

## Customer Satisfaction Towards Selected Cellular Service Providers in Thiruvavarur District

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### ABSTRACT

In recent years, the demand for mobile phones has increased significantly, with numerous players competing in the mobile phone industry. Although the cellular industry is relatively young, its growth has been remarkable. To attract and retain customers, companies continually introduce new features, attractive schemes, improved services, and a variety of handsets and models. This intense competition benefits subscribers by providing better options and lower charges for incoming and outgoing calls. The purpose of this study is to assess the level of customer satisfaction with mobile phone service providers in Thiruvavarur District. Using primary data collected through questionnaires, the study applies statistical techniques including percentage analysis, factor analysis, and ANOVA to identify key factors influencing consumer satisfaction with cellular service providers.

**KEYWORDS:** Mobile Phone Service Providers, Growth Trends, Customer Satisfaction, Thiruvavarur District.

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### 1. INTRODUCTION

Customer satisfaction is the primary goal of every business organization. In today's competitive business environment, all activities start and end with the customer. Telecommunications is the lifeblood of modern business, and competition among service providers is intense. In this dynamic environment, companies must identify, anticipate, and fulfill customer needs to maximize profits. Customer satisfaction is a complex outcome shaped by customers' perceptions, evaluations, and psychological responses relative to their expectations of a product or service. It represents the customer's overall judgment of how well a product or service performs. High customer satisfaction positively impacts loyalty and repeat purchase intentions across various sectors.

Customer satisfaction arises from the comparison of perceived performance with expectations—if performance meets or exceeds expectations, satisfaction occurs; otherwise, dissatisfaction results. Without customers, businesses cannot survive. Success is often a direct consequence of customer behavior. Businesses that fail to prioritize customer satisfaction risk becoming irrelevant, facing poor customer retention, loyalty, and sales. With the rapid expansion of cellular service providers in many regions, it is essential for firms to embed customer satisfaction into their operations to drive loyalty, retention, and growth. This study aims to examine customer satisfaction levels towards cellular service providers in Thiruvavarur District.

## Indian Telecom Sector - an Overview

India's telecom sector dominates as the world's second-largest market, home to 898 million subscribers by March 2013. This staggering user base fueled remarkable growth, pushing sector revenues up by 13.4% to hit \$64.1 billion in FY12. Infrastructure kept pace with this expansion, with telecom towers multiplying at 20% annually between 2008-2015 to meet soaring demand. The data revolution transformed usage patterns, catapulting monthly internet traffic from a modest 393 petabytes in 2012 to an overwhelming 2.5 exabytes by 2017. Wireless networks bore the brunt of this digital explosion, their traffic share swelling from 38% to 40% during the same period. Government initiatives like Digital India and 5G rollouts continue to propel the sector forward, ensuring India remains a prime destination for telecom investments and innovation. This perfect storm of factors - massive subscriber base, infrastructure growth, and policy support - solidifies India's position as a global telecom powerhouse.

## 2. REVIEW OF THE STUDY

Mohammed M. Almosawi (2012) conducted research to examine the importance and outcomes of customer satisfaction within the telecommunications sector in Bahrain. Data were collected through a structured questionnaire. The study identified three key categories influencing satisfaction: financial factors, communication, and intercommunication. Among these, financial factors were found to be particularly significant in determining customer satisfaction. While satisfaction contributes to customer retention, it does not necessarily guarantee customer loyalty.

Rajasekhara et al. (2012) investigated customer satisfaction with Ethiopian Telecom (ETC) in their study titled "An Assessment of Ethiopian Telecom Customer Satisfaction." They highlighted that marketing, especially service marketing, has gained equal importance alongside the marketing of tangible products. The research identified issues related to customer dissatisfaction and frustration during interactions with ETC employees. Using quantitative surveys and personal interviews with structured questionnaires, the study emphasized the need for ETC to revise its practices and policies to improve customer retention. It also underscored the importance of achieving total customer satisfaction by fostering positive attitudinal changes among customers.

