Chapter 4

Methodology
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4.1 Introduction

4.2 Statement of Problem

4.3 Research Objectives

4.4 Research Hypotheses

4.5 Rationale

4.6 Research Design

4.7 Justification for Paradigm and Methodology

  4.7.1 Research Design

  4.7.2 Sampling Element

  4.7.3 Sample Size

  4.7.4 Sampling Technique

  4.7.5 Data Source

    4.7.5.1 Questionnaire Development

    4.7.5.2 Scale Development

  4.7.6 Data Analysis

4.8 Ethical Considerations

4.9 Limitations

4.10 Conclusions
4.1 Introduction

The chapter presents the methodological foundations and issues that are pertinent to this study. The objectives and hypotheses are listed in order to draw focus on the major variables considered in the study as seen in the literature review. This is followed by the rationale, research design, methodology, ethical considerations and limitations.

4.2 Statement of Problem

The study wants to find out the consumer perception of Private Labels in Apparels with specific focus on Price and Quality variables in several retail formats in three important cities of Gujarat.

4.3 Research Objectives

The present study focuses on the retail sector, specially the private labels which are introduced by several retailers as studied in the earlier section. The major objectives of the study are as follows:

1. To study the emergence, growth and future of private labels in India

2. To bring out the major factors that affect the perception of consumers related to private label apparels

3. To identify major price related dimensions influencing the purchase of private label apparels

4. To determine the importance of quality related perceptions (extrinsic and intrinsic cues) influencing the purchase of private label apparels

5. To segment the consumers on the basis of factors affecting their perceptions towards private labels brought out from the study

6. To analyze whether there is any relation between price and quality dimensions related to private label apparels
4.4 Research Hypotheses

The following nine null hypotheses are formulated on the basis of objectives formulated for the study:

1. There is no association between selection of a retail store and amount spent

2. There is no significant relationship between the following factors influencing consumer perception and monthly income.
   a. There is no significant relationship between the proximity and monthly income
   b. There is no significant relationship between the private brand loyalty and monthly income
   c. There is no significant relationship between the risk aversion and monthly income
   d. There is no significant relationship between serviceability and monthly income
   e. There is no significant relationship between corporate image and monthly income
   f. There is no significant relationship between the price indicator and monthly income
   g. There is no significant relationship between quality indicator and monthly income

3. There is no significant relationship between the following factors influencing consumer perception and age.
   a. There is no significant relationship between the proximity and age
   b. There is no significant relationship between the private brand loyalty and age
   c. There is no significant relationship between the risk aversion and age
d. There is no significant relationship between serviceability and age

e. There is no significant relationship between corporate image and age

f. There is no significant relationship between the price indicator and age

g. There is no significant relationship between quality indicator and age

4. Price related perceptions towards private labels are not significantly different between male and female

5. Quality related perceptions towards private labels are not significantly different between male and female

6. There is no significant difference between extrinsic cues and intrinsic cues related to quality

7. There is no correlation between price indicators and quality indicators

8. There is no association between the different types of shoppers and the store selected for purchasing private labels

9. There is no association between the different types of shoppers and frequency of purchase.

4.5 Rationale

Apparel, along with food and grocery, will lead the organized retailing in India and over the past few years there have been sweeping changes in this sector with the introduction of private labels, which carry benefits for the retailers as well as customers. The introduction and development of private brands is constantly on the rise. Private brands were once a small part of retailers merchandise, is today taking a significant factor for most retail operations. For evaluating any retail store, the first thing customer takes into account is the brands (merchandize) it carries (Bhatt, 2012). This statement holds true in case of metro cities; however, a similar trend is evident in the young urban population of Gujarat as well. The current study attempts to discover the consumer perceptions related to private labels in apparels.
The proven relationships of private brands with store loyalty, satisfaction have been studied by several researchers and so it provides the base to understand the perceptions of consumers relating to private brands. Before formulating its business strategy it is important for a company to gain an insight into customers’ understanding and perception about a particular thing. Thus, in order to formulate strategies related to private label brands, retail companies need to have clear idea about what customers understand by the term private label brands.

Price and quality are the two most important variables which the consumers take into account apart from several other perceptions like store image, brand positioning, risk aversion which have also been studied. It has been studied that the people of Gujarat are very much price conscious. Moreover, even a cursory look through the literature, which shows that little empirical work on correlates of price and quality, is done on Gujarat data.

