



International Journal of Multidisciplinary Research and Development



IJMRD 2014; 1(7): 280-286
www.allsubjectjournal.com
Received: 04-12-2014
Accepted: 22-12-2014
e-ISSN: 2349-4182
p-ISSN: 2349-5979

V. Suganthi

Assistant Professor, Department
of Commerce, Vidyasagar
College of Arts and Science,
Udumalpet, Tamil Nadu,
India.

S. Mohan

Former Head & Associate
Professor, PG and Research
Department of Commerce, NGM
College, Pollachi.

A study on consumer behavior towards selected brands of washing machine with special reference to Udumalpet town

V. Suganthi, S. Mohan

Abstract

A huge population of consumers was spending large sums of money on goods and services. Besides this, consumer buying behavior were shifting and becoming highly diversified. Even in case of industrial markets, buyers' preferences were becoming diversified and they too were exhibiting less predictable buying behavior. In the emerging business scenario various techniques are used by the marketer for influencing the buying behavior of their consumers. For conducting the research, data was collected through convenience sampling of 60 consumers of Udumalpet town. Later the data was analyzed with statistical tools like mean and the hypothesis was tested by using Chi-Square analysis. The market statistics in India indicate the top five brands of washing machine such as LG, Samsung, Bosch, Whirlpool, and IFB have achieved greater heights. It reveals that demographic profile such as age, gender, educational qualification, marital status, occupation and income of consumer of selected brand do not have influence in the level of satisfaction of consumer buying behavior.

Keywords: Consumer, Brand, Important Factors, Buying Behavior.

1. Introduction

Consumer behavior is a complex, dynamic, multidimensional process, and all marketing decisions are based on assumptions about consumer behavior. Behavior is a mirror in which everyone shows his or her image. Behavior is a process of responding to stimuli. Consumer behavior is to do with the activities of individuals in obtaining and using the goods and services. A huge population of consumers was spending large sums of money on goods and services. Besides this, consumer preferences were shifting and becoming highly diversified. Even in case of industrial markets, where the need for goods and services is generally more homogenous, buyers' preferences were becoming diversified and they too were exhibiting less predictable buying behavior. Marketing researchers involved in studying the buying behavior of consumers soon appreciated the fact that though there were many similarities, consumers were not all alike. The buying of goods or services that receives attention in consumer behavior but, the process starts much before the goods have been acquired or bought. A process of buying starts in the minds of the consumer, which leads to the finding of alternatives between products that can be acquired with their relative advantages and disadvantages. This leads to internal and external research. Then follows a process of decision-making for purchase and using the goods, and then the post purchase behavior which is also very important, because it gives a clue to the marketers whether his product has been a success or not. To understand the likes and dislikes of the consumer, extensive consumer research studies are being conducted.

The term consumer behavior defines as, state "the behavior of consumers in deciding to buy or use or not to buy or use or dispose or not to dispose of the products which satisfy their needs".

2. Statement of Problem

This paper aims to find out the factors influencing the consumers buying behavior towards selected brands of washing machine. There are various factors used by the marketer to influence the consumer buying behavior but how to decide that which of them can stimulate the buying behavior. And an effort is made to know whether demographic profile such as age, gender, educational qualification, marital status, occupation and income has significant relationship with the factors influencing the level of satisfaction of consumer buying behavior.

Correspondence:

V. Suganthi

Assistant Professor,
Department of Commerce,
Vidyasagar College of Arts and
Science, Udumalpet, Tamil
Nadu, India.

3. Objectives of the Study

To examine the consumer preference towards selected brands of washing machine.

To study the factors that influences the level of satisfaction of consumer buying behavior of selected brands of washing machine.

4. Review of Literature

Abdul Brosekhan and Muthu Velayutham in their study concluded that, the consumer behavior have a great impact on the home appliance products of the clusters. In a consumption environment, a person chooses a product or a brand, which seems to possess a maximum possibility of the definition or elaboration of his life style identity. Alternatively, a person makes a choice in a consumption environment in order to define or actualize his life style, identify it through the products or brands chosen.

