

## **CUSTOMER SATISFACTION OF LANDLINE SERVICES OF BSNL, MADURAI REGION**

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### **ABSTRACT**

*Globally, telecommunication is acknowledged as a crucial element in the growth of social, economic, commercial, and cultural activities. Through the interconnected growth of several other sectors, the development of communications infrastructure is projected to play a bigger role in serving the diversified requirements of people and enhancing their quality of life. Every company organization's primary objective is customer happiness. Every action in this competitive business environment begins and finishes with the client. In the current environment, telephony is essential to all corporate operations. Even among the service providers in this business, there is fierce rivalry. Therefore, it is crucial for the service provider to comprehend how various demographic factors affect consumer satisfaction in order to win over their hearts. The BSNL may benefit from this study in terms of improvement. This paper aims to investigate customer satisfaction levels with regard to BSNL's landline services as well as the impact of respondents' demographic characteristics. It also seeks to determine the level of usage of various BSNL programs, as well as to assess the company's performance in terms of operations and customer satisfaction, and to make suggestions for improvement. Data have been gathered from the directory sample that was randomly selected. The sample size is 200, and time, money, and efficacy are among the things that must be taken into account. The research was carried out in July 2023. The study's findings are consistent with those of prior investigations. Additionally, this study's findings and analysis are exclusively applicable to the Madurai region. Depending on the location, it could change.*

**KEYWORDS:** BSNL, Customer Satisfaction, Landline, Telecommunication Industry.

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### **Introduction Industry Profile**

Globally, telecommunication is acknowledged as a crucial element in the growth of social, economic, commercial, and cultural activities. Through the interconnected growth of several other sectors, the development of communications infrastructure is projected to play a bigger role in serving the diversified requirements of people and enhancing their quality of life. In ITU lingo, the term "Telecommunication" refers to a very broad range of services, in addition to public telecommunications services, such as sound and television broadcasting, space communications, aeronautical and maritime mobile communications, radio-location and radio-navigation systems, radio astronomy, meteorological aids and services, radio amateurs, etc. There are sizable telecommunications networks owned by

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railways, paramilitary and military organisations, law enforcement agencies (police, etc.), public utility companies like electricity grids, transportation agencies, municipal services, national and international telecommunications service providers, both public and private, the civil aviation department and airlines, shipping and port authorities, sound and TV broadcasting organisations, the meteorological department, and others.

### **Need for the Study**

Every company organization's primary objective is customer happiness. Every action in this competitive business environment begins and finishes with the client. In the current environment, telephony is essential to all corporate operations. Even among the service providers in this business, there is fierce rivalry. Despite having a strong network and infrastructure, several service providers struggled to gain a foothold in the market because of poor client satisfaction and service. Their promotional efforts haven't been successful as a result.

Due to the little differences in the services provided, there is a greater chance that a customer would change service providers if they are not satisfied with the current one. Therefore, it is crucial for the service provider to comprehend how various demographic factors affect consumer satisfaction in order to win over their hearts. The BSNL may benefit from this study in terms of improvement.

### **Literature Review**

The spending needs are increased by the lifestyle. Considerable quick changes developed the needs of mobile telecom network usage. The evolution of the mobile network service provider and its existence depend on consumers' purchasing behaviour in the competitive market. Before signing up for the mobile network service, consumers must consider a number of factors in order to find the most appropriate one among their alternatives at an affordable price (Geethanjali, R., & Durai, 2013). Using a Job Descriptive Index, JDI scale, an analysis of the HR practices associated with job satisfaction by BSNL staff will be conducted. Work, supervision, remuneration, promotion and coworking were also part of the JDI scale. It is possible to define job satisfaction as a pleasant positive emotional state arising from an assessment of one's employment or occupational experience. In BSNL, Madurai SSA, a sample of 100 employees (Gopinath, R., & Shibu, N. S., 2014).

