

“A Study on the Factors Influencing the Selection of Mobile Telecom Services in Dharmapuri District, Tamil Nadu”

¹Dr.P.Sumathi, ²S.Ambiga,

¹Assistant Professor, ²Research Scholar .

¹PG and Research Department of Commerce, ²PG and Research Department of Commerce.

¹Govt. Arts College, Dharmapuri, Affiliated to Periyar University, Salem, Tamil Nadu,India

²Govt. Arts College, Dharmapuri, Affiliated to Periyar University, Salem, Tamil Nadu,India

Abstract

Telecommunication services have become an essential part of everyday life, supporting both personal communication and overall economic development. In recent years, mobile telecom services have experienced rapid growth, emerging as one of the most widely used communication technologies. In India, the telecom sector is highly competitive, with major service providers such as Reliance Jio, Bharti Airtel, BSNL, and Vodafone Idea striving to attract and retain customers.

Understanding the factors that influence consumers in choosing a mobile telecom service provider is crucial for companies to improve their services, retain existing customers, and attract new ones. With this perspective, the present study examines the key factors influencing consumer choice of mobile telecom services in Dharmapuri district of Tamil Nadu.

Primary data were collected from 524 respondents using an interview schedule. The data were analyzed using statistical tools such as percentage analysis, factor analysis, mean, standard deviation, t-test, and one-way ANOVA. The findings reveal that financial factors play the most significant role in influencing consumers' choice of mobile telecom services in the study area. These factors are particularly important for users of Jio and BSNL. On the other hand, internet-related factors are more influential for Airtel users, while promotional factors have a greater impact on VI customers.

The study also identifies significant differences in how various factors influence consumer choice based on socio-economic characteristics and telecom usage patterns. Overall, the findings provide useful insights for telecom service providers to better understand customer preferences and enhance their service strategies.

Keywords: Telecom services, service provider, portability, recharge, network, customer care

INTRODUCTION

The mobile telecom industry in India has seen significant growth and innovation in recent years. With a large and diverse market, multiple telecom operators compete to provide affordable and reliable services to millions of customers across the country. The industry has been revolutionized by the introduction of 4G and now 5G technology, enabling faster data speeds and more seamless connectivity. Additionally, the government initiatives like Digital India have played a crucial role in promoting the adoption of mobile and internet services among the population. Despite challenges like intense competition and regulatory hurdles, the mobile telecom industry in India continues to expand and evolve, driving economic growth and digital inclusion in the country. The mobile telecom market in India is one of the largest and fastest-growing in the world. With a population of over 1.3 billion people, India has seen a significant rise in mobile phone usage in recent years. The market is dominated by major players such as Jio, Airtel, and Vodafone Idea, who compete fiercely to attract and retain customers. The introduction of 4G and now 5G technology has further revolutionized the industry, offering faster internet speeds and improved connectivity across the country. Despite facing challenges such as regulatory hurdles and fierce competition, the mobile telecom market in India continues to thrive and innovate, offering a wide range of services to meet the diverse needs of its consumers.

Factors influencing the selection of a mobile telecom services provider in India can vary depending on the preferences and needs of individual consumers. Some key factors that may influence the decision include network coverage and reliability, competitive pricing and plans, quality of customer service, availability of value-added services like data packages and content offerings, brand reputation and trustworthiness, ease of switching or porting numbers, and availability of discounts or promotions. Additionally, factors such as the range of smartphone options, data speed and technology (3G, 4G, 5G), and bundled services like streaming platforms or international calling may also play a role in the selection process. Ultimately, consumers in India are likely to consider a combination of these factors when choosing a mobile telecom services provider. In this context, the researchers have undertaken the study to analyse the factors influencing the consumers in selection of mobile telecom service provider in Dharmapuri district in the state of Tamilnadu.

NEED OF THE STUDY.

The telecommunication sector has become one of the most dynamic and essential industries in India, playing a crucial role in connecting people and supporting economic growth. With the rapid expansion of mobile technology, the number of telecom users has increased significantly, leading to intense competition among service providers such as Reliance Jio, Bharti Airtel, BSNL, and Vodafone Idea.

In this competitive environment, understanding consumer preferences has become vital for telecom companies to survive and grow. Consumers today are more informed and have multiple options, making their selection process more complex. Factors such as pricing, network coverage, internet speed, customer service, and promotional offers significantly influence their decision-making.

Dharmapuri district, being a developing region in Tamil Nadu, presents a unique mix of urban and rural consumers with varying socio-economic backgrounds. The needs and expectations of these consumers may differ from those in metropolitan areas. However, there is limited research specifically focusing on consumer behavior and telecom service selection in this region.

STATEMENT OF THE PROBLEM

The mobile telecommunication sector in India has witnessed rapid growth and transformation with the advancement of technologies such as 4G and 5G, along with increased digital adoption under initiatives like Digital India. This growth has intensified competition among major service providers such as Reliance Jio, Bharti Airtel, BSNL, and Vodafone Idea, who continuously strive to attract and retain customers.