Paramanand Dasar and Mallikarjun Maradi (2013) in their study states that Marketers of consumer durables must identify who makes and influences the buying decisions. This will enable the marketers in understanding how consumers influences, different marketing campaigns might be targeted to each type of persons, marketers also examine buyer's level of involvement and numbers of brands available to determine consumers buying behavior.

Rajeswari and Pirakatheswari (2014) in their study found that among the 10 features that influence the respondents while they purchase the consumer durable goods, the factor "Price" ranked first. It was followed by "Quality". The factor "Brand Image" got third rank and the factor "Model/Design" got fourth rank.

Shumeet Kaur and Ashita Chadha (2014) in their study shows that consumers are becoming more knowledgeable, exploratory and moving out of villages to gather information and select their products. The change in consumer buying habits and spending power of the rural population is compelling companies to target marketing strategies to the rural areas. Today, the consumers are more concerned about value satisfaction for the money exchanged, brand image and performance than ever before and it is for the companies to

meet the customers requirement to convert them into highly profitable marketing opportunities.

Uma & Sasikala (2014) in their study finds that maximum of the respondents of urban area uses home appliances than the rural area. The researcher also found the "BRAND NAME" plays a dominant role in purchasing the home appliances.

Methodology

The study is based on both primary and secondary data. Primary data have been collected by interview schedule. The primary data were collect from the consumers by interview schedule during the months from Sep-Dec 2014. The data has been collected from sixty respondents using selected brands of washing machine in our daily life of Udumalpet town. In this study convenient sampling method is used.

Limitations of the study

The study is confined to a finite period. The study was conducted only in Udumalpet town, hence the result arrived from the study may not extended to the other parts. The data collection is based on the questionnaire and the result would be varying according to the opinion of the individual. The study is based on the present buying behavior of the customers, but behavior subject to frequent changes, because of changes in Technological development and Style of living. The sample size is limited to 60 respondents only.

Statistical Tools Used for Analysis

The formal statistical tools used are

1. Simple Percentage Analysis
2. Chi-square Analysis.

Analysis and Interpretation

The analysis of data collected from primary source is presented in the form of tables and interpretation is given in description as required. Analysis refers to the course of findings out answers to the question that had arises to the study. Interpretation finds out relationship among the available data and the variables.

Table 1: Profile of Consumer

Particulars	Classification	Numbers	Percentage
Age	Upto 20	25	41.67
	21 to 40	18	30.00
	Above 40	17	28.33
Gender	Male	24	40.00
	Female	36	60.00
Educational Qualification	H. Sc.	12	20.00
	Under Graduate	22	36.67
	Post Graduate	12	20.00
	Others	14	23.33
Marital Status	Unmarried	28	46.67
	Married	32	53.34
Occupation	Employment	20	33.33
	Business	15	25.00
	Agriculture	13	21.67
	Others	12	20.00
Monthly Income	Below 10000	14	23.33
	10001 to 20000	25	41.67
	20001 to 30000	13	21.67
	Above 30000	8	13.33
	TOTAL	60	100.00

Source: Primary Data

Out of 60 consumers taken for the study, 41.67% belong to the age group up to 20 years, 60% of the consumers are female. As regards educational qualification 36.67% are

under graduate level and 33.33% are employed and 41.67% of the consumer recorded monthly income of Rs. 10001 to Rs. 20000.

Table 2: Brand Preferred

Brand of Washing Machine	Numbers	Percentage
LG	20	33.33
Samsung	15	25.00
Bosch	12	20.00
Whirlpool	8	13.33
IFB	5	8.34
Total	60	100.00

Source: Primary Data

Table 2 shows that 20(33.33%) consumers prefer LG, 15 (25%) consumer prefer Samsung; 12(20.00%) prefer Bosch; 8(13.33%) prefer Whirlpool and five (8.34%) prefer IFB.

