STUDIES ON ANALYSIS OF DEMOGRAPHIC PROFILE OFCELLULAR PHONE CUSTOMERS IN CUDDALORE DISTRICT, TAMILNADU

[*1]K.Arivazhagan and [2]D.Aravazhi

[*1]Department of Commerce , Periyar Govt. Arts College, Cuddalore
[2]Department of Commerce,Manbumigu Dr.Puratchithalaivar MGR Arts & Science College,Kattumannarkoil – 608 301

ABSTRACT

This study is intended to analyze the socio economic profile of customers selected for the study towards their consumer behaviour in cuddalore district and their views about the brand preference of cellular phones is estimated in this chapter. The researcher used univariate and multivariate statistical tools namely percentage analysis, factor analysis, cluster analysis, and one way analysis of variance to examine the respondents behaviour towards brand preference of cellular phone

Keywords: Demographic profile of cellular phone, Preference of Cellular phone, Cuddalore District

1.INTRODUCTION

India consumers of cellular phone users have very positive attitude toward cellular phone usages, as maximum use these cellular phone in their daily lives and they are mostly satisfied with their cellular phone as it satisfies their need. Consumers using cellular phones are influenced to external factors like culture, social status, family and friend, word of mouth and marketing activities and the internal factors like perception, motivation, memory, learning and attitude. They visit websites like gsmarena.com and android authority.com for reviews on cellular phone, this also help as product advertisement as these websites review the cellular phones in depth which helps consumers increase their awareness about cellular phones and also helps them in selecting best phones while switching to different brands. In decision process a consumer chooses a product or brand, which seems to possess a maximum possibility of the characterization or elaboration of their lifestyle, it is only then consumers develop the idea of preference over to different brands of cellular phones. It can be assumed that the individual's behaviour towards different brands of cellular phone in market can be predicted from his level of awareness about the different brands existing in the market. The individual's life style system are known by the products and services which are selected, purchased and consumed by the individuals, in order for them to define, actualize or extend their life style identity.

2.MATERIALS AND METHODS

The methodology adopted in this study relates to data collection and questionnaires. The sampling plan used for the final study is discussed in detail along with data collection procedures and data analysis procedures used in pretest, pilot test and the final study.

This study is mainly based on primary data. The primary datawas collected through personal interview schedule from therespondents. The secondary data was collected to seek more information on brand preference of mobile phone users fromdifferent sources like books, journals, articles, news paper,unpublished thesis and websites.

Pilot Study and Pre-testing

A preliminary investigation was undertaken by contacting 100 customers of cellular phones. They were requested to express their opinion about their preference and satisfaction and behaviour. The preliminary investigation was conducted in different parts of cuddalore district. The convenient sampling method was applied to collect the preliminary

*Corresponding author: K.Arivazhagan, Department of commerce, Periyar Govt. Arts College, Cuddalore

samples. The Cronbach Alpha method and test were applied to check the reliability of the data.

Sampling Design

Convenience sampling procedure was used for selecting the samples from the huge population of the customers of cellular phones Cuddalore district. After testing its reliability, the revised questionnaire was administrated to a total of 700 respondents in the district, The researcher circulated them in all the tauluks of the district.

A total of 643 questionnaires were received. The scrutiny of these led to the rejection of 19 response sheets on account of incomplete responses. Thus, 624 completed questionnaires are considered for the research, These 624 responses are distributed over all the taluks of Cuddalore district.

Pilot Study

A pilot study was conducted to validate the questionnaire and to confirm the feasibility of the study. The personal interaction with customers of cellular phones gave the output of their behaviour namely, consumer preference, information search, purchase decision, responsiveness, price, technology, and payment methods.

Out of these factors, five predominant factors were extracted through ranking process of mean values. The numerical values of the total scores of each factor are arranged in the descending order and five indispensable factors are established. The filled up questionnaires are collected from 120 respondents and Cronbach's Alpha Criterion is applied to test the reliability. The value determined is 0.766 proving the reliability of the instrument. This also explains that the statements in the questionnaire are understood by the customers at 76.6% level. The quality of the questionnaire was ascertained and the test showed high reliability. The variables considered for the analysis satisfy the normal probability distribution. Based on the pilot study, the questionnaire is modified suitably to elicit response from the sample group.

Data Analysis

All data analysis is conducted using SPSS V-20. Sample means, standard deviation and N are presented in the analysis chapter for all the variables of the study. The data are screened in order to obtain the variance between various customer satisfaction elements. Factor analysis, cluster analysis, one way analysis of variance, linear multiple regression analysis, t-test, ranking analysis, non-parametric chi-square analysis of association are discussed here.