In such a highly competitive environment, consumers are provided with multiple choices, making their selection process more complex and dynamic. The decision to choose a particular mobile telecom service provider is influenced by various factors such as pricing, network coverage, internet speed, service quality, promotional offers, and brand reputation. Moreover, the availability of mobile number portability has made it easier for consumers to switch between service providers, further increasing competition.

Despite the availability of numerous studies on telecom services at the national level, there is limited region-specific research focusing on consumer behavior in semi-urban and rural districts like Dharmapuri in Tamil Nadu. The socio-economic diversity of consumers in this region may lead to variations in preferences and priorities when selecting telecom services. Additionally, the high usage of multiple SIM cards and significant adoption of portability among users indicate that consumers are not fully satisfied with a single service provider and are continuously evaluating alternatives. This raises an important question regarding which factors truly influence consumer choice and how these factors differ across various demographic and service-related variables.

Therefore, there is a need to systematically examine and identify the key factors influencing consumers in selecting mobile telecom service providers in Dharmapuri district. Understanding these factors will help telecom companies develop effective strategies to enhance customer satisfaction, reduce switching behavior, and improve service delivery.

RESEARCH GAP

Although several studies have been conducted on consumer behavior and factors influencing the selection of mobile telecom services, most of them are focused on urban areas or specific regions such as metropolitan cities and developed states. These studies have generally highlighted factors like pricing, service quality, network coverage, and customer satisfaction as key determinants of consumer choice.

However, there exists a **significant research gap** in the following aspects:

- **Lack of region-specific studies:**
Very few studies have focused on districts like Dharmapuri in Tamil Nadu, which have a mix of rural and urban populations. Consumer preferences in such regions may differ significantly from those in metropolitan areas.
- **Limited analysis of combined influencing factors:**
Previous studies have often examined individual factors such as price or service quality in isolation. There is a lack of comprehensive analysis that groups multiple influencing variables into broader dimensions like financial, service, internet, brand, and promotional factors.
- **Insufficient focus on socio-economic diversity:**
Many studies do not adequately consider how socio-economic variables such as age, income, education, and occupation influence consumer decision-making in selecting telecom services.
- **Neglect of telecom usage behavior:**
Factors such as the use of multiple SIM cards, mobile number portability, type of connection (prepaid/postpaid), and usage experience have not been extensively studied in relation to consumer choice.
- **Changing market dynamics:**
With the rapid expansion of telecom services, introduction of 4G and 5G technologies, and aggressive pricing strategies by providers like Reliance Jio, Bharti Airtel, BSNL, and Vodafone Idea, earlier findings may no longer fully reflect current consumer behavior.
- **Limited use of advanced statistical techniques:**
Some previous studies have not applied comprehensive analytical tools such as factor analysis and ANOVA to identify and validate the underlying factors influencing consumer decisions.

LITERATURE REVIEW

Singh M., and Bansai S. (2019) examined the factors which influenced brand switching behavior among customers regarding their mobile phone service providers. The study found positive relation of service quality with the brand switching behaviour. Though the quality service was provided but still customer shift to other service provider. Positive relation was found between the Brand switching and price. Higher the price, higher switching and vice versa. **Singh A. (2019)** studied the factors influencing prepaid consumer behavior in mobile telecom industry of Bihar & Jharkhand. The study found the values were significant at the specified level. The study suggested that demographic and Socio-economic factors influencing consumer behaviour cannot be ignored. These variables provide a holistic view of the consumer and also helps preponed and predict the churn or loyal behaviour. **Rahmoun M. (2020)** studied the factors affecting customer behavior in telecommunication industry. The study evidenced that most customers were satisfied with the quality of service provided to them, and most customers believe that Tunisie Telecom's service quality was above their expectations. Quality of reception at the counters of Tunisie Telecom's agencies was the key element for the success of the quality improvement project and was the major factor that can strongly influence client satisfaction and behavior.

Govindharaj Y., Govindasamy E., and Arumugam G. (2021) in their study concluded that the most influencing factors in the selection of a particular mobile network service provider were service quality, value added services and customer care services. **Mishra S.J., et al (2021)** studied the factors that customers emphasize more while selecting the service provider. Network quality, customer service, pricing strategies is the major factors. The study found that consumers preferred prepaid plans instead of post-paid plans and all most every customer treat their mobile phone as a necessity. JIO was the most preferred mobile phone

service providers among consumers followed by Airtel and VI. **Pant A. (2022)** investigated and analysed the determinants of customer loyalty towards Reliance Jio – a major Indian telecommunication service provider. The study found that out of the 10 determinants considered for the study, only 4 determinants (Brand experience, Corporate image, Switching cost and Satisfaction) had a significant impact on customer loyalty.

Srividya N., and Akila B. (2023) studied the factors behind consumer brand-switching behavior in the telecommunication industry in Chennai city. The study revealed that by providing value-added services and effective pricing strategies; telecom service providers could control consumer brand-switching behavior and can retain customers. **Yadav A., Patel J., and Vidani J. (2024)** evidenced in their study that age did not significantly impact consumer behavior across these variables, with all null hypotheses being accepted. The researchers found weak correlations. **Aruni G.C., and Muralikumar C. (2024)** in their study found that there was influence of customer satisfaction, service quality, price and customer loyalty on brand switching behaviour. There was no influence of brand image and trust on brand switching behaviour. **Ezugwu M.N. (2025)** examined factors affecting user's choice of mobile networks in South East Nigeria. The study found that the call rate of mobile networks, service availability, quality of service and promotional strategies determine the user's choice of a mobile network. The quality of service was the most contributing factor compared to the other factors.

