

## **A EMPIRICAL STUDY OF CONSUMER BUYING BEHAVIOUR REGARDING HOME APPLIANCES WITH SPECIAL REFERENCE TO JAIPUR CITY**

**Dr Neha Sharm**  
Asst. Professor, IIS University,  
Gurukul marg, Mansarovar, Jaipur, Rajasthan  
Email:neha.sharma@iisuniv.ac.in

**Abstract:** Consumer is nerve centre of the trendy promoting, understanding his behavior is kind of essential for economical and effective promoting management. Customers could state their desires, desires however act otherwise. They'll not be in-tuned with their deeper motivations. India's client market is riding the crest of the country's economic boom. Driven by a young population with access to disposable incomes and simple finance choices, the buyers market has been throwing up staggering figures. Promoting drawback enhancing from the buyers' behavior contains a larger degree of similarity behavioral issues about the consumer durables. Hence, this study has been chosen to spot and ascertain the extent of issues of client behavior have a sway on the promoting of durable goods within the quick growing Jaipur city. The buyer behavior in about durable goods is powerfully full of some economic, social, cultural associated psychological factors; this analysis has been chosen for an intensive empirical survey of the assorted factors influencing the buyer's behavior on durable goods in Jaipur city for the system behavior to complete.

**Introduction:** Profits from customer relationships are the foremost facet of all businesses. Therefore the basic objective of any business is profit maximization through customer satisfaction. However it's perpetually trouble some to urge customer satisfaction. A customer could state his desires and needs and nevertheless could act otherwise. He might not bear in mind of his deeper motivations and should amendment his mind at any stage. In spite of such diversities among customers there are several similarities among them. To search out these, the study of target customers' desires, perceptions and shopping behavior are useful because it can give the knowledge necessary for developing new product, prices, channels of communication and other marketing elements. In the majority of markets, however, buyers differ enormously in terms of their buying dynamics. The task faced by the marketing strategist in coming to terms with these differences is complex. In consumer markets, for example, not only do buyers typically differ in terms of their age, income, educational levels and geographical location, but more fundamentally in terms of their personality their lifestyles and their expectations.

The importance of consumer behavior in marketing has been beautifully described in **A journal titled Modern Management, Kolkata, January 1999**, in the following words ; “Consumer behavior is a rapidly growing field of research and teaching, in addition to considerable value of marketing managers and others who are professionally concerned with buying activity.” An important reason for studying consumer behavior is evaluation of consumer groups with unsatisfied needs and desires. The essence of modern marketing concept is that all elements of business should be geared for the satisfaction of consumers.

The challenge to the marketers is to determine the relative influence of the various factors and to adapt and apply skillfully the so-called information to a proper marketing mix. In other words, the total marketing effort must be so designed that the consumer perceives its various features as providing an answer to his perceived problems and felt needs.

### **Rationale Of The Study:**

The main aim of a market is to understand the needs and wants of the target consumers and satisfies them effectively<sup>1</sup>. For understanding the needs and wants of the consumers a marketer has to study consumer’s behavior. It is only after the detailed study of consumer behavior that a marketer is able to predict how consumers would react to the marketing strategies and promotional messages. From a review of literature, it is perceived that no research had been done to understand the behavior of people of Jaipur city towards buying behavior of home appliances

### **Objectives of the study:**

The present study focuses on consumer buying behavior in the Indian sector to explore its trends prospects, and challenges with the following objectives.

1. To analyze the relationship between the factors affecting the purchase consideration .
2. To study the significance of various roles played by individuals on purchase consideration.
3. To determine the relationship between the sources of information influencing the purchase consideration
4. To determine the significance of non-availability of buyer’s favorite brand in purchase consideration.

