

An Investigation on Purchase Behavior of Buyer White Durable Goods with Exceptional Reference to Chennai

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ABSTRACT

Consumer durable industry comprise of household appliances used for cooking, baking, cleaning, cooling, food preservation, heating and laundry appliances. Consumer durable industry is progressing at a brisk pace as the demand for the products is continuously on the rise. With rising level of disposable incomes and the need for both partners to work makes it necessary to go for consumer durable products. Available of credit facility and various models to suit various needs and budgets also contribute significantly to the growth of this industry. There was a period when consumer durable items were considered luxury, but now, it has become an essential commodity in every house hold. As with any other industry, consumer durable industry has become highly competitive and innovation is the name of the game. Manufacturers of white goods are hard pressed to differentiate and thus are forced to introduce feature-rich products. They develop innovative and new features every now and then based on thorough study of consumer perception. The survival and success of any white goods brand is dependent on factors such as aesthetics, performance, durability, price and self-esteem. How it relates to the self-image of the customer is also a key consideration that White Goods manufacturers need to fulfil. Primary data has been collected from the consumers who own the white goods – Refrigerator in Chennai city by giving a structure of the 13 questionnaires mainly . Secondary data has been collected from various published and reliable sources including Journals, Magazines, Reports, Books, Dailies, Periodicals, Articles, Research Papers, Websites, Association Publications, Manuals', Company annual reports and Booklets, etc. A convenient sample of 110 consumers who owns white goods Refrigerator was chosen for the study. This study concludes respondents prefer usability, quality, uniqueness, type of refrigerator, power consumption, etc. The study could enable to understand the users' view and expectations based on the utility of refrigerators and also the manufacturer could be able to fulfill the need of the respondents according to their preferences and perception. Hence these study inferences exhibit the users' perception of refrigerators in Chennai market.

Keywords : White Durable Goods, Consumer Perception, Refrigerators, Self Esteem.

I. INTRODUCTION

The consumer buying preferences are rapidly changing and moving towards high-end technology products with acculturation. Products which were once considered luxury items have become a necessity

because of the changing lifestyle and rising income levels. With growth in disposable incomes, the demand for high-end products such as television, washing machine, refrigerator, and air conditioners has increased considerably. It is also facilitated by the easy availability of finance and prevalence of nuclear

families. Increasing in demand for consumer durable in the market the fall in prices as Indian consumers are continue to attach a high degree of importance to value for money. The consumer is brand-conscious, but not necessarily brand-loyal, and might even pick up a reliable private label if it offers good price and quality values. The marketers are facing lot of challenges: regarding differentiation which is valued by the customers. Brands in this context are new business warriors. Brands are wealth generators of the twenty first century. Products are not differentiated in the factories, but brands are differentiated in the customers 'mind. Brands are capable of transforming mundane products into objects of desire. Accordingly, the market value of a business is determined by the number and types of brands it holds.

1.2. CONSUMER DURABLE WHITE GOODS

White goods are defined as major appliances, large machines which accomplish routine housekeeping tasks, including cooking, food preservation, or cleaning, whether in a household, institutional, commercial or industrial setting. The white goods are generally machines which perform tasks, such as cooking, food preservation and cleaning. The consumer durable white goods industry is heavily influenced by various energy-saving regulations, affecting not only the appliances, but the manufacturing facilities as well.

CLASSIFICATION OF CONSUMER DURABLES

Table-1

Consumer Appliances		Consumer Electronics
White goods	Brown Goods	
Refrigerators Washing machines Air-conditioners Speakers Audio equipments	Mixers Grinders Microwaveovens Iron Electric fans Cookingrange Chimneys	Mobile phones Televisions MP3 players DVD players VCD players

Source: Cygnus Quarterly Report, Aug 2007, Edelweiss Report on Industrial Production

1.3. STATEMENT OF THE PROBLEM

India's consumer durable market with the rising level of incomes, double income families, changing lifestyles, availability of credit, increasing consumer awareness and the introduction of new models by the Indian as well as multinational companies is riding the crest of the country's economic boom. As the Durable market is growing rapidly, an understanding of the consumer behaviour regarding the characteristic of consumers in influencing their buying behaviour is crucial. Consumer requirements of Air-condition, Washing machine and Refrigerator are at present not limited to its basic function but also on other values like – efficiency, ease of use and comfort. In recent years White Goods have been the subject of considerable research and development because they represent a significant proportion of the energy consumed in an average household. Attributes potentially influencing a consumer's decision entail design, performance, technological innovation, reliability, warranty, service and last but not least the initial purchase price. The purchase of white goods offers a complex and challenging field for investigating consumer behaviour.