Parker and Mathew (2001) discussed two fundamental approaches to defining customer satisfaction. The first views satisfaction as a process, while the second considers it an outcome of the consumption experience. These approaches are complementary, as the process often influences the eventual outcome.

Vavra (1997) defined customer satisfaction as "the number or percentage of customers whose experience with a firm, its products, or its services exceeds predetermined satisfaction goals." He described it as a psychological concept involving feelings of comfort and liking that result from fulfilling expectations for an appealing product or service. Vavra also emphasized customer satisfaction as a process, highlighting the perceptual and psychological factors that contribute to it. From a business perspective, customer satisfaction measures how well a company's products and services meet or surpass customer expectations. It is regarded as a key performance indicator and forms part of the Balanced Scorecard framework. In competitive markets, customer satisfaction serves as a crucial differentiator and increasingly plays a central role in business strategy. A substantial body of empirical research confirms the benefits of high customer satisfaction for firms.

Naumann (1995) identified five key reasons for measuring customer satisfaction, emphasizing its critical role:

- To develop a closer relationship with customers, improving understanding of their needs.
- To identify the attributes most important to customers and their influence on decision-making.
- To assess the firm's performance in delivering each attribute.
- To enable better communication between the firm and its customers.
- To provide actionable insights for improving customer satisfaction and loyalty.

### 3. NEED FOR THE STUDY

Customer satisfaction is central to the success of any business. In today's competitive environment, especially in the telecommunications sector, customer expectations shape every aspect of service delivery. Despite having robust infrastructure, several telecom providers struggle to retain customers due to inadequate service quality. As the differences in service offerings are minimal, customers are more likely to switch providers based on satisfaction. Understanding how demographic factors influence customer satisfaction is therefore vital for service providers seeking to improve retention and loyalty.

### 4. STATEMENT OF THE PROBLEM

The telecommunications sector has evolved into a highly segmented and dynamic market where customers exhibit diverse and informed preferences. Providers face the dual challenge of standing out in a crowded market and offering tailored, value-driven services. Factors such as network quality, pricing, innovation, brand reputation, and customer support all influence consumer choice. Despite rapid industry growth, issues like poor service coverage, lack of rural infrastructure, call disruptions, and billing problems have led to customer dissatisfaction and loss of market share. In this context, a focused study on customer satisfaction with selected cellular service providers in Thiruvavarur District is necessary to identify existing gaps, suggest improvements, and assess opportunities and challenges in the sector.

### 5. SCOPE OF THE STUDY

The shift to an information-driven economy, propelled by advances in computing and telecommunications, has significantly increased the importance of the service sector. As nations transition from agriculture-based economies to service-oriented models, the demand for quality services continues to grow. Contributing factors include rising per capita income, time constraints, rapid technological advancements, increased life expectancy, globalization, and heightened competition. These developments have expanded opportunities in marketing, particularly in leveraging new technologies, franchising, international markets, and service delivery innovations.

In this context, the present study explores customer satisfaction in the telecommunications sector, focusing on cellular service providers in Thiruvavarur District. The findings aim to benefit academicians, researchers, marketing professionals, and consumers by offering insights into customer expectations and service effectiveness.

### 6. OBJECTIVES OF THE STUDY

1. To examine the growth and performance of the cellular service industry in India.
2. To analyze customer satisfaction with cellular service providers in Thiruvavarur District.

### 7. HYPOTHESES OF THE STUDY

1.  $H_{01}$ : There is no significant relationship between customers' demographic variables and their type of cellular connection.
2.  $H_{02}$ : There is no significant difference in the factors influencing the choice of service providers between prepaid and postpaid customers with respect to personal variables

## 8. METHODOLOGY AND DESIGN

The present study adopts both exploratory and descriptive research approaches. Initially, a qualitative method was used to identify key factors influencing customer satisfaction among cellular service subscribers. A review of previous scholarly work on customer satisfaction in the telecom sector provided a foundational framework for this study. Based on this, in-depth interviews were conducted with 162 respondents who were users of various cellular service providers.