Nevertheless, a monopoly was in place because there were only two players. Consequently, telecommunications services have been regarded as luxury goods by companies and are often targeted at an elite segment of society during this period. In addition, this service has mostly been limited to metros. The slowdown in the growth of mobile phone services in India can also be attributed to other factors, including government regulations (Sakthi Prasad, R., 2015). The growth of whooping was attributable not only to public policies and people's needs, but also to very aggressive marketing practices adopted by the companies. For many years, the telephone service that had been regarded as a luxury was accessible to all sectors of society (Vijay, P., & Krishnaveni, V., 2016).

The other study concluded that customer satisfaction has been identified as satisfactory, and the impact of service quality on consumer satisfaction is significant. In order to improve the quality-of-service management and marketing information, it is apparent from this study that an efficient monitoring system should be in place (Siddiqui, M. A., 2017). In the field of telecommunications in India, land lines were dominant in past century. Mobile phone users were very small, and most of them came from the super wealthy or upper classes. This brings private operators into the telecommunications sector and sets off a fierce competition, resulting in an ideal atmosphere for spreading telephony services among all classes and segments (Sarkar, R., 2018).

The most relevant factor is customer satisfaction, as it includes the retention of customers and generates brand loyalty which in turn creates a base to attract potential clients. Another study suggests that BSNL must focus on frequent line faults, supplementary noise or disturbances, poor responses to complaints and temporary maintenance solutions in order to take appropriate corrective action (Deepa, V., 2019). By ignoring consumers' preferences, a marketing programme is impossible. The marketing agency may not reach its ultimate objectives if it does not take into account consumer preferences. In order to help producers produce products in such a trendy manner, as well as giving satisfaction to consumers, more and more information about them is becoming available (Muthaliff, S. S., Karpagam, K., & Aarthi, G., 2020).

Further study showed that for customers in the northern and southern Goan regions all other demographic parameters are of insignificant importance, with regard to income. Indian entrepreneurs can

learn from the entrepreneurial ways of Indonesia, where they want to achieve overall development by offering their products at an affordable price and in a manner that will be consistent with customer expectations (Gaonkar, D. N., Pillai, S. K. B., Castanha, J., Chang, L. C., & Chen, R. F., 2021). It has been found that significant influence on the acquisition and retention of Indian telecommunication companies is given to value added services, reliability of service factor, commitment in support factor, call rate and price elements, network quality factors as well as telecoms policy influenced by Regulatory Factors. Universities' researchers, managers and telecoms professionals are in great need of a study (Banik, S., & Sinha, P., 2022).

### **Objectives of the Study**

- To research how satisfied customers are with the BSNL Landline service.
- To research the effect of respondents' demographic factors.
- To determine the amount of utilisation of the various BSNL-offered programmes.
- To identify the operational performance of BSNL.
- To identify the customer opinion about BSNL.
- To suggest wants and means for the improvement.

### **Research Methodology**

The research difficulties can be methodically solved using methodology. It provides a logical explanation of the numerous approaches often used by researchers to explore the research topic. The research design is the fundamental framework or strategy for the study that directs data gathering and data processing. The method employed in this market study is Design for descriptive research. It comprises many types of surveys and fact-finding investigations. The primary goal of descriptive research is to describe the current condition of circumstances. To determine the customer satisfaction level, data are gathered from individuals and examined using various statistical methods. Additionally, cross table analysis was used to analyse the data and extract the information needed to fulfil the study's goals.

Due to time constraints, the researcher was unable to get information from every person in Madurai due to the city's enormous population. As a result, a sample of the population is used for analysis and the generation of conclusions that are applicable to the entire population. Data is gathered using the simple random sampling method. Data have been gathered from the directory sample that was randomly selected. The sample size is 200, and time, money, and efficacy are among the things that must be taken into account. The research was carried out in July 2023. The study's respondents are people who live in Madurai. The sample unit is regarded as each individual. One of the most crucial components of the research technique is thought to be data collecting. To fulfil the needs of the goal, this study uses both primary and secondary data. Primary data for this study was gathered utilising a structured questionnaire. Both open-ended and closed-ended questions are included in the structured questionnaire. The primary data was gathered through a questionnaire and in-person interviews. The questionnaire is made up of a number of questions that are printed on a form in a specific order. The main information was gathered through a questionnaire from residents of Madurai City. The secondary data come from a variety of websites related to telecommunications, magazines, books, pamphlets, and periodic surveys, among other sources. The following methods and tests were mostly utilised to analyse the data: percentage analysis, ranking method, chi-square test, cross tabulation, and percentage method. Appropriate charts were also used to explain the results.