1.4. OBJECTIVES OF THE STUDY

The specific objectives of the study are

- To determine the impact of Demographic Variables towards preference of White Goods.
- To identify and analyse the influence of various Dimensions of Market Stimuli on Consumer satisfaction level towards White Goods.

1.5. HYPOTHESIS

Ho: There is no significant difference between the male and female respondents on refrigerator.

H₀: There is no significant difference between various level of educated respondents on refrigerator.

II. LITERATURE REVIEW

Smith and Stewart A (1970), in their article reviewed and discussed the research related to how consumers choose between brands of durable goods and the implication of marketing strategy. Out of the sparse research collected they acknowledged that factors determining brand choice for packed goods are different from the factors that determine brand choice of durable goods and also identified a research gap on brand choice behaviour specifically for durable goods. Hence, concluded that brand choice determinants should be based on indirect inferences than direct findings.

Cox, Anthony et al. (1983) Preliminary results of a two-wave longitudinal study of durable goods purchase plans and fulfilment supported the value of further investigating four acquisition categories for major durables, including Maintenance Replacement, Upgrading Replacement, Additional Unit Expansion and First Acquisition Expansion. They identified that the categories were more useful than the distinction between “planned and “unplanned” measures in explaining variations in search, satisfaction and payment method variables.

Gupta and Singh (1989) in their research on consumer brand choice behaviour for televisions observed that majority of consumers owned black and white televisions. Durability, Brand Image and Price were the reasons for preference followed by Family and After Sales Service.

Gupta and Raut (1989) studied the consumer brand choice behaviour for television, observed that majority of the consumers owned black and white televisions. Durability, brand image and price were

the reasons for preference, followed by family liking and after sales services.

III. RESEARCH GAP

Researches on durable goods were mainly based on post purchase behaviour, Buying behaviour, replacement, impact of environmental factors, advertisement, decision making, perceived product quality, Women purchase attitude, etc., providing an opportunity for a new area of research. Among the research on durable goods very few researches have been conducted on white durable goods expose the essential of research. Based on the literature analysis the researcher has identified the research gap that there were no studies conducted on consumer perception on white durable goods based on marketing stimuli in Chennai

IV. RESEARCH METHODOLOGY

1) Sources of Data

a) **Primary data** has been collected from the consumers who own the white goods – Refrigerator were chosen for the study in Chennai city.

b) **Secondary data** has been collected from various articles published and reliable sources including Journals, Magazines, Reports, Books, Dailies, Periodicals, Articles, Research Papers, Websites, Association Publications, Manuals’, Company annual reports and Booklets etc.

2) Identification of Population

The study is conducted in Chennai as it is a vibrant market crammed with a melodious bend of both traditional and modern customers. People dwelling in Chennai were considered as the respondents.

3) Sampling Technique and Sample Size Determination

A sample of 110 white goods customers is taken through nonprobability convenient sampling. In non-probability samples, the probability of each case being selected from the total population is not known. The research focuses to study the consumer's perception on White Goods –Refrigerator.

4) Structure of the Questionnaire

The primary data was collected using a structured questionnaire consisting of three parts – 1. Personal Information – Demographic variables; 2. Basic Information on white goods chosen for the study – Refrigerator; 3. Consumer Satisfaction Level on white goods based on the market stimuli variable chosen for the study.

It includes both optional and statements in Linkert's five point scale. The responses are obtained from consumers who own a Refrigerator taken for the study. The five point scale allowed for the standards of results as well as making it easier for respondents to complete the questionnaire.

5) Analytical Tools

In order to analyze the customer perception on white goods in the selected sample units' techniques such as Percentage analysis, T-test, Annova, has been used with the help of SPSS 17 version.