The data collection instrument was a structured interview schedule comprising six major sections. A five-point Likert scale was used to assess respondents' perceptions of performance on various service aspects, ranging from 1 = Very Poor/Highly Dissatisfied to 5 = Excellent/Highly Satisfied. The schedule also included questions related to both demographic and psychographic variables.

The six parts of the interview schedule included:

1. Demographic profile and general information about the respondents' cellular service usage.
2. Selection factors influencing choice of service providers, assessed across three dimensions.
3. Customer behavior, explored across four dimensions.
4. Other contributing factors, studied through three dimensions.
5. Service quality dimensions, evaluated in five areas.
6. Problems encountered by users, examined across four dimensions.

Data was analyzed to assess the perception, satisfaction, and challenges faced by users in the context of cellular services in Thiruvavarur District.

### 8.1 Sampling Design

The study focused on subscribers of seven prominent service providers in Thiruvavarur District—BSNL, Airtel, Aircel, Reliance, and Vodafone, among others—selected for their popularity and service reliability.

A proportionate stratified sampling method (non-probability sampling) was used. Respondents were contacted in person, and data was collected through the structured interview schedule. The sample size was determined using the standard formula:

$$\text{Sample size} = \frac{Z^2 \times P(1 - P)}{e^2}$$

Where:

- $Z$  is the  $Z$ -value corresponding to the desired confidence level (typically 1.96 for 95%)
- $P$  is the estimated proportion of the population
- $e$  is the allowable margin of error

At the time of study, the estimated population of cellular service users in Thiruvavarur District was 1,73,395, with 1,21,376 literate users (54.56% male and 45.44% female). Based on this, a total of 162 respondents were proportionately selected from the district.

**Table 1: Distribution of Sample Customers**

S.No.	Name of the Town	Estimated Cellular Service Customers	No. of Customers	Percentage
1.	Thiruvavur ( O.T)	26703	35	22
2.	Gingee	21848	29	18
3.	Marakkanam	18206	24	15
4.	Tindivanam	16993	23	14
5.	Vikravand	24275	33	20
6.	Melmalayanur	13351	32	11
Total		121376	162	100

**Source** Record of Published by Municipality Office C Thiruvavur 2019-20.

## 8.2 Primary and Secondary Data Collection

Primary data was collected directly from individuals through a structured interview schedule and personal interviews. These first-hand data sources included responses from customers of various cellular service providers in Thiruvavur District. Interviews were conducted using pre-tested schedules designed for clarity and ease of completion.

Secondary data was obtained from credible sources such as:

- Annual reports of the Telecom Regulatory Authority of India (TRAI)
- Indian Telecom Policy documents
- Publications from the Department of Telecommunications
- World Telecommunications Development Reports
- Statistical yearbooks, journals, academic books, and websites of cellular operators.

## 8.3 Statistical Tools Used

The data collected through interview schedules were classified, tabulated, and analyzed to meet the research objectives. The following statistical tools were employed:

- Simple percentage analysis
- Mean, Standard Deviation (SD), and Coefficient of Variation (CV)
- Chi-square test
- T-test
- One-Way ANOVA
- Correlation Analysis
- Factor Analysis
- Data reliability and validity were tested using SPSS (Version 16.0) to ensure robustness of findings.

## 8.4 Selection of the Service Provider

Based on subscriber base and market presence, seven major telecom service providers were selected for the study. These include:

- BSNL
- Airtel
- Aircel

- Reliance
- Vodafone

### 8.5 Period of the Study

The research covers a ten-year period, from 2010–11 to 2021–22, for analyzing industry growth and performance. Primary data collection was carried out over six months, from November 2021 to April 2022, a time considered suitable for capturing regular consumer behavior and service experience.

### 8.6 Limitations of the Study

This study is subject to a few limitations:

- The findings are based solely on the opinions of respondents, which may be subjective in nature.
- Due to time constraints, the research was confined to Thiruvavur District and may not fully represent broader regional or national trends.
- The study employed a random sampling method rather than a complete census approach, which could limit the generalizability of the results.
- Despite these constraints, every effort was made to ensure the scientific rigor and accuracy of the analysis.

