

**A study on customers' attitudes on cell phones in tiruchirappalli city****G. SANKARANARAYANAN**

Assistant Professor of Commerce, Vel Tech Ranga Sanku Arts College, Avadi, Chennai 600 062.

**ABSTRACT:** Cellular phones are taking a very important role in our day to day life. Communication is an essential aspect in human life and the role of cell phones has become a very important part in these days.

In recent years, the number of mobile phones in the world had been increased at an exponential rate. The reasons for this are numerous, however lower prices and the availability of new technology mean that even the younger ones now own and regularly use mobile phones. Moreover, it has the capability to keeps in touch with family and friends from faraway places; these days due to the development of advanced technologies cell phones are not accomplished only for receiving and talking phone calls, but can also stores important data, takings cameras, stores songs etc.

Keywords: mobile phones; telecommunication; customers attitude

**INTRODUCTION**

From the year 1990s, the Telecommunications Sector has become a vital and dynamic key area for the economic development of industrialized nations. This is the result of enormous technical progress as well as of the increased number of network operators and the intense competition that has seen developed. These factors, in turn, are a consequence of the removal of monopoly rights, which were mainly enjoyed by state-owned operators of public telecommunication networks. The increasing economic importance of telecommunication companies inspired many management scholars to devote more teaching and research attention to this sector (Szyperski and Loebbecke, 1999).

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**AN OVERVIEW ON THE CELLULAR PHONE MARKET: INDIAN SCENARIO**

India is the world's second-largest telecommunication market. The telecom infrastructure in India is expected to increase at a compound annual growth rate (CAGR) of 20 per cent during the period 2008–2015 and to reach 5,71,000 towers by the year 2015. Over the past few years, the Indian mobile market has recorded an exponential growth that has exceeded the expert's expectations.

**Table - 1**  
**Highlights on Telecom Subscription Data as on 31st January 2013**

Particulars	Wireless	Wireline	Total Wireless + Wireline
Total Subscribers (Millions)	862.62	30.52	893.15
Total Net Monthly Addition (Millions)	-2.10	-0.27	-2.36
Monthly Growth (%)	-0.24%	-0.86%	-0.26%
Urban Subscribers (Millions)	528.88	23.66	552.55
Urban Subscribers Net Monthly Addition (Millions)	-4.24	-0.17	-4.41
Monthly Growth (%)	-0.80%	-0.73%	-0.79%
Rural Subscribers (Millions)	333.74	6.86	340.60
Rural Subscribers Net Monthly Addition (Millions)	2.14	-0.09	2.05
Monthly Growth (%)	0.65%	-1.33%	0.61%
Overall Teledensity*	70.57	2.50	73.07
Urban Teledensity*	142.10	6.36	148.46
Rural Teledensity*	39.26	0.81	40.07
Share of Urban Subscribers	61.31%	77.54%	61.87%
Share of Rural Subscribers	38.69%	22.46%	38.13%

Source: Telephone Regulatory Authority of India – Reports, 2013

Mobile Number Portability requests increased from 80.06 million subscribers at the end of December 2012 to 84.26 million at the end of January 2013. In the month of January 2013 alone, 4.20 million requests have been made for MNP.

- Active wireless subscribers on the date of Peak VLR in January 2013 are 708.00 Million, 82.08% of the total subscribers.
- Broadband subscription reached 15.01 million in January 2013 from 14.98 million in December 2012.

#### **Wireless Segment (GSM, CDMA & FWP)**

Total wireless subscriber base decreased from 864.72 million in December 2012 to 862.62 million at the end of January 2013, registering a monthly growth of -0.24%. This decline is mainly due to large scale disconnections of inactive SIMs by some of the service providers. The share of urban wireless subscribers has decreased from 61.65% to 61.31% where as share of rural wireless subscribers has increased from 38.35% to 38.69%. The overall wireless Teledensity in India has reached 70.57.

Wireless subscription in urban areas decreased from 533.12 million in December 2012 to 528.88 million at the end of January 2013. The wireless subscription in rural areas increased from 331.60 million to 333.74 million during the same period. The urban wireless Teledensity has decreased from 143.48 to 142.10 and rural Teledensity has increased from 39.04 to 39.26.