### **Research Methodology:**

---

<sup>1</sup> Philip Kotler, “Marketing Management”,

The present study is an empirical analysis of consumer behavior towards home appliances (Refrigerator, Washing Machine and air-conditioner) with reference to Jaipur region. This is a descriptive kind of research study. The research design has been adopted so as to suit an empirical study based on primary data. Moreover, this study is mainly based upon primary data and the primary data have been collected through direct personal interview and questionnaire has been used as an instrument. To conduct this study, I have surveyed 200 consumers and 100 dealers/retailers of Home Appliances'. The survey has been conducted in various localities of Jaipur City. In this Study, the home appliances like refrigerators, air conditioner, washing machine and the companies dealing in these products have been our main concern. In the present study, for analysis purpose I have mainly used statistical tools such as percentages, averages etc. Again, for the purpose of testing of certain hypothesis I have mainly used chi-square test, ANOVA test and factor analysis.

### **Hypotheses for the study:**

The following hypotheses have been formulated for the study:

Ho: There exists no relationship between the factors affecting the purchase consideration.

Ho: There is no significant relationship between the various roles played by individuals in consumer decision-making process on purchase consideration.

Ho: There is no significant relationship between the sources of information on purchase consideration

Ho: There is no significant relationship between non-availability of buyer's favourite brand on purchase consideration.

### **Research methodology:**

This study was conducted in the city of Jaipur. Questionnaires were handed over to the respondents who had purchased the consumer durables and were requested to fill the same. The filled-in questionnaires were later collected from the respondents. The sample size for the study was 200. Non-probability convenience sampling was used to select the respondents.

### **Data Analysis**

For analysis purpose I have mainly used statistical tools such as percentages, averages etc. Again, for the purpose of testing of certain hypothesis I have mainly used factor analysis.

**Table 1: Demographics of the Respondents for the survey**

|  | Categories | Count | Percentage |
|--|------------|-------|------------|
|--|------------|-------|------------|

|                        |                   |     |      |
|------------------------|-------------------|-----|------|
| <b>Gender</b>          | Male              | 146 | 73   |
|                        | Female            | 54  | 27   |
| <b>Age</b>             | Below 25          | 14  | 7    |
|                        | 25-35             | 58  | 29   |
|                        | 35-45             | 84  | 42   |
|                        | 45-55             | 32  | 16   |
|                        | Above 55          | 12  | 6    |
| <b>Education level</b> | Undergraduate     | 34  | 17   |
|                        | Graduate          | 76  | 38   |
|                        | Postgraduate      | 90  | 45   |
| <b>Occupation</b>      | Salaried Employee | 92  | 46   |
|                        | Self Employed     | 17  | 8.5  |
|                        | Professional      | 91  | 45.5 |
| <b>Monthly Income</b>  | 15000<            | 62  | 31   |
|                        | 15000-30000       | 69  | 34.5 |
|                        | 30000-45000       | 40  | 20   |
|                        | >45000            | 29  | 14.5 |

### **Testing of Hypotheses:**

Ho: There exists no relationship between the factors affecting the purchase consideration.

H<sub>1</sub>: There exists relationship between the factors affecting the purchase consideration

Factor Analysis :- The factor analysis of the 7 product attributes yields the following 3 factors:

- **Factor 1:** *Style, Brand image, after sale service.*
- **Factor 2:** *Price, Technology*
- **Factor 3:** *Durability, Appliance Warranty*

As factor 1 encompasses the style, after sale service and brand image of the product, it can be termed as ‘**Likeability**’.

As factor 2 encompasses the accessibility and affordability of the product, it can be termed as ‘**Purchase Feasibility**’.

As factor 3 encompasses the durability and appliance warranty, an indicator of quality, of the product, it can be termed as ‘**Utility**’.

**Table-2: KMO and Bartlett's Test**

|  |                    |         |
|--|--------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .582    |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 784.618 |
|  | Df                 | 21      |
|  | Sig.               | .000    |

For our factor analysis, the KMO measure of sampling adequacy = .582 which is much greater than the permissible value of 0.6. This also signifies that the scales of all the variables of the questionnaire were properly understood by all the respondents and they have correctly answered to the scale. Additionally, the Bartlett’s test of sphericity has a high Chi-square value and the significance is 0.000, which is less than 0.05. Hence the null Hypotheses is rejected and H1 is accepted.