**Table 2a:** Reliability and Validity Test for Operator Providers the Most Effective Packages

Factors	Reliability Co-efficient	Validity Co-efficient	Level of Significance
Network Excellence	0.74	0.64	0.001
Tariff Plan	0.76	0.67	0.002
Value Added Service	0.64	0.72	0.001
Customer Care	0.73	0.63	0.003
Billing Integrity	0.56	0.85	0.001

**Source:** Computed from Primary Data

**Table 2b: Demographic Profile of the Respondents**

S. No.	Demographic Profile	N	Percentage
1	Male	103	63.77
2	Female	59	36.23
	Total	162	100.00
1	Up to 25 years	26	15.79
2	26 to 35 years	85	52.94
3	36 to 45 years	28	17.34
4	46 to 55 years	18	11.46
5	Above 56 years	5	2.48
	Total	162	100.00
1	School Level	47	28.79
2	Under Graduate	39	24.15
3	Post Graduate	48	30.03
4	Professional	17	17.03
	Total	162	100.00
1	School Level	46	28.79
2	Under Graduate	39	24.15
3	Post Graduate	48	30.03
4	Professional	28	17.03
	Total	162	100.00
1	Student	46	30.03
2	Businessman	16	9.91
3	Private Employee	51	31.27
4	Government Employee	26	15.79

5	Others	21	13.00
	Total	162	100.00
1	Married	80	49.23
2	Unmarried	82	50.77
	Total	162	100.00
1	Up to 2 Member	20	12.07
2	3-4 Member	83	51.08
3	5-6 Member	52	32.20
4	More than 6 Members	8	4.64
	Total	162	100.00
1	Up to Rs. 10,000	104	64.71
2	Rs. 10,001 to Rs. 20,000	20	12.69
3	Rs.20,001 to Rs. 30,000	14	8.67
4	Rs.30,001 to Rs.40,000	10	5.88
5	More than Rs. 40,000	13	8.05
	Total	162	100.0

**Source:** Primary data

From the survey of 162 respondents, 63.77% were male and 36.23% female, indicating a lower female representation. In terms of educational qualification, 30.03% were postgraduates, followed by 28.79% with school-level education, 24.15% undergraduates, and 17.03% with professional degrees. Regarding occupation, the largest group was private employees (31.27%), followed by students (30.03%), government employees (15.79%), others (13.00%), and businessmen (9.91%). Marital status was nearly balanced, with 50.77% unmarried and 49.23% married. In terms of number of dependents, 51.08% had 3 to 4 dependents, making it the largest group, while 32.20% had 5 to 6, 12.07% had up to 2, and 4.64% had more than 6 dependents. As for monthly income, out of 162 respondents, 64.71% earned up to ₹10,000, followed by 12.69% earning ₹10,001–20,000, 8.67% earning ₹20,001–30,000, 5.88% earning ₹30,001–40,000, and 8.05% earning above ₹40,000. The data clearly shows that a majority of the customers fall into the lowest income bracket.

**Table 3: Type of Cellular Service Providers**

S. No.	Service Provider		Prepaid	Postpaid	Total
1.	BSNL	No	20	7	27
		%	12.07	4.33	16.41
2.	Airtel	No	28	9	37
		%	17.03	5.57	22.60
3.	Aircel	No	31	4	35
		%	19.20	2.48	21.67
4.	Reliance	No	9	1	10
		%	5.57	0.62	6.19
5.	Vodafone	No	28	2	30
		%	17.03	1.55	18.58
		%	4.33	0.62	4.95
	<b>Total</b>	No	133	29	162
		%	82.04	17.96	100.00

**Source:** Primary data

Table 3 shows the distribution of prepaid and postpaid subscribers across different cellular service providers. BSNL has 12.07% prepaid and 4.33% postpaid users. Airtel accounts for 17.03% prepaid and 5.57% postpaid subscribers. Aircel shows the highest prepaid usage at 19.20%, with 2.48% on postpaid. Reliance has 5.57% prepaid and 0.62% postpaid users, while Vodafone records 17.03% prepaid and 1.55% postpaid subscribers. This data highlights a clear preference for prepaid connections across all service providers.