#### **REVIEW OF LITERATURE**

**Nikou, Shahrokh et al ., (2011)** have considered Payment Mode, Functionality, Added Value and PQCP (perceived quality, cost and performance) as the main service adoption factors. The survey results indicated that functionality has been the most important influencing factor for the respondents, followed by Added Value, PQCP and Payment Mode.

**Dr. Pratyush Tripathi & Prof. Satish Kr. Singh (2012)** have found out that the Airtel connection is preferred by most of the consumers in the study area because of various schemes introduced by

Airtel. Only 50 percent of the respondents are attracted by the special scheme offer. The satisfaction level towards continuous connectivity and services provided by the cell phone companies get poor response. It reflects the dissatisfaction of the consumers towards the cell phone services.

The intention of the study of **Dr.G.Sakthivel (2012)** has found out that the influence of demographic variable in the level of satisfaction yielded by the mobile user as well as the behavioral pattern of the mobile user is analyzed in this study. Further, the customer expectations are comprehended from their usage pattern. Based on this comprehension it has been suggested that Airtel should enhance its coverage. BSNL should focus on the service at customer desk and the promotional measures.

A study of **Madhuri Ajit Chaudhari & Sachin Ashok Ambekar (2013)** revealed that the BSNL is the most preferred mobile phone service providers it is concluded from the study that majority of consumers are aware about the services offered by their mobile phone operators.

### **1.1 IMPORTANCE OF STUDY**

This is the era of mobile phones. They have opened a new way to our life. They have created an attractive business opportunity in all fields. The mobile phones have created a sort of demand among the lower level entrepreneurial groups, such as plumbers, carpenters, masons, conductors, painters, cooks, auto repair mechanics, welders, waiters, suppliers, vegetable, venders, auto drivers, astrologists and so on. In this way cell phone sector has emerged a separate business field, in which corers and corers have been invested. Nowadays, market research is important to every cell phone company. All mobile phone companies try to attract customers so that many concessions and price cuts are announced frequently.

### **STATEMENT OF THE PROBLEM**

The consumer is the king in market, so that all firms have to study the consumers' taste, preference, likes and dislikes carefully. Retaining the existing consumers and creating new customers are the two important tasks to the business firms in these days. Hence, consumer research takes a vital part in market survey. Utility of consumer research is felt strongly in these days.

So, it is clear that the consumer research plays a dominant role. All the firms spend a considerable amount for undertaking consumer research. In most of the organizations, there is a separate department for market research. In the light of this context, this kind of consumer survey gains a special importance and it will give various insights about the consumers' attitude. Consumers have every chance of switching the mobile service provider due to industry expansion. Mobile industry is growing technically and becoming economical due to competitors' innovative and attractive services. Number of players in this sector is increasing, so each one of them wants to overplay others to attract the consumers. Mobile industry has become economic with the end result that consumers have less switching cost. (M.Sathish *et al.*, 2011) In the light of these problems the present research is taken up.

### **OBJECTIVES OF THE STUDY**

Primary objective of the study is to analyse customers' attitude and impact of demographic variables on customers' attitude on cell phones in Tiruchirappalli city.

#### **1.1.1 VARIABLES OF THE STUDY**

Apart from the demographic variables, the survey takes the following research variables for customer's attitude:

- ✓ **Economy** (Usage of cell phone is always economy.)

- ✓ **Convenience** (Usage of cell phone is always more convenient than other communication media)
- ✓ **Full talk time** (Offer of full talk time is not a real concession.)
- ✓ **Hidden charges** (All service providers Charge hidden charges on the customers.)
- ✓ **Unnecessary SMS/voice advertisement** (SMS/voice advertisement is always a trouble).
- ✓ **Shifting intention** (I have no intention to shift to other service provider.)
- ✓ **Customer care** (The service providers do not care about the customers' grievances.)
- ✓ **Comparison** (I do not compare my service provider with other service providers.)

### 1.1.2 GEOGRAPHICAL AREA OF THE STUDY

Tiruchirappalli city is the geographical area for this research.

### DATA USED

Both primary data and secondary data were collected and used in this research. The primary data were collected in the form of their opinions through a structured questionnaire. The secondary data were collected from internet, books, journals and records of the telephone sector.