3.ANALYSIS AND DISCUSSION

DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Demographic information is imperative as it presents a profile of the entire sample taken for the study and represents a fundamental approach to the understanding of the consumer behaviour towards cellular phones. In particular, age, gender, Age, marital status, educational Qualification, monthly income, type of cellular phone, years of using cellular phone and frequency of changing cellular phone reveal their behavioural changes. In this section the researcher presents a complete demographic profile and cellular phones purchase pattern.

AGE OF THE RESPONDENTS

Segmentation based on age is an important aspect in marketing for all the companies to decide on the age segment they should concentrate. The customers of cellular phones start from the teens. Teenagers, college students, young salaried, middle aged, old aged and also the new segments namely most affluent one who influence the brand loyalty among the respondents of cellular phones is the core concept of the study. Age is a very critical factor which triggers the attitudes and thus paves the way for the entire consumer behavioral process.

Table –1 Age of the respondents

Age	Frequency	Valid Percent
Less than 20	41	6.5
21-25	239	38.3
26-30	146	23.4
31-40	98	15.8
41-50	71	11.4
51 & Above	29	4.6
Total	624	100.0

From the above table it is found that the sample unit comprises the maximum of 38.3% customers of cellular phones are in the age group within 21-25 and minimum of 4.6 percent represent the age group above 51. It is also found that 23.4percent representation is from the age group 26 to 30 and 15.8 percent have their contribution for the age group 31 to 40 respectively..

GENDER OF THE RESPONDENTS

Gender difference speaks of the difference in the psychological thoughts. Male and female attitude towards the preference of cellular phones have a significant impact on the study and help to prove their psychological thoughts. There is a vast difference between the male and female cognition process. It enlightens in this research to compare and contrast the differences in the gender attitudes.

Table 2 Gender of the respondents

Gender	Frequency	Valid Percent
Male	354	56.8
Female	270	43.2
Total	624	100.0

From the above table it is found that the sample unit comprises of 56.8% male customers of cellular phones and 43.2% female customers of cellular phones expressed their preferences and perception.

MARITAL STATUS OF THE RESPONDENTS

Married and unmarried persons have different purchasing behaviour. Unmarried with lesser responsibility have their own choice and freedom of purchase. The married person has to prioritize their need of purchase which reflects their

attitude of replacement. Their commitments need of the situations; affordability, convenience, and acceptability also reflect their attitude as a consumer while replacing the cellular phones. Therefore the marital status of the respondents influence their behavior as shown in the table .

Table .3 Marital status of the respondents

Marital Status	Frequency	Valid Percent
Married	374	60.0
Unmarried	250	40.0
Total	624	100.0

From the above table it is found that the sample unit consists of 60% married customers of cellular phones and 40% of unmarried customers prefer different brands of cellular phones

EDUCATIONAL QUALIFICATION OF THE RESPONDENTS

Education gives clarity and has an impact on the purchase decision. It also helps decide over the adoption of any type of new advanced technology.   The utilization of cellular phones by the educated respondents is booming and so this factor also has an effective impact on the attitude of the customers having high technological knowledge.

Table .4 Educational Qualification of the respondents

Qualification	Frequency	Valid Percent
SSLC	31	04.9
HSC	33	05.3
Diploma	50	08.0
U.G	250	40.0
PG	241	38.7
Others	19	03.1
Total	624	100.0

From the above table it is found a maximum of 40.% consumers with under graduate qualification prefer different brands of cellular phones and a minimum of 3.1% of customers with other qualifications use cellular phones. It is also found that 38.7 percent customers in the sample unit have PG qualifications and 4.9 percent and 5.3 percent of customers have the qualification of have SSLC and Higher secondary qualifications respectively.

OCCUPATION OF THE RESPONDENTS

Occupation or profession of a person influences buying behaviour. The lifestyles and buying considerations and decisions differ widely according to the nature of the occupation. The following frequency table explains customers using cellular phones and their different occupations

Table 5 Occupation of the respondents

Occupation	Frequency	Valid Percent
Student	86	13.7
Salaried	387	62.1
Business	29	04.6
Professional	96	15.4
Home maker	23	03.6
Others	4	00.6
Total	624	100.0

From the above table it is found that the sample unit of the research contains a maximum of 62.1% salaried customers of cellular phones and minimum of 3.6% customers are home makers and 15.4 percent represent the professionals in the sample unit.