**Table 4: Number of Respondents from Service Provider**

S. No.	Service Provider	No. of the Respondents	Percentage
1.	BSNL	27	16.41
2.	Airtel	36	22.60
3.	Aircel	35	21.67
4.	Reliance	27	16.67
5.	Vodafone	38	23.45
	<b>Total</b>	<b>162</b>	<b>100.00</b>

**Source:** Primary data

Table 4 presents the number of respondents using different cellular service providers in Thiruvavarur District. Among the 323 respondents, BSNL accounts for 16.41% (53 respondents), Airtel for 22.60% (73 respondents), Aircel for 21.67% (70 respondents), Reliance for 6.19% (20 respondents), and Vodafone for 18.58% (60 respondents). This indicates that Airtel has the highest number of respondents in the district, followed closely by Aircel.

**Table 5: Demographic Variables Vs Type of Cellular Connection**

S. No.	Demographic	Prepaid	Postpaid	Total	Calculated Chi-square
1.	Male	No169 % 52.32	37 11.45	206 63.77	Sig = 0.000 DF = 1 P = 0.998 (NS)
2.	Female	No96 % 29.72	21 6.50	117 36.22	
	Total	No265 % 82.04	58 17.96	323 100.00	
1.	Up to 25 years	No42 % 13.0	9 2.8	51 15.8	Sig= 11.877 DF= 4 P= 0.018 (S) P<0.05
2.	26 to 35 years	No147 % 45.5	24 7.4	171 52.9	
3.	36 to 45 years	No46 % 14.2	10 3.1	56 17.3	
4.	45 to 55 years	No23 % 7.1	14 4.3	37 11.5	
5.	Above 56	No7 % 2.2	1 0.3	8 2.5	
1.	School Level	No74 % 22.91	19 5.88	93 28.79	Sig= 8.124 DF= 4 P= 0.044 (S) P<0.05
2.	Under Graduate	No71 % 21.98	7 2.17	78 24.15	
3.	Post Graduate	No73 % 22.60	24 7.43	97 30.03	
4.	Professional	No47 % 14.55	8 2.48	55 17.03	
1.	Student	No88 % 27.24	9 2.79	97 30.03	Sig= 14.718 DF= 4 P= 0.005 (S) P<0.05
2.	Businessman	No27 % 8.36	5 1.55	32 9.91	
3.	Private Employee	No73 % 22.60	28 8.67	101 31.27	
4.	Government Employee	No39 % 12.07	12 3.72	51 15.79	
5.	Others	No38 % 11.76	4 1.24	42 13.00	
1.	Up to Rs. 10,000	No178 % 55.11	31 9.60	209 64.71	Sig= 25.673 DF= 4 P= 0.000 (S) P<0.05
2.	Rs. 10,001 to Rs. 20,000	No30 % 9.29	11 3.41	41 12.69	
3.	Rs. 20,001 to Rs. 30,000	No28 % 8.67	0 0.00	28 8.67	
4.	Rs. 30,001 to Rs. 40,000	No9 % 2.79	10 3.10	19 5.88	



5.	More than Rs. 40001	No	20	6	26	
		%	6.19	1.86	8.05	

Table 5 presents the results of chi-square tests assessing the association between demographic variables and the type of cellular connection (prepaid/postpaid). The findings are as follows: Gender: The chi-square value is 0.000, which is not significant, indicating no association between gender and type of connection. Hence, the null hypothesis is accepted. Age: The chi-square value is 11.877 and significant, indicating a significant association between age and type of connection. Hence, the null hypothesis is rejected. Educational Qualification: The chi-square value is 8.124 and significant, showing a significant association with the type of connection. Hence, the null hypothesis is rejected. Occupation: With a chi-square value of 14.718, the result is significant, suggesting a significant association between occupation and connection type. The null hypothesis is therefore rejected. Family Income: The chi-square value is 25.673, which is significant, indicating a strong association between family income and the type of connection. Thus, the null hypothesis is rejected.