OBJECTIVES

The study has been undertaken with the following objectives.

- To study the factors influenced the consumers in selection of mobile telecom services in Dharmapuri district.
- To study the relationship between socio-economic variables and factors influenced in selection of mobile telecom services in the study area.
- To study the relationship between services related variables and factors influenced in selection of mobile telecom services in the study area.

RESEARCH METHODOLOGY

This study adopts a systematic approach to identify and analyze the factors influencing the selection of mobile telecom services in Dharmapuri District, Tamil Nadu.

1. Research Design

The study is **descriptive and analytical in nature**, as it aims to describe consumer preferences and analyze the factors affecting their choice of mobile telecom service providers.

2. Source of Data

- **Primary Data:** Collected directly from respondents using a structured interview schedule.
- **Secondary Data:** Obtained from journals, books, reports, telecom websites, and related research articles.

3. Area of the Study

The study is confined to **Dharmapuri District, Tamil Nadu**, covering both rural and urban areas to ensure better representation.

4. Sample Size

The study is based on a sample of **524 respondents**, representing users of different mobile telecom service providers.

5. Sampling Technique

A **convenience sampling method** was used to select respondents based on their availability and willingness to participate in the survey.

6. Data Collection Tool

A **structured interview schedule/questionnaire** was used, consisting of:

- Demographic details (age, gender, income, education, occupation)
- Mobile usage patterns
- Factors influencing the selection of telecom services (price, network, internet, customer care, offers, etc.)

7. Statistical Tools Used

The collected data were analyzed using the following statistical techniques:

- **Percentage Analysis** – to understand the distribution of respondents
- **Mean and Standard Deviation** – to measure central tendency and variability
- **Factor Analysis** – to identify key influencing factors
- **'t' Test** – to compare differences between two groups
- **One-way ANOVA** – to test differences among multiple groups

8. Hypothesis (Optional – if included)

- There is no significant difference in the factors influencing the selection of mobile telecom services based on socio-economic variables.
- There is no significant difference in the factors influencing the selection of telecom services based on usage patterns.

9.. Limitations of the Study

- The study is limited to Dharmapuri District and may not be generalized to other regions.
- The use of convenience sampling may not fully represent the entire population.
- The findings are based on the responses of the sample and may involve personal bias

In first pass the linear regression is used to estimate beta which is the systematic risk.

RESULTS AND DISCUSSION

This portion of the paper presents the results and discussion regarding factors influenced the consumers of mobile telecom services in Dharmapuri district in the state of Tamilnadu. This portion provides the results of socio-economic background of the respondents, telecom service related variables, factor analysis and testing the association between the factors and socio-economic variables and services related variables

Table 1: Socio-Economic Background

| SN | Classification | Freq. | % | SN | Classification | Freq. | % |
|--------------------------|----------------|------------|------------|-----------------------|------------------------|------------|------------|
| Gender | | | | Education | | | |
| 1 | Male | 357 | 68.1 | 1 | Upto School Level | 61 | 11.6 |
| 2 | Female | 167 | 31.9 | 2 | UG Degree | 175 | 33.4 |
| Marital Status | | | | 3 | PG Degree | 144 | 27.5 |
| 1 | Married | 378 | 72.1 | 4 | Professional Education | 95 | 18.1 |
| 2 | Unmarried | 146 | 27.9 | 5 | Others | 49 | 9.4 |
| Residential Place | | | | Occupation | | | |
| 1 | Rural | 125 | 23.9 | 1 | Govt. Employee | 98 | 18.7 |
| 2 | Urban | 399 | 76.1 | 2 | Private Employee | 125 | 23.9 |
| Age | | | | 3 | Business | 130 | 24.8 |
| 1 | Upto 30 years | 145 | 27.7 | 4 | Profession | 62 | 11.8 |
| 2 | 31 to 40 years | 114 | 21.8 | 5 | Farmer | 88 | 16.8 |
| 3 | 41 to 50 years | 93 | 17.7 | 6 | Others | 21 | 4.0 |
| 4 | 51 to 60 years | 94 | 17.9 | Monthly Income | | | |
| 5 | Above 60 years | 78 | 14.9 | 1 | Upto ₹25,000 | 79 | 15.1 |
| Family Size | | | | 2 | ₹25,001 to ₹50,000 | 166 | 31.7 |
| 1 | Small | 198 | 37.8 | 3 | ₹50,001 to ₹75,000 | 149 | 28.4 |
| 2 | Medium | 178 | 34.0 | 4 | Above ₹75,000 | 130 | 24.8 |
| 3 | Big | 148 | 28.2 | Total | | | |
| Total | | 524 | 100 | Total | | 524 | 100 |

Table 1 shows that majority of the consumers of mobile telecom services in the study area were male (68.1%). About three fourth of the respondents (72.1%) were married and little more than three fourth of the respondents were residing in urban areas. It was observed that age of majority of the respondents (50.5%) was more than 40 years. More than one fourth of the respondents belonged to small size family and one third of the respondents completed upto under graduation degree. A considerable portion of the respondents (42.6%) were employees, either government or private sector. Majority of respondents (53.2%) had an income of more than ₹50,000 per month.