MONTHLY INCOME OF THE RESPONDENTS

The Monthly income has an important bearing on the mobile network purchases. The buying behaviour of customers will be highly influenced by the disposable income in their hands. The increase of competition in the mobile market in India has resulted to downfall of prices of cellular phones and has increased the buying behaviour of mobile phones purchase among the customers in cuddalore district.   The following frequency table explains the different incomes earned by the customers using cellular phones .

Table 6 Monthly Income of the respondents

Monthly Income	Frequency	Valid Percent
Below 10000	111	17.7
10001-20000	71	11.4
20001-30000	258	41.3
30001-40000	130	20.8
40000-50000	39	06.3
50000&Above	15	02.5
Total	624	100.0

From the above table, it is found that the sample unit comprises a maximum of 41.3%   of customers earning a monthly income of Rs.20001 to Rs.30000 and a minimum of 2.5% customers earning an income of above Rs.50000 prefer different brands of cellular phones. It is further found that 17.7 percent and 20.8 percent represent the customers in the income groups below 10000 and 30001to 40000 respectively.

WORK EXPERIENCE

Work experience plays a vital factor in this research. It is a well-known that as an individual puts in more work experience, Based on their experience their usage of cellular phones also change significantly.. As such the behaviour towards buying of more sophisticated cellular phones takes place.

Table .7 Work experience of the respondents

Work Experience	Frequency	Valid Percent
0-5	346	55.4
6-10	121	19.4
11-15	61	09.7
16-20	31	04.9
21-25	37	05.9
26-30	19	03.1
31&Above	10	01.6
	624	100.0

From the above table it is found that maximum of 55.4% customers possess 0-5 years of work experience and a minimum of 1.6% have the work experience of above 31 years of experience. It is further found that 19.4 percent and 9.7percent of cellular phone customers have 6 to 10 and 11 to 15 years of experience.

FACTORS OF REASONS FOR PREFERRING THE BRAND OF CELLULAR PHONES

The researcher incorporated 13 variables pertaining to the reasons for preferring the brand of cellular phones in likerts 5 point scale and expressed their firm reasons for preferring the brand of cellular phones consistently. In this juncture factor analysis by principle compound method is applied and the following results are obtained.

Table 8 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.814
Bartlett's Test of Sphericity	Approx. Chi-Square	2136.255
	Df	78
	Sig.	.000

From the above table it is found that the KMO value for sampling adequacy is .814. Bartlett's tests of spheribility along with approximate chi square value is 2136.255 are statistically significant at 5% level. This shows that the sample size is adequate and it designates to segment the reasons for preferring the brands into meaningful factors. The following communality table gives the range of variance for all the 13 variables from .284 to .735. This implies that the 13 variables of reason for preferring the brand possess the variance between 28.4% to 73.5% respectively.

Table 9 Communalities

	Initial	Extraction
Advertisement	1.000	.566
Added features in the other brand	1.000	.625
Change in perceived benefits	1.000	.580
Change in usage pattern	1.000	.542
Change in fashion	1.000	.534
Dissatisfaction with the present brand	1.000	.413
Inconvenience	1.000	.676
Involuntary switching	1.000	.735
Influence of friends and family	1.000	.595
Personal reason	1.000	.463
Promises made by competitors	1.000	.490
Variety seeking	1.000	.284
I am fashion consciousnessly attached to my cellular phone brand so I will never change the brand of my cellular phone	1.000	.554

Extraction Method: Principal Component Analysis.

From the above table it is found that the variance of the 13 variables of reasons for preferring the brand of cellular phones ranges from 0.284 to 0.676. Therefore this varies from 28.4 % to 67.6%. The upper limit of the variance is statistically significant and as the implication of properly segregated predominant factors as expressed in the table below:

Table 10 Total Variance Explained

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.824	29.417	29.417	2.480	19.081	19.081
2	2.041	15.698	45.115	2.375	18.270	37.350
3	1.193	9.179	54.294	2.203	16.944	54.294
4	.866	6.665	60.959			
5	.834	6.415	67.374			
6	.734	5.648	73.022			
7	.629	4.839	77.861			
8	.588	4.526	82.386			
9	.558	4.293	86.679			
10	.528	4.060	90.739			
11	.487	3.744	94.482			
12	.374	2.878	97.361			
13	.343	2.639	100.000			

Extraction Method: Principal Component Analysis.

From the above table it is found that the 13 variables are extracted into 3 predominant factors with eigenvalues 2.480, 2.375, 2.203 along with the individual variances 19.081,18.270 and 16.944. The total variance explained by these 13 variables is found 54.294. This leads to the following variable leading into the predominant factors.