### POPULATION AND SAMPLES

The cell phone consumers of the different service providers constitute the population of this study. As Tiruchirappalli city is the geographical area of this work, 100 sample customers have been selected from all 65 wards of the city at random. But, care was taken to include all types of customers in the sampling frame.

### MEASUREMENT SCALE

7 point Measurement scale (from 'Strongly Disagree' to 'Strongly Agree') is used in this study to measure the attitude.

### ANALYSIS AND INTERPRETATION

#### *Analysis of demographic variables*

**Table - 2**  
**Demography of the customers**

Sl.No.	Variable	Division	No. of respondents	Percentage
1	Gender	Male	60	60
		Female	40	40
2	Age group (in years)	20-30	23	23
		31-40	22	22
		41-50	34	34
		51-60	21	21
3	Marital status	Married	48	96
		Unmarried	52	52
4	Educational Qualification	Up to HSC/P.U.C/ITI	30	30
		Degree or Diploma	18	18
		PG Degree	24	24
		Professional Degree	28	28
5	Annual Income	Up to 100000	31	31
		100001 – 200000	35	35
		200001 – 300000	15	19

		Above 300001	19	15
6	Category	Employee	18	18
		Business	20	20
		Professional	34	34
		Agricultural	14	14
		Household	12	12
		Others	2	2
7	Area of residence	Rural	30	30
		Urban	40	40
		Semi-urban	30	30

**Source: Primary data**

As the above table is self-explanatory in nature, it is clear that the respondents come from different walks of life. The demography consists of seven variables and every variable is split into appropriate sub divisions.

**Testing the hypothesis (ANOVA Test)**

**ANOVA test for gender and attitude of the customers**

**HYPOTHESIS:**

**Null hypothesis H0-** There is no significant relationship between the gender and attitude of the customers.

**Alternative hypothesis H1-** There is significant relationship between the gender and attitude of the customers.

**Table – 3**  
**ANOVA test for gender and attitude of the customers**

		Sum of Squares	d.f	Mean Square	F	Sig.
<b>Economy</b> (Usage of cell phone is always economy.)	Between Groups	.027	1	.027	.019	.889
	Within Groups	134.483	98	1.372		
	Total	134.510	99			
<b>Convenience</b> (Usage of cell phone is always more convenient than other communication media)	Between Groups	.135	1	.135	.106	.745
	Within Groups	124.825	98	1.274		
	Total	124.960	99			
<b>Full talk time</b> (Offer of full talk time is not a real concession.)	Between Groups	1.707	1	1.707	1.270	.262
	Within Groups	131.683	98	1.344		
	Total	133.390	99			
<b>Hidden charges</b> (All service providers Charge hidden charges on the customers.)	Between Groups	.202	1	.202	.154	.695
	Within Groups	128.158	98	1.308		
	Total	128.360	99			
<b>Unnecessary SMS/voice advertisement</b> (SMS/voice advertisement is always a	Between Groups	.167	1	.167	.118	.732
	Within Groups	138.833	98	1.417		

trouble).	Total	139.000	99			
<b>Shifting intention</b> (I have no intention to shift to other service provider.)	Between Groups	2.407	1	2.407	1.773	.186
	Within Groups	133.033	98	1.357		
	Total	135.440	99			
<b>Customer care</b> (The service providers do not care about the customers' grievances.)	Between Groups	.667	1	.667	.479	.490
	Within Groups	136.333	98	1.391		
	Total	137.000	99			
<b>Comparison</b> (I do not compare my service provider with other service providers.)	Between Groups	.240	1	.240	.156	.694
	Within Groups	150.600	98	1.537		
	Total	150.840	99			

Source: Output generated from SPSS 19

Based on the result generated by SPSS 19, the significant values of the entire variable are greater than 0.05. So the null hypothesis is accepted and there is no significant relationship between the mean score of the gender of the respondents and all the variables i.e., economy, convenience, full talk time, hidden charges, unnecessary SMS/voice advertisements, shifting intention, customer care and comparison.

#### ANOVA test for age and attitude of the customers

##### HYPOTHESIS:

**Null hypothesis H<sub>0</sub>**- There is no significant relationship between the age and attitude of the customers.

**Alternative hypothesis H<sub>1</sub>**-There is significant relationship between the age and attitude of the customers.

