

## ASSESSMENT OF FACTORS INFLUENCING SELECTION AND PURCHASE OF HOUSEHOLD ELECTRONIC PRODUCTS

Urvashi Mishra\*

### Abstract

*Consumer behavior in the actual world often varies from that predicted by economics and policy. Drawing together evidence from behavioral economics and marketing, this paper pursued factors influencing the selection and purchase of selected electronic products and therefore will be helpful for consumer durable companies in deciding and implementing their sales strategy for the promotion of household electronic products. The present study is conducted on 400 buyers of selected electronic products- refrigerator, television, and washing machine, in Ahmadabad city of Gujarat. A structured questionnaire was distributed to the buyers which include their personal information and they were asked about the brand of the electronic product they had purchased, selection criteria for a particular product, main role player of purchasing a particular product, source of information and buying motives for selecting the product.*

### Introduction

Consumer behavior means in its simplest from selection, purchase and consumption of goods and services by consumers for satisfaction of their wants. The consumer buying behavior is a complex process as a number of internal and external factors influence the buyer's decision making and consumption pattern. The study of consumers helps firms and organizations improve their marketing strategies by understanding issues such as the psychology of how consumers think, feel, reason, and select between different alternatives (e.g., brands, products); the psychology of how the consumer is influenced by his or her environment (e.g., culture, family, signs, media); the behavior of consumers while shopping or making other marketing decisions; limitations in consumer knowledge or information processing abilities influence decisions and marketing outcome; how consumer motivation and decision strategies differ between products that differ in their level of importance or interest that they entail for the consumer; how marketers can adapt and improve their marketing campaigns and marketing strategies to more effectively reach the consumer. In most cases, other external factors (for example price, special offers, brand loyalty and the type of product) all played an influential role in purchasing decisions (FSA 2009). There are different processes involved in the consumer behavior. Initially the consumer tries to find what commodities he would like to consume among all the options available to him, and selects the one which promises him a maximum utility among all. After this he determines his capacity of spending money for that particular commodity and, last but not the least he analyzes the comparative prevailing prices of commodities and takes the decision about the commodity which he should consume.

### Objectives

1. To recognize the factors influencing the selection and purchase of household electronic products.
2. To study the factors affecting consumer's purchase behavior.
3. To find out the brand preferences of the consumers.
4. To ascertain the motives involved in purchasing

\*Assistant Professor, Department of Family and Community Resource Management, Faculty of Family and Community Sciences,

\*\*The Maharaja Sayajirao University of Baroda, Vadodara

household electronic products.

## **Review of Literature**

In Robinson and Ballinger (1996) point of view brand recognition may serve to reinforce buying habits, consumers exhibit much lower year- to-year brand loyalty than is often anticipated, with only a small percentage of consumers exhibiting what can be thought of as strong loyalty to particular brands. In Blythe's (2002) word, consumer behavior refers to the mental and emotional process and the observable behavior of consumers during searching, purchasing and post consumption of a product or service. Bart and Kama (2007) concluded in his research that despite claims that advertising creates consumer demand, attempts to convince consumers to buy a new product through advertising will do little more than stimulate initial sales. Only successful trials and the subsequent repeated buying of a product will actually lead to the maintenance of consumer demand. Dorin (2007) in his research paper stated that fashion affect consumer's behavior in electronic commerce environments. However, the study found inconsistent results between different dimensions of perception and its effects on buying decision. Kotler (2008) defines consumer behavior as study of how individuals, groups, and organization select, buy, use and dispose of goods, services ideas or experiences to satisfy their needs and desires. Lars (2008) in his research article mentioned that how consumer motivation and decision strategies differ between products that differ in their level of importance or interest that they entail for the consumer; and how the consumers is influenced by his or her environment (i.e. culture, family, signs, media). Sinha (2008) in her research article found that the purchase made by consumers is mainly to satisfy their demands and to solve the underlying problem.