Table 11 Rotated Component Matrix(a)

	Component		
	1	2	3
fashion consciousnessly attached	.739		
Personal reason	.651		
Promises made by competitors	.650		
Dissatisfaction with the present brand	.569		
Change in fashion	.511		
Variety seeking	.467		
Added features in the other brand		.784	
Advertisement		.739	
Change in perceived benefits		.672	
Change in usage pattern		.624	
Involuntary switching			.843
Inconvenience			.820
Influence of friends and family			.752

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a Rotation converged in 5 iterations.

FACTORS FOR BRAND LOYALTY OF CELLULAR PHONE CUSTOMERS

The researcher incorporated 10 variables pertaining to brand loyalty of cellular phone customers in likerts 5 point scale and expressed their decision making and expectation consistently. In this juncture factor analysis by principle compound method is applied and the following results are obtained

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Table –12 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			.816
Bartlett's Test of Sphericity	Approx. Chi-Square		1160.433
	Df		28
	Sig.		.000

From the above table it is found that the KMO value for sampling adequacy is .816. Bartlett's tests of sphearibility along with approximate chi square value is 1160.433 are statistically significant at 5% level. This shows that the sample size is adequate and it designates to segment the brand loyalty of variables into meaningful factors.

Table –13Communalities

	Initial	Extraction
Style	1.000	.589
Update Technology	1.000	.482
Status	1.000	.434
Better Offer	1.000	.461
Hobby	1.000	.524
Defect	1.000	.704
Broken	1.000	.570
Lost	1.000	.459
Influence of family and friends	1.000	.493
Compliment	1.000	.432

Extraction Method: Principal Component Analysis.

The following communality table gives the range of variance for all the 10 variables from .434 to .704. This implies that the 10 variables possess the variance between 43.4% to 70.4% respectively.

Table –14 Rotated Component Matrix(a)

	Component	
	1	2
Defect	.831	
Broken	.750	
Better Offer	.678	
Hobby	.672	
Lost	.646	
Style		.750
Status		.603
Update Technology		.560
Compliment		.489
Influence of family and friends		.410

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a Rotation converged in 3 iterations.

The first factor comprises 5 variables namely
Defect(.831),
Broken(.750),
Better Offer(.678)
Hobby(.672),

Lost(.646), This factor is known as "**Persuading spirit**

The second factor comprises of five variables namely
Style(.750),
Status(.603),
Update Technology(.560),
Compliment (.489)
Influence of family and friends (.410)
This factor can be known as " **Latest fashion".**

These customers are very firm in their decision making. Added features create an expectation and eagerness for the cellular phones, adopting an updated technology has become fashionable, Quality is the competitive variable which indirectly appeals to their ego needs. Therefore the positioning factor plays a urge role to purchase decision of cellular phones.

Cognitive theory holds that learning involves complex mental processing of information. Instead of stressing the importance of repetition or the association of a reward with a specific response, cognitive theories emphasize the role of motivation and mental processing in producing a desired response (lean G.schiffman and leslielazerkanuk). As the mental process is based on the mood, need and the price these variables supports the study on purchase decision.

Kim (2009) states that social influence could affect the intention to use a Cellular phone via influencing the perceived usefulness. Wan and Chiou, (2006)The technologies connecting individuals, colleagues, and organization groups hold great potential for learning, personal growth, and life improvement. Learning to use new Cellular phone and its related applications such as GPS, App Store (software supply for iPhone or android) could allow Cellular phone users to share their information seek self-development, and contribute to actualize the self.

Kotler and Armstrong (2010) the relationship between self-actualization and the adoption of Cellular phone has not been examined. This study suggests those new technologies and Cellular phone applications present consumers an opportunity to communicate and explore more and more of the world in order to actualize the product Brand is the most valuable asset for a company, where it represents a product or service means to consumers. Sharma (2010) focused on brand relationships are indeed*)* important for different categories of young consumers; second, to investigate the effect of peer influence, family influence, and brand relationships on switching intentions amongst young consumers; and third, to look at the impact of price changes on switching intentions in the context of brand relationships. Researcher's results suggest that young consumers develop relationships on all brand relationship dimensions.Shibashish, Chakraborty and KalyanSengupta (2008) endeavors to make a detailed study on important demographic variables of customers affecting brand switching of customers. This study will highlight pertinent aspects of prediction of switching proclivity of customers from one service provider to another. Jonathan, Lee ,Janghyuk, Lee and Lawrence, Feick, (2001) analysed that moderating role of switching costs in the customer satisfaction-loyalty link; and to identify customer segments and to retain them. Thus the purposes of this paper are: to

examine the moderating role of switching costs in the customer satisfaction-loyalty link; and to identify customer segments and then analyze the heterogeneity in the satisfaction-loyalty link among the different segments..

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