**Table – 4**  
ANOVA test for age and attitudes of the customers

		Sum of Squares	d.f	Mean Square	F	Sig.
<b>Economy</b> (Usage of cell phone is always economy.)	Between Groups	1.000	3	.333	.240	.869
	Within Groups	133.510	96	1.391		
	Total	134.510	99			
<b>Convenience</b> (Usage of cell phone is always more convenient than other communication media)	Between Groups	2.690	3	.897	.704	.552
	Within Groups	122.270	96	1.274		
	Total	124.960	99			
<b>Full talk time</b> (Offer of full talk time is not a real concession.)	Between Groups	2.429	3	.810	.594	.621
	Within Groups	130.961	96	1.364		
	Total	133.390	99			
<b>Hidden charges</b> (All service providers Charge hidden charges on the customers.)	Between Groups	10.117	3	3.372	2.738	.048
	Within Groups	118.243	96	1.232		
	Total	128.360	99			

<b>Unnecessary SMS/voice advertisement</b> (SMS/voice advertisement is always a trouble).	Between Groups	.825	3	.275	.191	.902
	Within Groups	138.175	96	1.439		
	Total	139.000	99			
<b>Shifting intention</b> (I have no intention to shift to other service provider.)	Between Groups	8.383	3	2.794	2.111	.104
	Within Groups	127.057	96	1.324		
	Total	135.440	99			
<b>Customer care</b> (The service providers do not care about the customers' grievances.)	Between Groups	10.109	3	3.370	2.549	.060
	Within Groups	126.891	96	1.322		
	Total	137.000	99			
<b>Comparison</b> (I do not compare my service provider with other service providers.)	Between Groups	1.348	3	.449	.289	.834
	Within Groups	149.492	96	1.557		
	Total	150.840	99			

Source: Output generated from SPSS 19

Based on the result generated by SPSS 19, the significant values of the entire variable except hidden charges are greater than 0.05. So the null hypothesis is accepted and there is no significant relationship between the mean score of the age of the respondents and the variables i.e., economy, convenience, full talk time, unnecessary SMS/voice advertisements, shifting intention, customer care and comparison. But, there is significant relationship between the mean score of the age of the respondents and hidden charges.

#### ANOVA test for marital status and attitudes of the customers

##### HYPOTHESIS:

**Null hypothesis H0-** There is no significant relationship between the marital status and attitudes of the customers.

**Alternative hypothesis H1-** There is significant relationship between the marital status and attitudes of the customers.

**Table – 5**

#### ANOVA test for marital status and attitudes of the customers

		Sum of Squares	d.f	Mean Square	F	Sig.
<b>Economy</b> (Usage of cell phone is always economy.)	Between Groups	.223	1	.223	.163	.687
	Within Groups	134.287	98	1.370		
	Total	134.510	99			
<b>Convenience</b> (Usage of cell phone is always more convenient than other communication media)	Between Groups	4.039	1	4.039	3.273	.073
	Within Groups	120.921	98	1.234		
	Total	124.960	99			
<b>Full talk time</b> (Offer of full talk time is not a real concession.)	Between Groups	.603	1	.603	.445	.506
	Within Groups	132.787	98	1.355		

	Total	133.390	99			
<b>Hidden charges</b> (All service providers Charge hidden charges on the customers.)	Between Groups	1.067	1	1.067	.821	.367
	Within Groups	127.293	98	1.299		
	Total	128.360	99			
<b>Unnecessary SMS/voice advertisement</b> (SMS/voice advertisement is always a trouble).	Between Groups	.361	1	.361	.255	.615
	Within Groups	138.639	98	1.415		
	Total	139.000	99			
<b>Shifting intention</b> (I have no intention shift to other service provider.)	Between Groups	.878	1	.878	.639	.426
	Within Groups	134.563	98	1.373		
	Total	135.440	99			
<b>Customer care</b> (The service providers not care about the customers' grievances.)	Between Groups	.160	1	.160	.115	.736
	Within Groups	136.840	98	1.396		
	Total	137.000	99			
<b>Comparison</b> (I do not compare my service provider with other service providers.)	Between Groups	2.616	1	2.616	1.729	.192
	Within Groups	148.224	98	1.512		
	Total	150.840	99			

Source: Output generated from SPSS 19

Based on the result generated by SPSS 19, the significant values of the entire variable are greater than 0.05. So the null hypothesis is accepted and there is no significant relationship between the mean score of the marital status of the respondents and the variables i.e., economy, convenience, full talk time, hidden charges, unnecessary SMS/voice advertisements, shifting intention, customer care and comparison.