Table 2: Telecom Services Related Background

| SN | Classification | Freq | % | SN | Classification | Freq | % |
|---------------------------|----------------|------------|------------|--------------------------------|------------------|------------|------------|
| Type of Connection | | | | Monthly Recharge / Bill | | | |
| 1 | Pre paid | 422 | 80.5 | 1 | Upto ₹250 | 143 | 27.3 |
| 2 | Post paid | 102 | 19.5 | 2 | ₹251 to ₹500 | 251 | 47.9 |
| No. of SIM Using | | | | 3 | ₹501 to ₹750 | 81 | 15.5 |
| 1 | One | 174 | 33.2 | 4 | Above ₹750 | 49 | 9.4 |
| 2 | Two | 260 | 49.6 | Experience | | | |
| 3 | Above Two | 90 | 17.2 | 1 | Less than a year | 97 | 18.5 |
| Service Provider | | | | 2 | 1 to 5 years | 166 | 31.7 |
| 1 | BSNL | 93 | 17.7 | 3 | 5 to 10 years | 94 | 17.9 |
| 2 | Jio | 208 | 39.7 | 4 | Above 10 years | 167 | 31.9 |
| 3 | Airtel | 154 | 29.4 | Portability Availed | | | |
| 4 | VI | 69 | 13.2 | 1 | Yes | 367 | 70.0 |
| Total | | | | 2 | No | 157 | 30.0 |
| Total | | 524 | 100 | Total | | 524 | 100 |

Table 2 shows that more than three fourth of the consumers in the study area (80.5%) were using pre-paid plan of telecom services. About half of the respondents (49.6%) were using two SIM cards and one third of the respondents were using one SIM card. Hence most number of respondents had alternate number. In the study area, Jio was the leading telecom service provider followed by Airtel. A considerable portion of respondents (47.9%) spent between ₹251 and ₹500 for mobile telecom services. The majority of the respondents had well experience with more than 5 years using the particular brand of mobile telecom services in the study area. It was surprising to know from the results that, 70% of the respondents opined that they used mobile number portability services during the tenure of using mobile telecom services.

Factors Influenced to Select the Service Provider

The researcher identified 19 different factors that could influence respondents' choice of a particular service provider for their telecommunications services in the study area. The number of factors identified by respondents in this respect appears to be high in number. Hence, in order to reduce these factors, the researcher used factor analysis. The results of Factor analysis are presented below.

Table 3: Communalities – Factors Influenced in Selecting Service Provider

| SN | Factors | Initial | Extraction |
|----|--|---------|------------|
| 1 | Brand Name | 1.000 | 0.531 |
| 2 | Recharge plans / Monthly bill | 1.000 | 0.607 |
| 3 | Network coverage | 1.000 | 0.677 |
| 4 | Internet speed | 1.000 | 0.649 |
| 5 | Free voice call duration | 1.000 | 0.574 |
| 6 | Daily limit of internet data | 1.000 | 0.505 |
| 7 | Convenient amount of top up for internet | 1.000 | 0.688 |
| 8 | Convenient amount of top up for voice call | 1.000 | 0.536 |
| 9 | Attractive advertising | 1.000 | 0.620 |
| 10 | Review by existing users | 1.000 | 0.572 |
| 11 | Recommendations by friends / relatives | 1.000 | 0.523 |
| 12 | Internet generation 4G / 5G | 1.000 | 0.611 |
| 13 | Daily SMS Limit | 1.000 | 0.518 |
| 14 | Uninterrupted services | 1.000 | 0.500 |
| 15 | Value added services | 1.000 | 0.588 |
| 16 | Approachable customer care | 1.000 | 0.556 |
| 17 | Company reputation | 1.000 | 0.572 |
| 18 | Length of telecom business by the company | 1.000 | 0.515 |
| 19 | Flexibility of recharge plans | 1.000 | 0.516 |

Table 3 shows that the calculated individual variances of the variables were high, which were at the level of fulfilling statistical significance. The results of the above show that the computed values of extracted communalities of all the factors are higher than the value of 0.5. Hence, the extracted communalities are considered fit for the factor analysis. Higher the value of extracted communalities of the variables, the better it is. So, for the analysis under 'factor analysis', all the above factors are selected. The factor analysis applies the process of Principle Component Analysis (PCA) with the intention of pick out and estimating the eigenvalues of principle components. After calculating the Eigen values of the components, the factors are organised in descending order with respect to calculated Eigen values. According to Kaiser's criterion, the factors having Eigen value more than 1 are retained for the study.