### **Limitations of the Study**

- Because the study only included the town of Madurai, the findings might not apply to other regions.
- The replies from the client are what determine the validity and reliability of the data.
- The use of structured questionnaires as the foundation for data collection may have the drawback of making it difficult to delve deeply into respondents' thinking.
- The researcher has a finite amount of time at their disposal.
- The sample is significantly smaller than the population as a whole, hence it does not accurately reflect the entire population.

### Analysis and Interpretation of Data

This information was gathered from BSNL Land Line Customers using a structured questionnaire. The questionnaire is made up of a number of questions that are printed on a form in a specific order.

**Table 1: Age of the Respondents**

Sl. No.	Age	Number of Respondents	Percentage
1.	Below 27 years	59	29.5
2.	27 to 35 years	70	35.0
3.	Above 35 years	71	35.5
	<b>Total</b>	<b>200</b>	<b>100.0</b>

According to the above data, the majority of respondents (35.0%) are above the age of 35, followed by 35.0% of respondents who are between the ages of 27 and 35, and 29.5% of respondents who are under the age of 27.

**Table 2: Gender of the Respondents**

Sl. No.	Gender	Number of Respondents	Percentage
1.	Male	143	71.5
2.	Female	57	28.5
	<b>Total</b>	<b>200</b>	<b>100.0</b>

The aforementioned table shows that 28.5% of the respondents are female and 71.5% of the respondents are male.

**Table 3: Education of the Respondents**

Sl. No.	Educational Qualification	Number of Respondents	Percentage
1.	Primary Education	6	3.0
2.	SSLC / HSC	77	38.5
3.	Collegiate Education	117	58.5
	<b>Total</b>	<b>200</b>	<b>100.0</b>

The aforementioned data shows that the majority of respondents (58.5%) have completed their tertiary education, 38.5% have completed their SSLC or HSC, and 3.0% have just completed their primary school.

**Table 4: Occupation of the Respondents**

Sl. No.	Occupation	Number of Respondents	Percentage
1.	Government Employee	7	3.5
2.	Private Employee	117	58.5
3.	Professionals	18	9.0
4.	Self Employed	58	29.0
	<b>Total</b>	<b>200</b>	<b>100.0</b>

According to the aforementioned table, 3.5% of respondents work for the government, 58.5% of respondents are employed by private companies, 9.0% of respondents are professionals, and 29.0% of respondents are self-employed.

**Table 5: Monthly Income of the Respondents**

Sl. No.	Monthly Income	Number of Respondents	Percentage
1.	Less than Rs.5000	19	9.5
2.	Rs.5001-Rs.10000	73	36.5
3.	Rs.10001 Rs.15000	81	40.5
4.	More than Rs.15000	27	13.5
	<b>Total</b>	<b>200</b>	<b>100.0</b>

From the table above, it can be deduced that 9.5% of respondents earn less than Rs.5000 per month, 36.5% earn between Rs.5001 and Rs.10000 per month, 40.5% earn between Rs.10001 and Rs.15000 per month, and 13.5% earn over Rs.15000 per month.

**Table 6: Schemes Preferred by the Respondents**

Sl. No.	Schemes	Number of Respondents	Percentage
1.	General	114	57.0
2.	Special	67	33.5
3.	Super	19	9.5
	<b>Total</b>	<b>200</b>	<b>100.0</b>

According to the above table, 57.0% of respondents are using the ordinary scheme, 33.5% are using the special scheme, and 9.5% are using the super plan.