#### ANOVA test for educational qualification and attitudes of the customers

##### HYPOTHESIS:

**Null hypothesis H0-** There is no significant relationship between the educational qualification and attitudes of the customers.

**Alternative hypothesis H1-** There is significant relationship between the educational qualification and attitudes of the customers.

**Table – 6**

#### ANOVA test for educational qualification and attitudes of the customers

		Sum of Squares	d.f	Mean Square	F	Sig.
<b>Economy</b> (Usage of cell phone is always economy.)	Between Groups	4.262	3	1.421	1.047	.375
	Within Groups	130.248	96	1.357		
	Total	134.510	99			
<b>Convenience</b> (Usage of cell phone is always more convenient than other	Between Groups	2.967	3	.989	.778	.509
	Within Groups					



communication media)	Within Groups	121.993	96	1.271		
	Total	124.960	99			
<b>Full talk time</b> (Offer of full talk time is not a real concession.)	Between Groups	7.093	3	2.364	1.797	.153
	Within Groups	126.297	96	1.316		
	Total	133.390	99			
<b>Hidden charges</b> (All service providers Charge hidden charges on the customers.)	Between Groups	6.516	3	2.172	1.711	.170
	Within Groups	121.844	96	1.269		
	Total	128.360	99			
<b>Unnecessary SMS/voice advertisement</b> (SMS/voice advertisement is always a trouble).	Between Groups	3.583	3	1.194	.847	.472
	Within Groups	135.417	96	1.411		
	Total	139.000	99			
<b>Shifting intention</b> (I have no intention to shift to other service provider.)	Between Groups	1.273	3	.424	.304	.823
	Within Groups	134.167	96	1.398		
	Total	135.440	99			
<b>Customer care</b> (The service providers do not care about the customers' grievances.)	Between Groups	9.768	3	3.256	2.457	.068
	Within Groups	127.232	96	1.325		
	Total	137.000	99			
<b>Comparison</b> (I do not compare my service provider with other service providers.)	Between Groups	12.575	3	4.192	2.910	.038
	Within Groups	138.265	96	1.440		
	Total	150.840	99			

Source: Output generated from SPSS 19

Based on the result generated by SPSS 19, the significant values of the entire variable (except comparison) are greater than 0.05. So the null hypothesis is accepted and there is no significant relationship between the mean score of the educational qualification of the respondents and the variables i.e., economy, convenience, full talk time, hidden charges, unnecessary SMS/voice advertisements, shifting intention and customer care. There is significant relationship between the mean score of the educational qualification of the respondents and the comparison.

#### **ANOVA test for occupation and attitudes of the customers**

##### **HYPOTHESIS:**

**Null hypothesis H0-** There is no significant relationship between the occupation and attitudes of the customers.

**Alternative hypothesis H1**-There is significant relationship between the occupation and attitudes of the customers.

**Table – 7**  
**ANOVA test for occupation and attitudes of the customers**

		<b>Sum of Squares</b>	<b>d.f</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Economy</b> (Usage of cell phone is always economy.)	Between Groups	10.009	5	2.002	1.511	.194
	Within Groups	124.501	94	1.324		
	Total	134.510	99			
<b>Convenience</b> (Usage of cell phone is always more convenient than other communication media)	Between Groups	11.523	5	2.305	1.910	.100
	Within Groups	113.437	94	1.207		
	Total	124.960	99			
<b>Full talk time</b> (Offer of full talk time is not a real concession.)	Between Groups	1.676	5	.335	.239	.944
	Within Groups	131.714	94	1.401		
	Total	133.390	99			
<b>Hidden charges</b> (All service providers Charge hidden charges on the customers.)	Between Groups	4.108	5	.822	.622	.684
	Within Groups	124.252	94	1.322		
	Total	128.360	99			
<b>Unnecessary SMS/voice advertisement</b> (SMS/voice advertisement is always a trouble).	Between Groups	8.232	5	1.646	1.184	.323
	Within Groups	130.768	94	1.391		
	Total	139.000	99			
<b>Shifting intention</b> (I have no intention to shift to other service provider.)	Between Groups	3.921	5	.784	.560	.730
	Within Groups	131.519	94	1.399		
	Total	135.440	99			
<b>Customer care</b> (The service providers do not care about the customers' grievances.)	Between Groups	4.286	5	.857	.607	.695
	Within Groups	132.714	94	1.412		
	Total	137.000	99			
<b>Comparison</b> (I do not compare my service provider with other service providers.)	Between Groups	7.238	5	1.448	.948	.454
	Within Groups	143.602	94	1.528		
	Total	150.840	99			