Table 4: Total Variance Explained - Factors Influenced in Selecting Service Provider

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 2.568 | 13.516 | 13.516 | 2.568 | 13.516 | 13.516 |
| 2 | 2.234 | 11.758 | 25.274 | 2.234 | 11.758 | 25.274 |
| 3 | 1.945 | 10.237 | 35.511 | 1.945 | 10.237 | 35.511 |
| 4 | 1.755 | 9.237 | 44.747 | 1.755 | 9.237 | 44.747 |
| 5 | 1.324 | 6.968 | 51.716 | 1.324 | 6.968 | 51.716 |
| 6 | 0.986 | 5.189 | 56.905 | | | |
| 7 | 0.861 | 4.532 | 61.437 | | | |
| 8 | 0.801 | 4.216 | 65.653 | | | |
| 9 | 0.796 | 4.189 | 69.842 | | | |
| 10 | 0.754 | 3.968 | 73.811 | | | |
| 11 | 0.730 | 3.842 | 77.653 | | | |
| 12 | 0.671 | 3.532 | 81.184 | | | |
| 13 | 0.633 | 3.332 | 84.516 | | | |
| 14 | 0.580 | 3.053 | 87.568 | | | |
| 15 | 0.575 | 3.026 | 90.595 | | | |
| 16 | 0.485 | 2.553 | 93.147 | | | |
| 17 | 0.460 | 2.421 | 95.568 | | | |
| 18 | 0.430 | 2.263 | 97.832 | | | |
| 19 | 0.412 | 2.168 | 100.000 | | | |

Extraction Method: Principal Component Analysis.

Table 4 shows that the results of factor analysis in terms of Eigen values at initial stage and after the process of rotation method for the variables regarding factors influenced the respondents in creating purchase intention towards selected brands of mobile phones in the study area. The results showed that all the 19 variables were reduced into 5 factors by applying factor analysis by following rotation method, i.e. which are having Eigen value of more than 1. All the 5 factors explained 51.716% of variance of the included factors. It is assumed that the explained variance is sufficient, and the extracted variables can be used for further analysis. For modifying the extracted components representing the selected statements (19 variables), orthogonal rotation (Varimax) is used. The Rotated Component Matrix (RCM) indicates the factor loading of each variable to the extracted factors. The factor loadings may be defined as the correlation between the factors and the variables. It is assumed that every factor considered for the study must have significant factor loading to only one factor and insignificant factor loadings to all other extracted factors.

Table 5: Factors Influenced in Selecting Service Provider (Rotated Component Matrix^a)

| Sl. No. | Variables | Component | | | | | Factor Name |
|---------|--|-----------|-------|-------|-------|-------|---------------------------|
| | | 1 | 2 | 3 | 4 | 5 | |
| 1 | Brand Name | 0.846 | | | | | Brand Related Factors |
| 2 | Company reputation | 0.801 | | | | | |
| 3 | Length of telecom business by the company | 0.763 | | | | | |
| 4 | Price of recharge plans / Monthly bill | | 0.834 | | | | Finance Related Factors |
| 5 | Convenient amount of top up for internet | | 0.765 | | | | |
| 6 | Convenient amount of top up for voice call | | 0.722 | | | | |
| 7 | Flexibility of recharge plans | | 0.703 | | | | Service Related Factors |
| 8 | Network coverage | | | 0.869 | | | |
| 9 | Free voice call duration | | | 0.841 | | | |
| 10 | Daily SMS Limit | | | 0.822 | | | |
| 11 | Uninterrupted services | | | 0.798 | | | |
| 12 | Value added services | | | 0.772 | | | Internet Related Factors |
| 13 | Approachable customer care | | | 0.736 | | | |
| 14 | Internet speed | | | | 0.829 | | |
| 15 | Daily limit of internet data | | | | 0.745 | | Promotion Related Factors |
| 16 | Internet generation 4G / 5G | | | | 0.708 | | |
| 17 | Attractive advertising | | | | | 0.833 | Promotion Related Factors |
| 18 | Review by existing users | | | | | 0.810 | |
| 19 | Recommendations by friends / relatives | | | | | 0.769 | |

Table 5 shows that the results of factor analysis for the variables regarding the study of influence level of various factors on the selection of mobile telecom services in the study area. A total of 19 factors were reduced into 5 factors by using factor analysis. They were labeled as Brand Related Factors, Financial Factors, Services Related Factors, Internet Related Factors and Promotion Related Factors.

Table 6: Rank Analysis of Factors Influenced in Selecting Service Provider

| SN | Factor | Total Score | Mean | SD | CV | Rank |
|----|---------------------------|-------------|------|------|-------|------|
| 1 | Brand Related Factors | 1534 | 2.93 | 0.75 | 25.55 | V |
| 2 | Financial Factors | 1662 | 3.17 | 0.64 | 20.31 | I |
| 3 | Services Related Factors | 1528 | 2.92 | 0.59 | 20.18 | IV |
| 4 | Internet Related Factors | 1563 | 2.98 | 0.83 | 27.99 | II |
| 5 | Promotion Related Factors | 1554 | 2.97 | 0.81 | 27.37 | III |

Source: Computed from Primary Data

Table 6 reveals that “Financial Related Factors” influenced more on the respondents in the selection of mobile telecom services in the study area, since it secured highest mean value (3.17) and it was ranked first. About all the respondents gave similar opinion regarding the influence of the above factor. Followed by, the factors of “Internet related factors: and “Promotion related factors” also influenced more on the respondents in selection of mobile telecom services in the study area. “Brand Related Factors” was the least influencing factor in selection of service provider in the study area.

