CHAPTER-III
RESEARCH METHODOLOGY

3.1 Aims and Objectives (Material & Methods)

The Research Methodology chapter explains the methodology used and adopted for testing the hypothesis proposed in the later section of this chapter. The hypotheses are framed having done through study of review of literature. The endogenous (dependent) variables include buying intention, loyalty and acceptability and frequency of purchase. The exogenous (independent) variables in the study are brand awareness, price & quality, promotion and peer-influence. The measures used in this study have been taken from the previous existing measures. In order to establish reliability and validity of the adopted measures the confirmatory factor analysis (CFA) has been applied. Due to covariate nature of the proposed research model the structural equation modeling (SEM) has been applied to evaluate research hypotheses.

3.2 Statement of the Problem

Having done initial discussions with various store managers of different private label brands of food & grocery, consumer durables and apparel and concluded that selling of private label brands by using traditional strategies doesn’t work in present environment. These challenges are there in the market and one has to face this very fact while entering in the private label brand business. These challenges faced by retailers and combined with high growth of PLBs in India prompted the researcher to undertake the research. Having studied secondary data in the form of popular articles and research papers it is evident that there is need to study the consumer buying behavior of PLBs with regard to NBs in organized retailing.

In India, traditionally customers are most willing to test new products particularly in food and grocery segments and in apparel. Indians are very fashion conscious and love to experiment things as and when get an opportunity. Private label brand business account approximately 5% of the overall organized retailing business in India and still there is a potential of high growth. These trends prompted researcher to
carry out present study on private label brands in Delhi & NCR in three products categories (FMCG, Apparel & Consumer Durables).

The present research has identified the following problems.

- What are the demographic characteristics of private label brand customers visiting organized retail store?
- Does price and quality play a role while making PLB purchase decisions in relation to national brands in organized retailing?
- What are the factors such as purchase intention, loyalty, brand image which have impact on purchase choice making of private label brand customers vis. a.vis national brands?
- Does awareness of Private Label Brands affects buying intention of consumers?

### 3.3 Objectives of the Study

Based on the problem formulation, the research objectives are as follows:

1. To identify the factors affecting consumer buying behaviour towards Private Label Brands (PLBs) in organized retailing vis. a vis. National Brands (NBs).
2. To find out the effect of acceptability of Private Label Brands (PLBs) and National Brands (NBs) on retail footfall and customer loyalty
3. To find out the Buying Intention towards Private Label Brands (PLBs) in organized retail vis. a vis. National Brands (NBs).

### 3.4 Research Design

The blueprint of the research used in this study is descriptive and causal in nature. The present research includes the following:

- What are the PLBs and NBs?
- What is the impact of PLBs and NBs on overall organized retail sales?
- The existing measures adopted for the study with a minor change in wording.
3.5 Sampling and Data Collection

As per the C R Kothari (2009) “The selected respondents from the population constitute sample and the selection process is called sampling technique”. In other words, a sample is a portion of the population and is formed by selecting some members from a population. For this research, Judgemental sampling was used. Important data was collected using structured questionnaire provided to customers visiting Big Bazaar and Reliance Stores in Delhi. An ideal representative sample reflects the characteristics of the chosen population in all respect.

A sample of 954 customers visiting Big Bazaar and Reliance Stores was chosen for study. Following criteria was adopted in deciding sample size

\[
\text{No. of factors} \times 25 \quad (\text{Hair et al, 1999})
\]

\[
7 \times 25 = 175 \quad (\text{For three product categories it is } 175 \times 3 = 525)
\]

\[
\text{By Other method, the Number of Statements} \times 5 \quad (\text{General thumb-rule})
\]

\[
38 \times 5 = 190 \quad (\text{for three product categories it would be } 190 \times 3 = 570)
\]

To conduct a factor analysis, a sample size of 330 is adequate. Hence 1000 respondents were chosen to fulfill the above objectives and even more because in the study there are two type of products i.e. private label brands (PLBs) and national brands (NBs). The customers at retail stores were assured that no attempt would be made to personally identify them and responses given by them would be confidential and will be used for research purpose only. Following points were taken in the practice to interact with the participants to win their confidence before getting questionnaire filled by them.