**Table- 6: ANOVA for Operator Providers the Most Effective Packages**

S.No.	Factors	Service	N	Mean	SD	SE	F-Value	P Value
1.	Network Quality	BSNL	53	4.79	1.072	.147	3.721	0.003* (S)
		Airtel	73	3.23	1.196	.140		
		Aircel	70	3.31	1.057	.126		
		Reliance	20	4.30	.801	.179		
		Vodafone	60	4.28	1.010	.130		
2.	Tariff Plan	BSNL	53	3.85	.533	.073	8.719	0.001* (S)
		Airtel	73	3.45	1.191	.139		
		Aircel	70	3.60	.750	.090		
		Reliance	20	4.10	.308	.069		
		Vodafone	60	3.75	.876	.113		
3.	Value Added Service	BSNL	53	3.02	.796	.109	6.123	0.001* (S)
		Airtel	73	3.22	1.346	.158		
		Aircel	70	3.43	.986	.118		
		Reliance	20	3.65	1.089	.244		
		Vodafone	60	3.65	1.132	.146		
4.	Customer Care	BSNL	53	2.66	.478	.066	7.451	0.001* (S)
		Airtel	73	3.27	1.326	.155		
		Aircel	70	3.71	1.276	.152		
		Reliance	20	3.75	.851	.190		
		Vodafone	60	3.75	1.174	.151		
5	Billing Integrity	BSNL	53	3.25	.979	.134	7.569	0.001* (S)
		Airtel	73	2.92	1.372	.161		
		Aircel	70	2.93	1.266	.151		

**Source:** Computed from Primary Data, \* Significant at 1 Per cent level

The analysis of variance (ANOVA) reveals significant differences among service providers across various service dimensions:

**Network Quality:** The F-value of 3.353 is significant at the 1% level, indicating a significant difference among providers. Airtel scored the highest mean (4.31), suggesting better perceived network quality. The null hypothesis is rejected.

**Tariff Plan:** The F-value of 6.718 is significant at the 1% level. Reliance had the highest mean score (4.10), indicating greater satisfaction with its tariff plans. The null hypothesis is rejected.

**Value-Added Services:** With an F-value of 7.208 (significant at 1%), there are notable differences among providers. Reliance again scored the highest (3.65), implying superior value-added services. The hypothesis is rejected.

Customer Care: A significant F-value of 9.741 (at 1% level) shows differences in customer care. Reliance leads with a mean score of 3.75, suggesting better service. The null hypothesis is rejected.

Billing Integrity: The F-value of 3.625 (significant at 1%) indicates variation in billing accuracy. BSNL scored highest (3.25), reflecting greater satisfaction with billing integrity. The null hypothesis is rejected.

These findings confirm that customer perceptions of service quality differ significantly across service providers in Thiruvavarur District.

**Table 7: Reliability and Validity Test**

S. No.	Factors	Reliability Co-efficient	Validity Co-efficient	Level of Significance
BSNL	Network Quality	0.72	0.62	0.001
	Tariff Plan	0.76	0.69	0.001
	Value Added Service	0.68	0.72	0.001
	Customer Care	0.71	0.68	0.001
	Billing Integrity	0.51	0.87	0.001
Airtel	Network Quality	0.81	0.69	0.001
	Tariff Plan	0.88	0.93	0.001
	Value Added Service	0.81	0.46	0.001
	Customer Care	0.79	0.93	0.001
	Billing Integrity	0.92	0.72	0.001
Aircel	Network Quality	0.84	0.62	0.001
	Tariff Plan	0.93	0.79	0.001
	Value Added Service	0.77	0.64	0.001
	Customer Care	0.62	0.92	0.001
	Billing Integrity	0.79	0.68	0.001
Reliance	Network Quality	0.63	0.73	0.001
	Tariff Plan	0.76	0.82	0.001
	Value Added Service	0.88	0.79	0.001
	Customer Care	0.72	0.74	0.001
	Billing Integrity	0.93	0.79	0.001
Vodafone	Network Quality	0.72	0.62	0.001
	Tariff Plan	0.78	0.92	0.001
	Value Added Service	0.63	0.89	0.001
	Customer Care	0.79	0.73	0.001
	Billing Integrity	0.93	0.79	0.001