Alreck and Robert (1999) studied in their research that a product or brand preference might be built through one or more of the theories behind the promotion strategies which motivate and stimulate consumer brand preference through the ideas of Maslow's hierarchy of needs. Simple brand preference building is an effective mechanism to present the product or brand name and a particular need through constant and simultaneous repetition.

A common feature of standard economic thought is the belief that, when individuals make poor choices it is the results of misinformation or a lack of information. The type, complexity and amount of information provided, and the way in which it is presented, all have a significant impact on the likelihood of people reading and understanding it. In the UK, research has found that consumers are

willing to spend time reading a lot of available information (especially 'small print') and that the formal, legal language of much information is confusing. Lee and Beatty (2002) found that the final outcome stage has been increasingly penetrated by adolescents and that there may be merit in reconsidering the role of children in family purchases at all stages of decision making. Belch et al (1985) reported a lower level of children's influence compared to that of the parents regarding both how much to spend and where to purchase using a quantitative approach. The changing structure of the family unit also may influence the role of children in decision making (Rindfleisch, Burroughs & Denton, 1997). As such, children are now increasingly raised in not just traditional families but also step-parent and single parent families (Haskey, 1998). In addition the supposed 'marked demise' of gender differences in family buying decisions (Engel et al, 1990) towards a more egalitarian approach may affect various aspects of consumer behavior with more modern families expecting more involvement from adolescents. Researches like Qualls (1987) have studied on the role of husband and wife in household decision making. In case of expensive products and services, husbands and wives engage in more joint decision making. The market needs to determine which member normally has the greater influence in the purchase of a particular product or services either the husband or the wife, or they have equal influence. People buy to satisfy all types of needs, not just for utilitarian purpose. According to Duncan, 2005, consumer motive is defined as "internal impulses that when simulated initiate some type of response." Consumers are continuously reacting to their internal impulses as well as the external environment. Since internal impulses and external environment also interact, resulting in psychological motivations to fulfill needs and wants, Kim and Jin (2001) argue that consumer motives are known to be the drives of behavior that bring consumers to the retail store.

## **Research Methodology**

The research design used for the research problem in hand is causal research as the objective is to determine which variable might be causing certain behavior, i.e. whether there is a cause and effect relationship between variables. In order to determine cause the effect, it is important to hold the variable that is assumed to cause the change in the other variable, constant, and then measure the changes in the other variable. This type of research is very complex and the researcher can never be completely certain that there are no other factors influencing the casual relationship, especially when dealing with people's attitudes and motivations.

## **Independent Variables**

(a) brand of the product, (b) criteria like price of the product (economical aspect), technology used in product (technical aspect), brand name and recognition of company (goodwill and quality), (c) Source and medium of information, (d) Each individual member of family (including spouse) plays a very influencing role, (e) consumer motive (quality, goodwill, need, etc.)

### Dependent Variables

(a) Consumer behavior and (b) consumer buying motives

### Product Class

In this study the product class is household consumer electronics durables. Selected household products in the product class are television, refrigerator, and washing machine.

### Sample Design and Sample Size

The sample design adopted for the research problem in hand is convenience sampling. The sample size for the study was 400 consumers selected randomly and the sample unit of the study includes male and female buyers of selected household electronic goods. The sample research area for the study in hand was Ahmedabad city of Gujarat.

### Methods of Data Collection

Both the primary and secondary data were collected. The primary data for the study was collected directly from target respondents through structured questionnaire. This questionnaire includes the personal information about the respondents. The questions asked to respondents were brands of the electronic product, main role player in purchasing the product, sources of information search, motives for selecting the product etc. the secondary data for the study was collected from different sources such as technical and trade journals, articles, newspapers, magazines, internet, periodicals, books, reports and publication of association related to consumer durable industry. Statistical tools such as tables, percentages, Chi-square test were used for analyzing the data which helps in arriving at sound conclusions.