Table 7: Influencing Factors – Brand-wise

| SN | Factor | BSNL | | Jio | | Airtel | | VI | |
|----|---------------------------|------|------|------|------|--------|------|------|------|
| | | Mean | Rank | Mean | Rank | Mean | Rank | Mean | Rank |
| 1 | Brand Related Factors | 2.91 | II | 2.87 | III | 3.15 | III | 2.64 | V |
| 2 | Financial Factors | 3.20 | I | 3.23 | I | 3.14 | IV | 3.03 | II |
| 3 | Services Related Factors | 2.70 | IV | 2.86 | IV | 3.19 | II | 2.75 | IV |
| 4 | Internet Related Factors | 2.67 | V | 2.83 | V | 3.35 | I | 3.02 | III |
| 5 | Promotion Related Factors | 2.87 | III | 3.00 | II | 2.92 | V | 3.11 | I |

Table 7 shows that “Finance related factors” influenced more on the consumers who held BSNL and Jio services in selection of mobile telecom services in the study area and “Internet related factors” were the least influencing factors of those consumers. “Internet related factors” influenced more on the Airtel consumers and “Promotion related factors” were the least influencing factor of those consumers in selection of mobile telecom services. On the other hand, “Promotion related factors” were

the more influencing factors of VI consumers and “Brand related factors” were the least influencing factors on the consumers in selection of mobile telecom services in the study area.

Association Between Influencing Factors and Socio-economic and Services Related Variables

The influencing level of various factors may vary depending on socio-economic factors and services related variables, in order to know whether there are any significant association between the level of influencing factors and the above variables the following null hypothesis was framed and they were tested using ‘t’ test and One-way ANOVA.

Ho: There is no significant association between level of influence of factors and socio-economic variables and mobile telecom services related variables.

Table 8: ‘t’ Test Between Influencing Factors and Demographical Variables

| SN | Influencing Factor | Gender | Marital Status | Residential Place |
|----|---------------------------|-------------------|------------------|-------------------|
| 1 | Brand Related Factors | 2.528 (0.012) | 1.406 (0.160) | 2.587 (0.010) |
| 2 | Financial Factors | 5.648 (0.000) | 2.254 (0.025) | 2.688 (0.006) |
| 3 | Services Related Factors | 2.984 (0.002) | 1.427 (0.154) | 5.364 (0.000) |
| 4 | Internet Related Factors | 1.381 (0.168) | 1.736 (0.083) | 1.621 (0.106) |
| 5 | Promotion Related Factors | -1.316 (0.189) | 5.643 (0.000) | 2.498 (0.018) |

Value: ‘t’ value; value in parentheses is p-value

Table 8 shows that significant association was found in level of influence of “Brand related factors”, “Financial factors” and “Services related factors” with the social factor of gender, since their calculated ‘t’ values (2.528, 5.648 and 2.984 respectively) as shown by the results of p-values. Significant association was identified in in level of influence of “Financial factors” and “Promotion related factors” with the social factor of marital status, since their calculated ‘t’ values (2.254 and 5.643 respectively) as shown by the results of p-values. The social variable ‘residential place’ of the respondents made significant association with the level of influence of “Brand related factors”, “Financial factors”, “Services related factors” and “Promotion related factors”, since their calculated ‘t’ values (2.587, 2.688, 5.664 and 2.498 respectively) as shown by the results of p-values.

Table 9: ANOVA Between Influencing Factors and Socio-economic and Services Related Variables

| SN | Influencing Factor | Age | Education | Occupation | Family Size | Income |
|----|---------------------------|------------------|------------------|------------------|------------------|------------------|
| 1 | Brand Related Factors | 2.592 (0.036) | 2.929 (0.021) | 2.581 (0.026) | 1.065 (0.345) | 3.565 (0.014) |
| 2 | Financial Factors | 2.733 (0.028) | 2.257 (0.062) | 6.596 (0.000) | 3.408 (0.034) | 3.814 (0.010) |
| 3 | Services Related Factors | 3.543 (0.000) | 2.389 (0.050) | 1.880 (0.096) | 1.081 (0.340) | 1.598 (0.189) |
| 4 | Internet Related Factors | 7.642 (0.000) | 1.636 (0.164) | 1.174 (0.321) | 1.658 (0.096) | 1.956 (0.120) |
| 5 | Promotion Related Factors | 2.313 (0.047) | 5.369 (0.000) | 1.375 (0.232) | 1.042 (0.353) | 6.334 (0.000) |

Source: Primary Data; F-Value (P-Value)

Table 9 shows that significant association was found in the level of influence of all the five factors with age of the respondents, since their calculated ‘F’ values (2.592, 2.733, 3.543, 7.642 and 2.313 respectively) under ANOVA as shown by the results of p-values. Significant association was identified in “Brand related factors”, “Services related factors” and “Promotion related factors” with the variable education of the respondents, since their calculated ‘F’ values (2.929, 2.389 and 5.369 respectively). The variable ‘occupation’ of the respondents made significant association with the “Brand related factors” and “Financial factors”, since their calculated ‘F’ values (2.581 and 6.596 respectively) as shown by the results of p-values. Significant association was identified in “Financial factors” with the variable family size of the respondents, since their calculated ‘F’ value (3.408). The variable ‘income’ of the respondents made significant association with the “Brand related factors”, “Financial factors” and “Promotion related factors”, since their calculated ‘F’ values (3.565, 3.814 and 6.334 respectively) as shown by the results of p-values.