1. No attempt was made to persuade them to participate if they felt uncomfortable.
2. No monetary benefit was presented with regard to their participation.
3. They were informed in the beginning itself that the questionnaire will not take much time to complete.
4. Participants willing to take part in the survey were properly screened to establish the need of PLB buyers who had actually made a Private Label Brands (PLBs) product purchase from that particular PLB retailer.
5. They were also requested to answer the questions given in the questionnaire keeping in mind their most recent Private Label Brands (PLBs) product purchase from that PLB retailer. After the questionnaire was completed, the respondents were thanked for their co-operation by the researcher.

3.6 Questionnaire Design, Existing Scales and Final Administration

A survey questionnaire has been designed to collect data. It was kept on priority to construct the questionnaires in simple language reflecting the desired questions to ensure that respondents would not have problems while responding to the presented questionnaire. Long questions were kept away as normally these results in low return. Questions finalized for the questionnaire appear in a sequence opening with introductory question and then to the core body of the questions followed by demographic questions. In present questionnaire the measures of previous studies were used dealing with consumer buying behavior, price, quality, Image, frequency of purchase, promotion, acceptability, peer-influence, availability and loyalty.

The following table states study areas, questionnaire section (Part-I or Part-II) and the questions asked in various sub-sections. It has 38 statements to get feedback from the respondents on five point Likert Scale.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Study Variable Area</th>
<th>Number of Question</th>
</tr>
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<tbody>
<tr>
<td>1.</td>
<td>Buying intention</td>
<td>Section-I, Q1 to Q4</td>
</tr>
<tr>
<td>2.</td>
<td>Brand Awareness &amp; Image</td>
<td>Section-I, Q5 to Q12</td>
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<tr>
<td>3.</td>
<td>Price &amp; Quality (Value for Money)</td>
<td>Section-I, Q13 to Q20</td>
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<tr>
<td>4.</td>
<td>Loyalty</td>
<td>Section-I, Q21 to Q25</td>
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<tr>
<td>5.</td>
<td>Promotion</td>
<td>Section-I, Q26 to Q29</td>
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<tr>
<td>6.</td>
<td>Peer Influence</td>
<td>Section-I, Q30 to Q35</td>
</tr>
<tr>
<td>7.</td>
<td>Acceptability &amp; Frequency of Purchase</td>
<td>Section-I, Q36 to Q38</td>
</tr>
</tbody>
</table>

Founded on the dimensions identified in the review of literature and the hypotheses, those were proposed for the study. Afterward, a structured questionnaire was developed using the scales available in the review of literature to collect data from the respondents. Buying Intention was measured using a four items scale developed by
(Feldman and Lynch, 1988). Brand Awareness & Image was measured using an eight items scale developed by Larache et. al (2005). Price& Quality (Value for Money) consciousness was measured using an eight items scale used by Wakefield & Inman (2003). Loyalty was measured by using five items scale used by Wunderlich, 2006. Promotion was measured by using a four point scale developed by Ruth and Simonin (2003). Peer influence was measured by six points scale developed by Gaski & Etagar (1980). Availability and frequency of purchase was measured by using three point scale developed by Reynolds and Beatty’s (1999). Major questions of above said scales were modified for this study by using product name in the blank.

As explained earlier that three questionnaires were prepared for three different chosen categories (Consumer Durables, FMCG & Apparel). Each questionnaire is divided in two parts, called Section-I and Section-II. In section-I, there are 38 statements, supporting the relevant questions asked for the study, whereas, section-II comprises demographic info of the respondent such as gender, marital status, age, profession, combined monthly income, educational qualification and family size etc totaling seven in number. One question which is a part of Section-I has been asked as first question to know whether respondent buy Local Brand (PLBs) or National Brand (NBs).