### Findings

Table 1 shows that the brand of the electronic product which was purchased by respondents recently. It is observed that more than one fourth of the customers (27.50%) had purchased L.G. T.V. in spite of lot of brands available in the market. The purchase of Godrej refrigerator is highest (18.50%) followed by Videocon and LG company (both 17.50%). The washing machine market is captured by Videocon brand in Ahmedabad city (36%).

**Table 1: Brand of Electronic Products**

S1 No.	Company Brand	Television		Refrigerator		Washing machine	
		No.	%	No.	%	No.	%
1	LG	110	27.5	70	17.5	78	19.5
2	SAMSUNG	74	18.5	20	05.0	24	06.0
3	VIDEOCON	54	13.5	70	17.5	144	36.0
4	SANSUI	18	04.5	00	00.0	00	00.0
5	ONIDA	38	09.5	00	00.0	06	01.5
6	BPL	60	15.0	02	00.5	20	05.0
7	PHILIPS	14	03.5	02	00.5	00	00.0
8	SONY	10	02.5	00	00.0	00	00.0
9	PANASONIC	06	01.5	00	00.0	00	00.0
10	CROWN	06	01.5	00	00.0	00	00.0
11	AKAI	04	01.0	00	00.0	00	00.0
12	WHIRLPOOL	00	00.0	66	16.5	52	13.0
13	DAEWOO	02	00.5	02	00.5	00	00.0
14	ZENITH	00	00.0	02	00.5	00	00.0
15	KENWOOD	02	00.5	00	00.0	00	00.0
16	TCL	04	01.0	00	00.0	02	00.5
17	VOLTAS	00	00.0	06	01.5	00	00.0
18	KELVINATOR	00	00.0	46	11.5	02	00.5
19	GODREJ	00	00.0	74	18.5	02	00.5
20	ELCTROLUX	00	00.0	02	00.5	06	01.5
21	SHARP	02	00.5	00	00.0	00	00.0
22	WESTON	02	00.5	00	00.0	00	00.0
23	ALLWYN	00	00.0	24	06.0	00	00.0
24	MAHARAJA	00	00.0	00	00.0	04	01.0
	TOTAL	400	100.0	400	100.0	400	100.0

**Selection Criteria for the Particular Company's Household Electronic Goods**

Table 2 indicates that the main selection criteria for purchasing television is technical aspects (32.50%) followed by brand name (30.50%) and quality (29.50%). The main criteria for selecting refrigerator is quality (36.50%) followed by technical considerations (29%) and brand name (23%). While selection criteria results for purchasing washing machine shows that 45% respondents view that technical aspects is the main selection criteria followed by brand (19.50%) and quality (19%). This fact is tested statistically by applying chi square test

and result came out to be highly significant ( $\chi^2 = 89.522$ ,  $df = 8$ ,  $p < 0.001$ ). Thus chi square test's results are confirming that consumers are always rationale in their buying motives and purchasing behavior and criteria like price of the product (economical aspect), technology used in product (technical aspect), brand name and recognition of company (goodwill and quality) effects their buying behavior and motives of purchasing electronic goods. Hence, it can be concluded that technical information, brand and quality of product are main selection criterion for purchasing electronic products.

**Table 2: selection criteria for the particular company's household electronic goods**

Product	Selection Criteria										
	Technical		Economical		Services & satisfaction		Brand		Quality		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	
Television	65	32.5	8	4.0	7	3.5	61	30.5	59	29.5	20
Refrigerator	58	29.0	14	7.0	9	4.5	46	23.0	73	36.5	200
Washing machine	90	45.0	6	3.0	27	13.5	39	19.5	38	19.0	200

Chi sqr = 89.522; df = 8; results = highly significant ( $p < 0.001$ )

**Source of information for Purchasing Household Electronic Goods**

Table 3 indicates that the main source of information for the purchase of television is newspapers and magazines (32.25%) followed by television (27.50%) and friends and refrigerator as it was found that 37.25% purchasers use newspaper as the main source of information followed by television (33%) and friends & relatives (21.25%). And for the purchase of washing machine, the similar trend is observed as it was found that newspaper and magazines are the

main source of information (37.50%) followed by television and friends and relatives (22.50%). Overall it can be said that the main sources of information for purchasing electronic products are newspapers & magazines, television and friends & relatives. This fact is further confirmed by applying test of association between source of information and electronic products. The chi- square test result is highly significant ( $\chi^2 = 45.85$ ,  $df = 12$ ,  $p < 0.001$ ) which shows type of electronic product and source of information are not independent.