**Table-3 :Communalities**

|            | Initial |
|------------|---------|
| PRICE      | 1.000   |
| TECHNOLOGY | 1.000   |
| STYLE      | 1.000   |

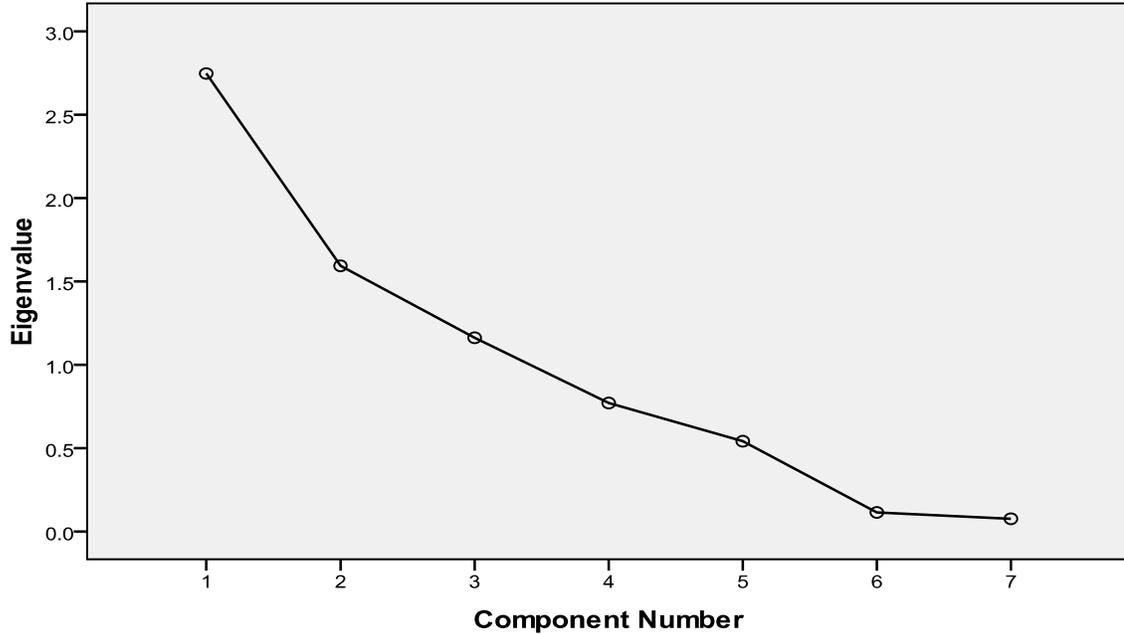
|            |       |
|------------|-------|
| B.IMAGE    | 1.000 |
| ASService  | 1.000 |
| DURABILITY | 1.000 |
| WARRANTY   | 1.000 |

**Extraction Method: Principal Component Analysis.**

**Table -4Total Variance Explained ~ EGIEN VALUES TABLE**

| Component  | Initial Eigenvalues |               |              | Rotation Sums of Squared Loadings |               |              |
|------------|---------------------|---------------|--------------|-----------------------------------|---------------|--------------|
|            | Total               | % of Variance | Cumulative % | Total                             | % of Variance | Cumulative % |
| PRICE      | 2.746               | 39.233        | 39.233       | 2.140                             | 30.574        | 30.574       |
| TECHNOLOGY | 1.593               | 22.764        | 61.997       | 2.129                             | 30.417        | 60.991       |
| STYLE      | 1.161               | 16.584        | 78.581       | 1.231                             | 17.590        | 80.581       |
| B.IMAGE    | .769                | 10.992        | 89.572       |                                   |               |              |
| ASService  | .541                | 7.722         | 97.295       |                                   |               |              |
| DURABILITY | .113                | 1.621         | 98.916       |                                   |               |              |
| WARRANTY   | .076                | 1.084         | 100.000      |                                   |               |              |