The questionnaire was administered in the field by the researcher itself, who also explained difficulties and doubts raised by the respondents with regard to items mentioned in the questionnaire. The questionnaire was collected by researcher himself after the respondents had filled in the responses.

### 3.7 Research Plan

<table>
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<th>Table 3.2: Research Plan</th>
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<td><strong>Research Design</strong></td>
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<td><strong>Research Instrument</strong></td>
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<tr>
<td><strong>Data Source</strong></td>
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<tr>
<td><strong>Measurement Technique</strong></td>
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<td><strong>Sample Size</strong></td>
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<tr>
<td><strong>Sampling Technique</strong></td>
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<tr>
<td><strong>Sample Location</strong></td>
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<tr>
<td><strong>Sample Unit</strong></td>
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</table>
3.8 Data Collection

Required data was collected and studied by using primary and secondary data collection methods.

The primary data have been collected by using a well designed questionnaire prepared for the study. For collection of data three questionnaires were used to find out customer response and these were for FMCG, Apparel and Consumer Durables. Apart from data received through structured questionnaire, some information was collected from the expert of the stores, malls and retail outlets to understand the private label product response and retail activities at large. The primary data was collected with the help of structured questionnaire developed for the study.

The secondary data have been followed from various sources such as research publications, Journals, Business Magazines, Retail Trade Associations, respective websites of Retailers. Internet was extensively used for almost every new concept and search related to the present study. The majority of the secondary data search was while doing review of literature for the study in hand. The data studied and gathered for this was mainly related to what is retail all about, functions of retail, PLBs and NBs.

3.9 Pilot-Pretest of the Survey Instrument

In order to test the questionnaire and find out its shortcomings and wrong assumptions a pilot test was conducted. The questionnaire was pre-tested on a random sample of 100 consumers who represented the target respondents for the final questionnaire. The sample had various kinds of consumers such as male, female, married, unmarried, student, employed and self-employed. All questionnaires at its pre-test level were filled by respondents at Big Bazaar and Reliance stores at various places in Delhi/NCR. Respondents were chosen who had an experience of purchasing PLB products. The respondents understood the survey without any difficulty hence there was no need to make any changes in the questionnaire. Although the scales had demonstrated high levels of reliability in the past studies, all the items were tested for this study by using Cronbach’s alpha and found that value of Cronbach’s alpha is
more than 0.7 in all three categories (Consumer Durables, Apparel and Food & Grocery) of the present study.

### 3.10 Product Category Selection

The present study has investigated the association among the constructs in three different product categories of Private Label Brands. Referring the retail sector research in India conducted by Ernst and Young as quoted in Marketing White book (2013-14), India has ascertained the market share for food and grocery at 1620000 Crore and apparel at 297000 Crore. Hence, consumer durables, food and grocery and apparels were preferred as the three product categories to be studied in the framework of PLBs.

![Figure 3.1: Segmentation of Indian Consumers](image)

**3.11 PLB Retailer Selection**

As stated by the Images Retail Report 2009, PLBs constitute about 10-12% of organized retail in India. Trent stores are not having all three product categories chosen for the study hence the current study has composed the responses from the customers of the next two most important retailers having the largest depth of PLBs in India. Following table give detail about retailers.
Table 3.3: PLB Retailers

<table>
<thead>
<tr>
<th>Product Category</th>
<th>PLB Retail Store</th>
<th>No. Of Stores in NCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and Grocery</td>
<td>Reliance Fresh</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Food Bazaar</td>
<td>20</td>
</tr>
<tr>
<td>Consumer Durables</td>
<td>Reliance Digital</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>E Zone</td>
<td>9</td>
</tr>
<tr>
<td>Apparel</td>
<td>Reliance Trends</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Pantaloons</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: Websites of respective stores

3.12 Development of Hypotheses

H1 : Brand Awareness is a significant factor for consumer buying NB.