Table 10: ‘t’ Test / ANOVA between Influencing Factors and Telecom Service-Related Factors

| SN | Influencing Factor | ‘t’ Test | | ANOVA | | | |
|----|---------------------------|--------------------|---------------------|------------------|------------------|------------------|------------------|
| | | Type of Connection | Portability Availed | Monthly Recharge | Service Provider | No. of SIM Using | Experience |
| 1 | Brand Related Factors | 2.087 (0.037) | 2.340 (0.020) | 2.670 (0.047) | 3.268 (0.021) | 3.161 (0.029) | 3.271 (0.021) |
| 2 | Financial Factors | 2.009 (0.045) | 1.785 (0.075) | 2.964 (0.008) | 2.129 (0.096) | 2.638 (0.072) | 4.311 (0.003) |
| 3 | Services Related Factors | 1.749 (0.081) | 2.403 (0.017) | 5.751 (0.000) | 3.334 (0.19) | 6.437 (0.000) | 2.996 (0.041) |
| 4 | Internet Related Factors | 1.404 (0.161) | 2.511 (0.014) | 2.773 (0.041) | 1.720 (0.162) | 2.953 (0.042) | 3.054 (0.031) |
| 5 | Promotion Related Factors | 1.103 (0.271) | 1.502 (0.134) | 1.906 (0.128) | 2.986 (0.039) | 7.220 (0.000) | 6.135 (0.000) |

Value: ‘t’ / F-value; (p-value)

Table 10 reveals that significant association was identified in the level of influence of factors related to ‘Brand’ and ‘Finance’ with the variable “Type of connection” of the respondents, since their calculated ‘t’ values (2.087 and 2.009 respectively) under ‘t’ test as shown by the results of p-values. Significant association was identified in the factors related to ‘Brand’, ‘Services’ and ‘Internet’ with the variable whether the respondents availed mobile number portability, since their calculated ‘t’ values (2.340, 2.403 and 2.511 respectively). The variable ‘Monthly amount of recharge / bill’ by the respondents made significant association with the factors related to ‘Brand’, ‘Financial’, ‘Services’ and ‘Internet’ since their calculated ‘F’ values under ANOVA (2.670, 2.964, 5.751 and 2.773 respectively) as shown by the results of p-values. Significant association was identified in the factors related to ‘Brand’, ‘Services’ and ‘Promotion’ with the variable services provider of their mobile telecom services, since their calculated ‘F’ values (3.268, 3.334 and 2.986 respectively). The variable ‘No. of SIM cards held by the respondents’ made significant association with the influence level of the factors related to ‘Brand’, ‘Services’, ‘Internet’ and ‘Promotion’, since their calculated ‘F’ values (3.161, 6.437, 2.953 and 7.220 respectively) as shown by the results of p-values. The variable ‘Experience’ of the respondents in holding a particular brand of SIM card made significant association with the influence level of all the five factors, since their calculated ‘F’ values (3.271, 4.311, 2.996, 3.054 and 6.135 respectively) as shown by the results of p-values.

FINDINGS OF THE STUDY

The major findings derived from the analysis are as follows:

1. Socio-Economic Profile

- Majority of respondents are **male (68.1%)** and **married (72.1%)**.
- Most respondents belong to **urban areas (76.1%)**.
- A significant portion of respondents are **above 40 years (50.5%)**.
- Many respondents are **graduates (33.4%)** and employed in **government/private sectors (42.6%)**.
- More than half of the respondents earn **above ₹50,000 per month (53.2%)**.

2. Telecom Usage Pattern

- A large majority (80.5%) use **prepaid connections**.
- Nearly half (49.6%) use **two SIM cards**, indicating multi-network usage.
- **Jio** is the leading service provider, followed by **Airtel**.
- Most respondents spend **₹251–₹500 per month** on mobile services.
- A significant number (70%) have used **mobile number portability**, indicating switching behavior.
- Majority have **more than 5 years of experience** with telecom services.

3. Factor Analysis Findings

- 19 variables were reduced into **5 major factors**:
 1. Brand-related factors
 2. Financial factors
 3. Service-related factors
 4. Internet-related factors
 5. Promotion-related factors
- These factors together explain **51.716% of total variance**, showing good explanatory power.

4. Ranking of Influencing Factors

- **Financial factors** are the most influential (Rank I).
- Followed by:
 - Internet-related factors (Rank II)
 - Promotion-related factors (Rank III)
 - Service-related factors (Rank IV)
- **Brand-related factors** are the least influential (Rank V).