**Source:** Computed from Primary Data

**Table -8: Customer satisfaction on Services Offered by the Service Providers**

Table -8. Customer satisfaction on services offered by the Service Providers							
S.No	Description	Very Good	Good	Fair	Bad	No Idea	Total
Connective							
1	Local Call	68	73	12	5	4	162.00
		42.11	44.89	7.74	2.79	2.48	100.00
2	STD Call	18	89	30	13	12	162.00
		11.15	54.80	18.58	8.05	7.43	100.00
3	Message Sending	54	69	22	10	9	162.00
		32.20	42.72	13.62	5.88	5.57	100.00
4	Picture Sending	17	76	30	22	15	162.00
		10.84	47.68	18.27	13.62	9.60	100.00
Information							
5	New Alerts	10	76	46	23	17	162.00
		5.88	40.87	29.10	13.93	10.22	100.00
6	Stock Prices	9	32	31	20	68	162.00
		5.88	19.81	19.50	12.38	42.41	100.00
7	Air / Train Tickets Status	10	23	32	32	59	162.00
		6.50	14.55	22.60	19.81	36.53	100.00
8	Bank Account Balance	17	46	32	36	31	162.00
		10.22	28.48	19.50	22.91	18.89	100.00
9	Transaction Alerts	19	43	51	26	23	162.00

		11.46	26.93	31.89	15.79	13.93	100.00
M-Commerce							
17	Purchase of Tickets	6	27	16	10	94	162.00
		4.02	17.03	11.15	6.50	61.30	100.00
18	Payment for Purchases	13	11	15	28	94	162.00
		8.05	6.81	9.29	17.34	58.51	100.00
	Over all	25	45	26	25	38	
		15.62	32.19	17.27	16.38	30.32	100.00

Table 8 presents customer satisfaction levels toward cellular service providers in Thiruvavur District. Among 162 respondents, 15.62% rated the service as very good, 32.19% as good, 17.27% as fair, 16.38% as bad, and 30.32% expressed no opinion about the services provided.

**Table 9: Customer satisfaction on Services Offered by the Service Providers**

S. No	Description	N	Mean	Standard Deviation	Standard Error
Connective					
1.	Local Call	162	4.21	0.889	0.049
2.	STD Call	162	3.54	1.040	0.058
3.	Message Sending	162	3.90	1.090	0.061
4.	Picture Sending	162	3.37	1.141	0.063
Information					
1.	New Alerts	162	3.18	1.078	0.060
2.	Stock Prices	162	2.34	1.352	0.075
3.	Air/Train Tickets Status	162	2.35	1.282	0.071
4.	Bank Account Balance	162	2.88	1.292	0.072
5.	Transaction Alerts	162	3.06	1.201	0.067
Entertainments					
1.	Songs Downloading	162	3.37	1.451	0.081
2.	Ring Tones	162	3.05	1.448	0.081
3.	Caller Ring Back	162	2.83	1.370	0.076
4.	Tones Downloading	162	2.97	1.487	0.083
5.	Wall Papers	162	2.89	1.471	0.082
6.	Games (on line)	162	2.83	1.349	0.075
7.	Jokes	162	2.74	1.452	0.081
M-Commerce					
1.	Purchase of Tickets	162	1.96	1.331	0.074
2.	Payment for Purchases	162	1.89	1.291	0.072

**Source:** Computed from Primary Data

Table 9 presents customer perceptions of service quality among cellular service providers in Thiruvavur District. Connectivity for local calls received the highest mean score of 4.21, while picture sending scored the lowest at 3.37. Regarding information services, new alerts had the highest mean score of 3.18, compared to stock prices at 2.34. In entertainment, song downloads scored highest with 3.37, and jokes received the lowest score of 2.74. For M-commerce, ticket purchases had a mean of 1.96, and payment for purchases scored 1.89. These results indicate that customers have a strong perception of services like local calls and song downloads, but low awareness or perception of stock prices and M-commerce services, suggesting limited familiarity with these offerings.