**Scree Plot**



**Figure 1.**

**Table -5 Rotated Component Matrix<sup>a</sup>**

|                  | Component   |             |       |
|------------------|-------------|-------------|-------|
|                  | 1           | 2           | 3     |
| <b>STYLE</b>     | <b>.933</b> | .198        | .069  |
| <b>B.IMAGE</b>   | <b>.915</b> | -.048       | -.089 |
| <b>ASService</b> | <b>.902</b> | -.884       | .004  |
| <b>PRICE</b>     | -.425       | <b>.923</b> | .011  |

|                   |      |             |             |
|-------------------|------|-------------|-------------|
| <b>TECHNOLOGY</b> | .341 | <b>.914</b> | .190        |
| <b>DURABILITY</b> | .196 | .164        | <b>.983</b> |
| <b>WARRANTY</b>   | .076 | .301        | <b>.955</b> |

**Extraction Method: Principal Component Analysis.**

Rotation Method: Equamax with Kaiser Normalization. a. Rotation converged in 5 iterations.

**Findings:** The output of factor analysis is obtained by requesting principal component analysis and specifying the rotation. As evident from table 4 (looking at the Cumulative Pct column), I find that the three factors together account for 80.5% of the total variance (information contained in the original 7 variables). Hence I reduced the number of variables from 7 to 3 underlying factors.

Looking at table 4 I see that the variables: Style, Brand Image and After sale service have loadings of 0.933, 0.915, 0.902 on **Factor 1**. This suggest that factor 1 is a combination of these three variables. Therefore this factor can be interpreted as “**Likeability**”

Now for **Factor 2** (in table 4), I see that price and technology have a high loading of 0.923, 0.914 respectively, indicating that factor 2 is a combination of these variables. Therefore this factor can be interpreted as **Purchase Feasibility**’.

As for **Factor 3** (as seen in Table 4), it is evident that durability and warranty have the highest loading of 0.955 and 0.933 and this is also reflected in Rotated factor matrix. This factor consisting of the above two variables can be termed as ‘**Utility**’.

Again, with the market now experiencing higher levels of competition than ever before, the particular marketing strategy adopted to circumvent competition will be deciding factor in the

company's survival. Company positioning and the nature of the target market should be commensurate with the market trends.

In home appliances market, the manufactures try to formulate, their marketing strategy keeping in view the source of information, of the consumers, their choice criteria (e.g. Price, Technology, Brand Image, Style , After Sales Services, Durability and Warranty) and other related factors affecting the decision making process.

The initial factor analysis was run, using principal component analysis method in SPSS 17.0 windows. The result was not satisfactory, as some of the attributes showed an Measure of Sample Adequacy value below 0.5, which was taken as the minimum level for acceptance. Thus after successive removal of the attributes with low MSA value, it as found that a solution containing 3 attributes (factors) gave a high KMO and also high individual MSA values.

The KMO and Bartlett's test value 0.582 is considered adequate to conduct factor analysis. Four attribute were rejected from original set of 7.

The criteria for extracting initial factors were Eigen value of over 1. As the number of variables was less than 50, the Eigen value was used as the criterion. In the first iteration a total of 4 factors were extracted with total variance explained being 85.50% the total variance of 85.50% is considered significant for a study of this nature.

Rotated component matrix was applied for the selected 3 attributes. The factor loadings of the 3 variables were then observed as the attributes are correlated, null hypothesis is rejected and alternate hypothesis is accepted.