Table 3: Factors Influencing Consumer Buying Behavior

Factors	Numbers	Percentage
Brand Loyalty	22	36.67
Price	12	20.00
Quality	11	18.33
Guarantee/ Warrantee	8	13.33
Durability	7	11.67
Total	60	100.00

Table 3 shows that 22(36.67%) consumer are influenced by brand loyalty; 12(20.00%) consumers are influenced by price; 11(18.33%) consumers are influenced by quality; 8(13.33%) consumers are influenced by Guarantee and Warrantee and only 7(11.67%) are influenced by durability.

Chi-Square Test

For the purpose of the analysis chi-square test was used to find out whether there is any significant relationship between dependent variables viz., level of satisfaction and independent variables likes sex, age, educational qualification, occupation, family size and income of the respondents. The following formula was applied for calculating the chi-square (x²) test.

$$X^2 = \frac{\sum (O - E)^2}{E}$$

Where,
 O = observed frequency
 E = expected frequency

Row total × column total

$$E = \frac{\text{Row total} \times \text{column total}}{\text{Grand total}}$$

Grand total

If the calculated value is greater than the table value at 5 percent level of significance, it is concluded that there is a significant relationship between the level of satisfaction of the respondents and that of independent variables. If calculated value is less than the table value, it is concluded that independent variable has no significant relationship in the level of satisfaction of the respondents.

5.4. Factors Influencing the Level of Satisfaction

An attempt has been made to study the factors influencing the level of satisfaction of the consumers. Demographic characteristics such as sex, age, education, occupation, income and family size are the important elements to be considered in measuring the attitudes of consumers. Thus in order to measure the attributes of consumers, they are classified based on their demographic characteristics.

Table 4: Age and Level of Satisfaction of Consumer

AGE	Level of Satisfaction					Total
	Highly Satisfied	Satisfied	Medium	Dissatisfied	Highly Dis satisfied	
Upto 20 years	9	4	5	4	3	25
21 to 40	7	3	3	3	2	18
Above 40	6	5	3	1	2	17
Total	22	12	11	8	7	60

Hypothesis = Age do not influence the level of satisfaction

Age and Level of Satisfaction of Consumer

Table 4 reveals the Age wise classification of the consumer and their level of satisfaction.

Table 4.1: Chi-Square Calculation

Cell	O _i	E _i	O _i -E _i	(O _i -E _i) ²	(O _i -E _i) ² / E _i
R1C1	9	9.16	.16	.0256	.0027
R2C1	7	6.6	.4	.16	.0242
R3C1	6	6.23	.23	.0529	.0084
R1C2	4	5	-1	1	0.2
R2C2	3	3.6	.6	.36	.1
R3C2	5	2.2	2.8	7.84	3.56
R1C3	5	4.83	.17	0.0289	.0059
R2C3	3	3.3	.3	.09	.0272
R3C3	3	2.01	.984	.9682	.4802
R1C4	4	3.33	.7	.49	.1471
R2C4	3	2.4	.6	.36	.15
R3C4	1	1.46	.46	.2116	.1449
R1C5	3	2.91	.09	.0081	.0278
R2C5	2	2.1	-0.1	.01	.0047
R3C5	2	1.28	.72	.5184	.405
Total					5.2881

Degree of freedom=(r-1)*(c-1) =(3-1)*(5-1)=2*3=8

Level of significance =.05

The tabulated value of chi square at 12 degrees of freedom on .05 level of significance is 15.5.

Since the calculated value 5.2881 is less than the table value of 15.5, the hypothesis is accepted.

Gender and Level of Satisfaction of Consumer

Table 5: Gender and Level of Satisfaction of Consumer

Gender	Level of Satisfaction					Total
	Highly Satisfied	Satisfied	Medium	Dissatisfied	Highly Dis satisfied	
Male	10	4	4	2	4	24
Female	12	8	7	6	3	36
Total	22	12	11	8	7	60

Hypothesis: Gender do not influence the level of satisfaction.