**Table 7: Period of using BSNL Land Line**

Sl. No.	Period	Number of Respondents	Percentage
1.	Less than 1 year	4	2.0
2.	1 to 3 years	49	24.5
3.	3 to 5 years	87	43.5
4.	More than 5 years	60	30.0
	<b>Total</b>	<b>200</b>	<b>100.0</b>

According to the above table, 43.5% of respondents have used the BSNL landline for 3-5 years, 30.0% have used the BSNL landline for more than 5 years, 24.5% have used the BSNL landline for 1-3 years, and 2.0% have used the BSNL landline for less than a year.

**Table 8: Purpose of Usage**

Sl. No.	Purpose	Number of Respondents	Percentage
1.	Residential	81	40.5
2.	Official	119	59.5
	<b>Total</b>	<b>200</b>	<b>100.0</b>

According to the above statistics, 40.5% of respondents are using it for domestic purposes, while 59.5% are using it for official purposes.

**Table 9: Monthly Bill Amount**

Sl. No.	Amount	Number of Respondents	Percentage
1.	Less than Rs.500	10	5.0
2.	Rs.501 to Rs.1000	41	20.5
3.	Rs.1001 to Rs.1500	78	39.0
4.	More than Rs.1500	71	35.5
	<b>Total</b>	<b>200</b>	<b>100.0</b>

According to the above analysis, 5.0% of respondents pay their bill amount less than Rs.500 per month, 20.5% pay their bill amount between Rs.501- Rs.1000 per month, 39.0% pay their bill amount between Rs.1001- Rs.1500, and 35.5% pay their bill amount more than Rs.1500.

**Table 10: Satisfaction Level towards Getting New Phone Connection**

Sl. No.	Opinion	Number of Respondents	Percentage
1.	Highly satisfied	73	36.5
2.	Satisfied	100	50.0
3.	Neutral	27	13.5
	<b>Total</b>	<b>200</b>	<b>100.0</b>

According to the above table, 50% of respondents are satisfied with getting a new phone connection after submitting their application, 36.5% are extremely satisfied with getting a new phone connection, and 13.5% are neutral about the service of getting a new phone connection provided by BSNL.

**Table 11: Satisfaction Level towards Call Connectivity (Local / Std / Isd)**

Sl. No.	Opinion	Number of Respondents	Percentage
1.	Highly satisfied	49	24.5
2.	Satisfied	133	66.5
3.	Neutral	18	9.0
	<b>Total</b>	<b>200</b>	<b>100.0</b>

According to the above analysis, 24.5% of respondents are extremely satisfied with call connectivity (Local, STD / ISD), 66.5% are satisfied with call connectivity (Local, STD / ISD), and 9.0% are neutral about call connectivity (Local, STD / ISD).

**Table 12: Satisfaction Level with Respect to the Basic Services Provided by BSNL**

Sl. No.	Particular	Number of Respondents	Percentage
1.	Getting a new phone connection after submitting our application	846	II
2.	Call connectivity (Local, STD / ISD)	831	III
3.	Voice clarity while communicating	897	I
4.	Features of the phone	792	IV
5.	Rent / Free various tariff package	766	V

According to the above table, the element 'Voice clarity when conversing' ranks top, with the factors 'Getting a new phone connection after completing the application' and 'call connectivity (Local, STD / ISD)' ranking second and third, respectively. The factors 'Features of the phone' and 'Rent / Free varied tariff bundle' are ranked fourth and last, respectively. According to the results of the aforementioned research, the majority of respondents believe that BSNL gives the finest voice clarity when communicating.

**Table 13: Satisfaction Level with Respect to the Billing Services Provided by BSNL**

Sl. No.	Billing Services Factors	Number of Respondents	Percentage
1.	Local call tariff rates	769	V
2.	STD / ISD call tariff rates	747	VI
3.	Mode of payment	803	II
4.	Issuing duplicate bills	771	IV
5.	Issuing itemized bills	797	III
6.	Delivery of bills	841	I

According to the above table, the factor 'Delivery of bills' is ranked top, with the factors 'Mode of Payment' and 'Issuing itemised bills' ranking second and third, respectively. The factors 'Issuing duplicate bills' and 'Local call tariff rates' are ranked fourth and fifth, respectively. The factor 'STD / ISD call tariff prices' is ranked last. According to the results of the aforementioned study, the majority of respondents are happy with 'Bill Delivery.'