6) Period of the Study

The study period of the research Work is 2018. The data was collected during the period 1 March 2018 – 31 July 2018.

V. DATA ANALYSIS AND INTERPRETATION

Demographic Profile of the Consumers

Demographic profile of the consumers are Classified according to Gender, Age wise, Marital status, Education, Occupation, Annual income and Number of earning members in the family.

A. DEMOGRAPHIC VARIABLES

The following table discusses the demographic variables of the respondents who were surveyed for the study.

TABLE-2

Demographic Variables	Categories	Frequency	Percent
Gender	Male	71	64.5
	Female	39	35.5
Age	<25	33	30.0
	26-35	30	27.3
	36-45	28	25.5
	>45	19	17.3
Marital Status	Single	37	33.6
	Married	73	66.4
Education	Schooling	32	29.1
	Graduate	56	50.9
	Post Graduate	11	10.0
	Professional	11	10.0
Occupation	Business	12	10.9
	Govt. Employee	11	10.0
	Private Employee	77	70.0
	Professional	10	9.1
Annual Income	< 2 Lakh	30	27.3
	200001-300000	48	43.6
	300001-400000	24	21.8
	> 4 Lakh	8	7.3

Source: Primary Data

INTERPRETATION

The study collected response from 110 respondents in Chennai. The study categorized the respondents on various demographic variables which are listed in the above table. The study found male respondents were 64.5 percent and respondents who are below age of 25 years consisted of 30 percent of the respondents. Two third of the respondents were married and more than two third of the respondents were graduates and above. Majority of the respondents were employed in private firms. One tenth of the respondents were running business and Govt. employees respectively. The annual income ranged between 2 lakh and 3 lakh for the majority of the respondents.

B.REFRIGERATOR USAGE OF THE RESPONDNETS

The study analyzes the information about the refrigerator from the respondents. The response were collected and listed in the below table.

TABLE-3

Factor	Categories	Frequency	Percent
Presence of refrigerator in home	Yes	110	100.0
Kind of refrigerator	Single Door	64	58.2
	Double Door	31	28.2
	Triple Door	15	13.6
Capacity of the Refrigerator	100 Lt	5	4.5
	200 Lt	65	59.1
	300 Lt	22	20.0
	400 Lt	13	11.8
	500 Lt	5	4.5
Preferred brand of refrigerator	LG	26	23.6
	Samsung	32	29.1
	Videocon	1	.9
	Godrej	40	36.4
	Whirlpool	11	10.0

Point of Purchase	Viveks	19	17.3
	Vasanth & Co	63	57.3
	Next	3	2.7
	Company Showroom	25	22.7
Period of usage	1 to 3 Year	22	20.0
	4 to 5 Year	23	20.9
	6 to 7 Year	24	21.8
	8 to 10 Year	11	10.0
	More than 10 Year	30	27.3

Source: Primary Data

Interpretation

From the above table, it is observed that all the respondents use refrigerator in their home. The kinds of refrigerator used by respondents were classified as single, double and triple door. More than half of the respondents used single door refrigerator. Double door refrigerator was used by 28.2 percent and triple door refrigerator was used by 13.6 percent. The capacity of the refrigerator ranges from 100 liters to 500 liters in Indian scenario. The respondents mainly used 200 liters refrigerator. 59.1 percent of the respondents used 200 liters refrigerator. Only 4.5 percent respondents used 100 liter refrigerator. The preferred brand for refrigerators by the respondents was Godrej. 36.4 percent agreed that it is their preferred brand for refrigerator. 29.1 percent agreed Samsung and 23.6 percent agreed LG as their preferred brand for refrigerator. Videocon was the least preferred brand by the respondents for the refrigerator with less than one percent.

Vasanth and Co was the favourite point of purchase for the respondents. 57.3 percent of the respondents endorsed Vasanth and Co as their favourite point of purchase. Company showroom was the second top destination with 22.7 percent for purchase of

refrigerators. Viveks showroom was third favourite destination with 17.3 percent.