The factors were named accordingly, the factors and their constitutes are:

- Factor 1: *Style, Brand image, after sale service.*
- Factor 2: *Price, Technology*
- Factor 3: *Durability, Appliance Warranty*

The four factors mentioned above are very important which the marketers cannot neglect at any cost in order to attract and satisfy the customers

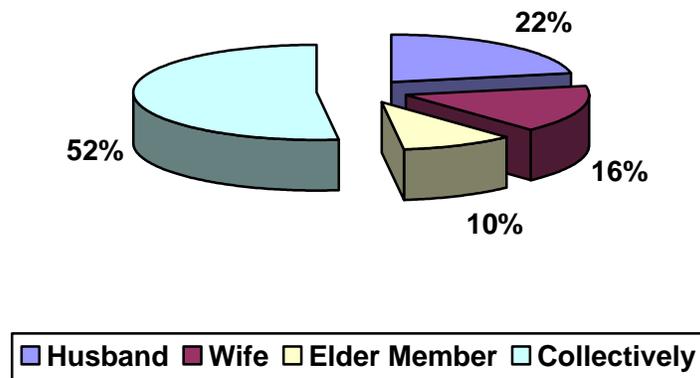
## Hypotheses 2

Ho: There is no significant relationship between the various roles played by individuals in consumer decision-making process on purchase consideration

H<sub>1</sub>: There is no significant relationship between the various roles played by individuals in consumer decision-making process on purchase consideration

### Influence of members of the Family on Purchase decision

Moreover, the above data can be graphically represented by the following **pie-chart 1**.



**Table-6: Purchase Decision Maker**

| S. No. | Purchase Decision Maker | No. of Respondents | Percentage |
|--------|-------------------------|--------------------|------------|
| 1.     | Husband                 | 44                 | 22%        |
| 2.     | Wife                    | 32                 | 16%        |
| 3.     | Elder Members           | 20                 | 10%        |
| 4.     | Collectively            | 104                | 52%        |

|              |            |             |
|--------------|------------|-------------|
| <b>Total</b> | <b>200</b> | <b>100%</b> |
|--------------|------------|-------------|

**Findings:** The consumers' survey carried out during the period of study, reveals that in 44 families' husband took a purchase a particular brand, in 20 families elder members of the family took the purchase decision and in 104 families the purchase decision was taken collectively by all members of the family. This shows significant relationship between the various roles played by individuals in consumer decision-making process on purchase consideration .These figures can be represented in a tabular form as above

### **Hypotheses 3**

Ho: There is no significant relationship between the sources of information on purchase consideration

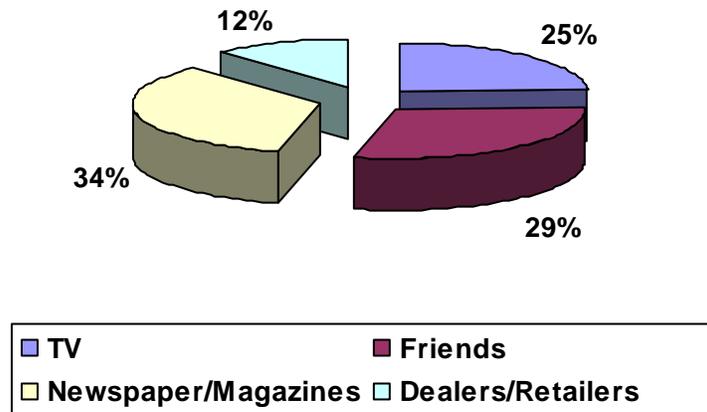
H<sub>1</sub>: There exists significant relationship between the sources of information on purchase consideration

### **Sources of Information influencing the Purchase Decision**

**Table:7 Source of Information**

| <b>S. No.</b> | <b>Source</b>             | <b>No. of Respondents</b> | <b>Percentage</b> |
|---------------|---------------------------|---------------------------|-------------------|
| 1.            | TV                        | 49                        | 24.5%             |
| 2.            | Friends                   | 69                        | 34.5%             |
| 3.            | Newspapers &<br>Magazines | 58                        | 29%               |
| 4.            | Dealers/Retailers         | 24                        | 12%               |
| <b>Total</b>  |                           | <b>200</b>                | <b>100%</b>       |

Moreover, the above data can be graphically represented by the following **pie-chart 2**.