It has also been found that major studies in private labels emphasize on the grocery sector (Garretson et al., 2002; Burton and Lichtenstein, 1998; Putsis and Dhar, 2001; Sethuraman, 1996; Narsimhan and Wilcox, 1998; Sinha and Batra, 1999; Richardson et al., 1996). Clothes are generally a higher involvement and higher ticket product than grocery items. There are also social risks attached to clothes. Besides, clothes are considered to have more ‘experience’ characteristics (Erdem and Swait, 1998) because consumers rely on how the clothes fit, how it feels, how it looks on them when worn, and expectation of how it would withstand the wear and tear of use. Researcher has tried to study whether the same is true in the case of apparels also. A detail analysis on price-quality relationship in private label industry is the need of the day.

Considering the research and literature gap on the subject, the present study is undertaken to understand the profile of customers visiting new-generation retail outlets like Big Bazar, Pantaloon, Westside and Globus. Additionally the researcher has identified the major price related dimensions and has segmented the customers based on those dimensions. Also quality dimensions have been worked upon and interrelationships between them and other demographic variables have also been studied. Apparel sector is on the edge for growth in domestic and global markets due to liberalization. Very few studies have been conducted using multivariate analysis.
factor analysis and cluster analysis) for studying the segments of shoppers for an apparel retail store, and so the study has been undertaken to better understand the consumer perceptions.

4.6 Research Design

A research design is a framework or blue print for conducting the research project. It details the procedures necessary for obtaining the information need to structure and/or solve the problems. The research design lays the foundation for conducting the project. The following chart shows the process of research done in order to enhance the study.

<table>
<thead>
<tr>
<th>Literature Review</th>
<th>↓</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification of the variables that lead to consumer’s perceptions</td>
<td>↓</td>
</tr>
<tr>
<td>Design of survey instrument by careful selection of items</td>
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<tr>
<td>Pre testing of the instrument by professionals and academicians (content validity)</td>
<td>↓</td>
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<tr>
<td>Modification and Refinement of the instrument</td>
<td>↓</td>
</tr>
<tr>
<td>Data collection from Consumers of Private Label Apparel</td>
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<tr>
<td>Data analysis</td>
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</tbody>
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4.7 Justification for Paradigm and Methodology

4.7.1 Research Design:

The current research is designed to assist the decision maker in determining, evaluating and selecting the best course of action. This research has the major objective of description related to private label perceptions of consumers. Additionally, the research design involves the collection of information from any
4.7.2 Sampling Element:

The objective of the research is to obtain information about the characteristics or parameters of population. Population and sample for the study are as follows:

- **Population:** The study has the population base as the Retail Apparel Formats located in Ahmedabad, Baroda and Surat cities of Gujarat State as it is experiencing highest growth rate.

- **Sample:** Consumers who are aware of private labels of major apparel formats located in Ahmedabad (Pantaloon, Westside, Globus, Big-Bazar), Baroda (Pantaloon, Westside, Big-Bazaar), Surat (Pantaloon, Westside, Big-Bazar) of Gujarat State. The reasons for choosing Ahmedabad, Baroda and Surat are supported through various relevant reports. Few of them are as follows:
  
  - According to Mc Kinsley and Company, in their report – The Great Indian Bazaar (Organized retail comes of Age in India) (August 2008) Ahmedabad figured among 8 Tier 1 cities and Baroda and Surat were in Tier 2 cities as far as organized retail growth is concerned in India. Only these 3 cities were cited in the report from Gujarat.
  
  - According to IBEF (India Brand Equity Foundation), in their report Retail: Market and Opportunities (June 2008); indicative list of emerging destination for retail activity were shown. Ahmedabad figured as a high growth city whereas Baroda and Surat in Emerging Cities. Only these 3 cities were included from Gujarat.
  
  - According to On-Point Retail Attractive Index – 2011, Ahmedabad ranked 8 in top 10 cities on market potential index. Surat and Baroda figured in next 10 cities in India. According to the report, Ahmedabad is the 8th most populous city of India and offers affordable rents to the retailers. The report also mentions that in Surat, every year hordes of entrepreneurs and factory workers flock to the city to be a part of wealth generating potential of the
city. Baroda is an industrial town, similar to Surat in terms of ethnicity and profile of consumers, and also has the highest expenditure per capita among top 20 cities.

- According to the Market Skyline of India 2008, Indicus Analytics, in Gujarat; the reach of malls is maximum in Ahmedabad, Baroda and Surat. In addition, the mall and multiplex culture had caught on in the country’s smaller cities in early 2000’s and in Gujarat; Ahmedabad, Baroda and Surat were the first ones powered by burgeoning purchasing power.