**Table 10: ANOVA for Frequency Use of Mobile Phones Vs Number of Family Members**

S. No.	Variables	Number of family Members	N	Mean	SD	SE	F-value	P Value
1.	Connective	Up to 2 Member	39	14.23	3.787	.606	1.201	0.310 (NS)
		3-4 Member	165	14.18	2.840	.221		
		4-6 Member	104	13.88	3.742	.367		
		More than 6 Members	15	12.60	2.293	.592		

		Total	323	14.02	3.260	.181		
2.	Information	Up to 2 Member	39	11.51	3.493	.559	1.248	0.292 (NS)
		3-4 Member	165	10.72	3.897	.303		
		4-6 Member	104	10.22	4.201	.412		
		More than 6 Members	15	9.80	4.539	1.172		
		Total	323	10.61	3.988	.222		
3.	Entertainments	Up to 2 Member	39	14.77	6.179	.989	0.777	0.508 (NS)
		3-4 Member	165	15.30	7.233	.563		
		4-6 Member	104	13.93	7.744	.759		
		More than 6 Members	15	15.33	7.613	1.966		
		Total	323	14.80	7.296	.406		
4.	M-Commerce	Up to 2 Member	39	2.28	.857	.137	1.483	0.219 (NS)
		3-4 Member	165	2.75	1.553	.121		
		4-6 Member	104	2.51	1.174	.115		
		More than 6 Members	15	2.60	1.404	.363		
		Total	323	2.61	1.366	.076		

**Source:** Computed from Primary Data

The calculated F-values for connectivity (1.201), information (1.248), entertainment (0.777), and M-commerce (1.483) are all not significant. These results indicate no significant difference in customer responses based on family size for any of these service aspects. Therefore, the stated hypotheses are accepted for all variables.

## 9. SUMMARY OF THE STUDY

The telecommunication sector in India has experienced significant growth, though recently it has slowed. Major companies like Airtel, Vodafone, Reliance, and BSNL dominate the market. This study aimed to identify the most used telecom service providers and the key factors influencing customer satisfaction. Results show that network quality is the primary factor contributing to customer satisfaction, followed by price fairness. To improve satisfaction, telecom providers should prioritize expanding network coverage and enhancing responsiveness. Additionally, superior customer care is essential, as positive interactions with call centers foster emotional attachment to the brand.

## 10. SUGGESTIONS OF THE STUDY

Customer satisfaction directly impacts retention; therefore, maintaining good business relationships is crucial. The study reveals a notable shift of Airtel and Reliance customers to other providers due to service dissatisfaction. Customer care emerged as a critical area needing improvement, particularly in problem resolution and reducing call center waiting times. Telecom providers must improve network connectivity and address service complaints promptly. BSNL, in particular, should focus on expanding its customer base by enhancing network services.

## 11. CONCLUSION

This study concludes that customer satisfaction in the cellular service industry is shaped by various factors that interact differently with demographic variables in Thiruvavur District. India's telecommunications network ranks among the largest globally, reflecting the success of reforms. While overall customer satisfaction is moderate to high, it may stem from limited alternatives or lack of awareness about service quality. Older and male customers reported higher satisfaction, possibly due to differing expectations and usage patterns. Interestingly, unemployed customers showed greater satisfaction than employed ones, perhaps due to less technical knowledge. Among service attributes,

network quality has the strongest influence on satisfaction, while billing, validity periods, and customer support have a lesser impact unless integrated into overall service excellence. Telecom operators should focus on enhancing network quality, offering competitive pricing and flexible plans, and providing effective customer support through regular staff training and user-friendly technology. A robust customer satisfaction strategy enables companies to align their services with customer expectations, identify areas for improvement, and strengthen customer loyalty, ultimately driving market success

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