Source: Output generated from SPSS 19

Based on the result generated by SPSS 19, the significant values of the entire variable are greater than 0.05. So the null hypothesis is accepted and there is no significant relationship between the mean score of the occupation of the respondents and the variables i.e., economy, convenience, full talk time, hidden charges, unnecessary SMS/voice advertisements, shifting intention, customer care and comparison.

**ANOVA test for income and attitudes of the customers****HYPOTHESIS:**

**Null hypothesis H0-** There is no significant relationship between the income and attitudes of the customers.

**Alternative hypothesis H1-** There is significant relationship between the income and attitudes of the customers.

**Table – 8**  
**ANOVA test for income and attitudes of the customers**

		<b>Sum of Squares</b>	<b>d.f</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Economy</b> (Usage of cell phone is always economy.)	Between Groups	2.366	3	.789	.573	.634
	Within Groups	132.144	96	1.376		
	Total	134.510	99			
<b>Convenience</b> (Usage of cell phone is always more convenient than other communication media)	Between Groups	8.934	3	2.978	2.464	.067
	Within Groups	116.026	96	1.209		
	Total	124.960	99			
<b>Full talk time</b> (Offer of full talk time is not a real concession.)	Between Groups	5.734	3	1.911	1.437	.237
	Within Groups	127.656	96	1.330		
	Total	133.390	99			
<b>Hidden charges</b> (All service providers Charge hidden charges on the customers.)	Between Groups	5.790	3	1.930	1.511	.216
	Within Groups	122.570	96	1.277		
	Total	128.360	99			
<b>Unnecessary SMS/voice advertisement</b> (SMS/voice advertisement is always a trouble).	Between Groups	2.367	3	.789	.554	.646
	Within Groups	136.633	96	1.423		
	Total	139.000	99			
<b>Shifting intention</b> (I have no intention to shift to other service provider.)	Between Groups	4.365	3	1.455	1.066	.367
	Within Groups	131.075	96	1.365		
	Total	135.440	99			
<b>Customer care</b> (The service providers do not care about the customers' grievances.)	Between Groups	13.877	3	4.626	3.607	.016
	Within Groups	123.123	96	1.283		
	Total	137.000	99			
<b>Comparison</b> (I do not compare my service provider with other service providers.)	Between Groups	2.491	3	.830	.537	.658
	Within Groups	148.349	96	1.545		
	Total	150.840	99			

Source: Output generated from SPSS 19

Based on the result generated by SPSS 19, the significant values of the entire variable (except customer care) are greater than 0.05. So the null hypothesis is accepted and there is no significant

relationship between the mean score of the income of the respondents and the variables i.e., economy, convenience, full talk time, hidden charges, unnecessary SMS/voice advertisements, shifting intention and comparison. There is significant relationship between the mean score of the income of the respondents and the customer care.

#### ANOVA test for area of residence and attitudes of the customers

##### HYPOTHESIS:

**Null hypothesis H0-** There is no significant relationship between the area of residence and attitudes of the customers.

**Alternative hypothesis H1-** There is significant relationship between the area of residence and attitudes of the customers.