- The reasons for selecting these four companies (Westside, Pantaloon, Globus and Big Bazaar) were: They had significant penetration of private labels as mentioned in the the earlier chapters of the thesis and literature review exhibited that the four stores constitutes a significant share (in the clothing sector) to organized retailing in India in 2008 when the study was initiated. Report shows 31% share of clothing in organized retailing of which the four stores contributed 19%.

4.7.3 Sampling Size:

Sample size has been decided taking both logical and statistical considerations into account.

- Logically:

As there are ten stores in the sample, 65 consumers from each store should be surveyed. It is found through statistics (from inquiring the store managers) that approximately 500-800 consumers visit the stores on a daily basis for purchase of apparels. Hence, taking an average of 650 consumers and further 10 percentage of that, sample size can be derived.

- Statistically:

\[
\text{Sample Size} = \frac{Z^2 \cdot (p) \cdot (1-p)}{c^2}
\]

\(Z = Z\) value (e.g. Table value for 95% confidence level =1.96)
\(p = \) percentage picking a choice, expressed as decimal
(.6 used for sample size needed)
c = confidence interval, expressed as decimal (0.0375)

Hence sample size finalized for the study is 656 consumers. The final sample size for the study after coding and editing is 608. Justification for the same is given in Data Analysis.

### 4.7.4 Sampling Technique:

The samples are taken from four stores in Ahmedabad, three stores in Baroda and three in Surat. So the groups are heterogenous in nature. Hence at the primary level, cluster sampling is taken. Then two other considerations are made to identify the strata: (i) samples have been taken on weekdays and on weekends, and (ii) on hour (timings when there is a lot of rush in the store) and off hour (timings when there is no rush in the store) Hence stratified sampling technique is used as there is homogeneity within groups and heterogeneity between groups and is collective and mutually exclusive in nature. Therefore, the sampling technique used for the study is Cluster followed by Stratified Sampling through mall intercept.

### 4.7.5 Data Source:

The proposed study is mainly based on the primary data, but it is supported by the secondary data.

Secondary data is collected from the publications and authentic records and websites of the selected stores. The data is also collected from libraries of IIMA, National Institute of Cooperative Management, Gandhinagar, AT Kearney's ninth/tenth annual Global Retail Development Index (GRDI) articles from journals in Retailing published by IIMA, ICFAI, summary proceedings of seminars and conferences, Internet, Newspapers etc.

Questionnaire is used as an instrument for collecting primary data. Looking to the nature of study, the questionnaire is structured and mainly contains questions, which are close-ended. Questionnaire was hand carried and personally explained to respondents by the trained interviewers. The interviewer waited until a respondent filled out the questionnaire, then collected the questionnaire. The response was
recorded and measured by using Likert scale. The questionnaire has been pre-tested before final use. Some senior professionals affiliated to Retail Industry in Gujarat have also evaluated the questionnaire.

4.7.5.1 Questionnaire Development

The first few questions comprise of the name of store, frequency of shopping, preferences in shopping private labels and average amount spent on a shopping trip. This is followed by four scales which are developed by the researcher as discussed in the section below. Lastly, the questionnaire also contains questions to solicit demographic information of the respondents such as gender, age, education, monthly income and marital status.

All the scales were checked, reliability and content validity of the scales were done. The questionnaire was pretested and certain items with low correlation were eliminated from each scale which has been shown in the next chapter of Data Analysis. The final questionnaire is attached in the annexure.

4.7.5.2 Scale Development:

The first three scales were five point Likert type scales in which respondents were asked to indicate their level of agreement (1 = strongly disagree to 5 = strongly agree).

**General Consumer Perceptions:**

For general consumer perceptions, scale was constructed exhibiting consumer characteristics, multi items were taken from Ailawadi et al. (2001), Batra and Sinha (2000), Linchtenstein et al. (1993), Jin and Suh (2005), and revised to fit the Indian condition. However, as the study emphasizes on price and quality dimensions, they were not included in this scale. Two separate scales are constructed for that purpose which has been discussed below.

**Quality Related Perceptions:**

For quality related perceptions, scale was constructed comprising of both cues (extrinsic and intrinsic). Items were taken from Richardson, Jain and Dick (1994). In
their study, the authors have examined the relative importance of extrinsic verses intrinsic cues in determining the perceptions of store brand quality. Promotion which is an extrinsic cue has not been included for the study as store brands are not promoted in India. Changes were made to make the scale relevant in Indian context.

**Price Related Perceptions:**

For price related perceptions, scale was constructed comprising of multiple items which were derived from Vipul Patel (2010), Jin et al. (2003), Baltas (1997), and Rao and Monroe (1989). Major items were taken from Vipul Patel (2010) who made an attempt to study the relation between several price dimensions and private label brand usage. Additionally the study was also done in Ahmedabad, so fewer changes had to be made.