**Table 3: source of information for purchasing household electronic goods.**

product	Source of information														
	T.V. and magazines		News paper relatives		Friends &		personal		salesman		From shop		none		total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
Television	55	27.5	64	32.0	48	24.0	6	3.0	10	5.0	8	4.0	9	4.5	200
Refrigerator	66	33.0	75	37.5	42	21.0	9	4.5	5	2.5	4	1.0	1	0.5	200
Washing Machine	63	31.5	74	37.0	45	22.5	10	5.0	4	2.0	2	1.0	2	1.0	200

Chi sqr = 45.85; df. =12; results = highly significant ( $p < 0.001$ )

**Table 4: Main Role of individual In Purchasing Household Electronic Goods**

Main Role Of Individual In Purchasing Household Electronic Goods
--

Product	Husband		Children		Wife		Husband & Wife Together		Mother		Father		Neighbor/ Relatives		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
Television	143	35.8	66	16.5	57	14.3	40	10.0	20	5.0	68	17.0	6	1.5	400
Refrigerator	97	24.3	34	8.5	126	31.5	43	10.8	50	12.5	48	12.0	2	0.5	400
Washing Machine	74	18.5	26	6.5	154	38.5	40	10.0	62	15.5	40	10.0	4	1.0	400

Chi sqr =120.712; df = 12; results = highly significant (p< 0.001)

### Main Role of Decision Maker in Purchase of Household Electronic Goods

Table 4 shows the main role of the individual who plays the main role in purchasing the household electronic goods. When it was asked to respondents about the person in the family who plays main role in purchasing a particular product, an interesting fact comes out in observation which shows that while purchasing television husbands play the main role in purchasing, whereas in purchasing refrigerator and washing machine wives play important role in purchasing that products.

In hypothesis4, is suggested that each individual member of family especially spouse plays a very influencing role in purchasing behavior of consumers of electronic goods. Chi square test of association also shows significant association between type of product purchased and main role played by an individual in family.

### Motives of Purchasing Household Electronic Goods

Consumer motives (quality, goodwill, need, etc.) is the most influencing factor that influences the consumer buying behavior and consumption pattern of different electronic goods as shown in following table (table 5).

The above table indicates that quality (25.50%) is the main motive for purchasing the television followed by goodwill (22.50%) and need (23%). While for refrigerator purchase, the same trend is observed (quality, 31%; goodwill 21.75% and need 21.75%). Whereas for the purchase of washing machine, the main motive of purchase is quality (28.25%) followed by need (27%) and goodwill (24%).

Overall it can be said that the main motive behind purchasing a particular electronic product is quality of goods followed by need of the goods and

thereafter goodwill of the goods. Regarding other factors taken under study, customers give least weight age to guarantee, services, advertisement, entertainment, and knowledge etc. chi square test also shows that purchase of a particular product is not independent of some particular motive behind purchasing particular electronic good.

### Implication of the Findings

The paper highlights that for selling household electronic goods, companies have to concentrate more on media of promotion of a specific product through newspaper, magazines and television to make the product popular and thus informs consumer about the qualities that differentiate their product from those available in market of the product.

The study also shows that husband and wife plays the main role in purchasing the household electronic goods. The paper also comes up with the finding that in the purchase of household electronic goods.

The main selection criteria is technical aspect in case of television and washing machine, followed by brand name and quality whereas in case of refrigerator the criteria becomes quality followed by technology used and brand of the product.