**Table – 9: ANOVA test for area of residence and attitudes of the customers**

		Sum of Squares	df	Mean Square	F	Sig.
<b>Economy</b> (Usage of cell phone is always economy.)	Between Groups	12.443	2	6.222	4.944	.009
	Within Groups	122.067	97	1.258		
	Total	134.510	99			
<b>Convenience</b> (Usage of cell phone is always more convenient than other communication media)	Between Groups	2.818	2	1.409	1.119	.331
	Within Groups	122.142	97	1.259		
	Total	124.960	99			
<b>Full talk time</b> (Offer of full talk time is not a real concession.)	Between Groups	.823	2	.412	.301	.741
	Within Groups	132.567	97	1.367		
	Total	133.390	99			
<b>Hidden charges</b> (All service providers Charge hidden charges on the customers.)	Between Groups	3.327	2	1.663	1.290	.280
	Within Groups	125.033	97	1.289		
	Total	128.360	99			
<b>Unnecessary SMS/voice advertisement</b> (SMS/voice advertisement is always a trouble).	Between Groups	.600	2	.300	.210	.811
	Within Groups	138.400	97	1.427		
	Total	139.000	99			
<b>Shifting intention</b> (I have no intention to shift to other service provider.)	Between Groups	3.098	2	1.549	1.135	.326
	Within Groups	132.342	97	1.364		
	Total	135.440	99			
<b>Customer care</b> (The service providers do not care about the customers' grievances.)	Between Groups	3.433	2	1.717	1.247	.292
	Within Groups	133.567	97	1.377		
	Total	137.000	99			
<b>Comparison</b> (I do not compare my service provider with other service providers.)	Between Groups	.107	2	.053	.034	.966
	Within Groups	150.733	97	1.554		
	Total	150.840	99			

Source: Output generated from SPSS 19

Based on the result generated by SPSS 19, the significant values of the entire variable (except economy) are greater than 0.05. So the null hypothesis is accepted and there is no significant relationship between the mean score of the area of residence of the respondents and the variables i.e., convenience, full talk time, hidden charges, unnecessary SMS/voice advertisements, shifting intention and comparison. There is no significant relationship between the mean score of the income of the respondents and the customer care. There is significant relationship between the mean score of the area of residence of the respondents and economy,

### Factor analysis for customers' attitudes

#### KMO and Bartlett's Test

The dimensionality of customers' attitudes was examined by using factor analysis based on 8 individual statements and the reliability of the subsequent factor structures was then tested for internal consistency of the grouping of the items. The eight customers' attitudes statements are:

1. **Economy** (Usage of cell phone is always economy.)
2. **Convenience** (Usage of cell phone is always more convenient than other communication media)
3. **Full talk time** (Offer of full talk time is not a real concession.)
4. **Hidden charges** (All service providers Charge hidden charges on the customers.)
5. **Unnecessary SMS/voice advertisement** (SMS/voice advertisement is always a trouble).
6. **Shifting intention** (I have no intention to shift to other service provider.)
7. **Customer care** (The service providers do not care about the customers' grievances.)
8. **Comparison** (I do not compare my service provider with other service providers.)

**Table – 10**

#### KMO and Bartlett's Test for customers' attitudes

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.596
Bartlett's Test of Sphericity	Approx. Chi-Square	237.601
	d.f	28
	Sig.	.000

Source: Output generated from SPSS 19

High value of KMO ( $0.596 > .05$ ) of indicates that a factor analysis is useful for the present data. The significant value for Bartlett's test of Sphericity is 0.000 and is less than .05 which indicates that there exist significant relationships among the variables. The resultant value of KMO test and Bartlett's test indicate that the present data is useful for factor analysis.

**Table – 11**

#### Total variance explained for customers' attitudes

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.271	28.393	28.393	2.271	28.393	28.393	1.963	24.534	24.534

2	1.772	22.155	50.547	1.772	22.155	50.547	1.805	22.564	47.099
3	1.056	13.200	63.748	1.056	13.200	63.748	1.332	16.649	63.748
4	.836	10.452	74.200						
5	.812	10.149	84.348						
6	.643	8.032	92.380						
7	.524	6.551	98.932						
8	.085	1.068	100.000						
Extraction Method: Principal Component Analysis.									

Source: Output generated from SPSS 19

The total variance accounted for, by all the three factors with Eigen value greater than 1 is 43.410 percent and the remaining variance is explained by other variables. Among the Three factors, the first factor accounts for around 17.184 percent of variance which is the prime criteria considered in customers' attitudes. All the statements are loaded on the three factors.