**Table 14: Satisfaction Level with Respect to the Customers Service Provided by BSNL**

Sl. No.	Customer Service Factors	Weightage Score	Rank
1.	Attitude of staff and response to their queries	902	I
2.	Providing information about the new schemes / services	778	III
3.	Transfer of phone connection	748	IV
4.	Call waiting facility	707	VII
5.	Call divert option	654	IX
6.	Caller ID facility	632	X
7.	Dynamic locking facility	691	VIII
8.	Bill collection centers	837	II
9.	Fault complaint redressal	759	IV
10.	Other general complaint redressal	752	V

According to the above table, the element 'Attitude of personnel and reaction to their concerns' provides the finest service and was placed top by respondents with a score of 902 points. The factors 'bill collecting centres' and 'offering information about new schemes/services' rank second and third, with scores of 837 and 778 points, respectively. The factors 'Fault complaint redressal' and 'other general complaint redressal' rank fourth and fifth, respectively, with 759 and 752 points. The factors 'Transfer of phone connection' and 'Call waiting facility' are ranked sixth and seventh, respectively, with scores of 748 and 707 points. The factors 'Dynamic locking facility' and 'Call divert option' are ranked eighth and ninth, respectively, with scores of 691 and 654 points. The factor 'Caller ID facility' ranks last with a score of 632 points. According to the results of the aforementioned study, the majority of respondents are happy with the 'Attitude of the personnel and answer to the inquiries.

**Table 15: Age and Overall Satisfaction Level Towards BSNL Landline Service (Two-Way Table)**

Sl. No.	Age	Level of Satisfaction of BSNL, Landline Service				Total
		Highly Satisfied	Satisfied	Neutral	Dissatisfied	
1.	Below 27 years	1	47	10	1	59
2.	27 to 35 years	9	51	8	2	70
3.	Above 35 years	4	50	17	0	71
	<b>Total</b>	<b>14</b>	<b>148</b>	<b>35</b>	<b>3</b>	<b>200</b>

**The null hypothesis (H<sub>0</sub>)** states that there is no significant link between age and overall level of satisfaction with the BSNL landline service.

**Alternative Hypothesis:** There is a close association between age and general level of satisfaction with BSNL landline service.

Calculated X <sup>2</sup> value	-	11.491
Degree of freedom	-	6
Table value	-	12.592

Based on the results of the above analysis, we conclude that the estimated value of X<sup>2</sup> is smaller than the table value, and so the null hypothesis is accepted. As a result, there is no significant association between age and overall satisfaction with BSNL landline service.

**Table 16: Gender and Overall Satisfaction Level towards BSNL Landline Service (Two-Way Table)**

Sl. No.	Gender	Level of Satisfaction of BSNL, Landline Service				Total
		Highly Satisfied	Satisfied	Neutral	Dissatisfied	
1.	Male	14	102	25	2	143
2.	Female	0	46	10	1	57
	<b>Total</b>	<b>14</b>	<b>148</b>	<b>35</b>	<b>3</b>	<b>200</b>

**The null hypothesis (H<sub>0</sub>)** states that there is no significant association between gender and overall satisfaction with BSNL landline service.

**Alternative Hypothesis (H<sub>1</sub>):** There is a strong link between gender and overall satisfaction with BSNL landline service.

Calculated X <sup>2</sup> value	-	6.099
Degree of freedom	-	3
Table value	-	7.815

Based on the results of the above analysis, we conclude that the estimated value of X<sup>2</sup> is smaller than the table value, and so the null hypothesis is accepted. As a result, there is no significant association between gender and overall satisfaction with BSNL landline service.