The period of usage of the present refrigerator was classified into 1 to 3 years, 4 to 5 years, 6 to 7 years, 8 to 10 years and more than 10 years. It was found majority of the respondents have the period of usage of current refrigerator been more than 10 years. One fifth of the respondents revealed that they are using it for a period of 1 to 3 years. Slightly more than one fifth of the respondents use it between 4 to 5 years and 6 to 7 years respectively.

C. PURCHASE INTENTIONS

The study evaluates the factors which are involved during the purchase of the refrigerator. The response of the sample respondents are summarized in the below table.

TABLE-4

Factor	Categories	Frequency	Percent
Mode of payment on purchase	Cash	87	79.1
	Credit	23	20.9
Preference of Purchase on Offer	Festival Offer	54	49.1
	Seasonal Offer	36	32.7
	Exchange Offer	20	18.2
Availing of loan for purchase	Yes	60	54.5
	No	50	45.5
	Total	110	100.0

Source: Primary Data

Interpretation

The study found that cash dominates the payment mode outperforming credit. Cash was the transaction mode for 79.1 percent of the respondents. Credit transactions accounted for the remaining 20.9 percent only.

The opinion of the respondents on purchasing refrigerator during offer sale was obtained. It was observed that 49.1 percent of the respondents

preferred purchasing during festive offers. Seasonal offers were next preferred with 32.7 percent. Exchange offer was preferred by only 18.2 percent. Provision of loan for refrigerators is on increase when the researcher witnessed in showrooms. The results obtained are also in similar manner. 54.5 percent availed loan during the purchase of refrigerator. Only 45.5 percent did not availed loan during the purchase. The statements on refrigerators were provided to the respondents. Various elements such as durability, guarantee, and aesthetic sense were considered for evaluation. The response on statements were collected based on the likert scale. The following table discloses the general statistical information on the statements.

TABLE-5

STATEMENTS	N	Mean	Std. Dev	Std. Error Mean
Ease of use in operating the product-Usability	110	3.28	1.300	.124
Performance promised without Break down	110	4.25	.837	.080
Reliability-Trustworthiness on the brand	110	4.40	.921	.088
Durability-Long Lasting performance of the product	110	4.68	.468	.045
Ranking of Brand Based on its performance of the product	110	3.61	.526	.050
Desired Demand for superior feature in the product	110	3.39	.490	.047
Price of the product indicates my prestige in the society	110	4.15	.492	.047
Warranty /Guarantee given to the product	110	4.00	.000 ^a	.000

Exchange offer Dwelled with the product /EMI Facilities	110	2.95	.298	.028
Seasonal offer provided for the product	110	3.34	.512	.049
Emotional related to the product	110	4.00	.000 ^a	.000
Product Aesthetic is appealing to me	110	3.89	.313	.030
Family Bondage with the product /Brand	110	3.78	.531	.051

a. t cannot be computed because the standard deviation is 0.

Source: Primary Data

INTERPRETATION

Thirteen statements were provided to the respondents and their responses were collected. It was found six statements had mean value more than four. Durability or long lasting performance of the product had the highest mean value. Reliability-Trustworthiness on the brand and reliability variables followed the former with mean value 4.40 and 4.25 respectively. The least mean value was for the statement on exchange offer dwelled with the product.

TABLE-6

Statements	Test Value = 3			
	t	df	Sig.	Mean Difference
Ease of use in operating the product- Usability	2.273	109	.025	.282
Performance promised without Break down	15.605	109	.000	1.245
Reliability-Trustworthiness on the brand	15.948	109	.000	1.400

Durability-Long Lasting performance of the product	37.698	109	.000	1.682
Ranking of Brand Based on its performance of the product	12.138	109	.000	.609
Desired Demand for superior feature in the product	8.364	109	.000	.391
Price of the product indicates my prestige in the society	24.617	109	.000	1.155
Exchange offer Dwelled with the product /Emi Facilities	-1.920	109	.057	-.055
Seasonal offer provided for the product	6.893	109	.000	.336
Product Aesthetic is appealing to me	29.836	109	.000	.891
Family Bondage with the product /Brand	15.435	109	.000	.782

Source: Primary Data

INTERPRETATION

The study applied one tailed t test to test the significance of the statement. It was found all the variables except one were found significant.