**Findings:** Again, when the consumers were surveyed about the source of information from where they got information about the brand of home appliance they have purchased, 49 said that they got information from TV commercials, 69 got information from Newspaper/Magazines, 58 from the friends and rest 24 got information from dealers/retailers. This shows that there exist significant relationship between the sources of information on purchase consideration

**Hypotheses 4**

Ho: There is no significant relationship between non-availability of buyer’s favourite brand on purchase consideration.

H<sub>1</sub>: There exist significant relationship between non-availability of buyer’s favourite brand on purchase consideration

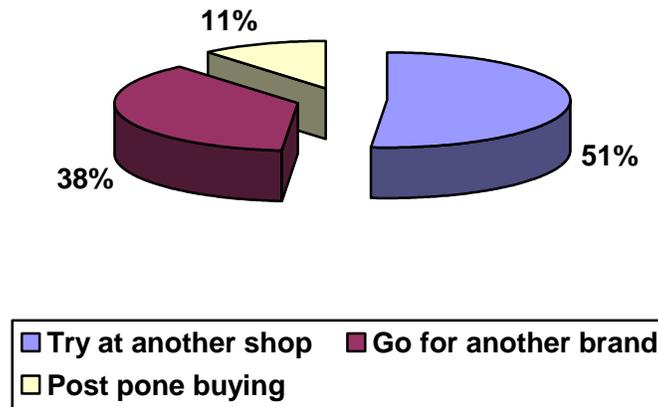
**Non-availability of Buyer’s Favourite Brand.**

**Table-8: Non-availability of Buyer’s Favourite Brand**

| S. No. | Source               | No. of Respondents | Percentage |
|--------|----------------------|--------------------|------------|
| 1.     | Try at another shop  | 102                | 51%        |
| 2.     | Go for another brand | 75                 | 37.5%      |
| 3.     | Post pone buying     | 22                 | 11%        |

|              |            |             |
|--------------|------------|-------------|
| <b>Total</b> | <b>200</b> | <b>100%</b> |
|--------------|------------|-------------|

Moreover, the above data can be graphically represented by the following **pie-chart 3** as below.



**Findings and Interpretation:** Again, when the consumers were surveyed about their decision in case of non-availability of their favourite brand at particular shop, 102 said that in this situation they will try at some other shop, 75 said that they will go for some other brand and only 22 were of the opinion that they will postpone buying. This shows that there exist significant relationship between non-availability of buyer's favourite brand on purchase consideration.

**CONCLUSION:** Moreover, study of behavioural pattern is an essential pre-requisite for deciding upon the marketing strategy regarding a particular product. What price is to be fixed, what quality is to be sold, which media of advertisement is to be selected, what offers are to be made, all such questions are to be answered only by reference to behavioural patterns. Nothing can be sold without knowing how the prospective buyers behave. Understanding the consumer psychology, thus, becomes the key factor that can decide the success or failure of a marketing strategy. It is revealed from the present study that consumer behaviour depends on a no. of variables such as demographic variables, personality, needs and buying motives, family life cycle stage, family buying roles and the factors included in the choice criteria (e.g. technology, brand image, price, style and after sales services).

Therefore, proper formulation of marketing strategy needs an overall understanding of this behavioural pattern of consumer.