**Table 17: Educational Status and Overall Satisfaction Level towards BSNL Landline Service (Two-Way Table)**

Sl. No.	Educational Status	Level of Satisfaction of BSNL, Landline Service				Total
		Highly Satisfied	Satisfied	Neutral	Dissatisfied	
1.	Primary Education	1	3	2	0	6
2.	SSLC / HSC	5	60	12	0	77
3.	Collegiate Education	8	85	21	3	117
	<b>Total</b>	<b>14</b>	<b>148</b>	<b>35</b>	<b>3</b>	<b>200</b>

There is no significant association between educational status and overall satisfaction with BSNL landline service, according to the null hypothesis (H<sub>0</sub>).

**Alternative Hypothesis (H<sub>1</sub>):** There is a close association between educational status and overall level of satisfaction with BSNL landline service.

Calculated X <sup>2</sup> value	-	4.652
Degree of freedom	-	6
Table value	-	12.592

Based on the results of the above analysis, we conclude that the estimated value of X<sup>2</sup> is smaller than the table value, and so the null hypothesis is accepted. As a result, there is no significant association between educational status and overall satisfaction with BSNL landline service.

**Table 18: Occupation Status and Overall Satisfaction Level Towards BSNL Landline Service (Two-Way Table)**

Sl. No.	Occupation Status	Level of Satisfaction of BSNL, Landline Service				Total
		Highly Satisfied	Satisfied	Neutral	Dissatisfied	
1.	Government Employee	0	5	0	2	7
2.	Private Employee	7	87	23	0	117
3.	Professionals	2	12	4	0	18
4.	Self employed	5	44	8	1	18
	<b>Total</b>	<b>14</b>	<b>148</b>	<b>35</b>	<b>3</b>	<b>200</b>

**The null hypothesis (H<sub>0</sub>)** states that there is no significant association between occupational status and overall satisfaction with BSNL landline service.

**Alternative Hypothesis (H<sub>1</sub>):** There is a close association between occupational status and overall level of satisfaction with the BSNL landline service.

Calculated X <sup>2</sup> value	-	39.947
Degree of freedom	-	9
Table value	-	16.919

According to the results of the preceding analysis, the computed value of X<sup>2</sup> is bigger than the table value, and hence the null hypothesis is rejected. As a result, there is a strong correlation between employment position and overall satisfaction with BSNL landline service.

**Table 19: Monthly Income and Overall Satisfaction Level Towards BSNL Landline Service (Two-Way Table)**

Sl. No.	Monthly Income	Level of Satisfaction of BSNL, Landline Service				Total
		Highly Satisfied	Satisfied	Neutral	Dissatisfied	
1.	Less than Rs.5000	1	14	3	1	19
2.	Rs.5001 – 10000	2	49	20	2	73
3.	Rs.10001-15000	4	66	1	0	81
4.	Above Rs.15000	7	10	1	0	27
	<b>Total</b>	<b>14</b>	<b>148</b>	<b>35</b>	<b>3</b>	<b>200</b>

The null hypothesis (H<sub>0</sub>) states that there is no significant association between monthly income and overall satisfaction with BSNL landline service.

**Alternative Hypothesis (H1):** There is a strong correlation between monthly income and overall satisfaction with BSNL landline service.

Calculated $\chi^2$ value	-	29.337
Degree of freedom	-	9
Table value	-	16.919

According to the results of the preceding analysis, the computed value of  $\chi^2$  is bigger than the table value, and hence the null hypothesis is rejected. As a result, there is a strong correlation between monthly income level and overall level of satisfaction with BSNL landline service.

**Table 20: Name of the Scheme and Overall Satisfaction Level toward BSNL Landline Service (Two-Way Table)**

Sl. No.	Name of the Scheme	Level of Satisfaction of BSNL, Landline Service				Total
		Highly Satisfied	Satisfied	Neutral	Dissatisfied	
1.	General	4	80	28	2	114
2.	Special	8	52	7	0	67
3.	Super	2	16	0	1	19
	<b>Total</b>	<b>14</b>	<b>148</b>	<b>35</b>	<b>3</b>	<b>200</b>

**The null hypothesis (H<sub>0</sub>)** states that there is no significant link between adopting the kind of plan and overall satisfaction with BSNL landline service.