Table 5.1: Chi-Square Calculation

Cell	O _i	E _i	O _i -E _i	(O _i -E _i) ²	(O _i -E _i) ² / E _i
R1C1	10	8.8	1.2	1.44	.1636
R2C1	12	13.2	-1.2	1.44	1.0909
R1C2	4	4.8	-0.8	.64	.1333
R2C2	8	7.2	.8	.64	.0889
R1C3	4	4.4	-0.4	.16	.0363
R2C3	7	6.6	.4	.16	.0242
R1C4	4	3.2	.8	.64	.2
R2C4	6	4.8	1.2	1.44	.3
R1C5	4	2.8	1.2	1.44	.5142
R2C5	3	4.2	-1.2	1.44	.3428
Total					2.8942

Degree of freedom=(r-1)*(c-1) =(2-1)*(5-1)=1*4=4

Level of significance =.05

The tabulated value of chi square at 12 degrees of freedom on .05 level of significance is 9.49.

Since the calculated value 2.8942 is less than the table value of 9.49, the hypothesis is accepted.

Educational Qualification and Level of Satisfaction of Consumer

Table 6: Educational Qualification and Level of Satisfaction of Consumer

Educational Qualification	Level of Satisfaction					Total
	Highly Satisfied	Satisfied	Medium	Dissatisfied	Highly Dis satisfied	
HSC	4	3	2	2	1	12
UG	5	2	3	2	0	22
PG	2	4	2	1	3	12
Others	11	3	4	3	3	14
Total	22	12	11	8	7	60

Hypothesis: Educational qualifications do not influence the level of satisfaction.

Table 6.1: Chi-Square Calculation

Cell	O _i	E _i	O _i - E _i	(O _i - E _i) ²	(O _i - E _i) ² / E _i
R1C1	4	4.4	-0.4	.16	.0363
R2C1	5	8.6	-3.6	12.96	1.5069
R3C1	2	4.4	-2.4	5.76	1.3090
R4C1	1	5.13	-4.13	17.056	3.3249
R1C2	3	2.4	.6	.36	.15
R2C2	2	4.4	-2.4	5.76	1.3090
R3C2	4	2.4	1.6	2.56	1.0667
R4C2	3	2.8	0.2	.04	.01428
R1C3	2	2.2	-0.2	.04	.1818
R2C3	3	4.03	1.03	1.0609	.2632
R3C3	2	2.2	-0.2	.04	.1818
R4C3	4	2.56	1.44	2.736	.81
R1C4	2	1.6	.4	.16	.1
R2C4	2	2.93	-0.93	.8649	.02951
R3C4	1	1.6	-0.6	.36	.225
R4C4	3	1.86	1.14	1.2996	.6987
R1C5	1	1.4	0.4	.16	.1142
R2C5	0	2.56	-2.56	6.5530	2.56
R3C5	3	1.4	1.6	2.56	1.8285
R4C5	3	1.63	1.37	1.8769	1.1514
Total					17.12618

Degree of freedom=(r-1)*(c-1)=(4-1)*(5-1)=3*4=12

Level of significance = .05

The tabulated value of chi square at 12 degrees of freedom on .05 level of significance is 21.026.

Since the calculated value 17.12618 is less than table value of 21.026, the hypothesis is accepted.

Marital Status and Level of Satisfaction of Consumer

Table 7: Marital Status and Level of Satisfaction of Consumer

Marital Status	Level of Satisfaction					Total
	Highly Satisfied	Satisfied	Medium	Dissatisfied	Highly Dis satisfied	
Unmarried	9	7	5	4	3	28
Married	13	5	6	4	4	32
Total	22	12	11	8	7	60

Hypothesis: Marital status do not influence the level of satisfaction.

Table 7.1: Chi-Square Calculation

Cell	O _i	E _i	O _i - E _i	(O _i - E _i) ²	(O _i - E _i) ² / E _i
R1C1	9	10.27	1.27	1.61	.1567
R2C1	13	11.73	1.27	1.61	.1372
R1C2	7	5.60	1.40	1.96	.35
R2C2	5	6.70	-1.70	2.89	.4313
R1C3	5	5.13	-0.13	0.02	.0038
R2C3	6	5.87	0.13	0.02	.0037
R1C4	4	3.73	0.27	0.07	.0187
R2C4	4	4.27	-0.27	0.07	.0163
R1C5	3	3.27	-0.27	0.07	.0214
R2C5	4	3.73	0.27	0.07	.0187
Total					1.1578

Degree of freedom=(c-1)*(r-1)=(2-1)*(5-1)=1*4=4

Level of significance = .05

The tabulated value of chi square at 4 degrees of freedom on .05 level of significance is 9.49

Since the calculated value 1.1578 is less than table value of 9.49, the hypothesis is accepted.