**Overall Private Label Attitude:**

This was measured using a semantic differential scale comprised of price, quality, brand image, store image, innovativeness and reliability with two bipolar words on a scale of -3 to 3.

**4.7.6 Analysis and Interpretation:**

For analyzing the hypothesis, parametric as well as non-parametric tests have been used in this research. The collected data has been edited, coded, tabulated, grouped and organized according to the requirement of the study and then entered into SPSS (statistical package for social sciences) for analysis. Different statistical tests have been performed for Nominal, Ordinal and data collected by using Likert scale, semantic differential scale etc. The data has been interpreted with the help of various statistical tools like Frequency analysis, Cross Tabulation for nominal scale data, CHI-Square Test for Symmetric measure for test of association like Phi, Cramer and Contingency Coefficient, Z-Test for testing the difference amongst the sample mean and population mean, independent sample t test, correlation, paired sample t test, and multivariate analysis like Factor Analysis, Cluster Analysis have also been used.

For each scale, data replicated normal distribution. This was assessed by checking the frequencies and mean, median and mode for all the questions. As the sample size was
huge, data showed a bell shaped curve. This was checked mainly as it is one of the key assumptions for conducting parametric analysis.

4.8 Ethical Considerations

The ethical issues considered in the research relate both to the participants as well as store owners. The informed consent of shoppers to participate in the survey has been obtained by the interviewers, who explained the purpose of the survey, who is conducting the survey and how long will it take. It was made clear that the participation was voluntary. Respondents were also made aware that the details in the questionnaire would remain confidential. Privacy of the data will be further maintained by securing the completed questionnaires and by ensuring the SPSS database file is not shared. With respect to the store owners, permission was obtained to carry out the survey on agreed dates and time; interviewers also complied with requests such as where shoppers could be intercepted. The final ethical consideration is related with the accuracy in reporting the findings, which requires that data collected has not been misrepresented or findings have not been altered with. The researcher has taken due care to ensure that all the ethical considerations have been met.

4.9 Limitations

The availability of precise and timely data is essence to good research. Again the Study on Consumer Perception of Private Labels in Apparels is restricted to Gujarat state only because of availability of time and other monetary and non-monetary resources. If carried out nationwide chances of better finding may be possible. In Gujarat state again sample belongs to three main cities namely Ahmedabad, Baroda, Surat. Due care is taken in selecting the cities as the apparel stores here are experiencing a very high growth in organized retail sector so as to make it true representative of the population. Also four retail outlets have are chosen i.e. Pantaloon, Westside, Big Bazar, Globus on similar grounds.

Two variables, price and quality have been given more emphasis in the study since, it has been found that people give more emphasis on price and quality compared to other variables like store name, brand name, innovativeness etc. Moreover the study
deals with apparels. This research can be carried out for other retail sectors such as food and grocery, consumer electronics, gifts and so on.

A key limitation of this study is the sampling frame. Results of this study encourage several other avenues for future research activity. Future studies should replicate this study in different context. Further, studies should use a number of different methodologies to shed additional light on store brands. Experimental studies could be conducted on specific private labels, instead of private labels in general. Cross-sectional, cross-cultural studies could compare the development of store brands against the market shares of retailers and manufacturers. If researchers had access to the customer data bases of leading retailers, more research could be done on behavioural data. An interesting approach would be to compare profitable versus less profitable customers against their use of store brands.

4.10 Conclusion:

This chapter focuses on the research methodology followed for the study. The problem statement is identified as to find out the consumer perception of Private Labels in Apparels with specific focus on Price and Quality variables in several retail formats in three important cities of Gujarat. The objectives and hypotheses have been framed in accordance with this problem statement. The penetration of private labels is on the rise in the already booming retail business. At this juncture, it is important for the retailers to get an insight into the customers’ perceptions regarding brands. Also, very few studies have concentrated on private labels in the apparels segment, especially in Gujarat (India). To do away with this gap, the study has been undertaken, which involves collecting data from about 650 consumers from the retail stores of Big Bazaar, Pantaloon, Westside and Globus in Ahmedabad, Baroda and Surat. The sampling technique used for the study is cluster followed by stratified sampling through mall intercept. Parametric tests like Anova, T-Test (independent and paired) and non parametric test including Chi-Square Test and Multivariate Analysis like Factor Analysis and Cluster Analysis are used to arrive at the findings. Key limitations regarding the sampling frame and others are explained in the chapter along with the scope for further research.