**Alternative Hypothesis (H1):** There is a strong association between the type of plan used and overall satisfaction with BSNL landline service.

Calculated value	-	16.595
Degree of freedom	-	6
Table value	-	12.592

According to the results of the preceding analysis, the computed value of  $\chi^2$  is bigger than the table value, and hence the null hypothesis is rejected. As a result, there is a strong correlation between adopting the kind of programme and overall satisfaction with BSNL landline service.

**Table 21: Period of using the Landline and Overall Satisfaction Level towards BSNL Landline Service (Two-Way Table)**

Sl. No.	Period of Using	Level of Satisfaction of BSNL, Landline Service				Total
		Highly Satisfied	Satisfied	Neutral	Dissatisfied	
1.	Less than 1 year	0	3	0	1	4
2.	1 to 3 years	3	30	10	0	49
3.	3 to 5 years	5	70	10	2	87
4.	More than 5 years	6	45	9	0	60
	<b>Total</b>	<b>14</b>	<b>148</b>	<b>35</b>	<b>3</b>	<b>200</b>

**The null hypothesis (H<sub>0</sub>)** states that there is no significant association between the length of use and overall level of satisfaction with the BSNL landline service.

**Alternative Hypothesis (H1):** There is a tight association between the length of use and overall satisfaction with the BSNL landline service.

Calculated $\chi^2$ value	-	28.749
Degree of freedom	-	9
Table value	-	16.919

According to the results of the preceding analysis, the computed value of  $\chi^2$  is bigger than the table value, and hence the null hypothesis is rejected. As a result, there is a tight substantial association between the length of use and overall level of satisfaction with the BSNL landline service.

**Table 22: Purpose of using the Landline and Satisfaction Level towards BSNL Landline Service (Two-Way Table)**

Sl. No.	Purpose of Using	Level of Satisfaction of BSNL, Landline Service				Total
		Highly Satisfied	Satisfied	Neutral	Dissatisfied	
1.	Residential	3	57	18	3	81
2.	Official	11	91	17	0	119
	<b>Total</b>	<b>14</b>	<b>148</b>	<b>35</b>	<b>3</b>	<b>200</b>

**The null hypothesis (H0)** states that there is no significant link between the reasons for utilising BSNL landline service and overall degree of satisfaction with the service.

**Alternative Hypothesis (H1):** There is a close association between the purpose of utilising the service and overall satisfaction with the BSNL landline service.

Calculated  $X^2$  value - 8.498

Degree of freedom - 3

Table value - 7.815

According to the results of the preceding analysis, the computed value of  $X^2$  is bigger than the table value, and hence the null hypothesis is rejected. As a result, there is a tight significant association between the purpose of utilising SNL landline service and overall degree of satisfaction with SNL landline service.

### Suggestions

- The majority of respondents are happy with the services provided by BSNL landline; actions should be done to increase customer satisfaction.
- Most customers are unaware of the phone plus service; measures should be done to raise awareness of these services.
- Given that the majority of respondents are dissatisfied with the characteristics of the phone offered by BSNL when compared to other private landline providers, the BSNL should give substantial weight age.
- Only a minority of respondents are pleased with call connectivity. It is advised that the firm prioritise this and ensure that all customers are happy.
- It is highlighted that demographic characteristics such as employment position and monthly income level have a link with overall happiness. As a result, it is recommended that these variables be addressed while making modifications to service or price.
- Service providers should organise their crews around existing subscribers in order to attract new customers.
- The aforementioned analysis found that the majority of respondents were unaware of various plans. As a result, it is recommended that the service provider give more weight age to learn about various plans.