#### BIBLIOGRAPHY

- Gandhi, J.C., *Marketing- A Managerial Introduction*, New Delhi: Tata McGraw Hill Publishing Co. Ltd., New Delhi, 2007
- Ghauri. P., and Goonhug. K., “Research Methods in business Studies”, Pearson Adrian Thornhill Education Limited, 2002
- Gupta, Soma Sen. *Consumer behaviour: dynamics of building brand Equity*. New Delhi: New Century, 2005.
- Hawkins. D, and Coney. K., “Consumer Behaviour: Building Marketing Strategy, Mc Graw Hill, 2000.
- Henry, Assacl., “*Consumer behaviour : A strategic approach*”, Indian adaptation 2005
- Hitler, Armstrong., “*Principles of marketing,*” 9th ed. Prentice Hall of India Private Ltd. 2001
- Jayaraj, S. Kumar. ,*Study of consumer behaviour in relation to the`marketing of consumer durables in Kerala. Thiruvananthapuram: University of Kerala, 2003. (Ph.D. Thesis)*
- Kapoor, Sheetal., *Understanding buying behaviour of Indian families. Delhi: New Century, 2002.*
- Kardes, Frank R., *Consumer behaviour and managerial decision making.* 2nd ed. Englewood Cliffs, NJ: Prentice-Hall, 2001.
- Khan, M., *Consumer behaviour.* 2nd ed. New Delhi: New age Publishers, 2004.
- Kotler, Philip.,*Marketing Management: Analysis planning and control*, England cliffs, N.J. Prentice Hall Inc., 2007
- Kumar Ranjit., “Research Methodology”, Pearson Education 2005
- Lee, Nick and Munro., *The consumption of mass.* Oxford, UK, Malden, MA: Blackwell; 2001.
- Lindquist, Jay D., *Shopper, buyer and consumer behaviour: theory, marketing applications and public policy implications.* 3rd ed. Mason, Ohio: Atomic Dog Publishing, 2006.
- Malhorta. NK., “Marketing Reasearch” Pearson Education, 5<sup>th</sup> ed, 2008.
- Mooij, Marieke K. de., *Consumer Behaviour* , Sage Publications; 2004
- Mowen and Minor., *Consumer Behaviour*, AIPI, 2006
- Nagaraj, H., *Quantitative approach to the study of consumer behaviour with special reference to durable goods.* Bangalore: Bangalore University, 2004. (Ph.D. Thesis)

- Neelamegham,S. ,*Marketing Management and The Indian Economy*, Vikas Publishing House, New Delhi , 2007
- Nessim, Hanna. Richard, Wozniak ., *Consumer Behaviour*, Addison Wesley Publishing Company, 2002.
- Radha Krishna, G., *Consumer behaviour*. New Delhi: D.K., 2005
- Ramaswami,V.S, Namakumari.S., *Marketing Management*, Macmillian India Ltd., Delhi, 2006
- Reddy,C.R.,*Research Methodolgy in Social Sciences*, Daya Publishing House, Delhi, 2006
- Schiffman And Kanuk., *Consumer Behaviour*, Prentice Hall Of India, New Delhi, 2006
- Schiffman, Leon G., Kanuk, Leslie Lazar and Das, Mallika., *Consumer behaviour*. Canada: Pearson Education, 2005.
- Schiffman, Leon, Bednall, David and Cowley, Elizabeth. *Consumer behaviour*. Frenchs Forest, NSW: Prentice-Hall, 2001.
- Schiffman,Leon G.,*Consumer Behaviour*,Prentice Hall of India Ltd., New Delhi, 2005
- Sethna,Beheruz N. and Leonard., *Research Methods in, Marketing*,New Groeneveld , Tata McGraw Hill Publishing Co. Ltd., Delhi, 1995
- Sharma, Atul K., *Consumer behaviour*. New Delhi: Global Vision, 2006.
- Sharma, Kavita., *Impact of consumer involvement on consumer behaviour: a case study of India*. Delhi: New Century, 2000.
- Sheth, Jagdish N. and Mittal Banwari., *Customer behaviour: a managerial perspective*. 2nd ed. Mason: Thomson, 2004.
- Sheth, Jagdish N., Mittal, Banwari and Newman, Bruce. *Customer behaviour: consumer behaviour and beyond*. Fort Worth, TX: Dryden Press, 1999.
- Sheth, Jagdish N; Banwari, Mittal, and Newman., *Consumer Behaviour* , Fort Worth, TX: Dryden Press; 2006