H2 : Price and quality (Value for Money) is a significant factor for consumer buying NB.

H3 : Peer influence is a significant factor for consumer buying for NB.

H4 : Loyalty is a significant factor for consumer buying for NB.

H5 : Buying intention is a significant factor for consumer buying NB.

H6 : Promotion is a significant factor for consumer buying for NB.

H7 : Acceptability and frequency of buying is a significant factor for consumer buying for NB.

H8 : Brand Awareness has Positive effect on Buying Intention of PLB.

H9 : Peer influence has Positive effect on Buying Intention of PLB.

H10 : Promotion has Positive effect on Buying Intention of PLB.

H11 : Promotion has Positive effect on Acceptability and frequency of Purchase of PLB.

H12 : Brand Awareness has Positive effect on Acceptability and Frequency of Purchase of PLB.

H13 : Promotion has Positive effect on Acceptability and frequency of Purchase of PLB.
H14 : Value for Money (Price and Quality) has positive effect on Loyalty of PLB.

H15 : Acceptability and Frequency of Purchase has Positive effect on Loyalty of PLB.

H16 : In terms of product you buy, the rating given by the respondents is significantly different from each other.

H17 : In terms of product you buy, the profession of the respondents is significantly different from each other.

H18 : In terms of product you buy, the family size of the respondents is significantly different from each other.

H19 : In terms of product you buy, the marital status of the respondents is significantly different from each other.

H20 : In terms of product you buy, the income of respondents of different is significantly different from each other.

H21 : In terms of product you buy, the gender of the respondents is significantly different from each other.

H22 : In terms of product you buy, the education of the respondents of different is significantly different from each other.

H23 : In terms of product you buy, the age of the respondents of different is significantly different from each other.

H24 : There is a significant relation between profession and Type of product you buy.

H25 : There is a significant relation between income and Type of product you buy.

H26 : There is a significant relation between gender and Type of product you buy.

H27 : There is a significant relation between education and Type of product you buy.

H28 : There is a significant relation between age and Type of product you buy.

3.13 Time Line of the Research Study

Admission as a research scholar was confirmed after passing the necessary class work examination and finally field research work and study of secondary data was started in July, 2013. The study/research is broadly classified in three main categories.
Chapter III: Research Methodology

1. Pre Data Collection Phase
2. Data Collection Phase
3. Post Data Collection Phase

In my pre data collection phase, I conducted and concluded following tasks successfully:

- Defining of Statement of the Problem
- Concluded Review of Literature
- Identified Certain Gaps of the Research
- Defining of the Research Objectives
- Developing the reach of the Study
- Development of Hypothesis for Research
- Designing of Research Methodology

During data collection phase, questionnaire was developed and tested as pilot test and afterwards required data was collected from the retail stores.

During post data collection phase data was checked for its accuracy, it was cleaned and coded properly. After successful coding it was put in the SPSS software for data analysis and afterwards interpretation and findings were written in the thesis.

**Development of Construct from Review**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Factor Name</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Brand Awareness</td>
</tr>
<tr>
<td>2</td>
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<tr>
<td>7</td>
<td>Acceptability and Frequency of Purchase</td>
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</tbody>
</table>
3.14 Ethical Considerations

Ethical considerations were on top priority throughout the research. Participants whether store owners/managers or shoppers were properly informed and after taking their permission they were asked to fill the questionnaire. Shoppers were explained in a proper manner about the purpose of the survey and the approximate time in filling the given questionnaire. Respondents were also made aware that the information shared by them while filling the questionnaire would remain confidential. A due permission was taken from the store manager to conduct survey with-in the premise and outside of the store. The last but not the least is that data collected has not been misrepresented or findings have not been altered with. A due care has been made by the researcher to make sure that all the ethical considerations have been met.