limitations of the Study

This study acknowledges several key limitations. Methodologically, the small sample size, possible measurement errors, and limited respondent access may affect the accuracy and representativeness of the results. Theoretically, the study's narrow focus, simplified conceptual framework, and use of correlation/regression analysis limit the ability to infer causality. Practically, time, financial, and ethical constraints restricted the research scope, depth, and exploration of certain topics. Externally, the findings may not be generalizable to other contexts, may become outdated due to changing conditions, and could be influenced by researcher bias.

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