5.1 Findings

1. Percentage Analysis

- Majority (71%) of the respondents are male.
- Majority (33%) of the respondents in the study belong to the age group of 25 years.
- Majority (73%) of the respondents are married.
- Majority (56%) of the respondents have completed graduate only.
- Majority (77%) of the respondents falls in the category of private employees.

- Majority (48%) of the respondent's monthly income is below Rs.200001-300000.
- Female respondents (3.03) dominated male respondents (2.90) on the exchange offer dwelled with the product and EMI facilities. Therefore majority of the respondents are Female Respondents.

2. Refrigerator Usage of the Respondents

- Majority(64%) of the respondents used single door refrigerator
- Majority (200lit) of the respondents used capacity of the refrigerator.
- Majority (40%) of the respondents preferred brand for Godrej.
- Majority (63%) of the respondents preferred Vasanth&Co was the favourite point of purchase.
- Majority (30%) of the respondents have the period of usage of current refrigerator been more than 10 years.
- The study employed ANOVA for analyzing the differences in educational level on the statements on refrigerators by the respondents. It was observed that only one statement had significant differences among the respondents. The respondents who had are not graduates and post graduates had more response for aesthetic appeal of the product. The mean of the respondents whose educational level is schooling was 4. Whereas, the mean of the graduates and post graduates was 3.80 and 3.91 indicating lesser acceptance. The educated respondents did not easily fall prey for aesthetic appeal.

3. Purchase Intention

- Majority (87%) of the respondents preferred cash only.
- Majority (54%) of the respondents on purchasing refrigerator during festival offers.
- Majority (60%) of the respondents availed loan during the purchase of refrigerator.

SUGGESTIONS

- The buyers of the consumer goods should insist that all the technical information are revealed on the use of durable products to enable them to use the products without any technical fault leading to frequent repairs, free servicing of the durables by dealers during the guarantee period insisted upon the buyers.
- Some customers are conscious of branded items; they consider a better known brand as a better brand. They also do not mind paying extra for a branded product. Therefore, the companies producing quality products but marketing with unpopular brands need to allocate huge budget for advertising and publicity in order to build a brand image. Successful brand building among the customers can also lead to the customers suggesting their brands to others; this ensures brand loyalty.
- Customer looking for services like warrantee and guarantee and promises and commitment are considerable for the customer for a trust, so that

VI. TEST ANALYSIS IN SATISFACTION LEVEL

The responses on statements were collected based on the likert scale. The following table discloses the general statistical information on the statements.

- Thirteen statements were provided to the respondents and their responses were collected. It was found six statements had mean value more than four. Durability or long lasting performance of the product had the highest Mean value (4.68).
- The statements on ease of use, performance, reliability, durability, ranking of brand, desired demand, and price of the product indicating prestige, seasonal offer provided, product aesthetic appeal and family bondage were significant. The tabulated t value was highest (29.836) for the statement on aesthetic sense of the refrigerator is appealing.

retail mall should give warrantee and guarantee to attract the customer and to fulfill the customer requirement.

VII. CONCLUSION

Demand for consumer white goods is more volatile since it moves rapidly or disperses quickly in relation to business conditions. Marketers separate the current demand for white goods in terms of replacement old products and expansion of the total stock demand for such goods. The study reveals the fact that a customer buys a durable only when he feels the need for it. While executing his decision to buy he considers the other aspects like quality, technology, price, etc. That is, in case of need, if the quality available is good if he is satisfied with technology on which it is bared he readily decides to buy, thus it means, he does not buy for the sake of the company or for the brand name. Thus, the manufacturer/dealer, through suitable advertising & promotional strategies create awareness, make the customer to feel that his product is essential for him, influence him to buy and experience the product in wholesome, deeply implant the goodness if it, in the customer create repetitive need for the same, upgrade the product simultaneously and try to retain the customer for ever.

VIII. SCOPE FOR FUTURE RESEARCH

Further study is advised especially to consider factors impacting choice of shopping formats, specific stores, and whether income plays a determining role in the decision making as regards the same. The topic discussed in this study is still developing at present, it is hoped to be continually explored with the addition of other external as well as internal factors affecting consumer preference toward consumer White durable in retail mall.

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