The study also depicts that the main motive for purchasing a particular household electronic good is its quality, need and goodwill. Consumers do not make their decisions in a vacuum. Their purchases are highly influenced by cultural, social, personal and psychological factors which are non- controllable by the marketer but must be taken into consideration as well as the source, medium and reliability of medium of information.

The study shows that consumers are open to new and different products from time to time. The need of the time is that consumers just want the product to be flexible and adapt their needs and preferences

**Table 5: motive behind purchase of household electronic goods**

Chi sqr = 66.563; d.f. = 16; Results = highly significant (p< 0.001)

product	Motive Behind Purchase Of Household Electronic Goods																	
	Goodwill		Need		Quality		Guarantee		Services		Advertisement		Entertainment And knowledge		Easily available		None	
	N o.	%	N o.	%	N o.	%	N o.	%	N o.	%	No.	%	No.	%	N o.	%	N o.	%
Television	90	22.50	92	23.00	102	25.50	6	1.50	20	5.00	14	3.50	30	7.50	4	1.00	42	10.50
Refrigerator	87	21.75	87	21.75	124	31.00	5	1.25	15	3.8	12	3.00	24	6.00	10	2.50	36	9.0
Washing machine	96	24.0	108	27.0	113	28.3	16	4.0	11	2.8	10	2.5	18	4.5	24	6.0	4	1.0

## Conclusion

The results derived from the study indicate that for selling household electronic goods, the companies have to concentrate on information media for popularizing their products. In this case the main criteria of selection of an electronic good are technical aspect followed by quality of product, need of the consumer and goodwill of the company. This study will also intimate the main influencer as well as the role of individual in family in buying decision process in regard to electronic products. The findings derived from the study will be helpful for consumer durable companies in deciding and implementing their sales strategy for the promotion of household electronic products. Thus, electronic goods producing companies in framing their marketing policies, must take into consideration. Consumer behavior towards electronic goods, according to the changing needs and demands of the consumer thus satisfying their existing customer needs and gain potential customers for sustained development and thus acquires competitive advantage in the highly dynamic and ever changing highly competitive market of electronic goods durable.

## Reference

1. Biloslavo, R., & Trnavcevic, A.2009. Web sites as tools of communication of a green company. *Management Decision*, 47(7), 1158-1173.
2. Gan, c., Wee, H.Y., Ozanne, L., & Kao, T.H.2008. Consumers' purchasing behavior towards green products in New Zealand. *Innovative Marketing*, 4(1), 93-102.
3. Irawan, R., & Darmayanti, D. 2012. The influence factors of green purchasing behavior: a study of University students in Jakarta. In *Proc. 6<sup>th</sup> ASIAN Business Research Conference* (pp. 1-11).
4. Lin, P.C., & Huang, Y.H.2012. The influence factors on choice behavior regarding green products based on the theory of consumption values. *Journal of cleaner Production*, 22(1), 11-18.
5. Majlath, M. 2009. Evaluation of environmentally friendly product attribute- results of an empirical research. *MEB 2009 7<sup>th</sup> International Conference of management, enterprise and benchmarking*.
6. Mohammad Reza Irawania, M.S.2012. Study of factors affecting young consumers to choose green products. *Journal of Basic and Applied*, 2(6), 5534-5544.
7. Montgomery, D.M. Eco- efficiency in customer products. *Philosophical Transactions: Mathematical, Physical and Engineering Sciences*, 355(1728), 1405-1414.
8. Mostafa, M. 2007. Gender differences in Egyptian consumers green purchasing behavior: the effects of environment knowledge, concern and attitude. *International Journals of Consumers Studieds*, 31,220-229.
9. Nunallu JC. 1978. *Psychometric Theory*, McGraw-Hill, New York.
10. Ottman, J 2011. *The new rules of green marketing: Strategies, tools, and inspiration for sustainable branding*. Berrett-Koehler Publishers.
11. Paco, A., Alves, H., & Shiel, C. 2013 Development of green consumer behavior model. *International Journal of Consumer Studies*, 37(4) 414-421.