5. Brand-wise Influence

- **BSNL & Jio users:** Highly influenced by **financial factors**.
- **Airtel users:** Highly influenced by **internet-related factors**.
- **VI users:** Highly influenced by **promotion-related factors**.
- Brand image plays a relatively **less significant role** across all providers.

6. Association with Socio-Economic Variables

- Significant differences exist in influencing factors based on:
 - **Gender, marital status, and residential area**
 - **Age, education, occupation, and income**
- Financial, brand, and promotion factors are strongly linked with these variables.

7. Association with Telecom Variables

- Influencing factors vary significantly with:
 - Type of connection (prepaid/postpaid)
 - Monthly recharge amount
 - Number of SIM cards used
 - Service provider
 - Experience and portability behavior

SUGGESTIONS

Based on the findings, the following suggestions are offered:

1. Focus on Affordable Pricing

- Since **financial factors are the most influential**, telecom providers should:
 - Offer **competitive pricing plans**
 - Provide **flexible recharge options**
 - Introduce **budget-friendly packages** for different income groups

2. Improve Internet Quality

- Providers like Airtel have an advantage due to internet performance.
- Other providers should:
 - Enhance **network coverage and data speed**
 - Expand **4G/5G services in rural areas**

3. Strengthen Promotional Strategies

- VI attracts customers through promotions; others should:
 - Use **targeted advertising**
 - Provide **cashbacks, discounts, and bundled offers**
 - Leverage **social influence (reviews & referrals)**

4. Enhance Service Quality

- Improve:
 - **Customer care services**
 - **Uninterrupted connectivity**
 - **Value-added services**
- This will reduce customer switching behavior.

5. Target Specific Customer Segments

- Since socio-economic variables influence decisions:
 - Design **customized plans** for different age, income, and occupation groups
 - Focus on **urban vs rural needs separately**

6. Reduce Customer Switching (Portability)

- High portability (70%) indicates dissatisfaction.
- Providers should:
 - Improve **customer retention strategies**
 - Offer **loyalty benefits and long-term plans**

CONCLUSION

The study clearly shows that mobile telecom services play a vital role in the daily lives of consumers in Dharmapuri district. With increasing competition among providers like Reliance Jio, Bharti Airtel, BSNL, and Vodafone Idea, understanding consumer preferences has become essential.

The study concludes that **financial factors are the most decisive element** in selecting mobile telecom services, followed by internet and promotional factors. While brand image has comparatively less influence, service quality and pricing remain critical for customer retention.

Further, the study highlights that consumer choices vary significantly based on socio-economic characteristics and usage patterns. The high level of mobile number portability indicates that customers are willing to switch providers in search of better value and service.

Overall, telecom companies must adopt **customer-centric strategies**, focusing on affordability, quality of service, and innovative promotions to sustain in the competitive market. The findings of this study provide valuable insights for both service providers and researchers in understanding consumer behavior in the telecom sector.

REFERENCES

- [1] Singh, M., & Bansai, S. (2019). Factors influencing brand switching behaviour among Indian youth: An empirical study of mobile service providers. *Journal of Management Research and Analysis*, 6(2), 98–100. <https://doi.org/10.18231/j.jmra.2019.018>
- [2] Singh, A. (2019). *Factors influencing prepaid consumer behavior in mobile telecom industry of Bihar & Jharkhand* (Doctoral dissertation, ICFAI University, Jharkhand).
- [3] Rahmoun, M. (2020). Factors affecting customer behavior in telecommunication industry. *International Journal of Research in Business and Social Science*, 9(2), 133–138.
- [4] Govindharaj, Y., Govindasamy, E., & Arumugam, G. (2021). Client consumption and commitment on JIO mobile network in Vellore district: An economic analysis. *Journal of Human Resource and Sustainability Studies*, 9, 122–133. <https://doi.org/10.4236/jhrss.2021.91009>
- [5] Mishra, S. J., et al. (2021). Consumer perception towards various mobile service providers. *International Journal of Creative Research Thoughts*, 9(3), 3126–3137.
- [6] Pant, A. (2022). Determinants of customer loyalty: A study on the factors affecting Reliance Jio. *IJFANS International Journal of Food and Nutritional Sciences*, 11(10), 27–33.
- [7] Srividya, N., & Akila, B. (2023). Factors influencing consumer brand switching behavior in telecommunication industry: An empirical study. *International Journal for Multidisciplinary Research*, 5(1), 1–7.
- [8] Yadav, A., Patel, J., & Vidani, J. (2024). To study consumer behaviour towards network connectivity of Airtel and Jio in Ahmedabad city. *International Journal of Sustainable Applied Sciences*, 2(6), 1115–1132.
- [9] Aruni, G. C., & Muralikumar, C. (2024). Factors influencing brand switching behaviour of telecom customers. *South Eastern European Journal of Public Health*, 25(S2), 3302–3311.
- [10] Ezugwu, M. N. (2025). Evaluation of factors affecting choice of service providers among mobile phone users in South East Nigeria. *Ianna Journal of Interdisciplinary Studies*, 7(1), 444–451. <https://doi.org/10.5281/zenodo.14335754>

Copyright & License:



© Authors retain the copyright of this article. This work is published under the Creative Commons Attribution 4.0 International License (CC BY 4.0), permitting unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.