**Table – 12**  
**Rotated Component Matrix for customers' attitudes**

Customers' attitudes	Component		
	1	2	3
<b>Hidden charges</b> (All service providers Charge hidden charges on the customers.)	<b>.958</b>		.142
<b>Customer care</b> (Service providers do not care about the customers' grievances.)	<b>.949</b>		.177
<b>Convenience</b> (Usage of cell phone is always more convenient than other communication media)	-.163	<b>.782</b>	.129
<b>Economy</b> (Usage of cell phone is always economy.)		<b>.743</b>	
<b>Shifting intention</b> (I have no intention to shift to other service provider.)	.117	<b>.725</b>	-.196
<b>Comparison</b> (I do not compare my service provider with other service providers.)		- .176	<b>.709</b>
<b>Full talk time</b> (Offer of full talk time is not a real concession.)	.199		<b>.641</b>
<b>Unnecessary SMS/voice advertisement</b> (SMS/voice advertisement is always a trouble).	.246	.275	<b>.557</b>
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.			
a. Rotation converged in 4 iterations.			

Source: Output generated from SPSS 19

**The statements are converted into 3 factors using factor analysis.**

**The following 2 statements are converted into a single factor.**

1. Hidden charges (All service providers Charge hidden charges on the customers.)
2. Customer care (The service providers do not care about the customers' grievances.)

**The following 3 statements are converted into a single factor.**

1. **Convenience** (Usage of cell phone is always more convenient than other communication media)
2. **Economy** (Usage of cell phone is always economy.)
3. **Shifting intention** (I have no intention to shift to other service provider.)

**The following 3 statements are converted into a single factor**

1. **Comparison** (I do not compare my service provider with other service providers.)
2. **Full talk time** (Offer of full talk time is not a real concession.)
3. **Unnecessary SMS/voice advertisement** (SMS/voice advertisement is always a trouble.)

Apart from the dimension of 'customers' attitude, there are 8 motivation statements. Out of eleven statements, three statements contribute more towards customers' attitude. The statements are (1)

**Hidden charges** (All service providers Charge hidden charges on the customers.), (2) **Convenience** (Usage of cell phone is always more convenient than other communication media) (3) **Full talk time** (Offer of full talk time is not a real concession.)

**FINDINGS**

1. Gender of the respondents does not make any significant impact of all the variables i.e., economy, convenience, full talk time, hidden charges, unnecessary SMS/voice advertisements, shifting intention, customer care and comparison. So, it is sure that the customers have their own likes and dislikes irrespective of their gender.
2. Age of the respondents do not influence the variables i.e., economy, convenience, full talk time, unnecessary SMS/voice advertisements, shifting intention, customer care and comparison (except hidden charges).
3. Marital status of the respondents does not make any effect on the attitude such as economy, convenience, full talk time, hidden charges, unnecessary SMS/voice advertisements, shifting intention, customer care and comparison.
4. Educational qualification of the respondents and the variables i.e., economy, convenience, full talk time, hidden charges, unnecessary SMS/voice advertisements, shifting intention and customer care do not have significant relationship (except comparison).
5. Occupation of the respondents is not significant to the variables i.e., economy, convenience, full talk time, hidden charges, unnecessary SMS/voice advertisements, shifting intention, customer care and comparison.
6. No significant relationship exists between the income of the respondents and all the variables i.e., economy, convenience, full talk time, hidden charges, unnecessary SMS/voice advertisements, shifting intention and comparison (except customer care).
7. Area of residence of the respondents and the variables (except i.e., customer care ) convenience, full talk time, hidden charges, unnecessary SMS/voice advertisements, shifting intention and comparison do not have significant relationship.
8. The significant value for Bartlett's test of Sphericity is 0.000 and is less than .05 which indicates that there exist significant relationships among the variables. The resultant value of KMO test and Bartlett's test indicate that the present data is useful for factor analysis.
9. Three statements contribute more towards customers' attitude. The statements are (1) **Hidden charges** (All service providers Charge hidden charges on the customers.), (2) **Convenience** (Usage of cell phone is always more convenient than other communication media) (3) **Full talk time** (Offer of full talk time is not a real concession.)

## CONCLUSION

The present study discloses that the customers' attitude is not favourable service providers and they think over realities of these providers. As this is the time of strict competition, the service providing companies should be very careful to function in the market. The present study reveals that the customers have adequate awareness towards the marketing techniques so that the companies must take every step forward by fulfilling the demands of the expectations of the customers.

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