Occupation and Level of Satisfaction of Consumer

Table 8: Occupation and Level of Satisfaction of Consumer

Occupation	Level of Satisfaction					Total
	Highly Satisfied	Satisfied	Medium	Dissatisfied	Highly Dis satisfied	
Employment	6	4	5	3	2	20
Business	8	2	3	2	0	15
Agriculture	4	3	3	1	2	13
Others	4	3	0	2	3	12
Total	22	12	11	8	7	60

Hypothesis: Occupation do not influence the level of satisfaction.

Table 8.1: Chi-Square Calculation

Cell	O _i	E _i	O _i - E _i	(O _i - E _i) ²	(O _i - E _i) ² / E _i
R1C1	6	7.33	-1.33	1.77	.24
R2C1	8	5.50	2.50	6.25	1.14
R3C1	4	4.77	-0.77	0.59	0.12
R4C1	4	4.40	-0.40	0.16	0.04
R1C2	4	4.00	0	0	0
R2C2	2	3.00	-1.00	1	0.33
R3C2	3	2.60	0.40	0.16	0.06
R4C2	3	2.40	.60	0.36	0.15
R1C3	5	3.67	1.33	1.77	0.48
R2C3	3	2.75	.25	0.06	0.02
R3C3	3	2.38	.62	0.38	0.16
R4C3	0	2.20	-2.2	4.84	2.20
R1C4	3	2.67	0.33	.11	0.04
R2C4	2	2.00	0	0	0
R3C4	1	1.73	-0.73	0.53	0.31
R4C4	2	1.60	.40	0.16	0.10
R1C5	2	2.33	-0.33	0.11	0.05
R2C5	0	1.75	-1.75	3.06	1.75
R3C5	2	1.52	0.48	0.23	0.15
R4C5	3	1.40	1.60	2.56	1.83
Total					9.17

Degree of freedom=(r-1)*(c-1) =(4-1)*(5-1)=3*4=12

Level of significance = .05

The tabulated value of chi square at 12 degrees of freedom on .05 level of significance is 21.0

Since the calculated value 9.17 is less than table value of 21.0, the hypothesis is accepted.

Income and Level of Satisfaction of Consumer

Table 9: Income and Level of Satisfaction of Consumer

Income	Level of Satisfaction					Total
	Highly Satisfied	Satisfied	Medium	Dissatisfied	Highly Dis satisfied	
Below 10000	5	3	3	2	1	14
10001 to 20000	10	4	4	4	3	25
20001 to 30000	4	4	2	1	2	13
Above 30000	3	1	2	1	1	8
Total	22	12	11	8	7	60

Hypothesis: Income do not influence the level of satisfaction.

Table 9.1: Chi-Square Calculation

Cell	O _i	E _i	O _i - E _i	(O _i - E _i) ²	(O _i - E _i) ² / E _i
R1C1	5	5.13	-.13	.0169	.0032
R2C1	10	9.71	.83	.688	.0751
R3C1	4	4.76	-.76	.5776	.1213
R4C1	3	2.93	.07	.0049	.0016
R1C2	3	2.8	.2	.04	.0142
R2C2	4	5	-1	1	0.2
R3C2	4	2.6	1.4	1.96	.7538
R4C2	1	1.6	-0.6	.36	.225
R1C3	3	2.5	.5	.25	.1
R2C3	4	4.58	-.58	.3364	.0737
R3C3	2	2.38	.38	.1444	.0606
R4C3	2	1.47	.53	.2809	.1910
R1C4	2	1.86	.14	.0196	.0105
R2C4	4	3.3	.7	.49	.1484
R3C4	1	1.7	-0.7	.49	.2882
R4C4	1	1.06	-0.06	.0036	.0032
R1C5	2	1.63	.37	.1369	.0839
R2C5	3	2.91	.09	.0081	.0027
R3C5	2	1.51	.49	.2401	.1590
R4C5	1	0.93	.07	.0049	.0052
Total					2.52068