### Conclusion

The study examines the impact of demographic variables on the amount of pleasure obtained by the user, as well as the user's behavioural pattern. It has been determined that the service offered by BSNL is satisfactory to the respondents. However, the majority of responders are dissatisfied with the phone's features. To please its clients, BSNL should focus on promotional techniques similar to those used by commercial service providers. By looking at, defining and fulfilling the values of goods or services, marketing plays a crucial part in meeting the needs of the target market. As it has three more Ps of the marketing mix to contend with, service sales are a specialised branch. In addition to the conventional 4 Ps, there are people, process and physical evidence for: Products, prices, places & promotions (Rathi, A., & Prajapat, M., 2023). Efficient policy making for infrastructure support, technological evolution and industry development. The success of an organisation shall not depend exclusively on a successful telecom policy structure, but also on the customers' loyalty, retention, marketing mix, service quality and corporate image of telecoms operators. These factors, in turn, had a positive impact on customers' opinion and satisfaction as well as their purchasing decisions to gain an edge over competitors within the telecom market (Das, S., & De, D. K., 2023). Another study suggests

that the most important factors of satisfaction for customers are individual variables, namely network coverage, customer services, video calls and download speed. In terms of individual variables, with regard to 3G and 4g network performance the Internet download speed has a very large impact on an independent variable indicating customer satisfaction (Haq, I., Soomro, J. A., Mazhar, T., Ullah, I., Shloul, T. A., Ghadi, Y. Y., & Tolba, A. (2023). The above study results also coherent with current study. Further the results and interpretation of this study is limited to Madurai location only. It might vary according to one region to another.

### References

1. Banik, S., & Sinha, P. (2022). A Study Of The Factors Influencing The Acquisition And Retention Of Customers In The Indian Telecommunications Industry: Systematic Analysis Using The SPSS Model. *Journal of Pharmaceutical Negative Results*, 422-435.
2. Das, S., & De, D. K. (2023). Survival in a Competitive Market: A Study on Mobile Telecom Operators in India. *Saudi J Bus Manag Stud*, 8(6), 124-131.
3. Deepa, V. (2019). A Study on Customer Satisfaction Towards BSNL With Reference to Chengalpattu District. *Think India Journal*, 22(14), 6105-6111.
4. Gaonkar, D. N., Pillai, S. K. B., Castanha, J., Chang, L. C., & Chen, R. F. (2021). Paradoxes of customer satisfaction in telecommunication industry in Goa, India. *International Journal of Learning and Change*, 13(3), 264-288.
5. Geethanjali, R., & Durai, M. M. (2013). A Study on consumer preference and fulfilment in subscribing mobile network service with special reference to Madurai city. *Journal of Exclusive Management Science*, 2(1), 3-12.
6. Gopinath, R., & Shibu, N. S. (2014). HRD practices and its impact towards Job Satisfaction in BSNL, Madurai SSA-A study. *International Journal of Human Resource Management Research and Development*, 4(1), 61-69.
7. Haq, I., Soomro, J. A., Mazhar, T., Ullah, I., Shloul, T. A., Ghadi, Y. Y., ... & Tolba, A. (2023). Impact of 3G and 4G Technology Performance on Customer Satisfaction in the Telecommunication Industry. *Electronics*, 12(7), 1697.
8. Muthaliff, S. S., Karpagam, K., & Aarthi, G. (2020). A study on subscriber's satisfaction towards jio network with special reference to Tiruchirapalli City. *Shanlax International Journal of Management*, 7(3), 44-56.
9. Rathi, A., & Prajapat, M. (2023). Consequences Of Covid-19 Pandemic On Telecom Industry. *Epra International Journal of Economic and Business Review (JEER)*, 11(5), 1-7.
10. Sakthi Prasad, R. (2015). A Study on Customer Satisfaction of Network Service Providers in Coimbatore City. *European Journal of Commerce and Management Research*, (1), 48-55.
11. Sarkar, R. (2018). Telecom sector in India and Customer Relationship Management (CRM). *International Journal for Innovative Research In Multidisciplinary Field*, 2(8), 9-14.
12. Siddiqui, M. A. (2017). A Study of The Impact of Service Quality on Customer Satisfaction with Reference to BSNL At Sagar District, Madhya Pradesh, India. *International Journal*, 2(10), 247-253.
13. Vijay, P., & Krishnaveni, V. (2016). Customer Preferences towards the mobile network service provider-A study with the special reference to Coimbatore City. *International Journal of Management Research and Reviews*, 6(10), 1386.