Degree of freedom=(c-1)*(r-1) =(5-1)*(4-1)=4*3=12

Level of significance = .05

The tabulated value of chi square at 12 degrees of freedom on .05 level of significance is 21.026

Since the calculated value 2.52068 is less than table value of 21.026, the hypothesis is accepted.

Findings of the Study

From the analysis carried out with the above objectives and hypotheses, the following are the major findings.

- 41.67% belong to the age group up to 20 years,
- 60% of the consumers are female.
- Majority 36.67% of consumers educational qualification are under graduate level.
- 33.33% are employed
- 41.67% of the consumer have a monthly income from Rs.10001 to Rs.20000.
- Majority 33.33% consumers prefer LG
- 25% of the consumers prefer Samsung
- 20.00% consumers prefer Bosch;
- 13.33% consumers prefer Whirlpool and
- 8.34% consumers prefer IFB.
- Majority 36.67% consumers are influenced by brand loyalty
- 20.00% consumers are influenced by price
- 18.33% consumers are influenced by quality;
- 13.33% consumers are influenced by Guarantee and Warrantee
- 11.67% consumers are influenced by durability.
- There is no significant relationship with demographic profile such as age, gender, educational qualification, marital status, occupation and income and factors influencing level of satisfaction of consumer buying behavior.

Suggestions

1. The manufacturers should initiate and encourage a regular monitoring and of consumers reaction towards himself, his product range and particular brand.
2. The buyers of the consumer durables should insist all the technical information on the use of durable products without any technical fault leading to frequent repairs, free servicing of the durables by dealers during the guarantee period insisted upon the buyers.
3. The buyers of consumer durables should prefer well known Indian brands to imported ones so that after sales service can be availed.
4. Not only quality improvements but improvement in after sales service can be developed.
5. A regular communication and announcement of product to the customers by using advance media techniques is inevitable.
6. Brand image is caused by the brand awareness and so brand awareness should be created to pull the customers towards purchasing of commodities.
7. The awareness being the first element of purchase process, the manufactures need to focus on the customer awareness in a better way for achieving the results.

Conclusion

On the basis of above findings it can be concluded that various factors plays significant role in consumer Buying Behavior. The consumers are most influenced by Brand Loyalty further followed by price and quality while Guarantee /warrantee and after sales service have been found to be insignificant. The marketers should focus on factors influencing consumer buying behavior. So the main mantra for the companies to be successful is to satisfy the consumers and develop brand image and brand loyalty amongst them. Therefore it is necessary it is for the companies to meet the

customers requirement to convert them into highly profitable marketing opportunities.

References

1. Brosekhan A, Velayutham M. "An Emprical Study on Consumers Buying Behaviour towards Selected Home Appliance Products in Ramanathapuram" IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668, 13-21.
2. Dasar P, Maradi M. "Consumer Behavior on Consumer Durables With Reference To Bijapur District" - Global Journal of Commerce and Management Perspective 2013; 2(1):36-46.
3. Rajeswari R, Pirakatheeswari P. "A Study on Consumer Behavior and Factors Influencing the Purchase Decision of Durable Goods with Reference to Salem District." International Research Journal of Business and management 2014; 7(11):10.
4. Kaur S, Chadha A. "Consumer Behaviour for Durable Goods: A Case Study of Rural Punjab". Journal of International Academic Research for Multidisciplinary 2014; 2(2).
5. Uma K, Sasikala P. "Study on Consumer's Perceptions and Buying Behaviour Towards Selected Home Appliances Products in Madurai District". Indian Journal of Applied Research 2014; 4(4):87.